MEMORANDUM

TO: **Sanibel City Council**

FROM: **Kevin Ruane, Mayor**

DATE: **May 23, 2013**

RE: **Sanibel Causeway**

It was determined at our May 7, 2013 meeting that the Sanibel Causeway should require further analysis and an in depth review of the information that was received. At that meeting a report of approximately 820 pages was delivered to Council in our IPad package in PDF digitation fashion to review and discuss the various issues associated with the audit. I believe that it is necessary to continue an ongoing relationship with Lee County and Sanibel as it pertains to the Sanibel Causeway. We have worked extremely hard to rekindle that relationship and should continue on the same path we have traveled. The next steps and the delivery of this message are essential in maintaining that relationship and continue to build upon it.

The Settlement Agreement and the Interlocal Agreement executed by officials from the City of Sanibel as well as commissioners from Lee County in essence is a legally binding contract between the parties that basically should be followed accordingly. Consequently, the Interlocal Agreement indicates an inspection of the bridge as well as a financial review of the revenue and expenses can be performed on a biennial basis. Therefore, we have two separate pieces associated with the Sanibel Causeway audit before City Council. The first part is to review the total cost of building the causeway, the appropriate financing and carrying expenses, the renewal and repair expenses and any others operating expenses to determine the net revenue. The second part is a process put in place to review the inspection reports and the financial pro forma reports. With that in mind, I believe it is our responsibility to discuss these as separate items.

It was agreed upon by Council that we would break this into two parts, the first part being one that we would look at and ask for any additional information necessary to review and give further reports, analysis and comments relative to the construction of the bridge. The Sanibel Causeway was constructed and built in 2007. It opened with a cost of approximately $144,000,000 consisting of $22,000,000 in overruns. The causeway had approximately 17 change orders for a total cost of $132,000,000 and $12,000,000 of additional soft costs. The questions that one may arrive at are:

1. What is the total cost of the causeway? I believe we can be comfortable that the cost of the bridge was approximately $144,000,000 as the financing necessary to secure financing of municipal bonds. The municipal bonds and the financing of the bridge required a Financial Report given to the bondholder that would indicate the total cost of $144,000,000 and how that was derived. I believe the total expense of $144,000,000 utilized is valid as many other agencies (financial regulatory and insurance) have determined that to be an accurate number.

2. What were the reasons for exceeding budget by $22,000,000? The largest single overrun expense of $8,000,000 was associated with constructing the toll plaza. Also, pointed out in the report was an overrun of $1,000,000 associated with an inaccurate report with regards to the depths of the piers the contractor had to work with. The question/additional information may be required to better determine what the remaining $13,000,000 of overruns might have been.

3. What were the various types of financing utilized to pay for the Sanibel Causeway? We should review the financing put together and the laddering of the various debt instruments that were created to finance the Sanibel Causeway. This should be accurate as investment firms and regulatory agencies associated with the debt have a responsibility to the bondholders.

4 What are the remaining expenses that need to be reviewed? The repair and renew expenses and any other operating expenses. These items might be considered/required to be viewed for additional scrutiny/information to better understand them.

The Settlement Agreement that was signed in 2005 indicated that Sanibel would forego all of its revenue, approximately 21%, for a period of time until the second lien known as the junior lien would be paid off. At that time Sanibel would then be in a position to receive its revenue stream of approximately 21% of the net dollars. It is important to understand not only the actual revenue coming in the door, but the various expenditures and deem them to be appropriate. At this point in time I think we should look into a couple of items relative to the building of the causeway and approximately $13,000,000 of overrun expenditures and request additional documentation so we can completely understand this overrun. As some Council members may be aware, when the bridge spans A, B and C were built, span C as it enters into Sanibel was constructed and deemed to have some flaws in the roadway pertaining to safety and that roadway and/or entry into Sanibel had to be reconstructed. As a Council member, I would like to understand what that additional cost was associated with design flaw and all appropriate documentation associated with the overruns.

The second part of this process that we should follow has to do with our Interlocal Agreement. In March 2005, the City of Sanibel and Lee County entered into a Settlement Agreement to resolve any outstanding claims between the appropriate parties relative to a dispute associated with the Sanibel Causeway. With that in mind, the underlying document that needs to be followed as indicated is our Interlocal Agreement. Within that Interlocal Agreement, there is an opportunity for us to go through bi-annual review of maintenance and finances each year. My suggestion is we need to work with the County and certainly not undermine anything that they

are doing but act as a partner by reviewing their reports and make any recommendations accordingly. I would suggest that we go through our bi-annual process of evaluating the structure, the reports associated with the structure and any other additional information that we can review. If the City Council believes there is a desire for a second opinion than an outside engineering consultant with a background that is associated with bridges specifically to give us any additional insight or opinions.

The second part is the financial review which we should again look to Council to review the bi-annual information of revenue for that six month period of time, the various debt obligations paid, the R & R expenditures and any other operating expenses. Upon the review, we can determine if any additional supporting documentation is required to further our understanding of that six month period.

Lastly, I believe that as a product of this review, both structural and financial, we can give the County some greater insight and recommendations as the appointed elected officials to interact with the County and suggest in letter form, email form or verbal form the opportunity to continue to strengthen and improve the transparency when it comes to financial as well as structural endeavors. This would not be limited to assist a structural and financial commitment, it also would allow us any other opportunity to discuss and/or review any other conditions we feel appropriate.

KBR/jg

Sanibel Causeway
Sanibel's Future Responsibility

Despite the fact that Lee County owns and maintains the Sanibel Causeway, it is important that Sanibel take an active role in monitoring the operations. This monitoring should include, but not be limited to accounting, repairs and maintenance, and inspections. The causeway represents the only vehicular passage on and off the island; therefore, it is critical for Sanibel to take a partnership role with the county to ensure it's appropriately maintained.

Who should be responsible for monitoring the causeway?

OPTIONS:

1. Member of City Council
2. Council appointed committee
3. Staff
4. Professional consultant

These options are not mutually exclusive. Probably a combination of any or all of these options should be considered. It is important that a monitoring mechanism is put in place that extends beyond lifespan of the current council and staff since the causeway will be in existence for decades and will require the same element of scrutiny by future generations.

The County hires consultants to report on different aspects of the causeway. The City needs to take an active role in reviewing and understanding report findings. Ideally, the City can play a role in the selection of the consultants.

1. Causeway engineering and maintenance inspections: Per our interlocal agreement, the county is to hire an independent engineering firm to inspect the causeway on a biennial basis. The City should at the very least, be aware of the independent engineering firm selection process. Ideally the city should be involved with the selection process, review the independent reports, and request a presentation from the engineering firm on their findings.
2. Crack Monitoring inspection – scheduled to occur in July 2013. Findings could dictate repair recommendations and future, more frequent inspections to monitor the cracks.
3. Does the county have recourse (legal or under warranty) regarding the possible crack repairs.
4. Semi-annual and annual Traffic and Revenue Report for Lee County toll facilities
5. Updated Exhibit B – which provides a summary of excess funds used to calculate Sanibel's revenue share. The City should understand the detail that makes up each element in this schedule. This report should be updated by the county on a semi-annual basis.

6. Review all inflows/outflows of the R&R fund
7. Review excess revenue worksheets prepared by the county semi-annually.
8. Review how the county is spending its share of excess toll funds (is there a sinking fund?)
9. Causeway counts

SANIBEL CAUSEWAY RE-CONSTRUCTION

April 22, 2013

Executive Summary

In conformance with the Consulting Contract dated March 5, 2013, I have completed the Assignment following the Objective of the engagement and services to be performed. I have reviewed all documentation, communications and financial information regarding:

1. **Sanibel's Interlocal and Settlement Agreement with Lee County**: The current **Interlocal Agreement** (Exhibit "A") went into effect on June 11, 2002. It provides for the Agreement to remain in effect as long as any Parity Bonds remain outstanding. It requires the County, which owns the Causeway, to maintain the Causeway in good repair and in sound operating condition. It called for biennial inspections. During one of those inspections the County determined that the Causeway bridges needed to be replaced. The County projected that the construction would commence in 2004. The City and County agreed that the City would receive 21% of the net revenues derived from operation of the Causeway. Net revenues were described as Gross Revenues less Operating Expenses, Debt Service for the Causeway, and Renewal and Replacement costs. The City had concerns about the design of one of the Bridges, reached an impasse with the County, and filed suit to force the County to revise the plan.

   The Settlement Agreement (Exhibit "B") between the City and County was executed on March 1, 2005. It allowed the County to proceed with its plans to re-construct the Causeway as designed. It re-stated the existing County 79%/City 21% split of the surplus revenues; it required increasing the tolls due to incurring costs of the construction of the new Causeway and Toll Plaza, and it included a Financing Model by the County that projected the potential rebate to the City and how it was to be applied. (Exhibit "B" of the Settlement Agreement). The Agreement states that all toll surplus revenues are to be applied by both parties to extinguish Junior Lien Debt or General Fund Loan. The County agreed to use its "best efforts" to pay off this obligation substantially by 2010, and completely by 2012. Through information received to date from County DOT Management, and confirmed by the County Clerk's office, it has been projected that the Junior

Lien will be paid off during Fiscal Year 2014. The Agreement also requires the County to hire a Traffic and Revenue Consultant in anticipation of the Loans being paid off, in order to determine whether there are sufficient funds to pay the debt service, and, if there are, the County shall review other options for use of the surplus funds. The DOT Director has confirmed that the County will be issuing an RFP shortly for this review and recommendation. There was also a statement in the Agreement that no additional sums will be added to the debt after initial establishment of the amount of the Loans. There were two Commercial Paper authorizations by the Board of County Commissioners in 2004. One was for $40 Million in June and $45 Million in November. The County has informed us that of that amount, only $43,500,000 was actually borrowed and the remaining balance of the loan was replaced by an Interfund Loan of $20,500,000 in 2009. (See Junior Lien below)

The Financing Model which was included as Exhibit B from the Settlement Agreement, was a projection made by the County prior to completion of the Causeway and Toll Plaza construction. It has been updated through 2018 by the County upon our request. (Exhibit C)

2. **The contracts and engineering design reports on file for the re-construction of the bridges and toll plaza:**
There were two Design Consultants used for the Causeway bridges and Toll Plaza: Hardesty and Hanover Exhibit (D) was the Consultant for Span "A" at an original contract price of $800,000; and URS Corporation Southern (Exhibits E & F) was the Consultant hired by the County for the Toll Plaza and Spans "B" & "C" of the Causeway at an original contract price of $3,130,600 for the bridges, and $1,805,000 for the Toll Plaza. During construction there were additional payments made to the Consultants as a result of several change orders.

3. **The actual cost of re-construction and the bonded indebtedness and additional financing required for completion, including the reserves set aside to assure payment:**

<u>COST TO BUILD CAUSEWAY AND TOLL PLAZA</u>

The original estimate in December 2004 was **$122** Million for the entire project, including the Toll Plaza, which was conveyed in Press Releases and County "Blue Sheets". At final completion in 2008, Jacobs Construction Services, the Construction Manager for the Bridges and Toll Plaza re-construction, was paid $132,090,434, which included 17 change orders. An additional $12 Million was spent for soft and other hard costs, bringing the actual total for the Causeway and Toll Plaza to **$144** Million, a **$22** Million overrun. The Toll Plaza cost almost double the estimated amount ($9,000,000 estimate vs. $17,000,000 actual), and there was a payment of an additional $1 Million as a result of inaccurate information regarding the depth of the piers that the Contractor had to work with. There were many other changes along the way during the 4 years to complete the job, due to weather conditions and other unforeseen occurrences, according to the documentation I reviewed.

HOW THE CAUSEWAY AND TOLL PLAZA WERE PAID FOR

There were several different funding methods used: 2005B Bond, Florida DOT borrowings, County & City Surplus toll funds, Commercial paper and Interfund Loans.

The 2005B Bond had a face value of $63,865,000. There were additional add-ons to the Bond so the total available to finance the Causeway and Toll Plaza was $69,000,000. The County borrowed $3,877,606 from Florida DOT. The Renewal and Replacement fund was tapped for an additional $4,962,725. The County took out loans, which were Commercial Paper available through the auspices of the Florida Association of Counties, totaling $43,509,922, and the balance of $23,200,704 was made up by Sanibel Toll Surplus funds.

Funding Source	Bridge	Toll Plaza	Total
2005B Bond	$69,000,000	$ 0	$69,000,000
Commercial Loan	32,016,262	11,493,660	43,509,922
Surplus Funds	19,027,849	4,172,855	23,200,704
R & R Funds	4,962,725	0	4,962,725
FDOT Loan	3,046,715	830,891	3,877,606
Totals	$128,053,551	$16,497,406	$144,550,957

Instead of cash on deposit, the reserve for the Bond payment was secured by a Surety Company for a fee.

It is important to note that the schedule of re-payments for Sanibel's Bond 2005B increase by $1,000,000 annually in 2018, from $3.8 Million to $4.8 Million. However, there is also a prior 2001A Transportation Facilities Bond from 2001 that the City is obligated for, but it has been paid down and replaced by a Bank Loan. Sanibel's share of the payment of this Bond has been averaging approximately $900,000 per year. Since this obligation has been projected to be paid off during fiscal year 2017, it will lessen the burden of the $1,000,000 payment increase of the higher 2005B debt service principal payments.

Sanibel's Bond Coverage (net revenues available to pay annual debt) in 2011 was 2.27, while the Cape Coral Bridges are averaging half that amount of coverage. Overall in 2012 the County's Transportation Bond coverage is 1.74. The requirement for Lee County is 1.2 for all Senior Lien debt.

4. **The status of the Junior Lien:**
   Originally $43,500,000, the Commercial Paper Loan balance of **$20,500,000** was paid off by a County Interfund Loan in 2009, of which a remaining balance of **$6.2 Million** is projected to be paid off during Fiscal Year 2014. This is considered what's left of the Junior Lien now. (Depicted in Exhibit "C" Column C2)

5. **The engineering and maintenance reports since the completion of the Causeway and present conditions of the bridges:**
   Attached as Exhibits G through R are the inspection reports for all of the individual bridges (Spans A, B & C) through January 2013. The 2011 inspections mentioned concerns about cracking, so the County hired CDM Smith to conduct an investigation in June 2012. Their recommendation was to monitor the status of the cracking every 6 months to determine if the cracking was stabilizing or increasing.
   The most recent inspection was a Beam Cracking Report by T. Y. Lin in January 2013. Their inspection report stated that the cracking was somewhat "normal" and their recommendation is to continue to monitor

the cracking every 6 months to determine if the cracking is stabilizing. Both Consultants do a lot of work for the County. There was a brief discussion about design defects in the reports, but the findings were inconclusive. Lee Transportation Department (DOT) is having the County Attorney's office look into whether there were any warranties for the construction and/ or the design, in the event the cracking worsens.

6. **The amount and use of funds collected from the tolls paid and their application by the County:**
   Sanibel's **net** revenues have been consistently higher than the other two bridges. Also the revenues from the fees for transponder sales and other fees that are collected by Leeway appear to be barely a third of the costs to maintain the transponder program.

   The "Annual Traffic and Revenue Report for Fiscal Year 2012 Lee County Toll Facilities" (Exhibit S) provides a plethora of statistical financial and operational data for each Lee County Toll Facility.

   Based on an updated Interlocal Financing Model (Exhibit "C"), created by the County at our request, **Sanibel should anticipate receiving $527,000 as its 21% share of the surplus starting in Fiscal Year 2014**. During years 2015 through 2018, Sanibel's share of these revenues should approximate $981,000 each year. The Settlement Agreement states "surplus toll revenues shall be used for any lawful transportation purpose."

7. **Information on the County's toll revenues and charges against the Causeway line item account:**
   The County DOT's Fiscal Manager assured me, and DOT Director David Loveland assured City Manager Judie Zimomra in an email, that no Sanibel surplus funds were used for anything other than the Sanibel Causeway and Junior Lien Debt re-payment, since the Settlement Agreement was signed in 2005. I asked for and received evidence of where the money came from for the following projects: Summerlin and Gladiolus widenings, the Summerlin Overpass and improvement to Boy Scout, as well as the Colonial Expressway (since terminated) and Colonial widening. None of the costs were paid for by the Sanibel Toll Surplus funds.

8. **Was any additional funding of projects charged to the Sanibel Causeway account or taken out of Surplus Toll funds?**
   I could find no evidence of the use of Sanibel Toll Surplus funds for any other projects besides the Causeway and Toll Plaza re-construction. Some entries were found whereby surplus funds were used to pay for other projects, but they pre-dated the Settlement Agreement in 2005, which established that surplus funds could only be used for the Causeway project.

Summary of Exhibits

Exhibit	Description
A	06-11-2002 Interlocal agreement between Lee County and the City of Sanibel
B	03-01-2005 Settlement agreement between Lee County and the City of Sanibel
C	Updated Transportation Facilities Financing Model "Exhibit B" of Settlement agreement prepared by County
D	Causeway Span A - Hardesty and Hanover Consultant agreement
E	Causeway Span B & C – URS Corporation Southern Consultant agreement
F	Toll Plaza Consultant Agreement - URS Corporation Southern Consultant agreement
G-R	Engineering and Maintenance Reports – 2007 (3), 2009 (3), 2011 (3), 2012 & 2013
S	Lee County 2012 Annual Toll Facilities Report

EXHIBIT "A"

AMENDED AND RESTATED

INTERLOCAL AGREEMENT

between

LEE COUNTY, FLORIDA

and

CITY OF SANIBEL, FLORIDA

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AMENDED AND RESTATED
INTERLOCAL AGREEMENT

THIS AMENDED AND RESTATED INTERLOCAL AGREEMENT is made and entered into on this 11th day of June, 2002, by and between Lee County, a political subdivision and charter county of the State of Florida (the "County"), and the City of Sanibel, a municipal corporation of the State of Florida (the "City"), collectively the "Parties" hereto.

WITNESSETH:

WHEREAS, the County currently owns and operates the Sanibel Bridge and Causeway; and,

WHEREAS, the County has heretofore enacted Lee County Ordinance No. 86-11 providing for the imposition of tolls on certain transportation facilities, including the Sanibel Bridge and Causeway, and authorizing the issuance of transportation facilities revenue bonds payable from the aggregate net revenues of such transportation facilities; and,

WHEREAS, the County has, pursuant to Ordinance No. 86-11, adopted Resolution No. 86-4-12, authorizing the issuance of Transportation Facilities Revenue Bonds, Series 1987, for the purpose of refunding the County's Sanibel Bridge Improvement Bonds dated June 1, 1979, and financing the construction of certain other Transportation Facilities; and,

WHEREAS, in connection with the County's issuance of the Sanibel Bridge Improvement Bonds dated June 1, 1979, the City and the County entered into an Interlocal

Agreement dated as of November 10, 1987; and,

WHEREAS, the Parties hereto have determined that it is in the best interests of the citizens of both the City and the County to amend and restate the prior 1987 Interlocal Agreement and to enter into this Interlocal Agreement in connection with the County's issuance of its Transportation Facilities Revenue Bonds pursuant to Ordinance No. 86-11, and Resolution No. 86-4-12 as it has been further amended.

NOW THEREFORE, in consideration of the mutual benefits to be derived from this Agreement, the Parties hereto covenant and agree as follows:

Section 1. Definitions.

When used in this Agreement, the following terms shall have the following meanings, unless the context clearly otherwise requires:

"Additional Obligations" shall mean indebtedness payable on a parity with the Series 1987 Bonds as they have been subsequently refunded, whether such indebtedness is initially issued on a parity basis or achieves parity status by accession as set forth in the applicable Resolution.

"Agreement" shall mean this Amended and Restated Interlocal Agreement.

"Bonds" shall mean the Series 1987 Bonds as they have been subsequently refunded, and any Additional Parity Obligations.

"Causeway" shall mean the Sanibel Bridge and Causeway extending McGregor Boulevard in Punta Rassa and Causeway Road on Sanibel Island.

"Causeway Debt Service Requirement" shall mean the sum of (a) the product of the Debt Service Requirement for the Series 1987 Bonds multiplied by the ratio derived by

dividing the sum of (i) the amount of proceeds of the Series 1987 Bonds required to refund the Series 1987 Bonds used to finance improvements, modifications or extensions to the Causeway and any capitalized interest in connection therewith by the total proceeds of the Series 1987 Bonds less the sum of (i) any accrued interest, (ii) all issuance costs including any bond insurance premium or other credit enhancement fees, and (iii) any deposit to the Reserve Subaccount established pursuant to the Resolution, and (b) the product of the Debt Service Requirement for any outstanding Additional Obligations and Subordinated Indebtedness multiplied by the ratio derived by dividing the amount of proceeds of any such Additional Obligations and Subordinated Indebtedness used to finance improvements, modifications or extensions to the Causeway and any capitalized interest in connection therewith by the total proceeds of such Additional Obligations and Subordinated Indebtedness less the sum of (i) any accrued interest, and (ii) all issuance costs including any bond insurance premium or other credit enhancement fees and (iii) any deposit to the Reserve Subaccount established pursuant to the Resolution or to any reserve account for Subordinated Indebtedness. The above shall apply to the 1987 Bonds as subsequently refunded by the Series 2001A Transportation Facilities Refunding Revenue Bonds.

"City" shall mean the City of Sanibel, a municipal corporation of the State of Florida.

"County" shall mean Lee County, a political subdivision and charter county of the State of Florida.

"Debt Service Requirement" for any semi-annual period shall mean the aggregate

amount of (a) interest paid or to be paid on account of the Bonds or any Subordinated Indebtedness during such semi-annual period, except to the extent that such interest is paid from the proceeds of such Bonds or Subordinated Indebtedness, (b) principal of outstanding Bonds or Subordinated Indebtedness paid or to be paid during such period whether such payment is due to maturity or mandatory redemption, (c) any deposits to the Reserve Subaccount required by the Resolution, or to any reserve account for Subordinated Indebtedness, during such period, and (d) disbursements for the expenses, liabilities and compensation of any paying agent, registrar, credit bank or depository related to the Bonds or Subordinated Indebtedness during such period.

"Gross Revenues" shall mean all income and monies received by the County from the rates, fees, tolls and other charges to be made and collected by the County from the operation and ownership of a Transportation Facility, or otherwise received by the County or accruing to the County in the ownership and operation of such Transportation Facility, calculated in accordance with generally accepted accounting principles employed in the operation of facilities similar to such Transportation Facility. "Gross Revenues" do not include the proceeds of any governmental grants received in connection with any Transportation Facility.

"Operating Expenses" shall mean the County's reasonable and necessary expenses for current operation, maintenance and repair with respect to a Transportation Facility and shall include, without limiting the generality of the foregoing, administration expenses, insurance and surety bond premiums, legal and engineering expenses, ordinary and current rentals of equipment or other property, refunds of monies lawfully due to

others, payments to pension, retirement, health and hospitalization funds, repayments of operating subsidies received by the County on account of such Transportation Facility, and any other expenses required to be paid for or with respect to proper operation, maintenance or repair of such Transportation Facility, all to the extent properly attributable to such Transportation Facility in accordance with generally accepted accounting principles employed in the operation of facilities similar to the Transportation Facility. "Operating Expenses" do not include any provision for interest, depreciation, amortization or similar charges.

"Ordinance" shall mean Lee County Ordinance No. 86-11, as the same may from time to time hereafter be amended and/or supplemented.

"Prior Agreement" shall mean the Interlocal Agreement dated as of November 10, 1987, entered into by the City and the County in connection with the County's issuance of its Series 1987 Bonds.

"Renewal and Replacement Costs" shall mean an amount equal to five percent (5%) of the Gross Revenues.

"Resolution" shall mean Resolution No. 86-4-12 of the County, including any amendments thereto, heretofore, or hereafter adopted by the County.

"Series 1979 Bonds" shall mean the County's Sanibel Bridge Improvement Bonds dated June 1, 1979.

"Series 1987 Bonds" shall mean the Transportation Facilities Revenue Bonds, Series 1987, issued by the County pursuant to the Resolution, for the purpose of refunding the Series 1979 Bonds, and to finance the construction of certain other Transportation

Facilities.

"Series 2001A Transportation Facilities Refunding Revenue Bonds" shall mean the Transportation Facilities Revenue Bonds issued by the County, pursuant to the Resolution for the purpose of refunding the Series 1987 Bonds among other related Transportation Bond issues.

"Subordinated Indebtedness" shall mean indebtedness secured by Gross Revenues on a basis junior and subordinate to the Bonds.

"Transportation Facility" shall mean the Causeway or any other bridge or bridges, causeway or expressway which is acquired, constructed or improved with the proceeds of any series of Bonds.

The terms "herein", "hereunder", "hereby", "hereto", "hereof", and any similar terms, shall refer to this Agreement; the term "heretofore" shall mean before the date of execution of this Agreement; and the term "hereafter" shall mean after the date of execution of this Agreement.

Words importing the masculine gender include every other gender.

Words importing the singular number include the plural number, and vice versa.

Section 2. <u>Term of Agreement</u>.

This Agreement shall become effective upon its execution by the Parties hereto, and shall remain in effect for as long as any Parity Bonds remain outstanding under the Resolution.

Section 3. <u>Maintenance of Causeway</u>.

The County agrees that it will, at all times, maintain the Causeway in good repair

and in sound operating condition and will make all necessary repairs, renewals and replacements. To facilitate the foregoing, the County will have the Causeway inspected by an engineering firm on a biennial basis. The engineering firm will be required to submit a report setting forth its findings whether the Causeway has been maintained in good repair, working order and condition. The inspection and report on the Causeway's condition may be combined with other transportation facilities of the County.

Section 4. Imposition of Causeway Tolls.

The Parties recognize that the County is empowered to establish and impose tolls for use of the Causeway. Subject to the provisions of the Resolution, the County agrees that all such tolls shall be reasonable in amount and shall be classified in a reasonable way to cover all traffic, so that such tolls are uniform in application to all traffic falling within any reasonable classes.

Section 5. Causeway Improvements.

The Parties recognize that the County is presently proceeding to permit, design and construct certain improvements to the Transportation Facility for its entire length, which, if constructed, will develop the Transportation Facility as a two-lane roadway for traffic; one traffic lane for each direction, with two, associated, marked emergency breakdown lanes, one breakdown lane for each direction. The County will proceed in good faith to permit, design and construct the improved two-lane Transportation Facility with the two emergency breakdown lanes as described, retaining the existing Causeway islands. The description for the two, associated, marked emergency breakdown lanes will not apply to Span A (the bascule bridge) of the Project.

The Parties agree that the County will proceed to seek all necessary and required permits for the proposed Transportation Facility pursuant to the terms and conditions of its Preliminary Design and Engineering ("PD&E") Report dated June 26, 2001, and that the City will not object to, nor interfere with, the County's pursuit of the said permits pursuant to the PD&E Study so long as the current Causeway configuration is maintained.

The Parties further acknowledge said planned Transportation Facility improvement process is an uncertain one as to end result and/or timing, although the County presently anticipates said road and bridge construction may commence approximately in Year 2004. The Parties recognize that the County and the City have been working and consulting together regarding the design of the projected improvements for a substantial period of time and in conjunction with a Study Group established by the City and the County for input on the design. Should the County be unable to reasonably obtain the permits for the projected improvements to the Transportation Facility and/or should circumstances arise beyond the lawful and reasonable control of the County in the permitting, design, or construction of the two-lane road with the two marked emergency breakdown lanes which would make such roadway improvements unfeasible, then this paragraph will be deemed null, void and of no further effect, and can be so declared by the County. The County will provide the City with ninety (90) days prior written notice of the County's proposed declaration of the nullification of this section and the basis for its decision. Then, in such event, the County will consult with the City concerning any alternative designs and applications for the construction of the improvements; such consultation to be non-binding in nature for both Parties.

Section 6. Payments to the City.

On October 30th and April 30th, the County shall remit to the City twenty-one percent (21%) of the Net Revenues derived from operation of the Causeway during the semiannual period ending thirty (30) days prior to each payment date. For purposes of this Agreement, Net Revenues shall mean Gross Revenues of the Causeway less (i) Operating Expenses of the Causeway, (ii) the Causeway Debt Service Requirement, and (iii) the Renewal and Replacement Costs of the Causeway. Commencing with the first full fiscal year following completion of the proposed improvements described in Section 5. hereof, the payment due April 30 of each year shall be adjusted, if necessary and if adequate funds are then on deposit in the Surplus Account, such that the total payment to the City in each fiscal year shall not be less than $200,000.00. Funds paid to the City pursuant to this Agreement may be used for any lawful purpose of the City.

It is expressly understood and agreed by the City that the obligation of the County to make payments to the City required by this Agreement is in all respects subject to the Resolution and that such payments shall be made only from the Surplus Account established pursuant to the Resolution and are junior and subordinate to all payments required by the Resolution.

Section 7. Tolls for Other Transportation Facilities.

The County agrees to impose on the Transportation Facilities other than the Causeway, tolls that produce Gross Revenues at least sufficient in the aggregate to pay (i) the Debt Service Requirement less the Causeway Debt Service Requirement, (ii) the Operating Expenses of Transportation Facilities other than the Causeway, and (iii) the

Renewal and Replacement Costs of Transportation Facilities other than the Causeway.

Notwithstanding the foregoing, during the period in which interest allocable to the amount of Series 1987 Bond proceeds used to finance the acquisition and construction of a parallel span to the Cape Coral Bridge has been funded from proceeds of the Series 1987 Bonds, the County may, at its sole option, elect to fund the Operating Expenses and renewal and replacement costs of the Cape Coral Bridge from lawfully available funds of the County other than Gross Revenues of the Causeway, in lieu of imposing any toll thereon.

Section 8. Series 1979 Renewal and Replacement Fund.

Upon defeasance of the Series 1979 Bonds, the County shall remit to the City a sum equal to sixteen percent (16%) of the amount then on deposit in the renewal and replacement fund established in connection with issuance of the Series 1979 Bonds.

Section 9. Books and Records.

The County agrees to maintain books, records and accounts sufficient to determine compliance with Section 6. and Section 7. of this Agreement. The City shall have the right at all reasonable times to inspect such books, records and accounts.

Section 10. Prior Agreement Amended.

Upon the execution of this Agreement by the Parties hereto, the 1987 Agreement shall be duly amended by the terms of this Agreement.

Section 11. Parties in Interest.

This Agreement is made solely for the benefit of the County and the City and no other party or person shall acquire or have any right hereunder or by virtue hereof.

Section 12. Counterparts.

This Agreement may be executed in several counterparts, each of which shall be regarded as the original and all of which shall constitute one and the same Agreement.

Section 13. Severability.

If any one or more of the covenants, agreements or provisions of this Agreement shall be held contrary to any express provision of law or contrary to the policy of express law, though not expressly prohibited, or against public policy, or shall for any reason whatsoever be held invalid or unenforceable, then such covenants, agreements or provisions be null and void and shall be deemed separable from the remaining covenants, agreements or provisions of this Agreement and shall in no way affect the validity or enforceability of any of the other covenants, agreements or provisions hereof.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed this 11th day of June, 20 02, for the purposes herein expressed.

ATTEST: CHARLIE GREEN
CLERK OF COURTS

By: _____
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

By: _____
Chairman

SEAL
BOARD OF COUNTY COMMISSIONERS
LEE COUNTY, FLORIDA

APPROVED AS TO FORM:

By: _____
Office of the County Attorney

ATTEST:

By: _____
City Clerk

CITY OF SANIBEL, FLORIDA

By: _____
Mayor

APPROVED AS TO FORM:

By: _____
City Attorney

EXHIBIT "B"

Lee County, Florida
Transportation Facilities Financing Model

DRAFT

Sanibel Interlocal Agreement Rebate

Year	Net Revenues	Less Bonded Debt Service	Other Debt Service	R&R Fund Deposit	Sanibel Net * Revenues	21% Rebate	Residual Net Revenue
1998	4,930,659	847,029	0	180,450	3,903,180	798,036	3 105,144
1999	5,136,449	847,053	0	83,615	4,205,780	845,491	3 360,289
2000	5,012,248	847,572	0	13,601	4,151,275	856,223	3 295,052
2001	4,969,224	613,750	0	293,819	4,061,654	844,791	3 216,863
2002	4,706,714	773,048	0	10,363	3,923,304	839,496	3 083,808
2003	4,146,884	790,136	0	807,939	2,548,810	641,485	1 907,325
2004	4,492,364	790,290	0	651,056	3,051,018	632,824	2 418,194
2005	11,000,000	790,303	443,333	806,352	8,960,012	(202,795)	9 162,807
2006	10,400,000	2,733,106	10,885,225	409,441	(3,627,772)	0	(3 627,772)
2007	11,700,000	5,239,676	6,155,075	25,000	280,249	0	280,249
2008	12,400,000	5,242,898	6,846,775	80,000	230,327	0	230,327
2009	12,300,000	4,629,379	7,329,925	90,000	250,696	0	250,696
2010	12,400,000	4,629,529	1,000,000	50,000	6,720,471	1,411,299	5 309,172
2011	11,200,000	4,629,296	300,000	60,000	6,210,704	1,304,248	4 906,456
2012	11,000,000	5,144,468	300,000	0	5,555,532	1,166,662	4 388,870
2013	11,100,000	5,139,339	0	40,000	5,920,661	1,243,339	4 677,322
2014	11,200,000	5,446,887	0	60,000	5,693,113	1,195,554	4 497,559
2015	11,100,000	5,439,177	0	210,000	5,450,823	1,144,673	4 306,150
2016	11,200,000	5,442,584	0	200,000	5,557,416	1,167,057	4 390,358
2017	11,300,000	5,441,722	0	210,000	5,648,278	1,186,138	4 462,140
2018	11,400,000	4,652,835	0	210,000	6,537,165	1,372,805	5 ,164,360
2019	11,300,000	5,634,959	0	210,000	5,455,041	1,145,559	4 ,309,482
2020	11,300,000	5,633,619	0	200,000	5,466,381	1,147,940	4 ,318,441
2021	11,400,000	5,635,022	0	205,000	5,559,978	1,167,595	4 ,392,383
2022	11,300,000	5,637,578	0	210,000	5,452,422	1,145,009	4 ,307,413
2023	11,400,000	5,636,008	0	200,000	5,563,992	1,168,438	4 ,395,554
2024	11,500,000	5,634,600	0	210,000	5,655,401	1,187,634	4 ,467,766
2025	11,400,000	5,637,294	0	210,000	5,552,706	1,166,068	4 ,386,638
2026	11,500,000	5,633,838	0	200,000	5,666,162	1,189,894	4 ,476,268
2027	11,500,000	5,637,528	0	210,000	5,652,472	1,187,019	4 ,465,453
2028	11,300,000	5,632,825	0	210,000	5,457,175	1,146,007	4 ,311,168
2029	11,300,000	5,634,195	0	200,000	5,465,806	1,147,819	4 ,317,986
2030	11,300,000	5,636,275	0	210,000	5,453,726	1,145,282	4 ,308,443
2031	11,300,000	5,633,794	0	210,000	5,456,207	1,145,803	4 ,310,403
2032	11,100,000	5,636,088	0	210,000	5,253,913	1,103,322	4 ,150,591
2033	11,000,000	5,636,871	0	200,000	5,163,130	1,084,257	4 ,078,872

* by Florida case law, this amount should be positive and thus not subsidized by CC/MP Revenues.

Information in this draft Financial Model is being provided solely as a convenience to the Public. It is not to be relied upon as a final expression of facts or calculations with respect to the Model. The information and calculations in this Model have been obtained from sources believed to be timely and reliable but are not guaranteed. Lee County undertakes no obligation to update any information included in this draft Model. The information, calculations or any expressions of opinion herein are subject to change without notice.

This Model constitutes statements of mathematical prediction(s) based on the most current information available at the time the Model was prepared, which was believed to be accurate. This Model is subject to specific criteria which may cause results to differ materially from those set forth herein in subsequent Models, if run under differing criteria.

Lee County disclaims any and all liability or responsibility for use of the draft Financial Model by others for purposes either consistent or inconsistent with its intended purpose, which is as an example of financial results obtained under certain, specific criteria as established by the County.

EXHIBIT "C"

LEE COUNTY RESOLUTION NO. 04-08-60

A RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA; AMENDING LEE COUNTY RESOLUTION NOS. 90-09-26, 90-09-27, 94-08-05, 96-12-105, 97-09-53, AND 01-06-58, RELATING TO THE CAPE CORAL, MIDPOINT MEMORIAL AND SANIBEL TOLL FACILITIES; MODIFY TOLL STRUCTURE; IMPOSING TOLLS ON THE SANIBEL BRIDGE; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, on April 16, 1986, the Board of County Commissioners of Lee County, Florida (the "Board"), enacted Lee County Ordinance No. 86-11, providing for the imposition of tolls on certain bridges and causeways and for the issuance of revenue bonds payable therefrom; and,

WHEREAS, the Board has previously adopted Lee County Resolution Nos. 90-09-26, 90-09-27, 94-08-05, and 01-06-58, which established the toll rates and commuter discount programs for the Sanibel Bridges, Midpoint Memorial Bridge and the Cape Coral Bridge collectively, "The Bridges"; and,

WHEREAS, the Board, on December 18, 1996, adopted Lee County Resolution No. 96-12-105 which sets forth reduced rates for each one-way trip on the Cape Coral Bridge and the Midpoint Memorial Bridge during off-peak hours when using the Automatic Vehicle Identification System (AVI System) for the duration of the congestion pricing program; and,

WHEREAS, the existing Cape Coral Bridge and the new Midpoint Memorial Bridge were established to function in concert to serve a common transportation corridor between the east and west banks of the Caloosahatchee River (collectively, the "Corridor"); and,

COPY

WHEREAS, on September 23, 1997, the Board adopted Lee County Resolution No. 97-09-53 extending the term for the use of decals for the discount program; and,

WHEREAS, the Board finds and determines that vehicle class, frequency of use and time-of-day of use are a reasonable ~~bases~~ basis for the classification of its tolls; and,

WHEREAS, the Board now finds it appropriate to further amend the Toll Facilities' Resolutions to better serve the public.

NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA, that:

SECTION ONE:

Lee County Resolution Nos. 90-09-26, 90-09-27, 94-08-05, 96-12-105, 97-09-53 and 01-06-58 are hereby amended with language being added indicated by underlining and language being deleted indicated by ~~strike-through~~, as indicated below.

Imposition of Tolls. Commencing on November 1, ~~1997~~ 2004, the following tolls shall be imposed for use of The Bridges.

a. Except as otherwise provided herein, a toll for each one-way trip on the Cape Coral and Midpoint Memorial Bridges shall be paid in accordance with the schedule set forth below:

Vehicle Class	Toll
Motorcycles	$ .50
2 axles, 4 tires	1.00
2 axles, 6 tires	1.00
3 axles	2.00
4 axles	3.00
5 axles	4.00
6 or more axles	1.00 per axle

b. The following commuter discount programs utilizing an AVI device will be available for 2-axle, 4-tire vehicles or 2-axle, 6-tire vehicles only:

i. An annual discount program utilizing an AVI device may be purchased at a cost of $40.00 per vehicle or $20.00 for the second, fourth, sixth, etc., non-commercial vehicle registered to or leased by the same natural person, which when properly installed will entitle such vehicle to use the Cape Coral and Midpoint Memorial Bridges for a period of twelve months commencing on November 1, upon payment of a $0.50 toll to be deducted from a prepaid debit account for each one-way trip across the Bridges.

ii. A semi-annual discount program utilizing an AVI device may be purchased at a cost of $24.00 per vehicle or $12.00 for the second, fourth, sixth, etc., non-commercial vehicle registered to or leased by the same natural person, which when properly installed will entitle such vehicle to use the Cape Coral and Midpoint Memorial Bridges for a period of six months commencing on November 1, or May 1, upon payment of a $0.50 toll to be deducted from a prepaid debit account for each one-way trip across the Bridges.

iii. An annual discount program utilizing an AVI device may be purchased at a cost of $330.00 per vehicle or $165.00 for the second, fourth, sixth, etc., non-commercial vehicle registered to or leased by the same natural person, which when properly installed will entitle such vehicle to use the Cape Coral and Midpoint Memorial Bridges for a period of twelve months commencing on November 1, without further payment. Prorated annual commuter programs will be sold per the following schedule:

Validity Period	Price	Half-Price
December 1 - October 31	$309.00	$155.00
January 1 - October 31	288.00	144.00
February 1 - October 31	267.00	134.00
March 1 - October 31	246.00	123.00
April 1 - October 31	222.00	111.00

iv. A semi-annual discount program utilizing an AVI device may be purchased at a cost of $200.00 per vehicle or $100.00 for the second, fourth, sixth, etc. non-commercial vehicle registered to or leased by the same natural person, which when properly installed will entitle such vehicle to use the Cape Coral and Midpoint Memorial Bridges for a period of six months commencing on November 1, or May 1, without further payment. Prorated semi-annual commuter programs will be available per the following schedule:

Validity Period	Price	Half-Price
December 1 - April 30	$168.00	$84.00
January 1 - April 30	136.00	68.00
February 1 - April 30	104.00	52.00
March 1 - April 30	72.00	36.00
June 1 - October 31	$168.00	$84.00
July 1 - October 31	136.00	68.00
August 1 - October 31	104.00	52.00
September 1 - October 31	72.00	36.00

c. Combination commuter discount programs utilizing an AVI device for use on the Cape Coral, Midpoint Memorial and Sanibel Toll Facilities will be available for 2-axle, 4-wheel vehicles or 2-axle, 6 wheel vehicles only:

i. Annual combination discount programs utilizing an AVI device may be purchased at a cost of ~~$50.00~~ $140.00 per vehicle of ~~$25.00~~ $70.00 for the second, fourth, sixth, etc., non-commercial vehicles registered to or leased by the same natural person, which when properly installed will entitle such vehicle to use the Cape Coral, Midpoint Memorial and Sanibel

Toll facilities for a period of twelve months commencing on November 1, upon the payment of a $0.50 toll deducted from a prepaid debit account at the Cape Coral and Midpoint Memorial Bridges and a $3.00 toll deducted from a prepaid debit account at the Sanibel Toll Facilities.

ii. Semi-annual combination discount programs utilizing an AVI device may be purchased at a cost of ~~$50.00~~ $99.00 per vehicle or ~~$15.00~~ $49.50 for the second, fourth, sixth, etc., non-commercial vehicles registered to or leased by the same natural person, which when properly installed will entitle such vehicle to use the Cape Coral, Midpoint Memorial and Sanibel Toll Facilities for a period of six months commencing on November 1 or May 1 upon payment of a $0.50 toll deducted from a prepaid debit account at the Cape Coral and Midpoint Memorial Bridges and a $3.00 toll deducted from a prepaid debit account at the Sanibel Toll Facilities.

iii. Annual combination discount programs utilizing an AVI device may be purchased at a cost of ~~$380.00~~ $930.00 per vehicle or ~~$190.00~~ $465.00 for the second, fourth, sixth, etc. non-commercial vehicle registered to or leased by the same natural person, which when properly installed, will entitle such vehicle to use the Cape Coral, Midpoint Memorial and the Sanibel Toll Facilities for a period of twelve months commencing on November 1, without further payment. Prorated annual combination commuter programs will be sold per the following schedule:

Validity Period	Price		Half-Price	
December 1 - October 31	~~$355.00~~	$884.00	~~$178.00~~	$442.00
January 1 - October 31	~~330.00~~	838.00	~~165.00~~	419.00
February 1 - October 31	~~304.00~~	792.00	~~152.00~~	396.00
March 1 - October 31	~~279.00~~	746.00	~~140.00~~	373.00
April 1 - October 31	~~253.00~~	697.00	~~127.00~~	349.00

iv. Semi-annual combination discount programs may be purchased at a cost of ~~$250.00~~ $650.00 per vehicle or ~~$115.00~~ $325.00 for the second, fourth, sixth, etc., non-commercial vehicle registered to or leased by the same natural person, which when the AVI device is properly installed will entitle such vehicle to use the Cape Coral, Midpoint Memorial and Sanibel Toll Facilities for a period of six months commencing on November 1 and May 1, without further payment. Prorated semi-annual combination commuter programs will be sold per the following schedule:

Validity Period	Price		Half-Price	
December 1 - April 30	~~$194.00~~	$543.00	~~$97.00~~	$272.00
January 1 - April 30	~~158.00~~	436.00	~~79.00~~	218.00
February 1 - April 30	~~123.00~~	329.00	~~62.00~~	165.00
March 1 - April 30	~~87.00~~	222.00	~~44.00~~	111.00
June 1 - October 31	~~$194.00~~	$543.00	~~$94.00~~	$272.00
July 1 - October 31	~~159.00~~	436.00	~~79.00~~	218.00
August 1 - October 31	~~123.00~~	329.00	~~62.00~~	165.00
September 1 - October 31	~~87.00~~	222.00	~~44.00~~	111.00

d. Except as otherwise provided herein, a full paid toll for each Sanibel bound trip on the Causeway shall be paid in accordance with the schedule set forth below.

Vehicle Class	Toll	
Motorcycles	~~$1.00~~	$ 2.00
2 axles, 4 tires	~~3.00~~	6.00
2 axles, 6 tires	~~3.00~~	6.00
3 axles	~~4.50~~	9.00
4 axles	~~6.00~~	12.00
5 axles	~~7.50~~	15.00
6 or more axles	~~1.50~~ per axle	3.00

No toll shall be charged for a mainland-bound trip on the Sanibel Causeway.

e. The following commuter discount program will be available for 2-axle, 4-tire vehicles or 2-axle, 6-tire vehicles only:

i. An annual discount program utilizing an AVI device may be purchased at a cost of ~~$25.00~~ $100.00 per vehicle of ~~$12.50~~ $50.00 for the second, fourth, sixth, etc., additional non-commercial vehicle registered to or leased by the same natural person which when properly installed will entitle such vehicle to use the Sanibel Causeway for a period of twelve months commencing on November 1, upon payment of a ~~$0.50~~ $3.00 toll deducted from a prepaid debit account for each Sanibel-bound trip on the Sanibel Causeway.

ii. A semi-annual discount program utilizing an AVI device may be purchased at a cost of ~~$15.00~~ $75.00 per vehicle or ~~$7.50~~ $37.50 for the second, fourth, sixth, etc., additional non-commercial vehicle registered to or leased by the same natural person which when properly installed will entitle such vehicle to use the Sanibel Causeway for a period of six months commencing on November 1, or May 1 upon payment of a ~~$0.50~~ $3.00 toll deducted from a prepaid debit account for each Sanibel-bound trip on the Sanibel Causeway.

iii. An annual discount program utilizing an AVI device may be purchased at a cost of ~~$150.00~~ $600.00 per vehicle or ~~$75.00~~ $300.00 for the second, fourth, sixth, etc., non-commercial vehicle registered to or leased by the same natural person, which when properly installed will entitle such vehicle to use the Sanibel Causeway for a period of twelve months commencing on November 1, without further payment. Prorated annual commuter programs will be sold per the following schedule:

Validity Period	Price		Half-Price	
December 1 - October 31	~~$140.00~~	$575.00	~~$70.00~~	$288.00
January 1 - October 31	~~130.00~~	550.00	~~65.00~~	275.00
February 1 - October 31	~~120.00~~	525.00	~~60.00~~	263.00
March 1 - October 31	~~110.00~~	500.00	~~55.00~~	250.00
April 1 - October 31	~~100.00~~	475.00	~~50.00~~	238.00

iv. A semi-annual discount program utilizing an AVI device may be purchased at a cost of ~~$90.00~~ $450.00 per vehicle or ~~$45.00~~ $225.00 for the second, fourth, sixth, etc., non-commercial vehicle registered to or leased by the same natural person, which when properly installed will entitle such vehicle to use the Sanibel Causeway for a period of six months commencing on November 1 or May 1, without further payment. Prorated semi-annual commuter programs will be sold per the following schedule:

Validity Period	Price		Half-Price	
December 1 - April 30	~~$76.00~~	$375.00	~~$38.00~~	$188.00
January 1 - April 30	~~62.00~~	300.00	~~31.00~~	150.00
February 1 - April 30	~~48.00~~	225.00	~~24.00~~	113.00
March 1 - April 30	~~34.00~~	150.00	~~17.00~~	75.00
June 1 - October 31	~~$76.00~~	$375.00	~~$38.00~~	$188.00
July 1 - October 31	~~62.00~~	300.00	~~31.00~~	150.00
August 1 - October 31	~~48.00~~	225.00	~~24.00~~	113.00
September 1 - October 31	~~34.00~~	150.00	~~17.00~~	75.00

f. During the term of the variable pricihg program, a toll for each one-way trip on the Cape Coral and Midpoint Memorial Bridges during off-peak hours when using the automatic vehicle identification system shall be paid in accordance with the schedule set forth below:

Vehicle Class	Off-Peak Hour Toll Payment Without AVI Device*	Off-Peak Hour Toll Payment With AVI Device*
Motorcycles	$ .50	$ .25~~, upon availability~~
2 axles, 4 tires	$1.00	$ .50/.25 (applies to $.25 ~~coin drop~~ pre-paid)
2 axles, 6 tires	$1.00	$ .50/.25 (applies to $.25 ~~coin drop~~ pre-paid)
3 axles	$2.00	$1.00~~, upon availability~~
4 axles	$3.00	$1.50~~, upon availability~~
5 axles	$4.00	$2.00~~, upon availability~~
6 or more axles	$1.00 per axle	$ .50 per axle~~, upon availability~~

*As defined and authorized by Paragraphs 1.b.i., 1.b.ii., 1.c.i. and 1.c.ii., above.

The above rates for off-peak discounted toll travel shall only be available to toll facility travelers who have established a pre-paid account and obtained an officially authorized automatic vehicle identification device. Accommodations for consumers desiring a single payment, annual or semi-annual, discount program, utilizing an AVI device free of a per-trip toll for either the Cape/Midpoint Corridor or with a combination of the Cape/Midpoint Corridor and Sanibel Bridges, shall be continued at the current pricing, but without any additional discounting.

Off-peak hours are currently defined as that time between 6:30 a.m. to 7:00 a.m.; 9:00 a.m. to 11:00 a.m.; 2:00 p.m. to 4:00 p.m.; and 6:30 to 7:00 p.m. Monday through Friday, excluding Memorial Day, Fourth of July, Labor Day, Thanksgiving, Christmas and New Year's Days. The Lee County Director of Public Works shall have the ability to modify the off-peak hours if deemed necessary, upon posting at the facilities of the changes in hours in accordance with §338.01, Florida Statutes. In the event the Fourth of July, Christmas or New Year's Day falls on a Saturday or Sunday, the week-day customarily given as a day off to county employees will be excluded from the definition of off-peak hours and no additional discount in accordance with this schedule will be given.

~~g. From November 1, 1997 should the transponders (AVI devices) not be substantially distributed and operational, any semi-annual and annual decal purchased after April 30, 1997 and October 31, 1996, respectively, will be honored at the toll facilities in Lee County for the various commuter discount programs as outlined in this Resolution, until such time that the transponders (AVI devices) be substantially distributed and operational.~~

~~Upon completion of distributing transponders to all persons taking part in the commuter discount programs, Lee County Division of Transportation will post notice at the facilities that the stickers will no longer be honored at the facilities.~~

SECTION TWO:

This Resolution shall be implemented as of November 1, 2004, however, the effective date that the time-of-day variable tolls as specified in Section One (d) are put into effect at the Cape Coral and Midpoint Memorial Toll Facilities will be determined by the Lee County Division of Transportation, upon posting at the facilities of the change in accordance with Section 338.01, Florida Statutes.

The foregoing Resolution was offered by Commissioner Judah, who moved its adoption. The motion was seconded by Commissioner St. Cerny and, being put to a vote, the vote was as follows:

DOUGLAS ST. CERNY	AYE
BOB JANES	AYE
RAY JUDAH	AYE
ANDREW COY	AYE
JOHN E. ALBION	AYE

DULY PASSED AND ADOPTED this 10th day of August, 2004.

ATTEST:
CHARLIE GREEN, CLERK

By: _____
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

By: _____
Chairman

APPROVED AS TO FORM:

By: _____
Office of County Attorney

S:\GS\RESOLUTION\04-08-60 AMENDING RESOLUTION - TOLL STRUCTURE.wpd

EXHIBIT "D"

IN THE CIRCUIT COURT OF THE TWENTIETH JUDICIAL CIRCUIT
IN AND FOR LEE COUNTY, FLORIDA
CIVIL DIVISION

CITY OF SANIBEL, a municipal corporation,	)	
	)	
Plaintiff,	)	
	)	
vs.	)	**CASE NO.: 04-134-CA-H**
	)	
LEE COUNTY, a political subdivision of the State of Florida, and THE BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, its governing body,	)	
	)	
Defendant.	)	

JOINT STIPULATED MOTION FOR DISMISSAL WITH PREJUDICE

Pursuant to Rule 1.420 of the Florida Rules of Civil Procedure and that certain Settlement Agreement and Release of Claims, dated March ___, 2005, by and between the parties, a copy of which is incorporated herein by reference, the Plaintiff City of Sanibel and Defendant Lee County, Florida, by and through their undersigned counsel, stipulate to the dismissal of this action, including any and all claims and counterclaims asserted herein, with prejudice, with each party to bear its own attorney's and expert fees, costs and other expenses.

By:	By:
CITY OF SANIBEL	**LEE COUNTY, FLORIDA**

ORDER

This matter came before me in Chambers in Ft. Myers, Florida, this _____ day of March 2005, upon the foregoing Stipulation of the parties. Based upon the Stipulation and the attached Settlement Agreement and Release of Claims, I find and conclude that this matter should be and hereby is dismissed with prejudice, with each party to bear its own attorney's and expert fees, costs, and other expenses.

_____

The Honorable Jay B. Rosman
Circuit Court Judge

IN THE CIRCUIT COURT OF THE TWENTIETH JUDICIAL CIRCUIT
IN AND FOR LEE COUNTY, FLORIDA
CIVIL DIVISION

CITY OF SANIBEL, a municipal corporation,	)	
Plaintiff,	)	
vs.	)	**CASE NO.: 04-134-CA-H**
LEE COUNTY, a political subdivision of the State of Florida, and THE BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, its governing body,	)	
Defendant.	)	

SETTLEMENT AGREEMENT AND RELEASE OF CLAIMS
BY AND BETWEEN THE CITY OF SANIBEL AND LEE COUNTY

This Settlement Agreement and Release of Claims (the "Agreement") is entered into this the 1st day of March, 2005 by and between the City of Sanibel ("City") and Lee County, Florida ("County"), who stipulate as follows:

RECITALS

A. WHEREAS, the City and County are parties to an action in the Circuit Court in and for Lee County, Florida, Case No. 04-134-CA-H, the style of which is set forth above (the "Litigation") arising out of or relating to the Sanibel Island Bridge and Causeway (the "Causeway"); and

B. WHEREAS, the parties have determined that settlement of the Litigation is in the best interests of the residents and businesses of the City and the County and will serve to improve the working relationship between the City and County in general, and specifically with regard to the reduction of the current Sanibel Discount Program Fees and Tolls; and

C. WHEREAS, the City and the County have determined to settle all the claims existing between them in the Litigation in accordance with the terms of this Settlement Agreement; and.

D. WHEREAS, the City and County have been parties to an interlocal agreement pertaining to the Causeway for several decades, the most recent of which is entitled the "Amended and Restated Interlocal Agreement," dated June 11, 2002 (the "Interlocal Agreement"), a copy of which is appended hereto as Exhibit A; and

E. WHEREAS, rights and liabilities of the Parties hereto arising under interlocal agreements other than the Interlocal Agreement as defined hereinabove are not affected nor addressed in any way by this Agreement; and

F. WHEREAS, under Section 6 of the Interlocal Agreement, the parties agreed that the County shall remit to the City twenty-one percent (21%) of the Net Revenues, as that term is defined therein, derived from operation of the Causeway; and

G. WHEREAS, as the result of incurring construction and other costs associated with construction of a new Causeway, the County has increased the Tolls and Sanibel Discount Program Fees associated with use of the Causeway (the "Causeway Tolls," as more fully defined below); and

H. WHEREAS, as the result of incurring construction and other costs associated with the construction of the new Causeway, the County has prepared a "Transportation Facilities Financing Model – Sanibel Interlocal Agreement Rebate" ("Financing Model"), a copy of which is appended hereto as Exhibit B; and

I. WHEREAS, the County intends to issue permanent financing for the replacement of the Sanibel Bridges and Causeway in parity with the County's Series 2001A Transportation Facilities Refunding Bonds, as defined in the Interlocal Agreement, with the estimated debt service payments (acknowledged by the parties to be only estimated as of the date of this Agreement, and subject to change) reflected in the "Bonded Debt Service" column of Exhibit "B".

NOW, THEREFORE, in consideration of the covenants by and between the City and the County, as set forth herein, and the sufficiency of each such sum and covenant being hereby acknowledged by the parties, it is agreed:

TERMS AND CONDITIONS OF AGREEMENT

1. The parties acknowledge that the recitals set forth hereinabove are material, are true and correct, and are incorporated herein by reference.

2. Definitions

a. Causeway Tolls – The term "Causeway Tolls" includes the fee charged the motoring public for the vehicular use of the Sanibel Causeway, and for purposes of this Agreement, the term "Causeway Tolls" shall include the following defined terms:

(i) "Sanibel Discount Program Fees", which shall include the cost of all Program Fees as described in Lee County Resolution No. 04-08-60, at Section One, Paragraph c., i, ii, iii and iv, and Paragraph e., i, ii, iii and iv, attached hereto as Exhibit C., on an annual, semi-annual or other basis as part of the Sanibel Discount Program, and the per trip charge applicable to such Sanibel Discount Program.

(ii) "Toll" shall mean the cash fee paid by motorists other than those paying Sanibel Discount Program Fees.

b. Junior Lien or General Loan Fund – The term "Junior Lien or General Loan Fund" means County debt obligation(s) other than bonded debt, and is reflected in the fourth column, "Other Debt Service," on Exhibit B. The County currently anticipates that this Junior Lien or General Loan Fund will be substantially retired in 2010 and completely retired by 2012.

c Surplus Toll Revenues – For the purposes of this Agreement only, "Surplus Toll Revenues" shall mean the "Gross Revenues" less the principal "Causeway Debt Service Requirement", "Additional Obligations", "Operating Expenses", "Renewal and Replacement Costs", and "Subordinated Indebtedness" for the 2001A Transportation Refunding Revenue Bonds, as all such terms are defined in the Interlocal Agreement, except that the term "Transportation Facility" shall mean the Causeway as defined hereinabove.

3. The Parties to this Agreement hereby expressly covenant and agree, for themselves and all who might make claim by and through them, to discontinue and dismiss with prejudice all actions, claims, counterclaims, suits and proceedings, including the Litigation, which are now pending by and between them with respect to the Causeway and/or the Interlocal Agreement, upon full payment of the sum set forth in paragraph No. 4 below, and do further expressly covenant and agree not to institute, reinstate or prosecute any action, cause of action, claim, cross-claim, counterclaim, proceeding or suit among or between them, whether sounding in tort, in contract, or otherwise for any loss or damage suffered by them and all who might make claim through them on account of the Causeway and/or the Interlocal Agreement or any matters related thereto. Each Party shall utilize its best efforts to seek the approval of the Circuit Court for a Joint Stipulated Motion for Dismissal With Prejudice and "Order," which is appended

hereto as Exhibit D. Each Party shall bear its own attorney's and expert fees, costs, and other expenses.

4. Lee County shall release to the City, the Surplus Toll Revenues which were otherwise due and payable to the City on November 1, 2004, in the sum of Two Hundred Two Thousand Seven Hundred Ninety-Four and 85/100 Dollars ($202,794.85) within ten (10) business days after the final execution of this Agreement. The City agrees to use same solely for reducing the Sanibel Discount Program Fees consistent with the terms of Paragraph no. 5.a. below.

5. Effective for all Surplus Toll Revenues collected and otherwise available as of October 1, 2004, the City and the County agree to contribute One Hundred Percent (100%) of their respective shares of the Surplus Toll Revenues for the following purposes:

a. The City shall contribute its 21% pro rata share of the Surplus Toll Revenues to which it is entitled under the terms of the Interlocal Agreement for the sole purpose of reducing the Sanibel Discount Program Fees for the Causeway so long as the County contributes its 79% pro rata share as described in Paragraph 5.b below. Notwithstanding the foregoing, and to the extent that the Surplus Toll Revenues must be utilized to retire the Junior Lien Debt or General Fund Loan in order to reduce the Sanibel Discount Program Fees, then to such extent the City contributes the same percentage of its pro rata share as is contributed by the County, with the remainder of its share pledged to the reduction of the Sanibel Discount Program Fees as described above.

b. The County shall contribute the entirety of its 79% pro rata share of the Sanibel Surplus Toll Revenues to which it is entitled under the terms of the Interlocal Agreement for the sole purpose of reducing the Sanibel Bridges Replacement and Toll Facility Project with

associated Sanibel Discount Program Fees and Causeway Tolls, until such time as the Junior Lien Debt or General Fund Loan is paid in full.

6. With respect to the issuance of the County's permanent bonded financing for the Project, the Parties recognize and acknowledge that the market conditions existing at the time of the bond sale, including but not limited to the prime interest rate, the bond ratings established by independent agencies, the relative strength or weakness of the bond market, and other financial variables are all conditions which are beyond the control of the County and make it impossible for the County to definitively agree upon a specific amount of decrease in the Sanibel Discount Program Fees. Nevertheless, it is the County's intention to utilize its best efforts to reduce such fees by at least thirty percent (30%) if market conditions existing at the time of the bond sale can sustain such percentage. The timing of the reduction shall be predicated on the timing of the sale of the County's bonds.

7. The County agrees to utilize its best efforts to establish amounts and schedules which shall result in the substantial retirement of the Junior Lien Debt or General Loan Fund in 2010, with final retirement of the same in 2012. After initial establishment of the amount of the Junior Lien or General Loan Fund, no additional sums shall be added to this class of debt service.

8. Upon the full retirement of the Junior Lien Debt or General Loan Fund, the County shall employ at its expense a Traffic and Revenue consultant to review the toll structure to ensure there are sufficient revenues to comply with the existing bond covenants. Said consultant shall exercise due diligence in reviewing and certifying its review. Within one year of the completion of the consultant's review and certification, the County shall consider possible additional reductions in the toll structure and shall perform an assessment of the Surplus Toll

Revenues for each Party. Under no circumstances shall the Surplus Toll Revenues be disbursed to only one of the Parties to this Agreement. Upon any such distribution, the Surplus Toll Revenues shall be used by the Parties for any lawful transportation purpose, as may be authorized by then existing law. In 2009, the Parties shall meet and negotiate in good faith, certain amendments to the "Interlocal Agreement" as defined herein, in conjunction with revisions to that certain Sanibel/Lee County Local Option Gas Tax distribution Interlocal Agreement as entered into by the Parties on May 31, 1989.

9. Subject to applicable laws relating to public hearings and other requirements of the laws of the State of Florida, the Parties will utilize their best efforts to amend and restate the Interlocal Agreement to reflect the above terms and conditions, effectuating the purposes of the Interlocal Agreement to the extent they are not inconsistent herewith.

10. Unless this Agreement is materially breached by the County, the City agrees that it will not bring any action or cause of action against the County or any other entity, nor will it take any action, formal or informal, which would be intended to adversely affect the County's ability to obtain permanent financing, in the form of the issuance of bonds or otherwise, for the Sanibel Bridges Replacement and Toll Facility Project.

11. The Parties acknowledge and agree that dates, assumptions and estimated costs set forth hereinabove and in Exhibit B are expressly contingent upon the Causeway not being subjected to an intervening Act of God or other natural disaster which render the projected performance of either Party as set forth herein or in Exhibit B, commercially impracticable.

12. The City hereby releases and forever discharges the County and its employees, officers, commissioners, agents, attorneys, and successors of and from all claims, demands, and causes of action of any kind and nature, whether known or unknown, in law or in equity, arising

out of or related to the Interlocal Agreement, including but not limited to the claims asserted in the Litigation and any and all such additional claims as could have been asserted in the Litigation.

13. The County hereby releases and forever discharges the City and its employees, officers, councilmen and councilwomen, agents, attorneys, and successors of and from all claims, demands, and causes of action of any kind and nature, whether known or unknown, in law or in equity, arising out of or related to the Interlocal Agreement, including but not limited to the claims asserted in the Litigation and any and all such additional claims as could have been asserted in the Litigation.

14. It is understood and agreed that the making and execution of this Agreement by the Parties hereto and the exchange of consideration reflected herein is not intended to be and shall not be construed as an admission of liability on the part of anyone or any entity, but is made and exchanged in settlement of disputed claims for the reasons set forth in the recitals and to avoid the expense of continuing litigation by the governmental bodies herein.

15. Each Party represents that the individual whose signature appears below on its behalf has full power and authority to execute this Agreement on its behalf, and that such authority is derived by virtue of that individual's office.

16. The Parties represent that they have not sold, assigned, granted or transferred to any person, corporate or natural, any claim, action, demand or cause of action which is released by this Agreement.

17. This Agreement is the result of negotiations among and between the City and the County, and each has had the opportunity to modify the drafting of this Agreement. Each Party

acknowledges that neither it nor anyone acting on its behalf is relying upon any statement, representation or promise (other than those set forth herein) made by or on behalf of any other Party but that, in agreeing to the settlement and in executing this Agreement, it is relying solely upon the results of its own investigation and knowledge and those of its own attorneys, agents, and employees and in reliance upon legal advice of counsel of its own selection, and not upon the legal advice of any other Party or that Party's attorneys.

18. The Parties agree that this Agreement shall be interpreted and construed in accordance with Florida law.

19. The Parties acknowledge and agree that this Agreement may be executed in counterparts, and that it shall be binding in all respects upon and inure to the benefit of the Parties, their legal representatives, successors, and duly approved assigns.

20. In the event that an action is commenced to enforce or interpret this Agreement, the Court may award attorneys' fees, costs and litigation expenses to the prevailing Party.

21. This Agreement must be signed and the Joint Stipulated Motion for Dismissal With Prejudice and Order appended hereto as Exhibit D must be executed and filed on or before the close of business on March 1, 2005; otherwise this Agreement shall be void and of no force and effect.

[BALANCE OF PAGE LEFT INTENTIONALLY BLANK][

LEE COUNTY, FLORIDA

By:_____
DOUGLAS R. ST. CERNY
CHAIRMAN, BOARD OF COUNTY
COMMISSIONERS OF LEE COUNTY

Attest: Charlie Green
Clerk of the Circuit Court
Lee County, Florida

By:_____
Deputy Clerk

_____
APPROVED AS TO FORM
DAVID OWEN
COUNTY ATTORNEY

BOARD OF COUNTY COMMISSIONERS
SEAL
LEE COUNTY, FLORIDA

CITY OF SANIBEL, FLORIDA

By:_____
MARTY HARRITY
MAYOR

Attest: City Clerk
City of Sanibel

By:_____

_____
APPROVED AS TO FORM
KENNETH CUYLER
CITY ATTORNEY

EXHIBIT C

****EXHIBIT C****

Lee County, FloridaTransportation Facilities Financing Model

Estimated Sanibel Surplus

Exhibit B - UPDATED

YEAR	Net Revenues	Less Bonded Debt Service	Other Debt Service - C				R&R Fund	Surplus Toll Revenues	21% Rebate	Residual Net Rev
	A	B	FDOT (1)	CP/GF Loan (2)	Interest (3)	Other Pmt (4)	D	E	F	G
2005	12,106,066	1,822,966	-	3,600,000	574,552	-	5,152,337	**956,211**	N/A	956,211
2006	9,765,210	4,565,203	166,178	4,000,000	807,050	1,544,211	547,168	**(1,864,600)**	N/A	(1,864,600)
2007	10,102,379	4,593,484	166,178	188,000	1,351,653	3,100,000	648	**702,416**	N/A	702,416
2008	10,714,060	4,006,484	666,178	834,000	782,266	1,117,975	12,258	**3,294,899**	N/A	3,294,899
2009	10,196,746	4,027,910	966,178	5,556,931	519,623	-	17,988	**(891,884)**	N/A	(891,884)
2010	10,260,333	4,031,089	966,178	9,372,879	88,560	(1,794,910)	100,673	**(2,504,136)**	N/A	(2,504,136)
2011	11,067,666	4,565,179	300,000	5,556,838	43,078	0	77	**602,494**	N/A	602,494
2012	10,771,815	4,542,031	300,000	5,191,352	31,472	0	20,262	**686,698**	N/A	686,698
2013	*10,186,870*	*4,761,136*	*0*	*4,265,185*			*375,000*	***785,549***	N/A	*785,549*
2014	*9,255,046*	*4,760,902*	*0*	*1,934,815*			*48,480*	***2,510,849***	*527,278*	*1,983,571*
2015	*9,481,162*	*4,759,067*	*0*	*0*			*48,480*	***4,673,615***	*981,459*	*3,692,156*
2016	*9,481,586*	*4,761,169*	*0*	*0*			*48,480*	***4,671,937***	*981,107*	*3,690,830*
2017	*9,481,803*	*4,759,570*	*0*	*0*			*48,480*	***4,673,753***	*981,488*	*3,692,265*
2018	*9,467,331*	*4,866,140*	*0*	*0*			*48,480*	***4,552,711***	*956,069*	*3,596,642*

A Net Revenues are causeway gross revenues (all monies received by the County from tolls) LESS operating and maintenance costs

B Senior debt obligation to construct new Causeway plus 2001A Transportation Facilities Refunding Bond and 2011 Suntrust loan used to refund 2001A Bond

C Other Debt services is Junior Lien or General Fund County debt obligations(s) **other** than bonded debt

1 - FDOT borrowings considered part of Junior Lien

2 - Commercial paper and general fund loans considered part of Junior Lien

3 - Interest accrued and paid on the Junior Lien debt

4 - FY 2006, 2007 and 2008 deductions of $5,762,186 deduction for funds used for the Bridge Project

D Repairs and Replacement fund must maintain a balance equivalent to 5% of gross revenues.

E Surplus Toll Revenues - Gross Revenues less the principal Causeway Debt, Additional Obligations, Operating Expenses, Renewal & Replacement Costs and subordinated indebtedness A -(B+C+D)

F 21% of toll surplus revenue (Column E) as per the interlocal agreement due to Sanibel

G 79% of toll surplus reveneu (Column E) as per the interlocal agreement due to Lee County

EXHIBIT D

PROFESSIONAL SERVICES AGREEMENT

This PROFESSIONAL SERVICES AGREEMENT is made and entered into this 7th day of January, 20 ~~02,~~ 03 between the Board of County Commissioners of LEE COUNTY, a political subdivision of the STATE OF FLORIDA hereinafter referred to as the "COUNTY", and HARDESTY & HANOVER, LLP hereinafter referred to as the "CONSULTANT".

WITNESSETH

WHEREAS, the COUNTY desires to obtain the professional _ENGINEERING services of said CONSULTANT to provide and perform professional services as further described hereinafter concerning the Project to be referred to and identified as:

Repair and Rehabilitation Structure A (Bridge No. 124043),

And

WHEREAS, the CONSULTANT hereby certifies that CONSULTANT has been granted and possesses valid, current licenses to do business in the State of Florida and in Lee County, Florida, issued by the respective State Boards and Government Agencies responsible for regulating and licensing the professional services to be provided and performed by the CONSULTANT pursuant to this Agreement; and

WHEREAS, the CONSULTANT has reviewed the professional services required pursuant to this Agreement and is qualified, willing and able to provide and perform all such services in accordance with the provisions, conditions and terms hereinafter set forth; and

WHEREAS, the selection and engagement of the CONSULTANT has been made by the COUNTY in accordance with the provisions of the Consultants' Competitive Negotiation Act, Chapter 287.055, Florida Statutes, and in accordance with the provisions of the Lee County Contract Manual for Professional Services as approved and put into effect by the Lee County Board of County Commissioners, September 25, 2001, and as subsequently revised.

NOW, THEREFORE, in consideration of the mutual covenants, terms and provisions contained herein, the parties hereto agree that with the mutual acceptance of this Agreement as indicated hereinafter by the execution of this Agreement by both parties that a Contract shall exist between both parties consisting of:

ARTICLE 1.00 – SCOPE OF PROFESSIONAL SERVICES

CONSULTANT hereby agrees to provide and perform the professional services required and necessary to complete the services and work as set forth EXHIBIT "A", entitled "SCOPE OF PROFESSIONAL SERVICES", which EXHIBIT "A" is attached hereto and made a part of this Agreement.

ARTICLE 2.00 – DEFINITIONS

The following definition of terms associated with this Agreement is provided to establish a common understanding between both parties to this Agreement as to the intended usage, application, and interpretation of such terms pertaining to this Agreement.

2.01 COUNTY

The term COUNTY shall refer to the Board of County Commissioners of Lee County, a political subdivision of the State of Florida, and any official and/or employees thereof who shall be duly authorized to act on the COUNTY'S behalf relative to this Agreement.

2.02 CONSULTANT

The term CONSULTANT shall refer to the individual or firm offering professional services which by execution of this Agreement shall be legally obligated, responsible, and liable for providing and performing any and all of the services, work and materials, including services and/or work of sub-consultants and subcontractors, required under the covenants, terms and provisions contained in this Agreement and any and all Change Orders thereto.

2.03 PROFESSIONAL SERVICES

The term PROFESSIONAL SERVICES shall refer to all of the services, work, materials and all related professional, technical and administrative activities which are necessary to be provided and performed by the CONSULTANT and its employees and any and all sub-consultants and subcontractors the CONSULTANT may engage to provide, perform and complete the services required pursuant to the covenants, terms and provisions of this Agreement.

2.04 SUB-CONSULTANT

The term SUB-CONSULTANT shall refer to any individual or firm offering professional services which is engaged by the CONSULTANT to assist the CONSULTANT in providing and performing the professional services, work and materials for which the CONSULTANT is contractually obligated, responsible and liable to provide and perform under this Agreement. The COUNTY shall not be a party to, responsible or liable for, or assume any obligation whatever for any Agreement entered into between the CONSULTANT and any SUB-CONSULTANT.

2.05 SUBCONTRACTOR

The term SUBCONTRACTOR shall refer to any individual, company or firm providing other than professional services which is engaged by the CONSULTANT to assist the CONSULTANT in providing and performing services, work and materials for which the CONSULTANT is contractually obligated, responsible, and liable to provide and perform under this Agreement. The COUNTY shall not be a party to, responsible or liable for, or assume any obligation whatever for any Agreement entered into between the CONSULTANT and any SUBCONTRACTOR.

2.06 PROJECT

The term PROJECT shall refer to such facility, system, program or item as described in the summary statement set forth in the Preamble on Page One of this Agreement.

2.07 BASIC SERVICES

The term BASIC SERVICES shall refer to the professional services set forth and required pursuant to this Agreement and as described in further

detail in the attached EXHIBIT "A", entitled "SCOPE OF PROFESSIONAL SERVICES", which EXHIBIT "A" is attached hereto and made a part of this Agreement.

2.08 ADDITIONAL SERVICES

The term ADDITIONAL SERVICES shall refer to such professional services as the COUNTY may request and authorize, in writing, the CONSULTANT to provide and perform relative to this Agreement which are not included in the BASIC SERVICES. Additional services shall be authorized by the execution of both parties to this Agreement by a Change Order Agreement.

2.09 CHANGE ORDER

The term CHANGE ORDER shall refer to a written document, CHANGE ORDER AGREEMENT, executed by both parties to this Agreement setting forth and authorizing changes to the agreed upon Scope of Professional Services and Tasks, Compensation and Method of Payment, Time and Schedule of Performance, or Project Guidelines and Criteria as such were set forth and agreed to in the initial AGREEMENT, SUPPLEMENTAL TASK AUTHORIZATION(S), or previous CHANGE ORDERS issued thereto. The CHANGE ORDER document, which shall be executed on a Lee County standard form, shall set forth the authorized changes to the: scope of professional services, tasks, work or materials to be performed or provided by the CONSULTANT; the compensation and method of payment; the schedule or time period for performance and completion, and the guidelines, criteria and requirements pertaining thereto.

The amount of the change in contract compensation and time set forth in any and all Change Orders executed and issued under this Agreement shall be understood and agreed by both Parties to this Agreement to be fair, equitable, adequate and complete. The changed compensation shall be understood and agreed to be the total of all costs associated with or impacted by the Change Order including, but not limited to any and all direct costs, indirect costs and associated costs which may result from or be caused by the Change Order, and shall be understood and agreed to include a fair, equitable and adequate adjustment to cover the CONSULTANT'S general administrative and overhead costs and profit.

In the event the County decides to delete all, or portions, of the Scope of Services, Task(s), or Requirements set forth in the initial Agreement, Supplemental Task Authorizations or previously authorized Change Orders, the COUNTY may do so by the unilateral issuance of a written Change Order to the CONSULTANT. Such a unilaterally issued Change Order shall set forth, if appropriate, (1) an agreement by both the COUNTY and the CONSULTANT establishing changes in the amount of compensation to be paid the CONSULTANT as a result of the deletion or decrease in services required, or (2) in the absence of such an agreement concerning compensation, the unilaterally issued Change Order shall set forth the basis to be used in subsequently considering, and reaching agreement on change(s) in the compensation to be paid the CONSULTANT. The failure on the part of the CONSULTANT to execute a Change Order issued unilaterally by the COUNTY to effect a deletion or decrease in the services required shall have no effect on, or otherwise prevent the COUNTY from exercising its rights to direct the stated deletion or decrease in the services to be provided or performed by the CONSULTANT.

2.10 SUPPLEMENTAL TASK AUTHORIZATION

The term Supplemental Task Authorization as used refers to a written document executed by both parties to an existing Professional Services Agreement, or Service Provider Agreement, setting forth and authorizing a limited number of Professional Services, tasks, or work. Such Supplemental Task Authorizations are consistent with and have previously been included within the scope of services in the initial Professional Services Agreement, or Service Provider Agreement, for which authorization has not been previously given or budgeted.

2.11 DEPARTMENT DIRECTOR

The term DEPARTMENT DIRECTOR shall refer to the Director of the Department requesting the service, employed by the Lee County Board of County Commissioners to serve and act on the COUNTY'S behalf, as it relates to this Project. The Chairman of the Board of County Commissioners, or his designated representative, shall act on behalf of the COUNTY to execute any and all CHANGE ORDER(S) or SUPPLEMENTAL TASK AUTHORIZATION(S) approved by the COUNTY and issued to the CONSULTANT pursuant to this Agreement. The DEPARTMENT DIRECTOR, within the authority conferred by the Board of County Commissioners, acting as the COUNTY'S designated representative shall issue written notification to the CONSULTANT of any and all changes approved by the COUNTY in the CONSULTANT'S: (1) compensation (2) time and/or schedule of service delivery; (3) scope of services; or other change(s) relative to BASIC SERVICES and ADDITIONAL SERVICES pursuant to this Agreement, or CHANGE ORDER(S) or SUPPLEMENTAL TASK AUTHORIZATION(S) pertaining thereto. The DEPARTMENT DIRECTOR shall be responsible for acting on the COUNTY'S behalf to administer, coordinate, interpret and otherwise manage the contractual provisions and requirements set forth in this Agreement, CHANGE ORDER(S), or SUPPLEMENTAL TASK AUTHORIZATION(S) issued thereunder.

2.12 PROJECT MANAGER

The term PROJECT MANAGER shall refer to the person employed or retained by the COUNTY and designated, in writing, to serve and act on the COUNTY'S behalf to provide direct contact and communication between the COUNTY and CONSULTANT with respect to providing information, assistance, guidance, coordination, review, approval and acceptance of the professional services, work and materials to be provided and performed by the CONSULTANT pursuant to this Agreement and such written SUPPLEMENTAL TASK AUTHORIZATION(S) and CHANGE ORDER(S) as are authorized. The PROJECT MANAGER is not authorized to, and shall not, issue any verbal, or written, request or instruction to the CONSULTANT that would have the effect, or be interpreted to have the effect, of modifying or changing in any way whatever the: (1) Scope of Services to be provided and performed by the CONSULTANT; (2) The time the CONSULTANT is obligated to commence and complete all such services; (3) The amount of compensation the COUNTY is obligated or committed to pay the CONSULTANT. The PROJECT MANAGER shall review and make appropriate recommendations on all requests submitted by the CONSULTANT for payment for services and work provided and performed, and reimbursable costs and expense, as provided for in this Agreement and approved CHANGE ORDER(S),or SUPPLEMENTAL TASK AUTHORIZATION(S) thereto.

2.13 LUMP SUM FEE(S)

Lump Sum Fee(s), hereinafter identified as L.S., are understood and agreed to include all direct and indirect labor costs, personnel related costs, overhead and administrative costs, costs of sub-consultant(s) and/or

subcontractor(s), out-of-pocket expenses and costs, professional service fee(s) and any other costs or expenses which may pertain to the services and/or work to be performed, provided and/or furnished by the Consultant as may be required and/or necessary to complete each and every task set forth in the Scope of Professional Services, Exhibit "A", or as may be set in subsequent Supplemental Task Authorizations, and/or Change Orders agreed to in writing by both parties to this Agreement.

2.14 NOT-TO-EXCEED FEE(S)

When all, or any portion, of the CONSULTANT'S compensation to provide and perform the services and work necessary and required pursuant to the Tasks set forth in Agreement Exhibit "A", and any Change Orders, Supplemental Task Authorizations, and Work Orders authorized thereto, is established to be made on a NOT-TO-EXCEED (N.T.E.) amount basis, it is mutually understood and agreed that such compensation for each completed Task shall be made on the following basis:

For the actual hours necessary, required and expended by the CONSULTANT'S professional and technical personnel, multiplied by the applicable hourly rates for each classification or position as set forth in Attachment No. 1 to Exhibit "B" to the above referenced Agreement and any Change Orders or Supplemental Task Authorizations authorized thereto; and

For the actual necessary, required and expended non-personnel reimbursable expenses and costs, multiplied by the applicable "Basis of Charges" for each item as set forth in Attachment No. 2 to Exhibit "B" to the above referenced Agreement and any Change Orders or Supplemental Task Authorizations authorized thereto; and

For the actual, necessary and required hours, and non-personnel expenses and costs, expended by Sub-Consultants and SubContractors engaged by the CONSULTANT, multiplied by such hourly rates and unit costs as are agreed to by the COUNTY and the CONSULTANT and as are set forth as a part of the above referenced Agreement and any Change Orders or Supplemental Task Authorizations authorized thereto; and

With the understanding and agreement that the COUNTY shall pay the CONSULTANT for all such costs and expenses within the established Not-to-Exceed amount for each Task or Sub-Task subject to the CONSULTANT presenting an itemized and detailed invoice with appropriate supporting documentation attached thereto to show evidence satisfactory to the COUNTY covering all such costs and expenses; and

With the understanding and agreement that the CONSULTANT'S invoices and all payments to be made for all Not-to-Exceed amounts shall be subject to the review, acceptance and approval of the COUNTY; and
With the understanding and agreement that when the CONSULTANT'S compensation is established on a Not-to-Exceed basis for a specific Task(s) or Sub-Task(s) the total amount of compensation to be paid the CONSULTANT to cover all personnel costs, non-personnel reimbursable expenses and costs, and Sub-Consultant and SubContractor costs for any such specific Task(s) or Sub-Task(s) shall not exceed the amount of

the total Not-to-Exceed compensation established and agreed to for each specific Task(s) or Sub-Task(s). In the event the amount of compensation for any Task(s) or Sub-Task(s) to which the CONSULTANT is entitled on the Not-to-Exceed basis set forth above is determined to be necessary, required and actually expended and is determined to be actually less than the Not-to-Exceed amount established for the specific Task or Sub-Task, it is understood and agreed that any unexpended amount under a specific Task or Sub-Task may not be used, applied, transferred, invoiced or paid for services or work provided or performed on any other Task(s) or Sub-Task(s).

ARTICLE 3.00 - OBLIGATIONS OF THE CONSULTANT

The obligations of the CONSULTANT with respect to all the BASIC SERVICES and ADDITIONAL SERVICES authorized pursuant to this Agreement shall include, but not be limited to, the following:

3.01 LICENSES

The CONSULTANT agrees to obtain and maintain throughout the period this Agreement is in effect all such licenses as are required to do business in the State of Florida and in Lee County, Florida, including, but not limited to, licenses required by the respective State Boards and other governmental agencies responsible for regulating and licensing the professional services provided and performed by the CONSULTANT pursuant to this Agreement.

3.02 PERSONNEL

(1) QUALIFIED PERSONNEL

The CONSULTANT agrees when the services to be provided and performed relate to a professional service(s) which, under Florida Statutes, requires a license, certificate of authorization or other form of legal entitlement to practice such services, to employ and/or retain only qualified personnel to be in responsible charge of all BASIC SERVICES and ADDITIONAL SERVICES to be provided pursuant to this Agreement.

(2) CONSULTANT'S PROJECT DIRECTOR

The CONSULTANT agrees to employ and designate, in writing, a qualified and, if required by law, a licensed professional to serve as the CONSULTANT'S Project Director. The CONSULTANT'S Project Director shall be authorized and responsible to act on behalf of the CONSULTANT with respect to directing, coordinating and administering all aspects of the services to be provided and performed under this Agreement thereto. The CONSULTANT'S Project Director shall have full authority to bind and obligate the CONSULTANT on any matter arising under this Agreement unless substitute arrangements have been furnished to the COUNTY in writing. The CONSULTANT agrees that the Project Director shall devote whatever time is required to satisfactorily direct,

supervise and manage the services provided and performed by the CONSULTANT throughout the entire period this Agreement is in effect. The person selected by the CONSULTANT to serve as the CONSULTANT'S Project Director shall be subject to the prior approval and acceptance of the COUNTY.

(3) REMOVAL OF PERSONNEL

The CONSULTANT agrees, within thirty (30) calendar days of receipt of a written request from the COUNTY, to promptly remove and replace the CONSULTANT'S Project Director, or any other personnel employed or retained by the CONSULTANT, or personnel of the sub-consultant(s) or subcontractor(s) engaged by the CONSULTANT to provide and/or perform services and/or work pursuant to the requirements of this Agreement, who the COUNTY shall request, in writing, be removed, which request may be made by the COUNTY with or without cause.

3.03 TIMELY ACCOMPLISHMENT OF SERVICES

The timely performance and completion of the required services, work and materials is vitally important to the interests of the COUNTY. Time is of the essence for all of the duties and obligations contained in this Agreement thereto. The COUNTY may suffer damages in the event that the CONSULTANT does not accomplish and complete the required services in a timely manner. The CONSULTANT agrees to employ, engage, retain and/or assign an adequate number of personnel throughout the period of this Agreement so that all BASIC SERVICES and ADDITIONAL SERVICES will be provided, performed and completed in a timely and diligent manner throughout.

3.04 STANDARDS OF PROFESSIONAL SERVICE

The work and/or services to be provided and/or performed by the CONSULTANT and by any Sub-Consultant(s) and/or SubContractor(s) engaged by the CONSULTANT as set forth in the Scope of Professional Services, Exhibit "A", shall be done in accordance with the generally accepted standards of professional practice and in accordance with the laws, rules, regulations, ordinances, codes, policies, standards or other guidelines issued by those governmental agencies which have jurisdiction over all or a portion of this project and which are in effect at the time the COUNTY approves this Agreement, or which may subsequently be changed or revised. Any subsequent change or revision to such laws, rules, regulations, ordinances, codes, policies, standards or other guidelines which requires the CONSULTANT to provide and/or perform work and/or services which are significantly different from that set forth in the Scope of Professional Services, Exhibit "A", shall serve as a basis for the COUNTY to consider the development and issuance of a Change Order to provide for a change to, or Additional Services to the services set forth in the Agreement.

3.05 CORRECTION OF ERRORS, OMISSIONS OR OTHER DEFICIENCIES

(1) RESPONSIBILITY TO CORRECT

The CONSULTANT agrees to be responsible for the professional quality,

technical adequacy and accuracy, timely completion, and the coordination of all data, studies, surveys, designs, specifications, calculations, estimates, plans, drawings, construction documents, photographs, reports, memoranda, other documents and instruments, and other services, work and materials performed, provided, and/or furnished by CONSULTANT or by any sub-consultant(s) and/or subcontractor(s) retained or engaged by the CONSULTANT pursuant to this Agreement. The CONSULTANT shall, without additional compensation, correct or revise any errors, omissions or other deficiencies in such data, studies, surveys, designs, specifications, calculations, estimates, plans, drawings, construction documents and instruments, and other services, work and materials resulting from the negligent act, errors or omissions or intentional misconduct of CONSULTANT or any sub-consultant(s) or subcontractor(s) engaged by the CONSULTANT.

(2) COUNTY'S APPROVAL SHALL NOT RELIEVE CONSULTANT OF RESPONSIBILITY

Neither review, approval, or acceptance by the COUNTY of data, studies, surveys, designs, specifications, calculations, estimates, plans, drawings, construction documents, photographs, reports, memoranda, other documents and instruments, and incidental professional services, work and materials furnished hereunder by the

(3) COUNTY'S APPROVAL SHALL NOT RELIEVE CONSULTANT OF RESPONSIBILITY (Continued)

CONSULTANT, or any sub-consultant(s) or subcontractor(s) engaged by the CONSULTANT, shall in any way relieve CONSULTANT of responsibility for the adequacy, completeness and accuracy of its services, work and materials and the services, work and materials of any and all sub-consultants and/or subcontractors engaged by the CONSULTANT to provide and perform services in connection with this Agreement. Neither the COUNTY'S review, approval or acceptance of, nor payment for, any of the CONSULTANT'S services, work and materials shall be construed to operate as a waiver of any of the COUNTY'S rights under this Agreement, or any cause of action it may have arising out of the performance of this Agreement.

3.06 LIABILITY

(1) CONSULTANT TO HOLD COUNTY HARMLESS

The CONSULTANT shall be liable and agrees to be liable for and shall indemnify and hold the COUNTY harmless for any and all claims, suits, judgements or damages, losses and expenses including court costs and attorney's fees arising out of the CONSULTANT'S errors, omissions, and/or negligence, or those of any and all sub-consultants and/or subcontractors engaged by the CONSULTANT during the providing, performing and furnishing of services, work and materials pursuant to this Agreement and any and all Change Orders, Supplemental Task Authorizations thereto. The CONSULTANT shall not be liable to nor indemnify the COUNTY for any portions of damages arising out of any error, omission, and/or negligence of the COUNTY, its employees, agents, or representatives or third parties. The CONSULTANT hereby

acknowledges that the compensation to be paid the CONSULTANT by the COUNTY as set forth in Agreement Exhibit "B" entitled "COMPENSATION AND METHOD OF PAYMENT" includes compensation as consideration for the indemnification provided herein.

3.07 NOT TO DIVULGE CERTAIN INFORMATION

CONSULTANT agrees, during the term of this Agreement, not to divulge, furnish or make available to any third person, firm, or organization, without COUNTY'S prior written consent, or unless incident to the proper performance of CONSULTANT'S obligations hereunder, or in the course of judicial or legislative proceedings where such information has been properly subpoenaed, any non-public information concerning the services to be rendered by CONSULTANT or any sub-consultant(s) or subcontractor(s) pursuant to this Agreement. CONSULTANT shall require all of its employees, sub-consultant(s) and subcontractor(s) to comply with the provisions of this paragraph.

3.08 CONSULTANT TO REPAIR PROPERTY DAMAGE CAUSED BY THE CONSULTANT

CONSULTANT agrees to promptly repair and/or replace, or cause to have repaired and/or replaced, at its sole cost and expense and in a manner acceptable to and approved by the COUNTY, any property damage arising out of, or caused by, the willful or negligent acts of the CONSULTANT, or of its sub-consultants and/or subcontractors. This CONSULTANT'S obligation under this sub-article does not apply to property damage caused by any other Consultant or Contractor engaged directly by the COUNTY.

3.09 CONSULTANT TO REPAIR PROPERTY DAMAGE CAUSED BY THE CONSULTANT (Continued)

The COUNTY reserves the right, should the CONSULTANT fail to make such repairs and/or replacement within a reasonable period of time, to cause such repairs and/or replacement to be made by others and for all costs and expenses associated with having such repairs and/or replacement done to be paid for by the CONSULTANT, or by the CONSULTANT reimbursing the COUNTY for all such costs and expenses.

3.10 RESPONSIBILITY FOR ESTIMATES

(1) In the event the services required pursuant to this Agreement include the CONSULTANT preparing and submitting to the COUNTY, cost estimates, the CONSULTANT, by exercise of his experience, effort, knowledge and judgment, shall develop such cost estimates as are set forth in, or as may be required under the Agreement and shall be held accountable, responsible and liable for the accuracy, completeness, and correctness of any and all such cost estimates. For purposes of the Liability Provisions of this Article only, the CONSULTANT'S estimate(s) shall be considered valid and effective for a period of six (6) months from the date of the COUNTY'S acceptance of the estimate(s).

(2) The cost estimates of CONSULTANTS or SUB-CONSULTANTS engaged by CONSULTANTS, for the appraisal or valuation of property or

easements, or the estimate of damages or costs associated with the acquisition of property or easements are exempted from the provisions of Article 3.09.

(3) Cost Estimates

(A) ORDER OF MAGNITUDE ESTIMATE

This is an approximate estimate made without detailed architect/engineering data. Examples include, but are not limited to, an estimate from cost-capacity curves, an estimate using scale-up or scale-down factors, and an approximate ratio estimate. This type of estimate shall be accurate within plus fifty percent (50.0%). If the bids, as described above, fail to meet this prescribed accuracy, the cost associated with the preparation and development of the ORDER OF MAGNITUDE ESTIMATE shall be recoverable by the COUNTY.

(B) BUDGET ESTIMATE

Budget in this case applies to the COUNTY'S budget and not to the budget as a project controlled document. A budget is prepared with the use of flowsheets, layouts, and equipment details. This type of estimate shall be accurate within plus twenty-five percent (25.0%). If the bids, as described above, fail to meet this prescribed accuracy, the cost associated with the preparation and development of the BUDGET ESTIMATE shall be recoverable by the COUNTY.

(C. CONSTRUCTION COST ESTIMATE.

A construction cost estimate for purposes of this Agreement is an estimate prepared on the basis of well defined engineering/architectural data and on detailed information set forth in specifications, designs or drawings which are to be used as a basis for obtaining bids or price proposals for constructing the project. This type of estimate shall be accurate within plus or minus ten percent (10%) of the cost of the construction of the project. The accuracy and reliability of a CONSTRUCTION COST ESTIMATE is vital to the COUNTY'S interests because it may be used for such purposes as, but not limited to the following; budgeting, obtaining, allocating or obligating funds for the project; evaluating and determining the reasonableness and acceptableness of bids or price proposals for construction projects; or establishing the assessment amounts for Municipal Service Benefit Units (M.S.B.U.).

In the event the COUNTY solicits and receives bids or price proposals from contractors on a construction project based on specifications, design, drawings and a CONSTRUCTION COST ESTIMATE prepared by the CONSULTANT, and the lowest bid or price proposal, submitted by a responsive and responsible bidder or proposer,

which bid or price proposal exceeds the amount of the CONSULTANT'S CONSTRUCTION COST ESTIMATE by more than the percent accuracy set forth hereinabove, the CONSULTANT shall, upon notification by the COUNTY, assume responsibility for and proceed to provide and perform the following service without additional compensation:

The CONSULTANT will, subject to the review and approval of the COUNTY, modify at its expense the specifications, design, drawings and related bidding and contract documents to the extent necessary to reduce the anticipated construction costs so that the re-solicitation of bids or price proposals will realize bids or price proposals being received that are within the range of accuracy established for the CONSTRUCTION COST ESTIMATE prepared by the CONSULTANT. Any such modifications made by the CONSULTANT shall not conflict with the functional or operational requirements established by the COUNTY for the project and set forth in the Agreement or Change Order(s) or Supplemental Task Authorization(s) issued thereto, nor shall any such modifications conflict with established rules, regulations, requirements or professional standards pertaining to the design, specifications or drawings prepared by the CONSULTANT, nor shall such modifications adversely affect the safe use or operation of the constructed project.

In the event (1) the CONSULTANT'S modification of the design, specifications, drawings and related bidding and contract documents, and (2) the re-solicitation of bids or price proposals do not result in bids or price proposals being received from a responsive and responsible bidder or proposer that are within the established percent accuracy of the CONSULTANT'S CONSTRUCTION COST ESTIMATE, the costs associated with the CONSULTANT'S preparation and development of the CONSTRUCTION

COST ESTIMATE shall be recoverable by the COUNTY by an appropriate reduction in the CONSULTANT'S invoice requesting payment for services rendered.

For determination of compliance with the accuracy requirement established for the CONSTRUCTION COST ESTIMATE prepared by the CONSULTANT, the amount of the CONSTRUCTION COST ESTIMATE submitted by the CONSULTANT shall be adjusted from the date the CONSTRUCTION COST ESTIMATE was received by the COUNTY until the date bids or price proposals are received by the COUNTY, by applying the percent change in the "20 Cities Cost Index" as published in the ENR (formerly ENGINEERING NEWS-RECORD) a McGraw-Hill, Inc. publication.

If, in response to its solicitation, the COUNTY receives less than three bids or priced proposals for a project, there is the potential that such bids or priced proposals may not be a realistic representation of the costs expected to be associated with the project. If under such circumstances, and if in the professional judgment of the CONSULTANT, the low bid or the low

priced proposal received from a responsive bidder or proposer does not realistically represent the costs associated with the project, the CONSULTANT may deem it appropriate to recommend the COUNTY reject any such bid(s) or priced proposal(s). If under such circumstances the COUNTY concurs with the CONSULTANT'S recommendation and rejects the bid(s) or priced proposal(s), the COUNTY will not hold the CONSULTANT responsible to, nor will the COUNTY require the CONSULTANT to, modify the specifications, design, drawings and related bidding and contract documents as set forth hereinbefore.

3.11 PERMITS

The CONSULTANT will be responsible for preparing and submitting all required applications and other supportive information necessary to assist the COUNTY in obtaining all reviews, approvals and permits, with respect to the CONSULTANT'S design, drawings and specifications required by any governmental body having authority over the project. Any fees required for such reviews, approvals or permits will be covered by a check issued by the COUNTY and made payable to the respective governmental body upon the CONSULTANT furnishing the COUNTY satisfactory documentation of such fees. The CONSULTANT will be similarly responsible for preparing and submitting all required applications and other supportive information necessary to assist the COUNTY in obtaining any renewals and/or extensions of reviews, approvals or permits that may be required while this Agreement is in effect. The COUNTY shall, at the CONSULTANT'S request, assist in obtaining required signatures and provide the CONSULTANT with all information known to be available to the COUNTY so as to assist the CONSULTANT in the preparation and submittal of any original, renewal or extension of required reviews, approvals or permits.

3.12 ADDITIONAL SERVICES

Should the COUNTY request the CONSULTANT to provide and perform professional services for this project which are not set forth in EXHIBIT "A", the CONSULTANT agrees to provide and perform such ADDITIONAL SERVICES as may be agreed to in writing by both parties to this Agreement.

Such ADDITIONAL SERVICES shall constitute a continuation of the professional services covered under this Agreement and shall be provided and performed in accordance with the covenants, terms, and provisions set forth in this Agreement thereto.

ADDITIONAL SERVICES shall be administered and authorized as "SUPPLEMENTAL TASK AUTHORIZATIONS" or "CHANGE ORDERS" under the Agreement. The CONSULTANT shall not provide or perform, nor shall the COUNTY incur or accept any obligation to compensate the CONSULTANT for any ADDITIONAL SERVICES unless and until a written "SUPPLEMENTAL TASK AUTHORIZATIONS" or "CHANGE ORDER" shall have been agreed to and executed by both parties.

Each such "SUPPLEMENTAL TASK AUTHORIZATION" or "CHANGE ORDER" shall set forth a comprehensive, detailed description of: (1) the Scope of the ADDITIONAL SERVICES requested; (2) the basis of compensation; and (3) the period of time and/or schedule for performing and completing said

ADDITIONAL SERVICES.

3.13 TRUTH-IN-NEGOTIATIONS CERTIFICATE

The COUNTY may request the CONSULTANT to execute a Truth-in-Negotiations Certificate ("Certificate"), in a form attached as EXHIBIT "F". The Certificate shall state that wage rates and other factual unit costs supporting the compensation are accurate, complete and current at the time this Agreement is executed. The original contract price and any additions thereto shall be adjusted to exclude any significant sums by which the COUNTY determines the contract price was increased due to inaccurate, incomplete or non-current wage rates or other factual unit costs.

3.14 COMPLETION OF TASKS

Unless otherwise set forth in the Agreement the CONSULTANT shall be responsible for providing and performing whatever services, work, equipment, material, personnel, supplies, facilities, transportation and administrative support that are necessary and required to complete all of the tasks set forth in Agreement Exhibit "A" entitled "Scope of Professional Services" and Change Orders, and Supplemental Task Authorizations authorized. The compensation to be paid the CONSULTANT as set forth in Agreement Exhibit "B" entitled "Compensation and Method of Payment" and Change Orders, and Supplemental Task Authorizations authorized thereto shall be understood and agreed to adequately and completely compensate the CONSULTANT for providing and performing whatever services, work, equipment, material, personnel, supplies, facilities, transportation and administrative support that are necessary and required to complete the tasks set forth in Agreement Exhibit "A" and Change Orders, Supplemental Task Authorizations, and Work Orders authorized thereto as stated above."

3.15 AFFIRMATIVE ACTION BY CONSULTANT WHEN ENGAGING SUB-CONSULTANTS

Florida Statute #287.042(4)(f) establishes that agencies, including Lee County, are encouraged to spend twenty-five (25%) percent of the monies actually spent for contractual services for the purpose of entering into contracts with certified Minority Business Enterprises. Accordingly, the CONSULTANT is encouraged, when selecting or engaging the services of sub-consultants or subcontractors pursuant to this Agreement, to spend twenty-five (25%) percent of the amount of compensation established in this Agreement and in subsequent CHANGE ORDERS, and SUPPLEMENTAL TASK AUTHORIZATIONS authorized thereto for the engagement of the services of certified Minority Business Enterprise sub-consultants or subcontractors.

In furtherance of this statutory goal the COUNTY expects the CONSULTANT to take affirmative action towards achieving this goal. "Affirmative Action" as used herein shall constitute a good faith effort by the CONSULTANT to achieve the stated goal of engaging certified Minority Business Enterprise sub-consultants or subcontractors to provide or perform services and/or work pursuant to the SCOPE OF SERVICES required under this Agreement. Efforts taken by the CONSULTANT to assist the COUNTY in meeting this statutory goal must be documented in detail, records of

sub-consultants or subcontractors contacted maintained, including negotiation efforts, and written Agreements maintained for services or work awarded to sub-consultants or subcontractors.

The CONSULTANT, upon receipt of a written request by the COUNTY, shall within ten (10) calendar days thereafter submit to the COUNTY copies of records and supporting documentation to show evidence of its affirmative action efforts to achieve the above stated goal.

The CONSULTANT is encouraged to contact the Lee County Department of Equal Opportunity for information and assistance regarding the COUNTY'S Minority Business Enterprise certification program and listing of certified Minority Business Enterprises.

ARTICLE 4.00 - OBLIGATIONS OF THE COUNTY

4.01 DESIGNATION OF PROJECT MANAGER

The COUNTY agrees after the execution of this Agreement to promptly advise the CONSULTANT, in writing, of the person designated to serve and act as the COUNTY'S PROJECT MANAGER pursuant to the provisions of Article 2.13 of this Agreement. Such notification shall be provided to the CONSULTANT by the COUNTY'S DEPARTMENT DIRECTOR.

4.02 AVAILABILITY OF COUNTY INFORMATION

(1) PROJECT GUIDELINES AND CRITERIA

Guidelines to the CONSULTANT regarding requirements the COUNTY has established or suggests relative to the Project including, but not limited to such items as: goals, objectives, constraints, and any special financial, budgeting, space, site, operational, equipment, technical, construction, time and scheduling criteria are set forth in EXHIBIT "E", entitled "PROJECT GUIDELINES AND CRITERIA", which EXHIBIT "E" is attached hereto and made a part of this Agreement.

4.03 AVAILABILITY OF COUNTY INFORMATION (Continued)

(1) COUNTY TO PROVIDE PERTINENT REFERENCE MATERIAL

At the CONSULTANT'S request, the COUNTY agrees to provide to the CONSULTANT, at no cost to the CONSULTANT, all pertinent information known to be available to the COUNTY to assist the CONSULTANT in providing and performing the required professional services. Such information may include, but not be limited to: previous reports; plans, drawings and specifications; maps; property, boundary, easement, right-of-way, topographic, reference monuments, control points, plats and related survey data; data prepared or services furnished by others to the COUNTY such as sub-surface investigations, laboratory tests, inspections of natural and man-made materials, property appraisals, studies, designs and reports.

4.04 AVAILABILITY OF COUNTY'S DESIGNATED REPRESENTATIVES

The COUNTY agrees that the DEPARTMENT DIRECTOR and the PROJECT MANAGER shall be available within a reasonable period of time, with reasonable prior notice given by the CONSULTANT, to meet and/or consult with the CONSULTANT on matters pertaining to the services to be provided and performed by the CONSULTANT. The COUNTY further agrees to respond within a reasonable period of time to written requests submitted by the CONSULTANT.

4.05 ACCESS TO COUNTY PROPERTY

The COUNTY agrees, with reasonable prior written notice given by the CONSULTANT, to provide the CONSULTANT with access within a reasonable period of time to COUNTY property, facilities, buildings and structures to enable the CONSULTANT to provide and perform the required professional services and work pursuant to this Agreement. Such rights of access shall not be exercised in such a manner or to such an extent as to impede or interfere with COUNTY operations, or the operations carried on by others under a lease, or other contractual arrangement with the COUNTY, or in such a manner as to adversely affect the public health and safety. Such access may, or may not be, within the CONSULTANT'S normal office and/or field work days and/or work hours.

ARTICLE 5.00 - COMPENSATION AND METHOD OF PAYMENT

5.01 BASIC SERVICES

The COUNTY shall pay the CONSULTANT for all requested and authorized BASIC SERVICES rendered hereunder by the CONSULTANT and completed in accordance with the requirements, provisions, and/or terms of this Agreement and accepted by the COUNTY in accordance with the provisions for compensation and payment of said BASIC SERVICES set forth and prescribed in EXHIBIT "B", entitled "COMPENSATION AND METHOD OF PAYMENT", which EXHIBIT "B" is attached hereto and made a part of this Agreement, or on the basis of such changes to the established compensation as may be mutually agreed to by both parties to this Agreement as evidenced by a written Change Order executed by both parties.

5.02 ADDITIONAL SERVICES

The COUNTY shall pay the CONSULTANT for all such ADDITIONAL SERVICES as have been requested and authorized by the COUNTY and agreed to, in writing, by both parties to this Agreement and which have been rendered as ADDITIONAL SERVICES by the CONSULTANT and completed in accordance with the requirements, provisions, and/or terms of this Agreement and accepted by the COUNTY in accordance with the provisions for compensation and payment of said ADDITIONAL SERVICES as set forth and prescribed in EXHIBIT "B", entitled "COMPENSATION AND METHOD OF PAYMENT", which EXHIBIT "B" is attached hereto and made a part of this Agreement, or on the basis of such changes to the established compensation as may be mutually agreed to by both parties to this Agreement as evidenced by a written Change Order or Supplemental Task Authorization executed by both parties.

5.03 METHOD OF PAYMENT

(1) MONTHLY STATEMENTS

The CONSULTANT shall be entitled to submit not more than one invoice statement to the COUNTY each calendar month covering services rendered

during the preceding calendar month. The CONSULTANT'S invoice statement(s) shall be itemized to correspond to the basis of compensation as set forth in the Agreement, or CHANGE ORDER(S), and SUPPLEMENTAL TASK AUTHORIZATION(S) thereunder. The CONSULTANT'S invoice statements shall contain a breakdown of charges, description of service(s) and work provided and/or performed, and where appropriate, supportive documentation of charges consistent with the basis of compensation set forth in the Agreement, or in CHANGE ORDER(S), and/or SUPPLEMENTAL TASK AUTHORIZATION(S) thereunder.

(2) PAYMENT FOR SERVICES PERFORMED

The COUNTY shall pay the CONSULTANT for services performed using either of the following methods, or using a combination thereof:

(A) The COUNTY shall pay the CONSULTANT on the basis of services completed for tasks set forth in Exhibits "A" and "B", as evidenced by work products such as reports, drawings, specifications, etc., submitted by the CONSULTANT and accepted by the COUNTY. No payments shall be made for CONSULTANT'S Work-in-Progress until service items for which payment amounts have been established and set forth in this Agreement have been completed by the CONSULTANT and accepted by the COUNTY. Whenever an invoice statement covers services for which no work product is required to be furnished by the CONSULTANT to the COUNTY, the COUNTY reserves the right to retain ten percent (10%) of the amount invoiced until such service requirements are fully completed.

(B) The COUNTY shall pay the CONSULTANT for services performed for tasks set forth in Exhibits "A" and "B" on the basis of an invoice statement covering CONSULTANT'S Work-in-Progress expressed as a percentage of the total cost of the service and/or work required for each task invoiced in this manner. All such Work-in-Progress percentages are subject to the review and approval of the COUNTY. The decision of the COUNTY shall be final as to the Work-in-Progress percentages paid. Payment by the COUNTY for tasks on a Work-in-Progress percentage basis shall not be deemed or interpreted in any way to constitute an approval or acceptance by the COUNTY of any such service or Work-in-Progress. The CONSULTANT shall be responsible for correcting, re-doing, modifying or otherwise completing the services and work required for each task before receiving final, full payment whether or not previous Work-in-Progress payments have been made. All tasks to be paid for on a Work-in-Progress percentage basis shall be agreed to by both parties to the Agreement and each task to be paid in this manner shall be identified in Exhibit "B" with the notation (WIPP). Only tasks so identified will be paid on a Work-in-Progress percentage basis. The COUNTY reserves the right to retain ten percent (10%) of the amount invoiced until such service requirements are fully completed.

(3) PAYMENT SCHEDULE

The COUNTY shall issue payment to the CONSULTANT within thirty (30) calendar days after receipt of an invoice statement from the CONSULTANT in an acceptable form and containing the requested breakdown and detailed description and documentation of charges. Should the COUNTY object or take exception to the amount of any CONSULTANT'S invoice statement, the COUNTY shall notify the CONSULTANT of such objection or exception within the thirty (30) calendar day payment period set forth hereinbefore. If such objection or exception remains unresolved at the end of said thirty (30) calendar day period, the COUNTY shall withhold the disputed amount and make payment to the CONSULTANT of the amount not in dispute. Payment of any disputed amount, or adjustments thereto, shall be made within thirty (30) calendar days of the date such disputed amount is resolved by mutual agreement of the parties to this Agreement.

5.04 PAYMENT WHEN SERVICES ARE TERMINATED AT THE CONVENIENCE OF THE COUNTY

In the event of termination of this Agreement at the convenience of the COUNTY, not at the fault of the CONSULTANT, the COUNTY shall compensate the CONSULTANT only for: (1) all services performed prior to the effective date of termination; (2) reimbursable expenses then due; and (3) reasonable expenses incurred by the CONSULTANT in affecting the termination of services and work, and incurred by the submittal to the COUNTY of project drawings, plans, data, and other project documents.

5.05 PAYMENT WHEN SERVICES ARE SUSPENDED

In the event the COUNTY suspends the CONSULTANT'S services and work on all or part of the services required to be provided and performed by the CONSULTANT pursuant to this Agreement, the COUNTY shall compensate the CONSULTANT only for the services performed prior to the effective date of suspension and reimbursable expenses then due and any reasonable expenses incurred or associated with, or as a result of such suspension.

5.06 NON-ENTITLEMENT TO ANTICIPATED FEES IN THE EVENT OF SERVICE TERMINATION, SUSPENSION, ELIMINATION, CANCELLATION AND/OR DECREASE

In the event the services required pursuant to this Agreement are terminated, eliminated, cancelled, or decreased due to: (1) termination; (2) suspension in whole or in part; and (3) and/or are modified by the subsequent issuance of SUPPLEMENTAL TASK AUTHORIZATION(S) and/or CHANGE ORDER(S), other than receiving the compensation set forth in Sub-Articles 5.04 and 5.05, the CONSULTANT shall not be entitled to receive compensation for anticipated professional fees, profit, general and administrative overhead expenses or for any other anticipated income or expense which may be associated with the services which are terminated, suspended, eliminated, cancelled or decreased.

ARTICLE 6.00 - TIME AND SCHEDULE OF PERFORMANCE

6.01 NOTICE TO PROCEED

Following the execution of this Agreement by both parties, and after the CONSULTANT has complied with the insurance requirements set forth hereinafter, the COUNTY shall issue the CONSULTANT a WRITTEN NOTICE TO PROCEED. Following the issuance of such NOTICE TO PROCEED the CONSULTANT shall be authorized to commence work and the CONSULTANT thereafter shall commence work promptly and shall carry on all such services and work as may be required in a timely and diligent manner to completion.

6.02 TIME OF PERFORMANCE

The CONSULTANT agrees to complete the services required pursuant to this Agreement within the time period(s) for completion of the various phases and/or tasks of the project services set forth and described in this Agreement, as set forth in EXHIBIT "C", entitled "SCHEDULE OF PERFORMANCE, which EXHIBIT "C" is attached hereto and made a part of this Agreement.

Should the CONSULTANT be obstructed or delayed in the prosecution or completion of its obligations under this Agreement as a result of causes beyond the control of the CONSULTANT, or its sub-consultant(s) and/or subcontractor(s), and not due to their fault or neglect, the CONSULTANT shall notify the COUNTY, in writing, within five (5) calendar days after the commencement of such delay, stating the cause(s) thereof and requesting an extension of the CONSULTANT'S time of performance. Upon receipt of the CONSULTANT'S request for an extension of time, the COUNTY shall grant the extension if the COUNTY determines the delay(s) encountered by the CONSULTANT, or its sub-consultant(s) and/or subcontractor(s), is due to unforeseen causes and not attributable to their fault or neglect.

6.03 CONSULTANT WORK SCHEDULE

The CONSULTANT shall be required as a condition of this Agreement to prepare and submit to the COUNTY, on a monthly basis, commencing with the issuance of the NOTICE TO PROCEED, a CONSULTANT'S WORK SCHEDULE. The WORK SCHEDULE shall set forth the time and manpower scheduled for all of the various phases and/or tasks required to provide, perform and complete all of the services and work required completion of the various phases and/or tasks of the project services set forth and described in this Agreement, as set forth in EXHIBIT "C", pursuant to this Agreement in such a manner that the CONSULTANT'S planned and actual work progress can be readily determined. The CONSULTANT'S WORK SCHEDULE of planned and actual work progress shall be updated and submitted by the CONSULTANT to the COUNTY on a monthly basis.

6.04 FAILURE TO PERFORM IN A TIMELY MANNER

Should the CONSULTANT fail to commence, provide, perform and/or complete any of the services and work required pursuant to this Agreement in a timely and diligent manner, the COUNTY may consider such failure as justifiable cause to terminate this Agreement. As an alternative to termination, the COUNTY at its option, may, upon written notice to the

CONSULTANT, withhold any or all payments due and owing to the CONSULTANT, not to exceed the amount of the compensation for the work in dispute, until such time as the CONSULTANT resumes performance of his obligations in such a manner as to get back on schedule in accordance with the time and schedule of performance requirements set forth in this Agreement, or any CHANGE ORDER(S), or SUPPLEMENTAL TASK AUTHORIZATION(S) issued thereto.

ARTICLE 7.00 - SECURING AGREEMENT

The CONSULTANT warrants that the CONSULTANT has not employed or retained any company or person other than a bona fide, regular, full time employee working for the CONSULTANT to solicit or secure this Agreement and that the CONSULTANT has not paid or agreed to pay any person, company, corporation or firm other than a bona fide employee working solely for the CONSULTANT any fee, commission, percentage, gift or any other consideration contingent upon or resulting from the award or making of this Agreement.

ARTICLE 8.00 - CONFLICT OF INTEREST

The CONSULTANT represents that it presently has no interest and shall acquire no interest, either direct or indirect, which would conflict in any manner with the performance of services required hereunder. The CONSULTANT further agrees that no person having any such interest shall be employed or engaged by the CONSULTANT for said performance.

If CONSULTANT, for itself and on behalf of its subconsultants, is about to engage in representing another client, which it in good faith believes could result in a conflict of interest with the work being performed by CONSULTANT or such sub-consultant under this Agreement, then it will promptly bring such potential conflict of interest to the COUNTY'S attention, in writing. The COUNTY will advise the CONSULTANT, in writing, within ten (10) calendar days as to the period of time required by the COUNTY to determine if such a conflict of interest exists. If the COUNTY determines that there is a conflict of interest, CONSULTANT or such sub-consultant shall decline the representation upon written notice by the COUNTY.

If the COUNTY determines that there is not such conflict of interest, then the COUNTY shall give its written consent to such representation. If CONSULTANT or sub-consultant accepts such a representation without obtaining the COUNTY'S prior written consent, and if the COUNTY subsequently determines that there is a conflict of interest between such representation and the work being performed by CONSULTANT or such sub-consultant under this Agreement, then the CONSULTANT or such sub-consultant agrees to promptly terminate such representation. CONSULTANT shall require each of such sub-consultants to comply with the provisions of this Section.

Should the CONSULTANT fail to advise or notify the COUNTY as provided hereinabove of representation which could, or does, result in a conflict of interest, or should the CONSULTANT fail to discontinue such representation, the COUNTY may consider such failure as justifiable cause to terminate this Agreement.

ARTICLE 9.00 - ASSIGNMENT, TRANSFER AND SUBCONTRACTS

The CONSULTANT shall not assign or transfer any of its rights, benefits or obligations hereunder, except for transfers that result from: (1) the merger or consolidation of CONSULTANT with a third party; or (2) the disestablishment of the CONSULTANT'S professional practice and the establishment of a successor consultant, or consulting organization. Nor shall the CONSULTANT subcontract any of its service obligations hereunder to third parties, except as otherwise authorized in this Agreement thereto, without prior written approval of the COUNTY. The CONSULTANT shall have the right, subject to the COUNTY'S prior written approval, to employ other persons and/or firms to serve as sub-consultants and/or subcontractors to CONSULTANT in connection with CONSULTANT providing and performing services and work pursuant to the requirements of this Agreement. The COUNTY shall have the right and be entitled to withhold such approval. Such approval shall not be unreasonably withheld.

In providing and performing the services and work required pursuant to this Agreement, CONSULTANT intends to engage the assistance of the sub-consultant(s) and/or subcontractor(s) set forth in EXHIBIT "D", entitled "CONSULTANT'S ASSOCIATED SUB-CONSULTANTS AND SUBCONTRACTORS", which EXHIBIT "D" is attached hereto and made a part of this Agreement.

ARTICLE 10.00 - APPLICABLE LAW

Unless otherwise specified, this Agreement shall be governed by the laws, rules, and regulations of the State of Florida, or the laws, rules, and regulations of the United States when providing services funded by the United States government.

ARTICLE 11.00 - COVENANTS AGAINST DISCRIMINATION

11.01 FOR PROJECTS WITH FUNDS APPROPRIATED FROM GENERAL LEE COUNTY REVENUES

The CONSULTANT for itself, its successors in interest, and assigns as part of the consideration thereof, does hereby covenant and agree that in the furnishing of services to COUNTY hereunder, no person on the grounds of race, color, national origin, handicap, or sex shall be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination. The CONSULTANT shall comply with Lee County's Affirmative Action Plan or state laws in the hiring of sub-consultants. CONSULTANTS who are uncertain of their obligation must obtain a copy of all relevant guidelines concerning Lee County's Affirmative Action Plan from the Lee County Department of Equal Opportunity.

11.02 FOR PROJECTS WITH FUNDS APPROPRIATED EITHER IN PART OR WHOLLY FROM FEDERAL OR STATE SOURCES

The CONSULTANT for itself, its successors in interest, and assigns as part of the consideration thereof, does hereby covenant and agree that in the furnishing of services to COUNTY hereunder, no person on the grounds of race, color, national origin, handicap, or sex shall be excluded from participation in, denied the benefits of, or otherwise

be subjected to discrimination. The CONSULTANT shall make every effort to comply with any Disadvantaged Business Enterprise goals which have been established for this project. CONSULTANTS who are uncertain of their obligations regarding Disadvantaged Business Enterprises for this project must obtain a copy of all relevant federal or state guidelines from the Lee County Department of Equal Opportunity. The failure of the CONSULTANT to adhere to relevant guidelines shall subject the CONSULTANT to any sanctions which may be imposed upon the COUNTY.

ARTICLE 12.00 - WAIVER OF BREACH

Waiver by either party of a breach of any provision of this Agreement shall not be deemed to be a waiver of any other breach and shall not be construed to be a modification of the terms of this Agreement.

ARTICLE 13.00 - INSURANCE

13.01 INSURANCE COVERAGE TO BE OBTAINED

(1) The CONSULTANT shall obtain and maintain such insurance as will protect him from: (1) claims under workers' compensation laws, disability benefit laws, or other similar employee benefit laws; (2) claims for damages because of bodily injury, occupational sickness or disease or death of his employees including claims insured by usual personal injury liability coverage; (3) claims for damages because of bodily injury, sickness or disease, or death of any person other than his employees including claims insured by usual personal injury liability coverage; and (4) from claims for injury to or destruction of tangible property including loss or use resulting therefrom; any or all of which claims may arise out of, or result from, the services, work and operations carried out pursuant to and under the requirements of this Agreement, whether such services, work and operations be by the CONSULTANT, its employees, or by any sub-consultant(s), subcontractor(s), or anyone employed by or under the supervision of any of them, or for whose acts any of them may be legally liable.

(2) The insurance protection set forth hereinabove shall be obtained and written for not less than the limits of liability specified hereinafter, or as required by law, whichever is greater.

(3) The CONSULTANT, throughout the time this Agreement is in effect, shall require and ensure that any and all of its Sub-Consultants and/or SubContractors obtain, have, and maintain the insurance coverages required by law to be provided.

(4) The CONSULTANT shall obtain, have and maintain during the entire period of this Agreement all such insurance policies as are set forth and required herein.

(5) In the event that the CONSULTANT engages Sub-Consultants or Sub-Contractors to assist the CONSULTANT in providing or performing services or work pursuant to the requirements of this Agreement, the

insurance coverages required under Article 13.03 to be provided by the CONSULTANT shall cover all of the services or work to be provided or performed by all of the Sub-Consultants or SubContractors engaged by the CONSULTANT. However, in the event the services or work of Sub-Consultants or Sub-Contractors engaged by the CONSULTANT is not covered by the CONSULTANT'S INSURANCE POLICY(s), it shall be the responsibility of the CONSULTANT to ensure that all Sub-Consultants or Sub-Contractors have fully complied with the COUNTY insurance requirements for: (1) Worker's Compensation; (2) Comprehensive General Liability; (3) Comprehensive Automobile Liability; or (4) Professional Liability as required and set forth in Agreement Article 13.00.

The services or work to be provided or performed by the following Sub-Consultant(s) or Sub-Contractor(s) identified in Agreement Exhibit "D" are exempted and excluded from the Professional Liability insurance coverage requirements set forth in this Agreement:

Service and/or work to be Provided and/or Performed	Indicate Name of Individual or Firm

(If none, enter the word "none" in the space below.)

NONE

13.01 INSURANCE COVERAGE TO BE OBTAINED Continued

(6) The insurance coverage to be obtained by the CONSULTANT or by Sub-Consultants or Sub-Contractors engaged by the CONSULTANT, as set forth in Agreement Article 13.03 for: (1) Workers' Compensation; (2) Comprehensive General Liability; (3) Comprehensive Automobile Liability; or (4) Professional Liability is understood and agreed to cover any and all of the services or work set forth in Agreement Exhibit "A" and all subsequent Change Order(s), or Supplemental Task Authorization(s). In the event the COUNTY shall execute and issue a written Change Order(s), or Supplemental Task Authorization(s) authorizing the CONSULTANT to provide or perform services or work in addition to those set forth in Agreement Exhibit "A", it is agreed that the COUNTY has the right to change the amount of insurance coverages required to cover the additional services or work. If the additional insurance coverages established exceeds the amount of insurance coverage carried by the CONSULTANT, the compensation established for the Change Order(s), or Supplemental Task Authorization(s) shall include consideration of any increased premium cost incurred by the CONSULTANT to obtain same.

13.02 CONSULTANT REQUIRED TO FILE INSURANCE CERTIFICATE(S)

(1) The CONSULTANT shall submit to the COUNTY'S RISK MANAGEMENT DIVISION all insurance certificates which are required under this Agreement for review and approval with respect to compliance with the insurance requirements. After approval by the RISK MANAGEMENT DIVISION, the COUNTY will execute this Agreement and issue a written Notice to Proceed. The CONSULTANT may then commence with any service or work pursuant to the requirements of this Agreement.

(2) All such insurance certificates shall be in a form and underwritten by an insurance company(s) acceptable to the COUNTY and licensed in the State of Florida.

(3) Each Certificate of Insurance submitted to the COUNTY shall be an original and shall be executed by an authorized representative of the insurance company affording coverage.

(4) Each Certificate of Insurance shall be addressed to the Lee County Board of County Commissioners, Attention: Lee County Contracts Management, P O Box 398, Fort Myers, Florida 33902-0398.

(5) Each Certificate of Insurance shall specifically include all of the following:

(A) The name and type of policy and coverages provided; and

(B) The amount or limit applicable to each coverage provided and the deductible amount, if any, applicable to each type of insurance coverage being provided; and

(C) The date of expiration of coverage; and

(D) The designation of the Lee County Board of County Commissioners both as an additional insured and as a certificate holder. (This requirement is excepted for Professional Liability Insurance and for Workers' Compensation Insurance); and

(E) A specific reference to this Agreement and the Project to which it pertains. (This requirement may be excepted for Professional Liability Insurance); or

In the event the CONSULTANT has, or expects to enter into an agreement for professional services other than those provided for in this Agreement, the CONSULTANT may elect to submit a certificate of insurance containing the following statement:

> "This policy covers the services or work provided or performed by the Named Insured for any and all projects undertaken for Lee County pursuant to one or more written Professional Services Agreements, or written Supplemental Task Authorizations, or Change Orders thereto, and the limit(s) of liability shown shall not be intended or construed as applying to only one project."

Upon receipt and approval of such a certificate of insurance the COUNTY will administer the insurance required for all such agreements utilizing the single "multi-project" certificate of insurance and a separate certificate of insurance will not be required for each separate agreement.

(F) The following clause must appear on the Certificate of Insurance:

> "Cancellation - Should any of the above described policies be cancelled before the expiration date thereof, the issuing company will endeavor to mail 30 days written notice to the Certificate Holder named."

(G) A statement indicating any services or work included in or required under Agreement Exhibit "A" Scope of Professional Services that is specifically excluded or exempted from coverage under the provisions, terms, conditions or endorsements of the CONSULTANT'S insurance policy(s). A statement which indicates any and all deductible amounts applicable to each type of insurance coverage required. In the absence of any such statements, the COUNTY will proceed with the understanding, stipulation and condition that there are no deductible amount(s), or exclusions or exemptions to the insurance coverage(s) provided.

(6) Each Certificate of Insurance shall be issued by an insurance agent and/or agency duly authorized to do so by and on behalf of the insurance company affording the insurance coverage(s) indicated on each Certificate of Insurance.

(7) If the initial, or any subsequently issued Certificate of Insurance expires prior to the completion of the work or termination of this

Agreement, the CONSULTANT shall furnish to the COUNTY renewal or replacement Certificate(s) of Insurance, or Certified Binder(s), not later than fifteen (15) calendar days prior to the date of their expiration. Failure of the CONSULTANT to provide the COUNTY with such renewal certificate(s) shall be considered justification for the COUNTY to terminate this Agreement.

(8) If any of the insurance coverage(s) required by this Agreement shall reach the date of expiration indicated on the approved Certificate(s) of Insurance without the COUNTY having received satisfactory evidence of renewal or replacement, the CONSULTANT shall automatically and without further notice stop performing all previously authorized services and work. During any time period that the CONSULTANT'S services or work is suspended for failure to comply with the insurance requirements set forth in the Agreement, the CONSULTANT shall not be entitled to any additional compensation or time to provide and perform the required services or work and the COUNTY shall not be required to make payment on any invoices submitted by the CONSULTANT. Upon receipt and approval of renewal or replacement Certificates of Insurance, payment for any such invoices shall be made promptly by the COUNTY.

13.03 - INSURANCE COVERAGES REQUIRED

The CONSULTANT shall obtain and maintain the following insurance coverages as provided hereinbefore, and in the type, amounts and in conformance with the following minimum requirements:

(1) WORKERS' COMPENSATION

Coverage to comply for all employees for statutory limits in compliance with the applicable State and Federal laws. In addition, the policy must include the following:

(A) Employer's Liability with a minimum limit per accident in accordance with statutory requirements, or a minimum limit of $100,000 for each accident, whichever limit is greater.

(B) Notice of Cancellation and/or Restriction - The policy must be endorsed to provide the COUNTY with thirty (30) days prior written notice of cancellation and/or restriction.

(2) COMMERCIAL GENERAL LIABILITY

Coverage must be afforded on a form no more restrictive than the last edition of the Commercial General Liability Policy filed by the Insurance Services Office and must include the following:

(A) Minimum limits of $100,000 per occurrence and $300,000 aggregate for Bodily Injury Liability and a minimum limit of $100,000 for Property Damage Liability, or a minimum combined single limit of $300,000.

(B) Contractual coverage applicable to this specific Agreement

including any hold harmless and/or such indemnification agreement.

(C) Such additional requirements as are set forth in Article 13.01 and 13.02 hereinabove.

(3) BUSINESS AUTOMOBILE LIABILITY

Coverage must be afforded on a form no more restrictive than the latest edition of the Business Automobile Liability Policy filed by the Insurance Services Office and must include the following:

(A) Minimum limits of $100,000 per person and $300,000 per accident for Bodily Injury Liability and a minimum limit of $100,000 for Property Damage Liability, or a minimum combined single limit of $300,000.

(B) Coverage shall include owned vehicles, hired and leased, or non-owned vehicles.

(C) Such additional requirements as are set forth in Articles 13.01

(4) PROFESSIONAL LIABILITY

Coverage must include the following:

(A) A minimum aggregate limit of $5,000,000.

(B) Such additional requirements as are set forth in Articles 13.01 and 13.02 hereinabove.

(C) Should the Professional Liability Insurance Policy issued pursuant to the above requirements and limits be written so as to provide an applicable deductible amount, or other exclusion or limitation as to the amount of coverage to be provided within the minimum coverage limits set forth above, the COUNTY shall hold the CONSULTANT responsible and liable for any such difference in the amount of coverage provided by the insurance policy. In the event of any such deductible amount, exclusion or limitation, the CONSULTANT shall be required to provide written documentation that is acceptable to the COUNTY establishing that the CONSULTANT has the financial resources readily available to cover damages, injuries and/or losses which are not covered by the policy's deductible amounts, exclusions and/or limitations as stated above.

ARTICLE 14.00 - DUTIES AND OBLIGATIONS IMPOSED ON THE CONSULTANT

The duties and obligations imposed upon the CONSULTANT by this Agreement and the rights and remedies available hereunder shall be in addition to, and not a limitation of, any otherwise imposed or available by law or statute.

ARTICLE 15.00 - REPRESENTATION OF THE COUNTY

The CONSULTANT in providing and performing the services and work required pursuant to this Agreement thereto shall only represent the COUNTY in the manner and to the extent specifically set forth in writing in this Agreement or thereto, and as provided in any written SUPPLEMENTAL TASK AUTHORIZATION(S), and CHANGE ORDER(S) issued thereunder.

In the event the CONSULTANT'S services or work involves construction contract administrative support services, the CONSULTANT is not authorized to act on the COUNTY'S behalf, and shall not act on the COUNTY'S behalf, in such a manner as to result in change(s) to (1) the cost or compensation to be paid the construction contractor, or (2) the time for completing the work as required and agreed to in the construction contract, or (3) the scope of the work set forth in the construction contract documents, unless such representation is specifically provided for, set forth and authorized in this Agreement or thereto.

The COUNTY will neither assume nor accept any obligation, commitment, responsibility or liability which may result from representation by the CONSULTANT not specifically provided for and authorized as stated hereinabove.

ARTICLE 16.00 - OWNERSHIP OF DOCUMENTS

All documents such as drawings, tracings, notes, computer files, photographs, plans, specifications, maps, evaluations, reports and other records and data relating to this project, other than working papers, specifically prepared or developed by the CONSULTANT under this Agreement shall be property of the CONSULTANT until the CONSULTANT has been paid for providing and performing the services and work required to produce such documents.

Upon completion or termination of this Agreement, or upon the issuance by the COUNTY of a written Change Order deleting all or portions of the scope of services or task(s) to be provided or performed by the CONSULTANT, all of the above documents, to the extent requested in writing by the COUNTY, shall be delivered by the CONSULTANT to the COUNTY within seven (7) calendar days of the COUNTY making such a request. In the event the COUNTY gives the CONSULTANT a written Notice of Termination of all or part of the services or work required, or upon the issuance to the CONSULTANT by the COUNTY of a written Change Order deleting all or part of the services or work required, the CONSULTANT shall deliver to the COUNTY the requested documents as set forth hereinabove, with the mutual understanding and commitment by the COUNTY that compensation earned or owing to the CONSULTANT for services or work provided or performed by the CONSULTANT prior to the effective date of any such termination or deletion will be paid to the CONSULTANT within thirty (30) calendar days of the date of issuance of the Notice of Termination or Change Order.

The CONSULTANT, at its expense, may make and retain copies of all documents delivered to the COUNTY for reference and internal use. The CONSULTANT shall not, and agrees not to, use any of these documents, and

data and information contained therein on any other project or for any other client without the prior expressed written permission of the COUNTY.

Any use by the COUNTY of said documents, and data and information contained therein, obtained by the COUNTY under the provisions of this Agreement for any purpose not within the scope of this Agreement shall be at the risk of the COUNTY, and without liability to the CONSULTANT. The COUNTY shall be liable and agrees to be liable for and shall indemnify, defend and hold the CONSULTANT harmless for any and all claims, suits, judgments or damages, losses and expenses including court costs, expert witness and professional consultation services, and attorneys' fees arising out of the COUNTY'S use of such documents in a manner contrary to the provisions set forth hereinabove. The COUNTY hereby acknowledges receipt of $10.00 (ten and no hundreds dollars) and other good and valuable consideration from the CONSULTANT which has been paid as specific consideration for the indemnification provided herein.

ARTICLE 17.00 - MAINTENANCE OF RECORDS

The CONSULTANT will keep and maintain adequate records and supporting documentation applicable to all of the services, work, information, expense, costs, invoices and materials provided and performed pursuant to the requirements of this Agreement. Said records and documentation will be retained by the CONSULTANT for a minimum of five (5) years from the date of termination of this Agreement.

The COUNTY and its authorized agents shall, with reasonable prior notice, have the right to audit, inspect and copy all such records and documentation as often as the COUNTY deems necessary during the period of this Agreement, and during the period five (5) years thereafter; provided, however, such activity shall be conducted only during normal business hours and at the expense of the COUNTY, and provided further that to the extent provided by law the COUNTY shall retain all such records confidential.

ARTICLE 18.00 - HEADINGS

The HEADINGS of the Articles, Sections, Exhibits, Attachments, Phases or Tasks as contained in this Agreement are for the purpose of convenience only and shall not be deemed to expand, limit or change the provisions contained in such Articles, Sections, Exhibits, Attachments, Phases or Tasks.

ARTICLE 19.00 - ENTIRE AGREEMENT

This Agreement, including referenced Exhibits and Attachments hereto, constitutes the entire Agreement between the parties hereto and shall supercede, replace and nullify any and all prior agreements or understandings, written or oral, relating to the matters set forth herein, and any such prior agreements or understandings shall have no force or effect whatever on this Agreement.

The following listed documents, which are referred to hereinbefore, are attached to and are acknowledged, understood and agreed to be an integral part of this Agreement:

(1) EXHIBIT "A" entitled "Scope of Professional Services" dated November, 20 02.

(2) EXHIBIT "B" entitled "Compensation and Method of Payment" dated November, 20 02.

(3) EXHIBIT "C" entitled "Time and Schedule of Performance" dated November, 20 02.

(4) EXHIBIT "D" entitled "Consultant's Associated Sub-Consultant(s) and SubContractor(s)", dated November, 20 02.

(5) EXHIBIT "E" entitled "Project Guidelines and Criteria", dated November, 20 02.

(6) EXHIBIT "F" entitled "Truth in Negotiation Certificate", dated November, 20 02.

(7) EXHIBIT "G" entitled "Insurance". (Containing copies of applicable Certificates of Insurance)

(8) EXHIBIT "H" entitled "Amendment to Articles", dated November, 20 02.

ARTICLE 20.00 - NOTICES AND ADDRESS OF RECORD

20.01 NOTICES BY CONSULTANT TO COUNTY

All notices required and/or made pursuant to this Agreement to be given by the CONSULTANT to the COUNTY shall be in writing and shall be given by the United States Postal Service Department first class mail service, postage prepaid, addressed to the following COUNTY address of record and sent to the attention of the County's Project Manager:

Lee County Board of County Commissioners
Post Office Box 398
Fort Myers, Florida 33902-0398

20.02 NOTICES BY COUNTY TO CONSULTANT

All notices required and/or made pursuant to this Agreement to be given by the COUNTY to the CONSULTANT shall be made in writing and shall be given by the United States Postal Service Department first class mail service, postage prepaid, addressed to the following CONSULTANT'S address of record:

__HARDESTY & HANOVER, LLP_____
(CONSULTANT'S Business Name)

___15485 Eagle Nest Lane, Suite 210_____
(Street/P.O. Box)

_Miami Lakes_____FL_____33014____
(City) (State) (Zip Code)

Telephone Number: __305-819-0601_____
Fax Number: _____305-819-0640_____

ATTENTION: __Timothy J. Noles, P.E._____
Project Director

20.03 CHANGE OF ADDRESS OF RECORD

Either party may change its address of record by written notice to the other party given in accordance with the requirements of this Article.

ARTICLE 21.00 - TERMINATION

This Agreement may be terminated by the COUNTY at its convenience, or due to the fault of the CONSULTANT, by the COUNTY giving thirty (30) day written notice to the CONSULTANT.

If the CONSULTANT is adjudged bankrupt or insolvent; if it makes a general assignment for the benefit of its creditors; if a trustee or receiver is appointed for the CONSULTANT or for any of its property; if it files a petition to take advantage of any debtor's act or to reorganize under the bankruptcy or similar laws; if it disregards the authority of the COUNTY'S designated representatives; if it otherwise violates any provisions of this Agreement; or for any other just cause, the COUNTY may, without prejudice to any other right or remedy, and after giving the CONSULTANT a thirty (30) calendar day written notice, terminate this Agreement.

In addition to the COUNTY'S contractual right to terminate this Agreement in its entirety as set forth above, the COUNTY may also, at its convenience, stop, suspend, supplement or otherwise change all, or any part of, the Scope of Professional Services as set forth in Exhibit "A", or the Project Guidelines and Criteria as set forth in Exhibit "E", or as such may be established by a Supplemental Task Authorization or Change Order Agreement. The COUNTY shall provide written notice to the CONSULTANT in order to implement a stoppage, suspension, supplement or change.

The CONSULTANT may request that this Agreement be terminated by submitting a written notice to the COUNTY dated not less than thirty (30) calendar days prior to the requested termination date and stating the reason(s) for such a request. However, the COUNTY reserves the right to accept or not accept the termination request submitted by the CONSULTANT, and no such termination request submitted by the CONSULTANT shall become effective unless and until CONSULTANT is notified, in writing, by the COUNTY of its acceptance.

21.01 CONSULTANT TO DELIVER MATERIAL

Upon termination, the CONSULTANT shall deliver to the COUNTY all papers, drawings, models, and other material in which the COUNTY has exclusive rights by virtue hereof or of any business done, or services or work performed or provided by the CONSULTANT on behalf of the COUNTY.

ARTICLE 22.00 - AMENDMENTS

The covenants, terms and provisions set forth and contained in all of the Articles to this Agreement may be amended upon the mutual acceptance thereof, in writing, by both parties to this Agreement, as evidenced by Exhibit H for amending articles. In the event of any conflicts between the requirements, provisions and/or terms of the Agreement and any written Amendment (Exhibit H), the requirements, provisions and/or terms of the Amendment shall take precedence.

ARTICLE 23.00 - MODIFICATIONS

Modifications to covenants, terms and provisions of this Agreement shall only be valid when issued in writing as a properly executed CHANGE ORDER(S) or SUPPLEMENTAL TASK AUTHORIZATION(S). In the event of any conflicts between the requirements, provisions, and/or terms of this Agreement and any written CHANGE ORDER(S), and/or SUPPLEMENTAL TASK AUTHORIZATIONS, the latest executed CHANGE ORDER(S), and/or SUPPLEMENTAL TASK AUTHORIZATION(S) shall take precedence.

In the event the COUNTY issues a purchase order, memorandum, letter, or other instruments covering the professional services, work and materials to be provided and performed pursuant to this Agreement, it is hereby specifically agreed and understood that such purchase order, memorandum, letter or other instruments are for the COUNTY'S internal control purposes only, and any and all terms, provisions and conditions contained therein, whether printed or written, shall in no way modify the covenants, terms and provisions of this Agreement and shall have no force or effect thereon.

No modification, waiver, or termination of the Agreement or of any terms thereof shall impair the rights of either party.

ARTICLE 24.00 - ACCEPTANCE

Acceptance of this Agreement shall be indicated by the signature of the duly authorized representative of the hereinabove named parties in the space provided hereinafter and being attested and witnessed as indicated.

ARTICLE 24.00 - ACCEPTANCE

Acceptance of this Agreement shall be indicated by the signature of the duly authorized representative of the hereinabove named parties in the space provided hereinafter and being attested and witnessed as indicated.

IN WITNESS WHEREOF, the parties hereto, by their duly authorized representatives, have executed this Agreement effective the day and year first written above.

ATTEST:
CLERK OF CIRCUIT COURT
Charlie Green, Clerk

BY: Michele L Cooper
Deputy Clerk

COUNTY: LEE COUNTY, FLORIDA
BOARD OF COUNTY COMMISSIONERS

BY: Ray Judah
Chairman of the Board

DATE: 1/7/03

APPROVED AS TO FORM

BY: _____
County Attorney's Office

ATTEST:

___Timothy J. Noles, P.E._____

_HARDESTY & HANOVER, LLP_____
(CONSULTANT)

John W Matthews III
(Witness)

BY: Timothy J. Noles
(Authorized Signature)

_____
(Witness)

__Associate_____
(Title)

DATE:_November 14, 2002_____

CORPORATE SEAL:

Date: 09/25/01

EXHIBIT A

Date: November 2002

SCOPE OF PROFESSIONAL SERVICES

Repair and Rehabilitation Structure A (Bridge No. 124043)

BASIC SERVICES

Section 1. GENERAL SCOPE STATEMENT

The Consultant shall provide and perform the following professional services, which shall constitute the GENERAL SCOPE of the BASIC SERVICES under the covenants, terms, and provisions of this PROFESSIONAL SERVICES AGREEMENT or SERVICE PROVIDER AGREEMENT:

Engineering Services to repair and rehabilitate Sanibel Island Causeway Structure A (CR 867) over Okeechobee Waterway. Elements of work, objectives, and requirements are included in the Scope of Services attached (pp. A3-A15).

Section 2. TASKS

Pursuant to the GENERAL SCOPE of the BASIC SERVICES stated herein above, the CONSULTANT shall perform all services and/or work necessary to complete the following task(s) and/or provide the following item(s) which are enumerated to correspond to the task(s) and/or items set forth in EXHIBIT "B" entitled "COMPENSATION AND METHOD OF PAYMENT".

TASK No. 1: Phase I: Preliminary Design/Bridge Development Report as described in Section III A of the Scope of Services. The following sub tasks will be required:

Sub Task 1A: Bascule Span Preliminary Engineering
Sub Task 1 B: Approach Spans and Roadway Preliminary Engineering
Sub Task 1C: Cathodic Protection System Analysis
Sub Task 1D: Geotechnical Services

TASK No. 2: Phase II: Final Engineering Plans as described in Section III B-D, Section IV & V and meeting the Section II Project Objectives of the Scope of Services. The following sub tasks will be required:

Sub Task 2A: Bascule Span Final Plans
Sub Task 2B: Approach Spans and Roadway Final Plans
Sub Task 2C: Cathodic Protection Final Plans
Sub Task 2D: Approach Spans and Roadway Widening Final Plans

TASK No. 3 Public Involvement Program as described in Section VI E of the Scope of Services.

SCOPE OF SERVICES

Group 3.1, 4.1, 4.2, 4.4

Repair And Rehabilitation Structure A (Bridge No. 124043)
Sanibel Island Causeway Improvements Segment A
Lee County

FOR

Lee County Board of County Commissioners
Lee County Department of Transportation
P.O. Box 398
Fort Myers, Florida 33902-0398

November 2002

SCOPE OF SERVICES FOR CONSULTING ENGINEERING SERVICES
HIGHWAY DESIGN

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SECTION I. PURPOSE

The purpose of this Attachment is to describe the scope of work and the responsibilities of the CONSULTANT and the DEPARTMENT in connection with the design and preparation of a complete set of roadway (approaches) and structure construction plans for the proposed improvements to this transportation facility.

The selected consultant shall be pre-qualified with the Florida Department of Transportation (FDOT) in work groups 3.1, 4.1, 4.2, & 4.4. The CONSULTANT shall perform those engineering services required to prepare a set of contract plans to include structures. It shall be the CONSULTANT'S responsibility to use the best engineering judgment, display economical structural solutions for the given conditions, practices and principles possible during the prosecution of the work commissioned under this contract. The CONSULTANT shall be aware that as the project is developed, certain minor modifications and/or improvements to the original recommendation may be required. The CONSULTANT is to incorporate these refinements into the design and will consider this effort to be an anticipated and integral part of the work. This will not be a basis for any supplemental fee request(s). The CONSULTANT shall demonstrate good project management practices while working on this project. These include communication with the DEPARTMENT and others as necessary, management of time and resources, and documentation. The CONSULTANT shall set up and maintain throughout the design of the project a contract file in accordance with DEPARTMENT procedures.

The DEPARTMENT will provide contract administration, management services, and technical reviews of all work associated with the development and preparation of the contract plans. The DEPARTMENT will provide job specific information, all available existing plans and reports to the CONSULTANT.

SECTION II. PROJECT OBJECTIVES

A. General Objectives

The general objective is for the CONSULTANT to prepare a set of plans and specifications to be used by the contractor to repair/rehabilitate Structure "A" (Bridge No. 124043) on Sanibel Island Causeway (CR 867) over Okeechobee Waterway. Elements of work include the rehabilitation of the structural components and the electrical and mechanical operating system of the bascule span and concrete repairs to the superstructure and substructure of the approach spans. Traffic control plans to accomplish the work shall be included. Scour protection, minor paving, and signing plans for the bridge ends shall also be included.

The existing bridge is 2078 feet long and 28 feet, curb to curb, with a 3'-1$^1/_2$" safety curb with post and beam traffic rail. The bascule consists of two leafs, each with Hopkins trunnion and machinery by Earl Gear and Machine Company. This structure was built in 1963.

This will be an English unit project.

B. Specific Project Objectives

The CONSULTANT shall perform an in-depth inspection to investigate and review project concepts (typical sections, alignments, scour reports etc.) developed from any prior studies including the Final Preliminary Engineering Report and the Bridge Inspection Reports. These reports, plans and documents will provide the basis for development of contract documents but may not fully define the final design. The Consultant shall maintain close coordination with the Lee County Department of Transportation Project Manager and Bridge Engineer.

All commitments listed in the Final Preliminary Engineering Report shall be met unless directed otherwise by the Department.

The CONSULTANT shall incorporate the following into the design:

Bascule

1. Blast clean and repaint all structural steel (containment for lead paint required).
2. Refurbish, replace as required entire operating (mechanical and electrical system) including navigation lights, emergency generator, motor control center (MCC), motor controllers, control console, submarine cable and cabinets, conduit and wiring and remove buffer cylinders.
3. Install lightning protection system.
4. Realign machinery and replace couplings.
5. Replace span lock bars and refurbish/replace live load bearings.
6. Trunnion modifications (new hub bolts, cap, and anchor bolts as required).
7. Perform miscellaneous structural steel repair on stringers, floor beams, brackets, etc. Widen roadway approximately 5 feet to accommodate two lanes MOT.
8. Replace steel deck grating on bascule leaves.
9. Replace existing post and rail.
10. Install the fender access ladders with safety cages or provide safer alternative access.
11. Repair fender system (bottom walers).
12. Refurbish, enlarge control house as required (replace doors and windows, construct new bathroom, replace tile floors, paint and trim inside and out, relocate electrical equipment as required). Provide larger platform to accommodate emergency generator fuel tank and air conditioner unit. Provide architectural, aesthetic improvements.
13. Install rock gabions at bascule piers for scour protection. The design will be based on recommendations from the Scour Evaluation Report and will be coordinated with FDOT.

Approach spans

1. Repair spalls and cracked concrete in prestressed beams and bent caps.
2. Install structural concrete pile jackets on selected piles; replace existing pile jackets with structural concrete jackets.
3. Replace all poured seals with silicone sealant. (902-XJS System)
4. Construct crutch bents at locations indicated in the Final Preliminary Engineering Report, the Scour Evaluation Report and the latest bridge inspection reports.
5. Prepare scour protection for bridge ends within and around the limits of existing seawalls using rubble (bank & shore).
6. Widen bridge deck approximately 5 feet to accommodate 2 Lane MOT.
7. Scarify deck to first layer of reinforcing and provide overlay.
8. Replace bridge rails with concrete NJ Barriers.
9. Provide closed roadway drainage system on the structure and water quality treatment measures (storm ceptor).

General

1. Prepare complete traffic control plans (vehicular and marine) necessary to accomplish the bridge work.
2. Provide recommendation and plan details for installation of cathodic protection system (See CONCORR Corrosion Report).
3. Prepare a complete specification package for the project including required technical special provisions.
4. Prepare computation book showing all pay items and quantities as required.
5. Prepare all required permits.
6. Prepare roadway related designs (pavement widening, guard rail, pavement marking, signing, etc.) and contract plan documents.

SECTION III. STRUCTURE PLANS PACKAGE

Phase I (Preliminary Design):

A. Bridge Development Report (BDR)

An abbreviated Bridge Development Report for the repair and rehabilitation as required in Chapter 26 of the Florida Department of Transportation (FDOT) Plans Preparation Manual (Volume 1). The CONSULTANT shall include in the BDR an existing condition report of findings, mechanical and structural load rating analysis (HS-20) of the proposed rehabilitated structure, recommendations for repair and rehabilitation, and cost estimate for the rehabilitation proposed. This report shall be neatly written and the contents presented in a logical order. An executive summary is required which discusses the work considered and recommended plan of implementation with cost estimate for the scope of work proposed. The BDR shall include preliminary drawings of the proposed rehabilitation and widening. The final report must be signed by the registered engineer responsible for the work and who checked the work prior to submittal to the DEPARTMENT.

The DEPARTMENT shall select the work to be implemented for Final Design after the evaluation and concurrence of the Bridge Development Report recommendations and associated cost estimates.

Phase II (Final Design):

B. 30% Bridge Plans

The CONSULTANT shall prepare and submit 30% plans after the Department has evaluated and approved the Bridge Development Report recommendations and associated cost estimates.

The 30% submittal should consist of plan sheets, notes and details to include, but not limited to, the following: general notes, general plan and elevation, typical bridge section, foundation layout sheet, and superstructure/pier/bent sheets to sufficiently identify all of the proposed repair/rehabilitation and construction proposed. Sequence of work and traffic control plan should be included.

C. 90% Bridge Plans

The CONSULTANT shall prepare the Bridge Plans Package. This work effort includes the design analysis needed to prepare a complete set of 90% Bridge Plans and other necessary documents pursuant to the Florida Department of Transportation Plans Preparation Manual and revised cost estimates.

The CONSULTANT shall prepare 90% bridge construction plans for all the work approved/selected by the DEPARTMENT. The 30% bridge plans review comments and written responses shall be documented at the time of 90% plans submittal.

D. Final Bridge Plans

The CONSULTANT shall prepare and submit plan sheets, notes, and details to include, but not limited to, the following: key map, general index, structures standard sheets, stage construction sequence sheet, pile layout sheet, intermediate bent/crutch bent sheet, bent detail sheet, superstructure sheet, superstructure detail sheet, framing plan, steel bascule girder and detail sheet showing beam repairs, typical section, control house plans, miscellaneous detail for superstructure deck repairs and all mechanical and electrical plans for rehabilitation of the bascule operating systems. A Summary of Estimated Bridge Quantities sheet must be included in the front of the plans. The Summary may utilize FDOT bid item numbers from the FDOT Contract Estimating System (CES) to insure compliance with FDOT Standard Specifications.

1. Design Calculations

The CONSULTANT shall submit to the DEPARTMENT all reports, design and quantity calculation prepared during the development of the plans. The design calculations submitted shall adequately address the complete design of all bridge components. These calculations shall be neatly and logically presented on 8½ by 11 inch paper (where possible) and shall be signed and sealed by a registered professional engineer. A cover sheet indexing the contents of the calculations shall be included and all pages must be numbered.

2. Load Ratings

The CONSULTANT shall be responsible for performing Load Ratings in accordance with AASHTO specifications and the FDOT procedure 850-010-035. The FDOT's SALOD and BARS programs may be used for load ratings. Load ratings will be performed for all seven Florida legal truck types and the HS-20 design truck. The CONSULTANT will submit the proposed rehabilitated Load Capacity Information sheet and hard copy of the calculations with the BDR for HS-20 Truck. At final plans submittal a signed and sealed copy of the as-built rehabilitated load rating shall be sent to the Department for all seven Florida legal loads.

SECTION IV. ROADWAY PLANS PACKAGE

A. Traffic Control Plan

1. Traffic Control Analysis - The CONSULTANT shall design a safe and effective Traffic Control Plan to move marine, vehicular and bicycle/pedestrian traffic during all phases of construction. The areas shall include, but are not limited to, construction phasing of bridge construction, utility relocation, drainage provisions, ditches, slopes, drop offs within clear zone, traffic monitoring sites, ingress and egress to toll plaza and recreational areas, signing and pavement markings, signal and detour quantity tabulations.

The CONSULTANT shall investigate the need for peak hour constraints when excessive traffic may require the ceasing of construction and/or all lanes remaining open during certain hours of the day, possibility of night work, temporary traffic signals, lane & road closures, and the use of materials such as sheet piling in the analysis. The Traffic Control Plan shall be prepared by a certified designer who has completed a FDOT approved training course, and in accordance with the FDOT Roadway and Traffic Design Standards and the FDOT Plans Preparation Manual.

The CONSULTANT shall consider the local impact of any lane closures. When the need to close a road is identified during this analysis, the CONSULTANT shall notify the DEPARTMENT's Project Manager as soon as possible. Proposed road closings must be reviewed and approved by the DEPARTMENT. Diligence shall be used to minimize negative impacts by appropriate specifications, recommendations or plans development. Local impacts to consider will be island businesses, local events, holidays, peak seasons, detour route deterioration and other eventualities. CONSULTANT shall be responsible to obtain local authorities permission for use of lane and road closures. Provide access for law enforcement and emergency vehicles at all times.

SECTION V. SPECIFICATION PACKAGE

The CONSULTANT shall prepare and provide a complete Specifications Package, including Technical Special Provisions for all items of work not covered by the Florida Department of Transportation (FDOT) Standard Specifications, Supplemental Specifications or Recurring Special Provisions. The current Supplemental Specifications and Special Provisions are accessible on the FDOT Internet website at the State Specifications Office Web Page (http://www.dot.state.fl.us/specificationsoffice/) under the Standard Specifications for Road and Bridge Construction & Implemented Modifications.

SECTION VI. PROJECT REQUIREMENTS AND PROVISIONS FOR WORK

A. Governing Regulations

The services performed by the CONSULTANT shall be in compliance with all applicable FDOT Manuals and Guidelines. The FDOT manuals and Guidelines incorporate, by requirement or reference, all applicable State and Federal regulations. The current edition, including updates, of the following FDOT Manuals and Guidelines shall be used in the performance of this work. It shall be the CONSULTANT'S responsibility to acquire and utilize the necessary FDOT manuals that apply to the design work required to complete this project.

1. Florida Department of Transportation Plans Preparation Manual
2. Florida Department of Transportation Roadway and Traffic Design Standards
3. Florida Department of Transportation Bicycle Facilities Planning and Design Manual, Rev. Ed. 1998
4. Florida Department of Transportation Right-of-Way Mapping Handbook
5. Florida Department of Transportation Right-of-Way Mapping CADD Handbook
6. Florida Department of Transportation Location Survey Manual
7. Florida Department of Transportation EFB User Guide (Electronic Field Book)
8. Florida Department of Transportation Drainage Manual
9. Florida Department of Transportation Crossdrain Handbook
10. Florida Department of Transportation Soils and Foundations Manual
11. Florida Department of Transportation Structures Design Guidelines
12. Florida Department of Transportation Computer Aided Design and Drafting (CADD) Roadway Standards Manual
13. Florida Department of Transportation Roadway CADD Handbook
14. AASHTO "A Policy on Geometric Design of Highways and Streets
15. AASHTO Standard Specifications for Highway Bridges
16. AASHTO Standard Specifications for Movable Highway Bridges
17. MUTCD
18. American Disabilities Act
19. Elder Road User Act
20. MUTS Manual
21. Florida Department of Transportation Structures CADD Manual
22. Florida Department of Transportation Structures Detail Manual
23. Florida Department of Transportation Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Street and Highways
24. Florida Department of Transportation Stormwater Management Manual

25. Florida Department of Transportation Basis of Estimates Handbook

26. Florida Department of Transportation Standard Drawings for Structures (Topic No. 625-020-300f)

27. Federal Highway Administration Best Management Practices for Erosion and Sediment Control

28. Florida Department of Transportation Utility Accommodation Manual

29. Florida Department of Transportation Flexible Pavement Design Manual

The following provisions shall apply:

1. Roadway Improvements

All plans and design are to be prepared in accordance with the latest standards adopted by AASHTO, FDOT Standard Specifications, FDOT current memorandums, and the current editions of the FDOT Roadway Plans Preparation Manual, FDOT Flexible Pavement Design Manual, FDOT Drainage Manual and shall be accurate, legible, complete in design, and drawn to the appropriate scale, furnished in reproducible form on material acceptable to the DEPARTMENT.

2. Drainage Services

All drainage plans and designs are to be prepared in accordance with current FDOT memorandums, FDOT Drainage Manual, 23 CFR 650, and other CONSULTANT Plans Submittal Requirements.

3. Scour Protection Measures

Scour protection measures for the bascule piers will be designed in accordance with FDOT and FHWA criteria. The design will be based on the hydrologic and hydraulic parameters and recommendations from the Bridge Hydraulic Report and the scour protection recommendations from the Scour Evaluation Report.

4. Environmental Services

a. Stormwater and Surface Water

Plans shall be prepared in accordance with Chapter 62-25 Florida Administrative Code (F.A.C.), Regulation of Stormwater Discharge. Surface water management aspects of the plans shall be in accordance with Chapter 14-86, F.A.C., as applicable. The Florida Department of Environmental Protection (FDEP) administers chapter 62-25, F.A.C.; and FDOT administers Chapter 14-86, F.A.C.

The requirements of 40 CFR 122.26 shall also be considered. The Stormwater Pollution Prevention shall meet the requirements of the DEPARTMENT and the Environmental Protection Agency/NPDES (National Pollutant Discharge Elimination System) permit for construction sites.
In addition to these State and Federal permitting requirements, any stormwater management permitting required by local governments for FDOT and DEPARTMENT projects shall be prepared in accordance with their specific regulations.

b. Permits

All applicable data shall be prepared in accordance with Chapter 403, Florida Statutes, as implemented in Chapters 62-4, 62-312, and 62-302, Florida Administrative Code (F.A.C.), or, if within SFWMD, Chapter 40B-4, F.A.C. The data shall also be in

accordance with Federal Regulations; Rivers and Harbors Act of 1899; Section 404 of the Clean Water Act; and parts 114 and 115, Title 33, Code of Federal Regulations. In addition to these State and Federal permitting requirements, any dredge and fill permitting required by local governments for FDOT and DEPARTMENT projects shall be prepared in accordance with their specific regulations.

5. Geotechnical Services

Work shall be performed in accordance with the FDOT Soils and Foundations Procedure Manual #675-020-012-c with all tests performed as specified in the manual using the appropriate FM, AASHTO and ASTM standard testing methods.

6. Structure Plans

All plans and designs are to be prepared in accordance with the sixteenth edition AASHTO Standard Specifications for Highway Bridges and referenced Guide Specifications, Florida Department of Transportation Standard Specifications, Structures Design Guidelines, Structures Detailing Manual, and directions from the State Structures Design Engineer, FDOT District Structures Design Office and/or Lee County Department of Transportation. The design method used should be consistent with that used in the original design.

7. Signing and Marking Plans

All plans are to be prepared in accordance with the latest design standards and practices (Manual on Uniform Traffic Control Devices), FDOT Standard Specifications, Indexes, FDOT Plans Preparation Manual, and instructions issued by the DEPARTMENT to the CONSULTANT, and shall be accurate, legible, complete in design and drawn to the scale as directed by the DEPARTMENT and furnished in reproducible form.

8. Utilities

All work shall be in accordance with the FDOT'S Utility Manual, Standard Specifications, current memorandums, Plans Preparation Manual, and instructions as issued by the DEPARTMENT to the CONSULTANT, and shall be accurate, legible, complete in design, drawn to the appropriate scale and furnished in reproducible form on material acceptable to the DEPARTMENT. Utility relocation plans shall reflect future construction.

9. Construction Contract Duration

The CONSULTANT shall establish the construction contract duration for the subject project. The estimate will be established following the FDOT'S procedures outlined in Topic 700-010-044-a. A guideline has been created by the FDOT and is available for use by the CONSULTANT.

B. Project Schedule

The CONSULTANT shall submit a project schedule as part of the negotiation process to be negotiated and approved by the DEPARTMENT. The project schedule shall consist of the Department's Activity/Event numbers and descriptions utilizing the Critical Path Method of Scheduling.

The CONSULTANT shall submit an anticipated payout curve within ten (10) days after the Notice to Proceed Meeting.

C. Key Personnel

The CONSULTANT'S work shall be performed and directed by the key personnel identified in the proposal presentations by the CONSULTANT. Any changes in the indicated personnel shall be subject to review and approval by the Department Project Manager.

D. Progress Reporting

The CONSULTANT shall meet with the DEPARTMENT on a monthly basis and provide written progress reports, which describe the work performed on each task. Progress reports shall be delivered to the DEPARTMENT on a bi-weekly basis. Upon receipt of the monthly invoice, the Project Manager will make judgment on whether work of sufficient quality and quantity has been accomplished by comparing the reported percent complete against actual work accomplished.

E. Public Involvement Program, Meetings and Presentations

The Public Involvement Program will include communicating to all interested persons, groups, and government organizations information regarding the design of the project.

1. Public Involvement Data

The CONSULTANT will be responsible for the collection of Public Involvement data and the preparation of the Mailing List. The Mailing list will include:

- Any affected or possibly affected parties
- Elected and appointed officials in the area (City, County, State)
- Possible permit and review agencies
- Media in the project area (to be used for news releases, advertisements or any concerns)
- Any person or institution expressing an interest in the project

The collection of public input occurs throughout the life of the project and requires maintaining of files, newspaper clippings, and letters. In addition to collecting public input data, the CONSULTANT shall assist the COUNTY in preparing responses to any public inquiries as a result of the Public Involvement Process.

2. Coordination Meeting with Local Officials

Meetings shall be held with the City of Sanibel (1) and Lee County Management and Planning (1) to brief local officials on the details of the design.

3. Correspondence

Within three (3) days of the receipt or mailing of all written correspondence between the CONSULTANT and any party pertaining specifically to this project, copies shall be provided to the COUNTY for their records.

4. Newsletter

The CONSULTANT shall prepare one (1) newsletter during the course of the design. The newsletter will be mailed by the CONSULTANT to elected officials, property owners, businesses and interested persons included on a mailing list compiled by the CONSULTANT. COUNTY review prior to mailing is required.

5. Unscheduled Meetings and Presentations

The CONSULTANT shall attend a Notice-To-Proceed Meeting with COUNTY representatives, where relevant project information will be provided by the COUNTY, along with procedures for administering the contract. The CONSULTANT and his staff shall also be available with no more than a five (5) workday notice to attend meetings or make presentations at the request of the COUNTY. Such meetings and presentations may be held at any hour between 8:00 A.M. and 12:00 midnight on any day of the week. The CONSULTANT may be called upon to provide maps, press releases, advertisements, audiovisual displays and similar material for such meetings. No more than six such meetings are anticipated. The CONSULTANT shall attend all Pre-Construction and Utility Meetings. The CONSULTANT shall be available for coordination meetings with local governments and/or the consultant preparing the design documents for the adjoining project.

F. Quality Control

The CONSULTANT shall be responsible for the professional quality, technical accuracy and coordination of all surveys, designs, drawings, specifications and other services furnished by the CONSULTANT under this contract.

The CONSULTANT shall provide a Quality Control Plan, which describes the procedures to be utilized to verify, independently check, and review all design drawings, specifications, and other documentation prepared as a part of the contract. The CONSULTANT shall describe how the checking and review processes are to be documented to verify that the required procedures were followed. The Quality Control Plan may be one utilized by the CONSULTANT as part of their normal operation or it may be one specifically designed for this project. The CONSULTANT shall submit a Quality Control Plan for approval within 20 (twenty) calendar days of the written Notice to Proceed. The responsible Professional Engineer or Professional Surveyor that performed the Quality Control review will sign a statement certifying that the review was conducted.

The CONSULTANT shall, without additional compensation, correct all errors or deficiencies in the designs, drawings, specifications and/or other services.

G. Correspondence

Copies of all written correspondence between the CONSULTANT and any party pertaining specifically to this contract shall be provided to the DEPARTMENT for their records within one (1) week of the receipt or mailing of said correspondence.

H. Professional Endorsement

The CONSULTANT shall furnish to the DEPARTMENT, upon final plans acceptance, the original contract plans package, one set of record prints, one set of special provisions and all reference and support documents utilized in the preparation of the contract plans package. The record prints, the special provisions and all reference and support documents shall be professionally endorsed (signed, sealed and certified) by the consultant's Professional Engineer in responsible charge of the project's design. The professional endorsement shall be performed in accordance with the FDOT Plans Preparation Manual.

I. Liaison Office

The DEPARTMENT and the CONSULTANT will designate a Liaison Office and a Project Manager who shall be the representative of the their respective organization for the Project.

J. Optional Services

At the DEPARTMENT'S option, the CONSULTANT may be requested to provide additional services. The fee for these services shall be negotiated in accordance with the terms detailed in Exhibit B, Method of Compensation of the Standard Consultant Agreement or supplemental agreements for a fair, competitive and reasonable cost, considering the scope and complexity of the project(s).

Upon completion certain studies and analysis by the CONSULTANT, the DEPARTMENT may request the CONSULTANT to perform Optional Services in the areas of Design Surveys, Overhead Sign Lighting Upgrades, Overhead Sign Supports Design, Bridge Hydraulics Analysis, Scour Analysis and any other design, which is deemed necessary for completion of the Project. The fee for these services shall be provided for and negotiated, if necessary, in accordance with the estimates provided previously by the CONSULTANT for these specific work areas, and in accordance with the terms detailed in Exhibit B, Method of Compensation, for a fair, competitive and reasonable cost, considering the scope and complexity of the project. The Optional Services will be authorized by letter from the DEPARTMENT'S Project Manager upon documentation prepared as part of the contract.

K. Submittals

The CONSULTANT shall be responsible for detailed plans checking as outlined in the FDOT Plans Preparation Manual. This includes showing a checklist of the items listed in the Plans Preparation Manual for each submittal that has been completed. Plans must meet the minimum contents of a particular phase submittal prior to submission for review. The CONSULTANT shall provide copies of the required documents as directed by the Department.

The CONSULTANT'S schedule should allow for a four-week review time for all scheduled submittals.

L. Computer Automation

The project will be developed utilizing Computer Aided Drafting and Design (CADD) systems. The FDOT makes available software to help assure quality and conformance with policy and procedures regarding CADD. It is the responsibility of the CONSULTANT to meet the requirements in the FDOT CADD MANUAL (Topic No. 625-050-001). The CONSULTANT will submit final documents and files as described therein. Additional related information is found in the FDOT Plans Preparation Manual (Topic No. 625-000-008).

SECTION VII. METHOD OF COMPENSATION

Payment for the work accomplished will be in accordance with Exhibit B of this contract. Invoices shall be submitted in a format prescribed by the DEPARTMENT. The DEPARTMENT'S Project Manager and the CONSULTANT shall monitor the cumulative invoiced billings to insure the reasonableness of the billings compared to the project schedule and the work accomplished and accepted by the DEPARTMENT.

SECTION VIII. OTHER SPECIAL AREAS (MISCELLANEOUS ITEMS)

A. General

1. PLANS UPDATE AND MAINTENANCE:

   The CONSULTANT shall perform engineering analyses and/or make revisions to original reproducibles or special provisions, as requested by the DEPARTMENT, to reflect additions, deletions and/or modifications prior to and subsequent to letting. Whenever original reproducibles are changed, the CONSULTANT shall submit to the DEPARTMENT one (1) set of signed and sealed prints of the revised sheets with the revised reproducibles. This requirement is in addition to any other reproduction and delivery instruction given by the DEPARTMENT in specific instances.

2. POST-DESIGN SERVICES:

   The CONSULTANT shall provide to the DEPARTMENT additional services as required to satisfactorily complete construction. These services are intended to deal with changed conditions or services required during construction and is not intended for instances of CONSULTANT errors and/or omissions. The fee(s) for these services shall be established if and when said services are required.

3. CONSTRUCTION ASSISTANCE:

   The CONSULTANT shall provide to the DEPARTMENT qualified representation during the construction phase to deal with issues concerning the intent and interpretation of the construction contract plans and documents prepared in the work. Should changed conditions be encountered in the field and when requested by the DEPARTMENT, the CONSULTANT shall respond in a timely manner with suitable engineering solutions, which take into account the changed conditions.

   On site appearance of CONSULTANT shall be made during construction at the request of the DEPARTMENT or its designated representative.

From time to time during construction the CONSULTANT may be requested by the DEPARTMENT or its designated representative to review contractor proposed field changes or to respond with a recommended solution to remedy particular field situations not covered by the plans and specifications.

The CONSULTANT is required to attend Pre-Utility and Pre-Construction meetings on the project. The Department, prior to the beginning of construction will schedule these meetings. The CONSULTANT may be required to attend Partnering Meetings if the project is identified as a partnering project.

4. REVIEW OF SHOP DRAWINGS:

Shop drawing reviews shall be performed by the CONSULTANT in accordance with Chapter 28 of the Florida Department of Transportation Plans Preparation Manual.

EXHIBIT B

Date: November 2002

COMPENSATION AND METHOD OF PAYMENT

For

Repair and Rehabilitation Structure A (Bridge No. 124043)

Section 1. BASIC SERVICES/TASK(S)

The COUNTY shall compensate the CONSULTANT for providing and performing the Task(s) set forth and enumerated in EXHIBIT "A", entitled "SCOPE OF PROFESSIONAL SERVICES", as follows:

NOTE: A Lump Sum (L.S.) or Not-to-Exceed (N.T.E.) amount of compensation to be paid the CONSULTANT should be established and set forth below for each task or sub-task described and authorized in Exhibit "A". In accordance with Agreement Article 5.02(2) "Method of Payment", tasks to be paid on a Work-in-Progress payment basis should be identified (WIPP).

Sub Task Number	Sub Task Title	Amount of Compensation	Indicate Basis of Compensation LS or NTE	If Applicable Indicate (W.I.P.P.)
	Preliminary Engineering			
1A	Bascule Span Preliminary Engineering	$ 62,080.00	NTE	W.I.P.P.
1B	Approach Spans and Roadway Preliminary Engineering	$ 39,514.27	NTE	W.I.P.P.
1C	Cathodic Protection System Analysis	$ 38,438.82	NTE	W.I.P.P.
1D	Geotechnical Services	$ 49,677.75	NTE	W.I.P.P.
2	**Final Engineering Plans**			
2A	Bascule Span Final Plans	$247,390.00	NTE	W.I.P.P.
2B	Approach Spans Final Plans	$182,635.54	NTE	W.I.P.P.
2C	Cathodic Protection Final Plans	$ 52,398.56	NTE	W.I.P.P.
2D	Approach Spans & Roadway Widening Final Plans	$ 73,851.33	NTE	W.I.P.P.
3	**Public Involvement**	$ 14,463.94	NTE	W.I.P.P.
4	**Expenses**	$ 39,444.42	LS	W.I.P.P.
TOTAL		$799,894.63		

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Section 2. ADDITIONAL SERVICES

The COUNTY shall compensate the CONSULTANT for such ADDITIONAL SERVICES as are requested and authorized in writing for such amounts or on such a basis as may be mutually agreed to in writing by both parties to this Agreement. The basis and/or amount of compensation to be paid the CONSULTANT for ADDITIONAL SERVICES requested and authorized in writing by the COUNTY shall be as set forth in Article 3.11 of this Agreement.

Should it be mutually agreed to base compensation for ADDITIONAL SERVICES on an hourly rate charge basis for each involved professional and technical employee's wage rate classification, the applicable hourly rates to be charged are as set forth and contained in ATTACHMENT NO. 1 hereto dated **November 2002**, entitled "CONSULTANT'S PERSONNEL HOURLY RATE SCHEDULE".

ATTACHMENT NO. 1 TO EXHIBIT B

Date: November 2002

CONSULTANT'S PERSONNEL HOURLY RATE SCHEDULE ***

For

Repair and Rehabilitation Structure A (Bridge No. 124043)

CONSULTANT OR SUB-CONSULTANT NAME **Hardesty & Hanover, LLP**

(1) Project Position or Classification (Function to be Performed)	(2) Current Direct* Payroll Average Hourly Rate	(3) Multiplier**	(4) Hourly Rate To Be Charged (Column 2x3)
Principal	$50.00	2.8	$140.00
Senior Structural Engineer	$35.71	2.8	$100.00
Project Structural Engineer	$26.79	2.8	$75.00
Senior Mechanical Engineer	$35.71	2.8	$100.00
Project Mechanical Engineer	$26.79	2.8	$75.00
Senior Electrical Engineer	$35.71	2.8	$100.00
Project Electrical Engineer	$26.79	2.8	$75.00

*NOTE: Direct Payroll hourly rate means the actual gross hourly wage paid.

**NOTE: Indicate applicable multiplier for indirect personnel costs, general administrative and overhead costs, and profit.

***NOTE: A separate personnel hourly rate schedule should also be attached for each Sub-Consultant listed in Exhibit "D".

ATTACHMENT NO. 1 TO EXHIBIT B

Date: November 2002

CONSULTANT'S PERSONNEL HOURLY RATE SCHEDULE ***

For

Repair and Rehabilitation Structure A (Bridge No. 124043

CONSULTANT OR SUB-CONSULTANT NAME **HNTB Corporation**

(1) Project Position or Classification (Function to be Performed)	(2) Current Direct* Payroll Average Hourly Rate	(3) Multiplier**	(4) Hourly Rate To Be Charged (Column 2x3)
Chief Bridge Engineer	$53.59	2.83	$151.67
Senior Engineer	$31.52	2.83	$89.21
Engineer	$24.29	2.83	$68.74
Senior Technician	$39.76	2.83	$112.53
Technician	$23.68	2.83	$67.02

*NOTE: Direct Payroll hourly rate means the actual gross hourly wage paid.

**NOTE: Indicate applicable multiplier for indirect personnel costs, general administrative and overhead costs, and profit.

***NOTE: A separate personnel hourly rate schedule should also be attached for each Sub-Consultant listed in Exhibit "D".

ATTACHMENT NO. 1 TO EXHIBIT B

Date: November 2002

CONSULTANT'S PERSONNEL HOURLY RATE SCHEDULE ***

For

Repair and Rehabilitation Structure A (Bridge No. 124043)

CONSULTANT OR SUB-CONSULTANT NAME **CONCORR, Inc.**

(A separate Attachment No. 1 should be included for each Sub-Consultant)

(1) Project Position or Classification (Function to be Performed)	(2) Current Direct* Payroll Average Hourly Rate	(3) Multiplier**	(4) Hourly Rate To Be Charged (Column 2x3)
Principal	$46.42	2.68	$124.40
Project Manager	$29.78	2.68	$79.81
Technician	$19.15	2.68	$51.32
Draftsman	$22.53	2.68	$60.38

*NOTE: Direct Payroll hourly rate means the actual gross hourly wage paid.

**NOTE: Indicate applicable multiplier for indirect personnel costs, general administrative and overhead costs, and profit.

***NOTE: A separate personnel hourly rate schedule should also be attached for each Sub-Consultant listed in Exhibit "D".

ATTACHMENT NO. 1 TO EXHIBIT B

Date: November 2002

CONSULTANT'S PERSONNEL HOURLY RATE SCHEDULE ***

For

Repair and Rehabilitation Structure A (Bridge No. 124043)

CONSULTANT OR SUB-CONSULTANT NAME **Ardaman & Associates, Inc.**

(1) Project Position or Classification (Function to be Performed)	(2) Current Direct* Payroll Average Hourly Rate	(3) Multiplier**	(4) Hourly Rate To Be Charged (Column 2x3)
Senior Project Engineer	$51.64	2.13	$110.00
Technical Draftsperson	$17.37	2.13	$37.00
Technical Secretary	$17.37	2.13	$37.00

*NOTE: Direct Payroll hourly rate means the actual gross hourly wage paid.

**NOTE: Indicate applicable multiplier for indirect personnel costs, general administrative and overhead costs, and profit.

***NOTE: A separate personnel hourly rate schedule should also be attached for each Sub-Consultant listed in Exhibit "D".

ATTACHMENT NO. 1 TO EXHIBIT B

Date: November 2002

CONSULTANT'S PERSONNEL HOURLY RATE SCHEDULE ***

For

Repair and Rehabilitation Structure A (Bridge No. 124043)

CONSULTANT OR SUB-CONSULTANT NAME **Cella Associates, Inc.**

(1) Project Position or Classification (Function to be Performed)	(2) Current Direct* Payroll Average Hourly Rate	(3) Multiplier**	(4) Hourly Rate To Be Charged (Column 2x3)
Project Manager	$34.69	3.2	$111.00
Senior Professional	$28.84	3.2	$92.30
Planner	$24.43	3.2	$78.18
Technician	$20.97	3.2	$67.11
Administrative	$18.09	3.2	$57.82

*NOTE: Direct Payroll hourly rate means the actual gross hourly wage paid.

**NOTE: Indicate applicable multiplier for indirect personnel costs, general administrative and overhead costs, and profit.

***NOTE: A separate personnel hourly rate schedule should also be attached for each Sub-Consultant listed in Exhibit "D".

NON-PERSONNEL REIMBURSABLE EXPENSES AND COSTS

for CN-02-14 Sanibel Span "A" and Bascule Rehabilitation Design

(Enter Project Name from Page 1 of the Agreement)

CONSULTANT OR SUB-CONSULTANT NAME Hardesty & Hanover LLP

(A separate Attachment No. 2 should be included for each Sub-Consultant)

ITEM	BASIS OF CHARGE
Telephone (Long Distance)	Actual Cost
Postage and Shipping	Actual Cost
Commercial Air Travel	Actual Cost (Coach)
Vehicle Travel Allowance (or)	$0.29/Mile
Vehicle Rental/Gas	Actual Cost
Lodging (Per Person)	Actual Cost or NTE $85.00
Meals: (Breakfast)	NTE $3.00
(Lunch)	NTE $6.00
(Dinner)	NTE $12.00
Reproduction (Photocopy) 8 ½" x 11"	$0.15/Page
8 ½" x 14"	$0.20/Page
11" x 14"	$0.35/Page
Reproduction (Blue/White Prints)	$0.20/Sq. Ft.
Printing/Binding	Actual Cost
Mylar Sheets	Actual Cost
Photographic Supplies & Services	Actual Cost
Tolls	Actual Cost
*List other specific project related reimbursables (i.e. film/developing):	
NOTE: Receipts or in-house logs are required for all non-personnel reimbursable expenses unless exempt (such as meals).	
Administrative Services Fee – Applicable only when specifically authorized by the County, for administering the procurement of special additional services, equipment, reimbursables etc. not covered under the costs and/or changes established in the Agreement.	

NOTE: N.T.E. indicates Not-To-Exceed

CMO:033
09/25/01

NON-PERSONNEL REIMBURSABLE EXPENSES AND COSTS

for CN-02-14 Sanibel Span "A" and Bascule Rehabilitation Design

(Enter Project Name from Page 1 of the Agreement)

CONSULTANT OR SUB-CONSULTANT NAME HNTB

(A separate Attachment No. 2 should be included for each Sub-Consultant)

ITEM	BASIS OF CHARGE
Telephone (Long Distance)	Actual Cost
Postage and Shipping	Actual Cost
Commercial Air Travel	Actual Cost (Coach)
Vehicle Travel Allowance (or)	$0.29/Mile
Vehicle Rental/Gas	Actual Cost
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Tolls	Actual Cost
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NOTE: Receipts or in-house logs are required for all non-personnel reimbursable expenses unless exempt (such as meals).	
Administrative Services Fee – Applicable only when specifically authorized by the County, for administering the procurement of special additional services, equipment, reimbursables etc. not covered under the costs and/or changes established in the Agreement.	

NOTE: N.T.E. indicates Not-To-Exceed

CMO:033
09/25/01

NON-PERSONNEL REIMBURSABLE EXPENSES AND COSTS

for CN-02-14 Sanibel Span "A" and Bascule Rehabilitation Design

(Enter Project Name from Page 1 of the Agreement)

CONSULTANT OR SUB-CONSULTANT NAME Ardaman & Associates

(A separate Attachment No. 2 should be included for each Sub-Consultant)

ITEM	BASIS OF CHARGE
Telephone (Long Distance)	Actual Cost
Postage and Shipping	Actual Cost
Commercial Air Travel	Actual Cost (Coach)
Vehicle Travel Allowance (or)	$0.29/Mile
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NOTE: Receipts or in-house logs are required for all non-personnel reimbursable expenses unless exempt (such as meals).	
Administrative Services Fee – Applicable only when specifically authorized by the County, for administering the procurement of special additional services, equipment, reimbursables etc. not covered under the costs and/or changes established in the Agreement.	

NOTE: N.T.E. indicates Not-To-Exceed

CMO:033
09/25/01

NON-PERSONNEL REIMBURSABLE EXPENSES AND COSTS

for CN-02-14 Sanibel Span "A" and Bascule Rehabilitation Design

(Enter Project Name from Page 1 of the Agreement)

CONSULTANT OR SUB-CONSULTANT NAME Concorr Inc.

(A separate Attachment No. 2 should be included for each Sub-Consultant)

ITEM	BASIS OF CHARGE
Telephone (Long Distance)	Actual Cost
Postage and Shipping	Actual Cost
Commercial Air Travel	Actual Cost (Coach)
Vehicle Travel Allowance (or)	$0.29/Mile
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Photographic Supplies & Services	Actual Cost
Tolls	Actual Cost
*List other specific project related reimbursables (i.e. film/developing):	
NOTE: Receipts or in-house logs are required for all non-personnel reimbursable expenses unless exempt (such as meals).	
Administrative Services Fee – Applicable only when specifically authorized by the County, for administering the procurement of special additional services, equipment, reimbursables etc. not covered under the costs and/or changes established in the Agreement.	

NOTE: N.T.E. indicates Not-To-Exceed

CMO:033
09/25/01

NON-PERSONNEL REIMBURSABLE EXPENSES AND COSTS

for CN-02-14 Sanibel Span "A" and Bascule Rehabilitation Design

(Enter Project Name from Page 1 of the Agreement)

CONSULTANT OR SUB-CONSULTANT NAME Cella & Associates.

(A separate Attachment No. 2 should be included for each Sub-Consultant)

ITEM	BASIS OF CHARGE
Telephone (Long Distance)	Actual Cost
Postage and Shipping	Actual Cost
Commercial Air Travel	Actual Cost (Coach)
Vehicle Travel Allowance (or)	$0.29/Mile
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Lodging (Per Person)	Actual Cost or NTE $85.00
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NOTE: Receipts or in-house logs are required for all non-personnel reimbursable expenses unless exempt (such as meals).	
Administrative Services Fee – Applicable only when specifically authorized by the County, for administering the procurement of special additional services, equipment, reimbursables etc. not covered under the costs and/or changes established in the Agreement.	

NOTE: N.T.E. indicates Not-To-Exceed

CMO:033
09/25/01

EXHIBIT C

Date: November 2002

TIME AND SCHEDULE OF PERFORMANCE

For

Repair and Rehabilitation Structure A (Bridge No. 124043)

This EXHIBIT C establishes times of completion for the various phases and tasks required to provide and perform the services and work set forth in EXHIBIT "A" of this Agreement. The times and schedule of performance set forth hereinafter is established pursuant to Article 6.00 of this Agreement.

Phase and/or Task Reference As Enumberated in EXHIBIT "A"	NAME OR TITLE Of Phase and/Task	Number Of Calendar Days For Completion Of Each Phase And/or Task	Cumulative Number Of Calendar Days For Completion From Date of Notice to Proceed
Task 1	Phase I : Preliminary Engineering/Bridge Development Report	90	90
Preliminary Engineering			
Task 2: Final Plans & Task 3: Public Involvement	30% Plans	75	195
	90% Plans	150	375
	FINAL PLANS	45	450

CMO:034
09/25/01

EXHIBIT D

Date: November 2002

CONSULTANT'S ASSOCIATED SUB-CONSULTANT(S) AND SUBCONTRACTOR(S)

For

Repair and Rehabilitation Structure A (Bridge No. 124043)

CONSULTANT has identified the following Sub-Consultant(s) and/or SubContractor(s) which may be engaged to assist the CONSULTANT in providing and performing services and work on this Project:

Service and/or Work to be Provided or Performed	Name and Address of Individual or Firm	Disadvantaged, Minority or Women Business Enterprise. (If Yes, Indicate Type)			Sub-Consultant Services are Exempted from Prime Consultant's Insurance Coverage	
		Yes	No	Type	Yes	No
Approach Roadway and Approach Span Engineering	HNTB 5850 TG Lee Blvd, Suite 600 Orlando, FL 32822		X		X	
Geotechnical Engineering Services	Ardaman & Associates, Inc. 9970 Bavaria Road Ft. Myers, FL 33913		X		X	
Concrete Corrosion Specialists	Concorr, Inc. 44633 Guilford Drive #101 Ashburn, VA 20147	X		MBE	X	
Public Involvement	Cella & Associates 2125 First Street Suite 201 Fort Myers, FL 33901	X		WBE	X	

CMO:035
09/25/01

EXHIBIT E

Date: November 2002

PROJECT GUIDELINES AND CRITERIA

For

Repair and Rehabilitation Structure A (Bridge No. 124043)

The COUNTY has established the following Guidelines, Criteria, Goals, Objectives, Constraints, Schedule, Budget and/or Requirements which shall serve as a guide to the CONSULTANT in performing the professional services and work to be provided pursuant to this Agreement:

See Exhibit A Scope of Services

CMO:036
09/25/01

EXHIBIT F

DATE: November 2002

TRUTH IN NEGOTIATION CERTIFICATE

This Certificate is executed and given by the undersigned as a condition precedent to entering into a Professional Services Agreement with the Lee County Board of County Commissioners for the project known as: **Repair and Rehabilitation Structure A (Bridge No. 124043)**

Before me, the undersigned authority personally appeared, who having personal knowledge as to the facts and statements contained herein after being duly sworn, deposes and states under oath that:

1. This Certificate shall be attached to and constitute an integral part of the above said Professional Services Agreement as provided in Article 3.11.

2. The undersigned hereby certifies that the wage rates and other factual unit costs supporting the compensation on which this Professional Services Agreement is established are accurate, complete, and current on the date set forth here-in-above.

3. The truth of statements made herein may be relied upon by the County and the undersigned is fully advised of the legal effect and obligations imposed upon him by the execution of this instrument under oath.

Executed on behalf of the Party to the Professional Services Agreement referred to as the CONSULTANT, doing business as:

HARDESTY & HANOVER, LLP

Timothy J. Noles

BY: Timothy J. Noles, P.E.

TITLE: Associate

The foregoing instrument was signed and acknowledged before me this 15 day of November 2002, 2002, by Timothy J. Noles who has produced N/A as
(Print or Type Name) (Type of Identification and Number)
identification or who is known by me personally.

Megan L. Andresen
Notary Public Signature

Megan L. Andresen
Printed Name of Notary Public

Megan L. Andresen
Commission # DD 086569
Expires Jan. 24, 2006
Aaron Notary
1-800-350-5161

DD 086569 / 1-24-06
Notary Commission Number/Expiration

CMO:
00/00/00

KAE

ACORD. CERTIFICATE OF LIABILITY INSURANCE

OP ID CV HARDS-1 | DATE (MM/DD/YY) 11/14/02

PRODUCER

ACEC/MARSH
800 Market St, Ste. 2600
St. Louis MO 63101-2500
Phone: 800-338-1391 Fax: 888-621-3173

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

INSURED

Hardesty & Hanover, LLP
ATT: Kathleen Eng
1501 Broadway
New York NY 10036

INSURERS AFFORDING COVERAGE

INSURER A: Hartford Insurance Company
INSURER B:
INSURER C:
INSURER D:
INSURER E:

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
A	GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY CLAIMS MADE X OCCUR X CONTRACT LIAB. GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PROJECT LOC	84UUVNU6250	11/01/02	11/01/03	EACH OCCURRENCE FIRE DAMAGE (Any one fire) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1000000 $ 300000 $ 10000 $ 1000000 $ 2000000 $ 2000000
A	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS X HIRED AUTOS X NON-OWNED AUTOS	84UEGNP2566	11/01/02	11/01/03	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1000000 $ $ $
	GARAGE LIABILITY ANY AUTO				AUTO ONLY - EA ACCIDENT OTHER THAN AUTO ONLY: EA ACC AGG	$ $ $
A	EXCESS LIABILITY X OCCUR CLAIMS MADE DEDUCTIBLE RETENTION $	84XHGRL6841	11/01/02	11/01/03	EACH OCCURRENCE AGGREGATE	$ 5000000 $ 5000000 $ $ $
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY	84WBGFI1755	11/01/02	11/01/03	X WC STATUTORY LIMITS OTHER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 500000 $ 500000 $ 500000
A	OTHER Valuable Papers	84UUVNU6250	11/01/02	11/01/03	1,000,000	All Risk

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS

RE: SANIBEL ISLAND, H&H 2260
CERTIFICATE HOLDER IS INCLUDED AS ADDITIONAL INSURED FOR ALL COVERAGES SHOWN ABOVE EXCEPT FOR W/C.

CERTIFICATE HOLDER | N ADDITIONAL INSURED; INSURER LETTER: | LEECO-2

Lee County Board of County Commissioners
Attn: Public Works Admin
P.O. Box 398
Ft. Myers FL 33902-0398

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE Alfred A. Petrillo

ACORD CERTIFICATE OF LIABILITY INSURANCE

CER RS HARDNEW

DATE (MM/DD/YY) 11/14/02

PRODUCER
Cornwall & Stevens A Div of
Arthur J. Gallagher & Co
444 Madison Avenue
New York NY 10022
Phone: 212-994-7100 Fax: 212-994-7021

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

INSURERS AFFORDING COVERAGE

INSURED
Hardesty & Hanover LLP
15485 Eagle Nest Lane
Miami Lakes FL 33014

INSURER A: Continental Casualty Company
INSURER B:
INSURER C:
INSURER D:
INSURER E:

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
	GENERAL LIABILITY				EACH OCCURRENCE	$
	COMMERCIAL GENERAL LIABILITY				FIRE DAMAGE (Any one fire)	$
	CLAIMS MADE OCCUR				MED EXP (Any one person)	$
					PERSONAL & ADV INJURY	$
					GENERAL AGGREGATE	$
	GEN'L AGGREGATE LIMIT APPLIES PER: POLICY PRO-JECT LOC				PRODUCTS - COMP/OP AGG	$
	AUTOMOBILE LIABILITY				COMBINED SINGLE LIMIT (Ea accident)	$
	ANY AUTO					
	ALL OWNED AUTOS				BODILY INJURY (Per person)	$
	SCHEDULED AUTOS					
	HIRED AUTOS				BODILY INJURY (Per accident)	$
	NON-OWNED AUTOS					
					PROPERTY DAMAGE (Per accident)	$
	GARAGE LIABILITY				AUTO ONLY - EA ACCIDENT	$
	ANY AUTO				OTHER THAN AUTO ONLY: EA ACC	$
					AGG	$
	EXCESS LIABILITY				EACH OCCURRENCE	$
	OCCUR CLAIMS MADE				AGGREGATE	$
						$
	DEDUCTIBLE					$
	RETENTION $					$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY				WC STATUTORY LIMITS / OTHER	
					E.L. EACH ACCIDENT	$
					E.L. DISEASE - EA EMPLOYEE	$
					E.L. DISEASE - POLICY LIMIT	$
A	OTHER Professional Liability	AAE 821-84-28	01/01/02	01/01/03	5,000,000	

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS
Sanibel Island H&H Job # 2260

CERTIFICATE HOLDER | N | ADDITIONAL INSURED; INSURER LETTER:

LEECOUN
Lee County Board of County Commissioners Attn: Public Works Administration
Contracts Management
POBox 398, Fort Myers FL 33902-0398

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 60 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO MAIL SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE
Ronald L. Sposato Ronald L. Sposato

©ACORD CORPORATION 1988

EXHIBIT E

2404

PROFESSIONAL SERVICES AGREEMENT

This PROFESSIONAL SERVICES AGREEMENT is made and entered into this 18th day of March, 2003, between the Board of County Commissioners of LEE COUNTY, a political subdivision of the STATE OF FLORIDA hereinafter referred to as the "COUNTY", and URS Corporation Southern, Tampa, Florida, hereinafter referred to as the "CONSULTANT".

WITNESSETH

WHEREAS, the COUNTY desires to obtain the professional Engineering and Design services of said CONSULTANT to provide and perform professional services as further described hereinafter concerning the Project to be referred to and identified as: Causeway Reconstruction and Replacement of Structures B and C Sanibel Island Causeway Improvements, and

WHEREAS, the CONSULTANT hereby certifies that CONSULTANT has been granted and possesses valid, current licenses to do business in the State of Florida and in Lee County, Florida, issued by the respective State Boards and Government Agencies responsible for regulating and licensing the professional services to be provided and performed by the CONSULTANT pursuant to this Agreement; and

WHEREAS, the CONSULTANT has reviewed the professional services required pursuant to this Agreement and is qualified, willing and able to provide and perform all such services in accordance with the provisions, conditions and terms hereinafter set forth; and

WHEREAS, the selection and engagement of the CONSULTANT has been made by the COUNTY in accordance with the provisions of the Consultants' Competitive Negotiation Act, Chapter 287.055, Florida Statutes, and in accordance with the provisions of the Lee County Contract Manual for Professional Services as approved and put into effect by the Lee County Board of County Commissioners, September 25, 2001, and as subsequently revised.

NOW, THEREFORE, in consideration of the mutual covenants, terms and provisions contained herein, the parties hereto agree that with the mutual acceptance of this Agreement as indicated hereinafter by the execution of this Agreement by both parties that a Contract shall exist between both parties consisting of:

ARTICLE 1.00 - SCOPE OF PROFESSIONAL SERVICES

CONSULTANT hereby agrees to provide and perform the professional services required and necessary to complete the services and work as set forth in EXHIBIT "A", entitled "SCOPE OF PROFESSIONAL SERVICES", which EXHIBIT "A" is attached hereto and made a part of this Agreement.

EXHIBIT "A", entitled "SCOPE OF PROFESSIONAL SERVICES", which EXHIBIT "A" is attached hereto and made a part of this Agreement.

ARTICLE 2.00 - DEFINITIONS

The following definition of terms associated with this Agreement is provided to establish a common understanding between both parties to this Agreement as to the intended usage, application, and interpretation of such terms pertaining to this Agreement.

2.01 COUNTY

The term COUNTY shall refer to the Board of County Commissioners of Lee County, a political subdivision of the State of Florida, and any official and/or employees thereof who shall be duly authorized to act on the COUNTY's behalf relative to this Agreement.

2.02 CONSULTANT

The term CONSULTANT shall refer to the individual or firm offering professional services which by execution of this Agreement shall be legally obligated, responsible, and liable for providing and performing any and all of the services, work and materials, including services and/or work of sub-consultants and subcontractors, required under the covenants, terms and provisions contained in this Agreement and any and all Supplemental Agreements or Change Orders thereto.

2.03 PROFESSIONAL SERVICES

The term PROFESSIONAL SERVICES shall refer to all of the services, work, materials and all related professional, technical and administrative activities which are necessary to be provided and performed by the CONSULTANT and its employees and any and all sub-consultants and subcontractors the CONSULTANT may engage to provide, perform and complete the services required pursuant to the covenants, terms and provisions of this Agreement.

2.04 SUB-CONSULTANT

The term SUB-CONSULTANT shall refer to any individual or firm offering professional services which is engaged by the CONSULTANT to assist the CONSULTANT in providing and performing the professional services, work and materials for which the CONSULTANT is contractually obligated, responsible and liable to provide and perform under this Agreement. The COUNTY shall not be a party to, responsible or liable for, or assume any obligation whatever for any Agreement entered into between the CONSULTANT and any SUB-CONSULTANT.

2.05 SUBCONTRACTOR

The term SUBCONTRACTOR shall refer to any individual, company or firm providing other than professional services which is engaged by the CONSULTANT to assist the CONSULTANT in providing and performing services, work and materials for which the CONSULTANT is contractually obligated, responsible, and liable to provide and perform under this Agreement. The COUNTY shall not be a party to, responsible or liable for, or assume any obligation whatever for any Agreement entered into between the CONSULTANT and any SUBCONTRACTOR.

2.06 PROJECT

The term PROJECT shall refer to such facility, system, program or item as described in the summary statement set forth in the Preamble on Page One of this Agreement.

2.07 BASIC SERVICES

The term BASIC SERVICES shall refer to the professional services set forth and required pursuant to this Agreement and as described in further detail in the attached EXHIBIT "A", entitled "SCOPE OF PROFESSIONAL SERVICES", which EXHIBIT "A" is attached hereto and made a part of this Agreement.

2.08 ADDITIONAL SERVICES

The term ADDITIONAL SERVICES shall refer to such professional services as the COUNTY may request and authorize, in writing, the CONSULTANT to provide and perform relative to this Agreement which are not included in the BASIC SERVICES. Additional services shall be authorized by the execution of both parties to this Agreement of either a Supplemental Agreement or a Change Order Agreement.

2.09 SUPPLEMENTAL AGREEMENT

The term SUPPLEMENTAL AGREEMENT shall refer to a written document executed by both parties to this Agreement setting forth and authorizing professional service tasks which were not set forth in and are supplemental to the Scope of Services contained in the initial Professional Services Agreement or other SUPPLEMENTAL AGREEMENTS issued thereto. The SUPPLEMENTAL AGREEMENT, which shall be executed on a Lee County standard form, shall set forth the authorized supplement(s) to the: Scope of the Professional Services tasks, work or materials to be performed or provided by the CONSULTANT; the compensation and method of payment; the schedule or time period for performance and completion; and the guidelines, criteria, or requirements pertaining thereto.

The amount of the change in contract compensation and time set forth in any and all Supplemental Agreements executed and issued under this Agreement shall be understood and agreed by both Parties to this Agreement to be fair, equitable, adequate and complete. The changed

compensation shall be understood and agreed to be the total of all costs associated with or impacted by the Supplemental Agreements including, but not limited to any and all direct costs, indirect costs and associated costs which may result from or be caused by the Supplemental Agreements, and shall be understood and agreed to include a fair, equitable and adequate adjustment to cover the CONSULTANT's general administrative and overhead costs and profit.

2.10 CHANGE ORDER

The term CHANGE ORDER shall refer to a written document, CHANGE ORDER AGREEMENT, executed by both parties to this Agreement setting forth and authorizing changes to the agreed upon Scope of Professional Services and Tasks, Compensation and Method of Payment, Time and Schedule of Performance, or Project Guidelines and Criteria as such were set forth and agreed to in the initial AGREEMENT, SUPPLEMENTAL AGREEMENTS, SUPPLEMENTAL TASK AUTHORIZATION(S), or previous CHANGE ORDERS issued thereto. The CHANGE ORDER document, which shall be executed on a Lee County standard form, shall set forth the authorized changes to the: scope of professional services, tasks, work or materials to be performed or provided by the CONSULTANT; the compensation and method of payment; the schedule or time period for performance and completion, and the guidelines, criteria and requirements pertaining thereto.

The amount of the change in contract compensation and time set forth in any and all Change Orders executed and issued under this Agreement shall be understood and agreed by both Parties to this Agreement to be fair, equitable, adequate and complete. The changed compensation shall be understood and agreed to be the total of all costs associated with or impacted by the Change Order including, but not limited to any and all direct costs, indirect costs and associated costs which may result from or be caused by the Change Order, and shall be understood and agreed to include a fair, equitable and adequate adjustment to cover the CONSULTANT's general administrative and overhead costs and profit.

In the event the County decides to delete all, or portions, of the Scope of Services, Task(s), or Requirements set forth in the initial Agreement, Supplemental Agreements, Supplemental Task Authorizations or previously authorized Change Orders, the COUNTY may do so by the unilateral issuance of a written Change Order to the CONSULTANT. Such a unilaterally issued Change Order shall set forth, if appropriate, (1) an agreement by both the COUNTY and the CONSULTANT establishing changes in the amount of compensation to be paid the CONSULTANT as a result of the deletion or decrease in services required, or (2) in the absence of such an agreement concerning compensation, the unilaterally issued Change Order shall set forth the basis to be used in subsequently considering, and reaching agreement on change(s) in the compensation to be paid the CONSULTANT. The failure on the part of the CONSULTANT to execute a Change Order issued unilaterally by the COUNTY to effect a deletion or decrease in the services required shall have no effect on, or otherwise prevent the COUNTY from exercising its rights to direct the stated deletion or decrease in the services to be provided or performed by the CONSULTANT.

2.11 SUPPLEMENTAL TASK AUTHORIZATION

The term Supplemental Task Authorization as used refers to a written document executed by both parties to an existing Professional Services Agreement, or Service Provider Agreement, setting forth and authorizing a limited number of Professional Services, tasks, or work. Such Supplemental Task Authorizations are consistent with and have previously been included within the scope of services in the initial Professional Services Agreement, or Service Provider Agreement, for which authorization has not been previously given or budgeted.

2.12 WORK ORDER

The term WORK ORDER shall refer to the written document executed by both parties to this Agreement whereby the COUNTY provides authorization and notification to the CONSULTANT, and the CONSULTANT agrees, to proceed to provide or perform certain professional services, tasks or work for which the Scope of Services and Compensation to be paid the CONSULTANT were set forth and agreed to in the initial AGREEMENT, or other SUPPLEMENTAL AGREEMENTS or CHANGE ORDERS or SUPPLEMENTAL TASK AUTHORIZATIONS thereto, such professional services, tasks or work having previously been excluded and not included in written Notice(s) to Proceed issued by the COUNTY to the CONSULTANT. The WORK ORDER document, which shall be executed on a Lee County standard form, shall provide confirmation of the previously agreed to: scope of professional services, tasks, work or materials to be performed or provided by the CONSULTANT; the compensation and method of payment; the schedule or time period for performance and completion; and the guidelines, criteria and requirements pertaining thereto.

2.13 DEPARTMENT DIRECTOR

The term DEPARTMENT DIRECTOR shall refer to the Director of the Department requesting the service, employed by the Lee County Board of County Commissioners to serve and act on the COUNTY'S behalf, as it relates to this Project. The Chairman of the Board of County Commissioners, or his designated representative, shall act on behalf of the COUNTY to execute any and all SUPPLEMENTAL AGREEMENT(S) or CHANGE ORDER(S) or SUPPLEMENTAL TASK AUTHORIZATION(S) approved by the COUNTY and issued to the CONSULTANT pursuant to this Agreement. The DEPARTMENT DIRECTOR, within the authority conferred by the Board of County Commissioners, acting as the COUNTY'S designated representative shall issue written notification to the CONSULTANT of any and all changes approved by the COUNTY in the CONSULTANT'S: (1) compensation (2) time and/or schedule of service delivery; (3) scope of services; or other change(s) relative to BASIC SERVICES and ADDITIONAL SERVICES pursuant to this Agreement, or SUPPLEMENTAL AGREEMENT(S), WORK ORDER(S), or CHANGE ORDER(S) or SUPPLEMENTAL TASK AUTHORIZATION(S) pertaining thereto. The DEPARTMENT DIRECTOR shall be responsible for acting on the COUNTY'S behalf to administer, coordinate, interpret and otherwise manage the contractual provisions and requirements set forth in this Agreement, CHANGE ORDER(S), SUPPLEMENTAL AGREEMENT(S) or WORK ORDER(S) or SUPPLEMENTAL TASK AUTHORIZATION(S) issued thereunder.

2.14 PROJECT MANAGER

The term PROJECT MANAGER shall refer to the person employed or retained by the COUNTY and designated, in writing, to serve and act on the COUNTY'S behalf to provide direct contact and communication between the COUNTY and CONSULTANT with respect to providing information, assistance, guidance, coordination, review, approval and acceptance of the professional services, work and materials to be provided and performed by the CONSULTANT pursuant to this Agreement and such written WORK ORDER(S), SUPPLEMENTAL AGREEMENT(S), SUPPLEMENTAL TASK AUTHORIZATION(S) and CHANGE ORDER(S) as are authorized. The PROJECT MANAGER is not authorized to, and shall not, issue any verbal, or written, request or instruction to the CONSULTANT that would have the effect, or be interpreted to have the effect, of modifying or changing in any way whatever the: (1) Scope of Services to be provided and performed by the CONSULTANT; (2) The time the CONSULTANT is obligated to commence and complete all such services; (3) The amount of compensation the COUNTY is obligated or committed to pay the CONSULTANT. The PROJECT MANAGER shall review and make appropriate recommendations on all requests submitted by the CONSULTANT for payment for services and work provided and performed, and reimbursable costs and expense, as provided for in this Agreement and approved WORK ORDER(S), SUPPLEMENTAL AGREEMENT(S), CHANGE ORDER(S), SUPPLEMENTAL TASK AUTHORIZATION(S) thereto.

2.15 LUMP SUM FEE(S)

Lump Sum Fee(s), hereinafter identified as L.S., are understood and agreed to include all direct and indirect labor costs, personnel related costs, overhead and administrative costs, costs of sub-consultant(s) and/or subcontractor(s), out-of-pocket expenses and costs, professional service fee(s) and any other costs or expenses which may pertain to the services and/or work to be performed, provided and/or furnished by the Consultant as may be required and/or necessary to complete each and every task set forth in the Scope of Professional Services, Exhibit "A", or as may be set forth in subsequent Work Orders, Supplemental Agreements, Supplemental Task Authorizations, and/or Change Orders agreed to in writing by both parties to this Agreement.

2.16 NOT-TO-EXCEED FEE(S)

When all, or any portion, of the CONSULTANT'S compensation to provide and perform the services and work necessary and required pursuant to the Tasks set forth in Agreement Exhibit "A", and any Supplemental Agreements, Change Orders, Supplemental Task Authorizations, and Work Orders authorized thereto, is established to be made on a NOT-TO-EXCEED (N.T.E.) amount basis, it is mutually understood and agreed that such compensation for each completed Task shall be made on the following basis:

For the actual hours necessary, required and expended by the CONSULTANT'S professional and technical personnel, multiplied by the applicable hourly rates for each classification or position as set forth in Attachment No. 1 to Exhibit "B" to the above referenced Agreement and any Supplemental Agreements or Change Orders or Supplemental Task Authorizations authorized thereto; and

2.16 NOT-TO-EXCEED FEE(S) (Continued)

For the actual necessary, required and expended non-personnel reimbursable expenses and costs, multiplied by the applicable "Basis of Charges" for each item as set forth in Attachment No. 2 to Exhibit "B" to the above referenced Agreement and any Supplemental Agreements or Change Orders or Supplemental Task Authorizations authorized thereto; and

For the actual, necessary and required hours, and non-personnel expenses and costs, expended by Sub-Consultants and SubContractors engaged by the CONSULTANT, multiplied by such hourly rates and unit costs as are agreed to by the COUNTY and the CONSULTANT and as are set forth as a part of the above referenced Agreement and any Supplemental Agreements or Change Orders or Supplemental Task Authorizations authorized thereto; and

With the understanding and agreement that the COUNTY shall pay the CONSULTANT for all such costs and expenses within the established Not-to-Exceed amount for each Task or Sub-Task subject to the CONSULTANT presenting an itemized and detailed invoice with appropriate supporting documentation attached thereto to show evidence satisfactory to the COUNTY covering all such costs and expenses; and

With the understanding and agreement that the CONSULTANT'S invoices and all payments to be made for all Not-to-Exceed amounts shall be subject to the review, acceptance and approval of the COUNTY; and

With the understanding and agreement that when the CONSULTANT'S compensation is established on a Not-to-Exceed basis for a specific Task(s) or Sub-Task(s) the total amount of compensation to be paid the CONSULTANT to cover all personnel costs, non-personnel reimbursable expenses and costs, and Sub-Consultant and SubContractor costs for any such specific Task(s) or Sub-Task(s) shall not exceed the amount of the total Not-to-Exceed compensation established and agreed to for each specific Task(s) or Sub-Task(s). In the event the amount of compensation for any Task(s) or Sub-Task(s) to which the CONSULTANT is entitled on the Not-to-Exceed basis set forth above is determined to be necessary, required and actually expended and is determined to be actually less than the Not-to-Exceed amount established for the specific Task or Sub-Task, it is understood and agreed that any unexpended amount under a specific Task or Sub-Task may not be used, applied, transferred, invoiced or paid for services or work provided or performed on any other Task(s) or Sub-Task(s).

ARTICLE 3.00 - OBLIGATIONS OF THE CONSULTANT

The obligations of the CONSULTANT with respect to all the BASIC SERVICES and ADDITIONAL SERVICES authorized pursuant to this Agreement shall include, but not be limited to, the following:

3.01 LICENSES

The CONSULTANT agrees to obtain and maintain throughout the period this Agreement is in effect all such licenses as are required to do business in the State of Florida and in Lee County, Florida, including, but not limited to, licenses required by the respective State Boards and other governmental agencies responsible for regulating and licensing the professional services provided and performed by the CONSULTANT pursuant to this Agreement.

3.02 PERSONNEL

(1) QUALIFIED PERSONNEL

The CONSULTANT agrees when the services to be provided and performed relate to a professional service(s) which, under Florida Statutes, requires a license, certificate of authorization or other form of legal entitlement to practice such services, to employ and/or retain only qualified personnel to be in responsible charge of all BASIC SERVICES and ADDITIONAL SERVICES to be provided pursuant to this Agreement.

(2) CONSULTANT'S PROJECT DIRECTOR

The CONSULTANT agrees to employ and designate, in writing, a qualified and, if required by law, a licensed professional to serve as the CONSULTANT'S Project Director. The CONSULTANT'S Project Director shall be authorized and responsible to act on behalf of the CONSULTANT with respect to directing, coordinating and administering all aspects of the services to be provided and performed under this Agreement thereto. The CONSULTANT'S Project Director shall have full authority to bind and obligate the CONSULTANT on any matter arising under this Agreement unless substitute arrangements have been furnished to the COUNTY in writing. The CONSULTANT agrees that the Project Director shall devote whatever time is required to satisfactorily direct, supervise and manage the services provided and performed by the CONSULTANT throughout the entire period this Agreement is in effect. The person selected by the CONSULTANT to serve as the CONSULTANT'S Project Director shall be subject to the prior approval and acceptance of the COUNTY.

(3) REMOVAL OF PERSONNEL

The CONSULTANT agrees, within thirty (30) calendar days of receipt of a written request from the COUNTY, to promptly remove and replace the CONSULTANT'S Project Director, or any other personnel employed or retained by the CONSULTANT, or personnel of the sub-consultant(s) or subcontractor(s) engaged by the CONSULTANT to provide and/or perform services and/or work pursuant to the requirements of this Agreement, who the COUNTY shall request, in writing, be removed, which request may be made by the COUNTY with or without cause.

3.03 TIMELY ACCOMPLISHMENT OF SERVICES

The timely performance and completion of the required services, work and materials is vitally important to the interests of the COUNTY. Time is of the essence for all of the duties and obligations contained in this Agreement thereto. The COUNTY may suffer damages in the event that the CONSULTANT does not accomplish and complete the required services in a timely manner. The CONSULTANT agrees to employ, engage, retain and/or assign an adequate number of personnel throughout the period of this Agreement so that all BASIC SERVICES and ADDITIONAL SERVICES will be provided, performed and completed in a timely and diligent manner throughout.

3.04 STANDARDS OF PROFESSIONAL SERVICE

The work and/or services to be provided and/or performed by the CONSULTANT and by any Sub-Consultant(s) and/or SubContractor(s) engaged by the CONSULTANT as set forth in the Scope of Professional Services, Exhibit "A", shall be done in accordance with the generally accepted standards of professional practice and in accordance with the laws, rules, regulations, ordinances, codes, policies, standards or other guidelines issued by those governmental agencies which have jurisdiction over all or a portion of this project and which are in effect at the time the COUNTY approves this Agreement, or which may subsequently be changed or revised. Any subsequent change or revision to such laws, rules, regulations, ordinances, codes, policies, standards or other guidelines which requires the CONSULTANT to provide and/or perform work and/or services which are significantly different from that set forth in the Scope of Professional Services, Exhibit "A", shall serve as a basis for the COUNTY to consider the development and issuance of a Change Order to provide for a change to, or Additional Services to the services set forth in the Agreement.

3.05 CORRECTION OF ERRORS, OMISSIONS OR OTHER DEFICIENCIES

(1) RESPONSIBILITY TO CORRECT

The CONSULTANT agrees to be responsible for the professional quality, technical adequacy and accuracy, timely completion, and the coordination of all data, studies, surveys, designs, specifications, calculations, estimates, plans, drawings, construction documents, photographs, reports, memoranda, other documents and instruments, and other services, work and materials performed, provided, and/or furnished by CONSULTANT or by any sub-consultant(s) and/or subcontractor(s) retained or engaged by the CONSULTANT pursuant to this Agreement. The CONSULTANT shall, without additional compensation, correct or revise any errors, omissions or other deficiencies in such data, studies, surveys, designs, specifications, calculations, estimates, plans, drawings, construction documents and instruments, and other services, work and materials resulting from the negligent act, errors or omissions or intentional misconduct of CONSULTANT or any sub-consultant(s) or subcontractor(s) engaged by the CONSULTANT.

(2) COUNTY'S APPROVAL SHALL NOT RELIEVE CONSULTANT OF RESPONSIBILITY

Neither review, approval, or acceptance by the COUNTY of data, studies, surveys, designs, specifications, calculations, estimates, plans, drawings, construction documents, photographs, reports, memoranda, other documents and instruments, and incidental professional services, work and materials furnished hereunder by the CONSULTANT, or any sub-consultant(s) or

(2) COUNTY'S APPROVAL SHALL NOT RELIEVE CONSULTANT OF RESPONSIBILITY (Continued)

subcontractor(s) engaged by the CONSULTANT, shall in any way relieve CONSULTANT of responsibility for the adequacy, completeness and accuracy of its services, work and materials and the services, work and materials of any and all sub-consultants and/or subcontractors engaged by the CONSULTANT to provide and perform services in connection with this Agreement. Neither the COUNTY'S review, approval or acceptance of, nor payment for, any of the CONSULTANT'S services, work and materials shall be construed to operate as a waiver of any of the COUNTY'S rights under this Agreement, or any cause of action it may have arising out of the performance of this Agreement.

3.06 LIABILITY

(1) CONSULTANT TO HOLD COUNTY HARMLESS

The CONSULTANT shall be liable and agrees to be liable for and shall indemnify and hold the COUNTY harmless for any and all claims, suits, judgements or damages, losses and expenses including court costs and attorney's fees arising out of the CONSULTANT'S errors, omissions, and/or negligence, or those of any and all sub-consultants and/or subcontractors engaged by the CONSULTANT during the providing, performing and furnishing of services, work and materials pursuant to this Agreement and any and all Supplemental Agreements, Change Orders, Supplemental Task Authorizations thereto. The CONSULTANT shall not be liable to nor indemnify the COUNTY for any portions of damages arising out of any error, omission, and/or negligence of the COUNTY, its employees, agents, or representatives or third parties. The CONSULTANT hereby acknowledges that the compensation to be paid the CONSULTANT by the COUNTY as set forth in Agreement Exhibit "B" entitled "COMPENSATION AND METHOD OF PAYMENT" includes compensation as consideration for the indemnification provided herein.

3.07 NOT TO DIVULGE CERTAIN INFORMATION

CONSULTANT agrees, during the term of this Agreement, not to divulge, furnish or make available to any third person, firm, or organization, without COUNTY'S prior written consent, or unless incident to the proper performance of CONSULTANT'S obligations hereunder, or in the course of judicial or legislative proceedings where such information has been properly subpoenaed, any non-public information concerning the services to be rendered by CONSULTANT or any sub-consultant(s) or subcontractor(s) pursuant to this Agreement. CONSULTANT shall require all of its employees, sub-consultant(s) and subcontractor(s) to comply with the provisions of this paragraph.

3.08 CONSULTANT TO REPAIR PROPERTY DAMAGE CAUSED BY THE CONSULTANT

CONSULTANT agrees to promptly repair and/or replace, or cause to have repaired and/or replaced, at its sole cost and expense and in a manner acceptable to and approved by the COUNTY, any property damage arising out of, or caused by, the willful or negligent acts of the CONSULTANT, or of its sub-consultants and/or subcontractors. This CONSULTANT'S obligation under this sub-article does not apply to property damage caused by any other Consultant or Contractor engaged directly by the COUNTY.

The COUNTY reserves the right, should the CONSULTANT fail to make such repairs and/or replacement within a reasonable period of time, to cause such repairs and/or replacement to be made by others and for all costs and expenses associated with having such repairs and/or replacement done to be paid for by the CONSULTANT, or by the CONSULTANT reimbursing the COUNTY for all such costs and expenses.

3.09 RESPONSIBILITY FOR ESTIMATES

(1) In the event the services required pursuant to this Agreement include the CONSULTANT preparing and submitting to the COUNTY, cost estimates, the CONSULTANT, by exercise of his experience, effort, knowledge and judgment, shall develop such cost estimates as are set forth in, or as may be required under the Agreement and shall be held accountable, responsible and liable for the accuracy, completeness, and correctness of any and all such cost estimates. For purposes of the Liability Provisions of this Article only, the CONSULTANT'S estimate(s) shall be considered valid and effective for a period of six (6) months from the date of the COUNTY'S acceptance of the estimate(s).

(2) The cost estimates of CONSULTANTS or SUB-CONSULTANTS engaged by CONSULTANTS, for the appraisal or valuation of property or easements, or the estimate of damages or costs associated with the acquisition of property or easements are exempted from the provisions of Article 3.09.

(3) Cost Estimates

(A) ORDER OF MAGNITUDE ESTIMATE

This is an approximate estimate made without detailed architect/engineering data. Examples include, but are not limited to, an estimate from cost-capacity curves, an estimate using scale-up or scale-down factors, and an approximate ratio estimate. This type of estimate shall be accurate within plus fifty percent (50.0%). If the bids, as described above, fail to meet this prescribed accuracy, the cost associated with the preparation and development of the ORDER OF MAGNITUDE ESTIMATE shall be recoverable by the COUNTY.

(B) BUDGET ESTIMATE

Budget in this case applies to the COUNTY'S budget and not to the budget as a project controlled document. A budget is prepared with the use of flowsheets, layouts, and equipment details. This type of estimate shall be accurate within plus twenty-five percent (25.0%). If the bids, as described above, fail to meet this prescribed accuracy, the cost associated with the preparation and development of the BUDGET ESTIMATE shall be recoverable by the COUNTY.

(C) CONSTRUCTION COST ESTIMATE.

A construction cost estimate for purposes of this Agreement is an estimate prepared on the basis of well defined engineering/architectural data and on detailed information set forth in specifications, designs or drawings which are to be used as a basis for obtaining bids or price proposals for constructing the project. This type of estimate shall be accurate within plus or minus ten percent (10%) of the cost of the construction of the project. The accuracy and reliability of a CONSTRUCTION COST ESTIMATE is vital to the COUNTY'S interests because it may be used for such purposes as, but not limited to the following; budgeting, obtaining, allocating or obligating funds for the project; evaluating and determining the reasonableness and acceptableness of bids or price proposals for construction projects; or establishing the assessment amounts for Municipal Service Benefit Units (M.S.B.U.).

In the event the COUNTY solicits and receives bids or price proposals from contractors on a construction project based on specifications, design, drawings and a CONSTRUCTION COST ESTIMATE prepared by the CONSULTANT, and the lowest bid or price proposal, submitted by a responsive and responsible bidder or proposer, which bid or price proposal exceeds the amount of the CONSULTANT'S CONSTRUCTION COST ESTIMATE by more than the percent accuracy set forth hereinabove, the CONSULTANT shall, upon notification by the COUNTY, assume responsibility for and proceed to provide and perform the following service without additional compensation:

The CONSULTANT will, subject to the review and approval of the COUNTY, modify at its expense the specifications, design, drawings and related bidding and contract documents to the extent necessary to reduce the anticipated construction costs so that the re-solicitation of bids or price proposals will realize bids or price proposals being received that are within the range of accuracy established for the CONSTRUCTION COST ESTIMATE prepared by the CONSULTANT. Any such modifications made by the CONSULTANT shall not conflict with the functional or operational requirements established by the COUNTY for the project and set forth in the Agreement or Supplemental Agreement(s) or Change Order(s) or Supplemental Task Authorization(s) issued thereto, nor shall any such modifications conflict with established rules, regulations, requirements or professional standards pertaining to the design, specifications or drawings prepared by the CONSULTANT, nor shall such modifications adversely affect the safe use or operation of the constructed project.

(C) CONSTRUCTION COST ESTIMATE. (Continued)

In the event (1) the CONSULTANT's modification of the design, specifications, drawings and related bidding and contract documents, and (2) the re-solicitation of bids or price proposals do not result in bids or price proposals being received from a responsive and responsible bidder or proposer that are within the established percent accuracy of the CONSULTANT'S CONSTRUCTION COST ESTIMATE, the costs associated with the CONSULTANT's preparation and development of the CONSTRUCTION

COST ESTIMATE shall be recoverable by the COUNTY by an appropriate reduction in the CONSULTANT'S invoice requesting payment for services rendered.

For determination of compliance with the accuracy requirement established for the CONSTRUCTION COST ESTIMATE prepared by the CONSULTANT, the amount of the CONSTRUCTION COST ESTIMATE submitted by the CONSULTANT shall be adjusted from the date the CONSTRUCTION COST ESTIMATE was received by the COUNTY until the date bids or price proposals are received by the COUNTY, by applying the percent change in the "20 Cities Cost Index" as published in the ENR (formerly ENGINEERING NEWS-RECORD) a McGraw-Hill, Inc. publication.

If, in response to its solicitation, the COUNTY receives less than three bids or priced proposals for a project, there is the potential that such bids or priced proposals may not be a realistic representation of the costs expected to be associated with the project. If under such circumstances, and if in the professional judgment of the CONSULTANT, the low bid or the low priced proposal received from a responsive bidder or proposer does not realistically represent the costs associated with the project, the CONSULTANT may deem it appropriate to recommend the COUNTY reject any such bid(s) or priced proposal(s). If under such circumstances the COUNTY concurs with the CONSULTANT'S recommendation and rejects the bid(s) or priced proposal(s), the COUNTY will not hold the CONSULTANT responsible to, nor will the COUNTY require the CONSULTANT to, modify the specifications, design, drawings and related bidding and contract documents as set forth hereinbefore.

3.10 PERMITS

The CONSULTANT will be responsible for preparing and submitting all required applications and other supportive information necessary to assist the COUNTY in obtaining all reviews, approvals and permits, with respect to the CONSULTANT'S design, drawings and specifications required by any governmental body having authority over the project. Any fees required for such reviews, approvals or permits will be covered by a check issued by the COUNTY and made payable to the respective governmental body upon the CONSULTANT furnishing the COUNTY satisfactory documentation of such fees. The CONSULTANT will be similarly responsible for preparing and submitting all required applications and other supportive information necessary to assist the COUNTY in obtaining any renewals and/or extensions of reviews, approvals or permits that may be required while this Agreement is in effect. The COUNTY shall, at the CONSULTANT'S request, assist in obtaining required signatures and provide the CONSULTANT with all information known to be available to the COUNTY so as to assist the CONSULTANT in the preparation and submittal of any original, renewal or extension of required reviews, approvals or permits.

3.11 ADDITIONAL SERVICES

Should the COUNTY request the CONSULTANT to provide and perform professional services for this project which are not set forth in EXHIBIT "A", the CONSULTANT agrees to provide and perform such ADDITIONAL SERVICES as may be agreed to in writing by both parties to this Agreement.

Such ADDITIONAL SERVICES shall constitute a continuation of the professional services covered under this Agreement and shall be provided and performed in accordance with the covenants, terms, and provisions set forth in this Agreement thereto.

ADDITIONAL SERVICES shall be administered and authorized as "SUPPLEMENTAL AGREEMENTS", "SUPPLEMENTAL TASK AUTHORIZATIONS" or "CHANGE ORDERS" under the Agreement. The CONSULTANT shall not provide or perform, nor shall the COUNTY incur or accept any obligation to compensate the CONSULTANT for any ADDITIONAL SERVICES unless and until a written "SUPPLEMENTAL AGREEMENT", "SUPPLEMENTAL TASK AUTHORIZATIONS" or "CHANGE ORDER" shall have been agreed to and executed by both parties.

Each such "SUPPLEMENTAL AGREEMENT", "SUPPLEMENTAL TASK AUTHORIZATION" or "CHANGE ORDER" shall set forth a comprehensive, detailed description of: (1) the Scope of the ADDITIONAL SERVICES requested; (2) the basis of compensation; and (3) the period of time and/or schedule for performing and completing said ADDITIONAL SERVICES.

3.12 TRUTH-IN-NEGOTIATIONS CERTIFICATE

The COUNTY may request the CONSULTANT to execute a Truth-in-Negotiations Certificate ("Certificate"), in a form attached as EXHIBIT "F". The Certificate shall state that wage rates and other factual unit costs supporting the compensation are accurate, complete and current at the time this Agreement is executed. The original contract price and any additions thereto shall be adjusted to exclude any significant sums by which the COUNTY determines the contract price was increased due to inaccurate, incomplete or noncurrent wage rates or other factual unit costs.

3.13 COMPLETION OF TASKS

Unless otherwise set forth in the Agreement the CONSULTANT shall be responsible for providing and performing whatever services, work, equipment, material, personnel, supplies, facilities, transportation and administrative support that are necessary and required to complete all of the tasks set forth in Agreement Exhibit "A" entitled "Scope of Professional Services" and Supplemental Agreements, Change Orders, Supplemental Task Authorizations and Work Orders authorized. The compensation to be paid the CONSULTANT as set forth in Agreement Exhibit "B" entitled "Compensation and Method of Payment" and Supplemental Agreements, Change Orders, Supplemental Task Authorizations, and Work Orders authorized thereto shall be understood and agreed to adequately and completely compensate the CONSULTANT for providing and performing whatever services,work, equipment, material, personnel, supplies, facilities, transportation and administrative support that are necessary and required to complete the tasks set forth in Agreement Exhibit "A" and Supplemental Agreements, Change Orders, Supplemental Task Authorizations, and Work Orders authorized thereto as stated above."

3.14 AFFIRMATIVE ACTION BY CONSULTANT WHEN ENGAGING SUB-CONSULTANTS

Florida Statute #287.042(4)(f) establishes that agencies, including Lee County, are encouraged to spend twenty-five (25%) percent of the monies actually spent for contractual services for the purpose of entering into contracts with certified Minority Business Enterprises. Accordingly, the CONSULTANT is encouraged, when selecting or engaging the services of sub-consultants or subcontractors pursuant to this Agreement, to spend twenty-five (25%) percent of the amount of compensation established in this Agreement and in subsequent SUPPLEMENTAL AGREEMENTS, CHANGE ORDERS, SUPPLEMENTAL TASK AUTHORIZATIONS, and WORK ORDERS authorized thereto for the engagement of the services of certified Minority Business Enterprise sub-consultants or subcontractors.

In furtherance of this statutory goal the COUNTY expects the CONSULTANT to take affirmative action towards achieving this goal. "Affirmative Action" as used herein shall constitute a good faith effort by the CONSULTANT to achieve the stated goal of engaging certified Minority Business Enterprise sub-consultants or subcontractors to provide or perform services and/or work pursuant to the SCOPE OF SERVICES required under this Agreement. Efforts taken by the CONSULTANT to assist the COUNTY in meeting this statutory goal must be documented in detail, records of sub-consultants or subcontractors contacted maintained, including negotiation efforts, and written Agreements maintained for services or work awarded to sub-consultants or subcontractors.

The CONSULTANT, upon receipt of a written request by the COUNTY, shall within ten (10) calendar days thereafter submit to the COUNTY copies of records and supporting documentation to show evidence of its affirmative action efforts to achieve the above stated goal.

The CONSULTANT is encouraged to contact the Lee County Department of Equal Opportunity for information and assistance regarding the COUNTY'S Minority Business Enterprise certification program and listing of certified Minority Business Enterprises.

ARTICLE 4.00 - OBLIGATIONS OF THE COUNTY

4.01 DESIGNATION OF PROJECT MANAGER

The COUNTY agrees after the execution of this Agreement to promptly advise the CONSULTANT, in writing, of the person designated to serve and act as the COUNTY'S PROJECT MANAGER pursuant to the provisions of Article 2.13 of this Agreement. Such notification shall be provided to the CONSULTANT by the COUNTY'S DEPARTMENT DIRECTOR.

4.02 AVAILABILITY OF COUNTY INFORMATION

(1) PROJECT GUIDELINES AND CRITERIA

Guidelines to the CONSULTANT regarding requirements the COUNTY has established or suggests relative to the Project including, but not limited to such items as: goals, objectives, constraints, and any special financial, budgeting, space, site, operational, equipment, technical, construction, time and scheduling criteria are set forth in EXHIBIT "E", entitled "PROJECT GUIDELINES AND CRITERIA", which EXHIBIT "E" is attached hereto and made a part of this Agreement.

(2) COUNTY TO PROVIDE PERTINENT REFERENCE MATERIAL

At the CONSULTANT'S request, the COUNTY agrees to provide to the CONSULTANT, at no cost to the CONSULTANT, all pertinent information known to be available to the COUNTY to assist the CONSULTANT in providing and performing the required professional services. Such information may include, but not be limited to: previous reports; plans, drawings and specifications; maps; property, boundary, easement, right-of-way, topographic, reference monuments, control points, plats and related survey data; data prepared or services furnished by others to the COUNTY such as sub-surface investigations, laboratory tests, inspections of natural and man-made materials, property appraisals, studies, designs and reports.

4.03 AVAILABILITY OF COUNTY'S DESIGNATED REPRESENTATIVES

The COUNTY agrees that the DEPARTMENT DIRECTOR and the PROJECT MANAGER shall be available within a reasonable period of time, with reasonable prior notice given by the CONSULTANT, to meet and/or consult with the CONSULTANT on matters pertaining to the services to be provided and performed by the CONSULTANT. The COUNTY further agrees to respond within a reasonable period of time to written requests submitted by the CONSULTANT.

4.04 ACCESS TO COUNTY PROPERTY

The COUNTY agrees, with reasonable prior written notice given by the CONSULTANT, to provide the CONSULTANT with access within a reasonable period of time to COUNTY property, facilities, buildings and structures to enable the CONSULTANT to provide and perform the required professional services and work pursuant to this Agreement. Such rights of access shall not be exercised in such a manner or to such an extent as to impede or interfere with COUNTY operations, or the operations carried on by others under a lease, or other contractual arrangement with the COUNTY, or in such a manner as to adversely affect the public health and safety. Such access may, or may not be, within the CONSULTANT'S normal office and/or field work days and/or work hours.

ARTICLE 5.00 - COMPENSATION AND METHOD OF PAYMENT

5.01 BASIC SERVICES

The COUNTY shall pay the CONSULTANT for all requested and authorized BASIC SERVICES rendered hereunder by the CONSULTANT and completed in accordance with the requirements, provisions, and/or terms of this Agreement and accepted by the COUNTY in accordance with the provisions for compensation and payment of said BASIC SERVICES set forth and prescribed in EXHIBIT "B", entitled "COMPENSATION AND METHOD OF PAYMENT", which EXHIBIT "B" is attached hereto and made a part of this Agreement, or on the basis of such changes to the established compensation as may be mutually agreed to by both parties to this Agreement as evidenced by a written Supplemental Agreement or Change Order executed by both parties.

5.02 ADDITIONAL SERVICES

The COUNTY shall pay the CONSULTANT for all such ADDITIONAL SERVICES as have been requested and authorized by the COUNTY and agreed to, in writing, by both parties to this Agreement and which have been rendered as ADDITIONAL SERVICES by the CONSULTANT and completed in accordance with the requirements, provisions, and/or terms of this Agreement and accepted by the COUNTY in accordance with the provisions for compensation and payment of said ADDITIONAL SERVICES as set forth and prescribed in EXHIBIT "B", entitled "COMPENSATION AND METHOD OF PAYMENT", which EXHIBIT "B" is attached hereto and made a part of this Agreement, or on the basis of such changes to the established compensation as may be mutually agreed to by both parties to this Agreement as evidenced by a written Supplemental Agreement or Change Order or Supplemental Task Authorization executed by both parties.

5.03 METHOD OF PAYMENT

(1) MONTHLY STATEMENTS

The CONSULTANT shall be entitled to submit not more than one invoice statement to the COUNTY each calendar month covering services rendered during the preceding calendar month. The CONSULTANT'S invoice statement(s) shall be itemized to correspond to the basis of compensation as set forth in the Agreement, or SUPPLEMENTAL AGREEMENT(S), CHANGE ORDER(S), SUPPLEMENTAL TASK AUTHORIZATION(S), and/or WORK ORDER(S) thereunder. The CONSULTANT'S invoice statements shall contain a breakdown of charges, description of service(s) and work provided and/or performed, and where appropriate, supportive documentation of charges consistent with the basis of compensation set forth in the Agreement, or in SUPPLEMENTAL AGREEMENT(S), CHANGE ORDER(S), SUPPLEMENTAL TASK AUTHORIZATION(S) and/or WORK ORDER(S) thereunder.

(2) PAYMENT FOR SERVICES PERFORMED

The COUNTY shall pay the CONSULTANT for services performed using either of the following methods, or using a combination thereof:

(A) The COUNTY shall pay the CONSULTANT on the basis of services completed for tasks set forth in Exhibits "A" and "B", as evidenced by work products such as reports, drawings, specifications, etc., submitted by the CONSULTANT and accepted by the COUNTY. No payments shall be made for CONSULTANT's Work-in-Progress until service items for which payment amounts have been established and set forth in this Agreement have been completed by the CONSULTANT and accepted by the COUNTY. Whenever an invoice statement covers services for which no work product is required to be furnished by the CONSULTANT to the COUNTY, the COUNTY reserves the right to retain ten percent (10%) of the amount invoiced until such service requirements are fully completed.

(2) PAYMENT FOR SERVICES PERFORMED (Continued)

(B) The COUNTY shall pay the CONSULTANT for services performed for tasks set forth in Exhibits "A" and "B" on the basis of an invoice statement covering CONSULTANT'S Work-in-Progress expressed as a percentage of the total cost of the service and/or work required for each task invoiced in this manner. All such Work-in-Progress percentages are subject to the review and approval of the COUNTY. The decision of the COUNTY shall be final as to the Work-in-Progress percentages paid. Payment by the COUNTY for tasks on a Work-in-Progress percentage basis shall not be deemed or interpreted in any way to constitute an approval or acceptance by the COUNTY of any such service or Work-in-Progress. The CONSULTANT shall be responsible for correcting, re-doing, modifying or otherwise completing the services and work required for each task before receiving final, full payment whether or not previous Work-in-Progress payments have been made. All tasks to be paid for on a Work-in-Progress percentage basis shall be agreed to by both parties to the Agreement and each task to be paid in this manner shall be identified in Exhibit "B" with the notation (WIPP). Only tasks so identified will be paid on a Work-in-Progress percentage basis. The COUNTY reserves the right to retain ten percent (10%) of the amount invoiced until such service requirements are fully completed.

(3) PAYMENT SCHEDULE

The COUNTY shall issue payment to the CONSULTANT within thirty (30) calendar days after receipt of an invoice statement from the CONSULTANT in an acceptable form and containing the requested breakdown and detailed description and documentation of charges. Should the COUNTY object or take exception to the amount of any CONSULTANT'S invoice statement, the COUNTY shall notify the CONSULTANT of such objection or exception within the thirty (30) calendar day payment period set forth hereinbefore. If such objection or exception remains unresolved at the end of said thirty (30) calendar day period, the COUNTY shall withhold the disputed amount and make payment to the CONSULTANT of the amount not in dispute. Payment of any disputed amount, or adjustments thereto, shall be made within thirty (30) calendar days of the date such disputed amount is resolved by mutual agreement of the parties to this Agreement.

5.04 PAYMENT WHEN SERVICES ARE TERMINATED AT THE CONVENIENCE OF THE COUNTY

In the event of termination of this Agreement at the convenience of the COUNTY, not at the fault of the CONSULTANT, the COUNTY shall compensate the CONSULTANT only for: (1) all services performed prior to the effective date of termination; (2) reimbursable expenses then due; and (3) reasonable expenses incurred by the CONSULTANT in affecting the termination of services and work, and incurred by the submittal to the COUNTY of project drawings, plans, data, and other project documents.

5.05 PAYMENT WHEN SERVICES ARE SUSPENDED

In the event the COUNTY suspends the CONSULTANT'S services and work on all or part of the services required to be provided and performed by the CONSULTANT pursuant to this Agreement, the COUNTY shall compensate the CONSULTANT only for the services performed prior to the effective date of suspension and reimbursable expenses then due and any reasonable expenses incurred or associated with, or as a result of such suspension.

5.06 NON-ENTITLEMENT TO ANTICIPATED FEES IN THE EVENT OF SERVICE TERMINATION, SUSPENSION, ELIMINATION, CANCELLATION AND/OR DECREASE

In the event the services required pursuant to this Agreement are terminated, eliminated, canceled, or decreased due to: (1) termination; (2) suspension in whole or in part; and (3) and/or are modified by the subsequent issuance of SUPPLEMENTAL AGREEMENT(S), SUPPLEMENTAL TASK AUTHORIZATION(S) and/or CHANGE ORDER(S), other than receiving the compensation set forth in Sub-Articles 5.04 and 5.05, the CONSULTANT shall not be entitled to receive compensation for anticipated professional fees, profit, general and administrative overhead expenses or for any other anticipated income or expense which may be associated with the services which are terminated, suspended, eliminated, canceled or decreased.

ARTICLE 6.00 - TIME AND SCHEDULE OF PERFORMANCE

6.01 NOTICE TO PROCEED

Following the execution of this Agreement by both parties, and after the CONSULTANT has complied with the insurance requirements set forth hereinafter, the COUNTY shall issue the CONSULTANT a WRITTEN NOTICE TO PROCEED. Following the issuance of such NOTICE TO PROCEED the CONSULTANT shall be authorized to commence work and the CONSULTANT thereafter shall commence work promptly and shall carry on all such services and work as may be required in a timely and diligent manner to completion.

6.02 TIME OF PERFORMANCE

The CONSULTANT agrees to complete the services required pursuant to this Agreement within the time period(s) for completion of the various phases and/or tasks of the project services set forth and described in this Agreement, as set forth in EXHIBIT "C", entitled "SCHEDULE OF PERFORMANCE, which EXHIBIT "C" is attached hereto and made a part of this Agreement.

Should the CONSULTANT be obstructed or delayed in the prosecution or completion of its obligations under this Agreement as a result of causes beyond the control of the CONSULTANT, or its sub-consultant(s) and/or subcontractor(s), and not due to their fault or neglect, the CONSULTANT shall notify the COUNTY, in writing, within five (5) calendar days after the commencement of such delay, stating the cause(s) thereof and requesting an extension of the CONSULTANT'S time of performance. Upon receipt of the CONSULTANT'S request for an extension of time, the COUNTY shall grant the extension if the COUNTY determines the delay(s) encountered by the CONSULTANT, or its sub-consultant(s) and/or subcontractor(s), is due to unforeseen causes and not attributable to their fault or neglect.

6.03 CONSULTANT WORK SCHEDULE

The CONSULTANT shall be required as a condition of this Agreement to prepare and submit to the COUNTY, on a monthly basis, commencing with the issuance of the NOTICE TO PROCEED, a CONSULTANT'S WORK SCHEDULE. The WORK SCHEDULE shall set forth the time and manpower scheduled for all of the various phases and/or tasks required to provide, perform and complete all of the services and work required completion of the various phases and/or tasks of the project services set forth and described in this Agreement, as set forth in EXHIBIT "C", pursuant to this Agreement in such a manner that the CONSULTANT'S planned and actual work progress can be readily determined. The CONSULTANT'S WORK SCHEDULE of planned and actual work progress shall be updated and submitted by the CONSULTANT to the COUNTY on a monthly basis.

6.04 FAILURE TO PERFORM IN A TIMELY MANNER

Should the CONSULTANT fail to commence, provide, perform and/or complete any of the services and work required pursuant to this Agreement in a timely and diligent manner, the COUNTY may consider such failure as justifiable cause to terminate this Agreement. As an alternative to termination, the COUNTY at its option, may, upon written notice to the CONSULTANT, withhold any or all payments due and owing to the CONSULTANT, not to exceed the amount of the compensation for the work in dispute, until such time as the CONSULTANT resumes performance of his obligations in such a manner as to get back on schedule in accordance with the time and schedule of performance requirements set forth in this Agreement, or any WORK ORDER(S), SUPPLEMENTAL AGREEMENT(S), CHANGE ORDER(S), SUPPLEMENTAL TASK AUTHORIZATION(S) issued thereto.

ARTICLE 7.00 - SECURING AGREEMENT

The CONSULTANT warrants that the CONSULTANT has not employed or retained any company or person other than a bona fide, regular, full time employee working for the CONSULTANT to solicit or secure this Agreement and that the CONSULTANT has not paid or agreed to pay any person, company, corporation or firm other than a bona fide employee working solely for the CONSULTANT any fee, commission, percentage, gift or any other consideration contingent upon or resulting from the award or making of this Agreement.

ARTICLE 8.00 - CONFLICT OF INTEREST

The CONSULTANT represents that it presently has no interest and shall acquire no interest, either direct or indirect, which would conflict in any manner with the performance of services required hereunder. The CONSULTANT further agrees that no person having any such interest shall be employed or engaged by the CONSULTANT for said performance.

If CONSULTANT, for itself and on behalf of its subconsultants, is about to engage in representing another client, which it in good faith believes could result in a conflict of interest with the work being performed by CONSULTANT or such sub-consultant under this Agreement, then it will promptly bring such potential conflict of interest to the COUNTY'S attention, in writing. The COUNTY will advise the CONSULTANT, in writing, within ten (10) calendar days as to the period of time required by the COUNTY to determine if such a conflict of interest exists. If the COUNTY determines that there is a conflict of interest, CONSULTANT or such sub-consultant shall decline the representation upon written notice by the COUNTY.

ARTICLE 8.00 - CONFLICT OF INTEREST (Continued)

If the COUNTY determines that there is not such conflict of interest, then the COUNTY shall give its written consent to such representation. If CONSULTANT or sub-consultant accepts such a representation without obtaining the COUNTY'S prior written consent, and if the COUNTY subsequently determines that there is a conflict of interest between such representation and the work being performed by CONSULTANT or such sub-consultant under this Agreement, then the CONSULTANT or such sub-consultant agrees to promptly terminate such representation. CONSULTANT shall require each of such sub-consultants to comply with the provisions of this Section.

Should the CONSULTANT fail to advise or notify the COUNTY as provided hereinabove of representation which could, or does, result in a conflict of interest, or should the CONSULTANT fail to discontinue such representation, the COUNTY may consider such failure as justifiable cause to terminate this Agreement.

ARTICLE 9.00 - ASSIGNMENT, TRANSFER AND SUBCONTRACTS

The CONSULTANT shall not assign or transfer any of its rights, benefits or obligations hereunder, except for transfers that result from: (1) the merger or consolidation of CONSULTANT with a third party; or (2) the disestablishment of the CONSULTANT'S professional practice and the establishment of a successor consultant, or consulting organization. Nor shall the CONSULTANT subcontract any of its service obligations hereunder to third parties, except as otherwise authorized in this Agreement thereto, without prior written approval of the COUNTY. The CONSULTANT shall have the right, subject to the COUNTY'S prior written approval, to employ other persons and/or firms to serve as sub-consultants and/or subcontractors to CONSULTANT in connection with CONSULTANT providing and performing services and work pursuant to the requirements of this Agreement. The COUNTY shall have the right and be entitled to withhold such approval. Such approval shall not be unreasonably withheld.

In providing and performing the services and work required pursuant to this Agreement, CONSULTANT intends to engage the assistance of the sub-consultant(s) and/or subcontractor(s) set forth in EXHIBIT "D", entitled "CONSULTANT'S ASSOCIATED SUB-CONSULTANTS AND SUBCONTRACTORS", which EXHIBIT "D" is attached hereto and made a part of this Agreement.

ARTICLE 10.00 - APPLICABLE LAW

Unless otherwise specified, this Agreement shall be governed by the laws, rules, and regulations of the State of Florida, or the laws, rules, and regulations of the United States when providing services funded by the United States government.

ARTICLE 11.00 - COVENANTS AGAINST DISCRIMINATION

11.01 FOR PROJECTS WITH FUNDS APPROPRIATED FROM GENERAL LEE COUNTY REVENUES

The CONSULTANT for itself, its successors in interest, and assigns as part of the consideration thereof, does hereby covenant and agree that in the furnishing of services to COUNTY hereunder, no person on the grounds of race, color, national origin, handicap, or sex shall be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination. The CONSULTANT shall comply with Lee County's Affirmative Action Plan or state laws in the hiring of sub-consultants. CONSULTANTS who are uncertain of their obligation must obtain a copy of all relevant guidelines concerning Lee County's Affirmative Action Plan from the Lee County Department of Equal Opportunity.

11.02 FOR PROJECTS WITH FUNDS APPROPRIATED EITHER IN PART OR WHOLLY FROM FEDERAL OR STATE SOURCES

The CONSULTANT for itself, its successors in interest, and assigns as part of the consideration thereof, does hereby covenant and agree that in the furnishing of services to COUNTY hereunder, no person on the grounds of race, color, national origin, handicap, or sex shall be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination. The CONSULTANT shall make every effort to comply with any Disadvantaged Business Enterprise goals which have been established for this project. CONSULTANTS who are uncertain of their obligations regarding Disadvantaged Business Enterprises for this project must obtain a copy of all relevant federal or state guidelines from the Lee County Department of Equal Opportunity. The failure of the CONSULTANT to adhere to relevant guidelines shall subject the CONSULTANT to any sanctions which may be imposed upon the COUNTY.

ARTICLE 12.00 - WAIVER OF BREACH

Waiver by either party of a breach of any provision of this Agreement shall not be deemed to be a waiver of any other breach and shall not be construed to be a modification of the terms of this Agreement.

ARTICLE 13.00 - INSURANCE

13.01 INSURANCE COVERAGE TO BE OBTAINED

(1) The CONSULTANT shall obtain and maintain such insurance as will protect him from: (1) claims under workers' compensation laws, disability benefit laws, or other similar employee benefit laws; (2) claims for damages because of bodily injury, occupational sickness or disease or death of his employees including claims insured by usual personal injury liability coverage; (3) claims for damages because of bodily injury, sickness or disease, or death of any person other than his employees including claims insured by usual personal injury liability coverage; and (4) from claims for injury to or destruction of tangible property including loss or use resulting therefrom; any or all of which claims may arise out of, or result from, the services, work and operations carried out pursuant to and under the requirements of this Agreement, whether such services, work and operations be by the CONSULTANT, its employees, or by any sub-consultant(s), subcontractor(s), or anyone employed by or under the supervision of any of them, or for whose acts any of them may be legally liable.

(2) The insurance protection set forth hereinabove shall be obtained and written for not less than the limits of liability specified hereinafter, or as required by law, whichever is greater.

(3) The CONSULTANT, throughout the time this Agreement is in effect, shall require and ensure that any and all of its Sub-Consultants and/or SubContractors obtain, have, and maintain the insurance coverages required by law to be provided.

(4) The CONSULTANT shall obtain, have and maintain during the entire period of this Agreement all such insurance policies as are set forth and required herein.

(5) In the event that the CONSULTANT engages Sub-Consultants or SubContractors to assist the CONSULTANT in providing or performing services or work pursuant to the requirements of this Agreement, the insurance coverages required under Article 13.03 to be provided by the CONSULTANT shall cover all of the services or work to be provided or performed by all of the Sub-Consultants or SubContractors engaged by the CONSULTANT. However, in the event the services or work of Sub-Consultants or SubContractors engaged by the CONSULTANT is not covered by the CONSULTANT'S INSURANCE POLICY(s), it shall be the responsibility of the CONSULTANT to ensure that all Sub-Consultants or SubContractors have fully complied with the COUNTY insurance requirements for: (1) Worker's Compensation; (2) Comprehensive General Liability; (3) Comprehensive Automobile Liability; or (4) Professional Liability as required and set forth in Agreement Article 13.00.

The services or work to be provided or performed by the following Sub-Consultant(s) or SubContractor(s) identified in Agreement Exhibit "D" are exempted and excluded from the Professional Liability insurance coverage requirements set forth in this Agreement:

Service and/or work to be Provided and/or Performed	Indicate Name of Individual or Firm

(If none, enter the word "none" in the space below.)

Hydraulic Analysis	Hydrosystems Inc.
Public Involvement	Cella & Associates

13.01 INSURANCE COVERAGE TO BE OBTAINED Continued

(6) The insurance coverage to be obtained by the CONSULTANT or by Sub-Consultants or SubContractors engaged by the CONSULTANT, as set forth in Agreement Article 13.03 for: (1) Workers' Compensation; (2) Comprehensive General Liability; (3) Comprehensive Automobile Liability; or (4) Professional Liability is understood and agreed to cover any and all of the services or work set forth in Agreement Exhibit "A" and all subsequent Change Order(s), Supplemental Agreement(s), Work Assignment(s), Supplemental Task Authorization(s), or Work Order(s). In the event the COUNTY shall execute and issue a written Change Order(s), or Work Order(s) or Supplemental Task Authorization(s) authorizing the CONSULTANT to provide or perform services or work in addition to those set forth in Agreement Exhibit "A", it is agreed that the COUNTY has the right to change the amount of insurance coverages required to cover the additional services or work. If the additional insurance coverages established exceeds the amount of insurance coverage carried by the CONSULTANT, the compensation established for the Change Order(s), Supplemental Agreement(s), Work Assignment(s), Supplemental Task Authorization(s), or Work Order(s) shall include consideration of any increased premium cost incurred by the CONSULTANT to obtain same.

13.02 CONSULTANT REQUIRED TO FILE INSURANCE CERTIFICATE(S)

(1) The CONSULTANT shall submit to PUBLIC WORKS ADMINISTRATION, CONTRACTS MANAGEMENT all insurance certificates which are required under this Agreement for review and approval with respect to compliance with the insurance requirements. After approval the COUNTY will execute this Agreement and issue a written Notice to Proceed. The CONSULTANT may then commence with any service or work pursuant to the requirements of this Agreement.

(2) All such insurance certificates shall be in a form and underwritten by an insurance company(s) acceptable to the COUNTY and licensed in the State of Florida.

(3) Each Certificate of Insurance submitted to the COUNTY shall be an original and shall be executed by an authorized representative of the insurance company affording coverage.

(4) Each Certificate of Insurance shall be addressed to the Lee County Board of County Commissioners, Attention: Public Works Administration, Contracts Management, P O Box 398, Fort Myers, Florida 33902-0398.

(5) Each Certificate of Insurance shall specifically include all of the following:

(A) The name and type of policy and coverages provided; and

(B) The amount or limit applicable to each coverage provided and the deductible amount, if any, applicable to each type of insurance coverage being provided; and

(C) The date of expiration of coverage; and

(D) The designation of the Lee County Board of County Commissioners both as an additional insured and as a certificate holder. (This requirement is excepted for Professional Liability Insurance and for Workers' Compensation Insurance); and

(E) A specific reference to this Agreement and the Project to which it pertains. (This requirement may be excepted for Professional Liability Insurance); or

In the event the CONSULTANT has, or expects to enter into an agreement for professional services other than those provided for in this Agreement, the CONSULTANT may elect to submit a certificate of insurance containing the following statement:

> "This policy covers the services or work provided or performed by the Named Insured for any and all projects undertaken for Lee County pursuant to one or more written Professional Services Agreements, or written Supplemental Agreements or Supplemental Task Authorizations, or Change Orders thereto, and the limit(s) of liability shown shall not be intended or construed as applying to only one project."

Upon receipt and approval of such a certificate of insurance the COUNTY will administer the insurance required for all such agreements utilizing the single "multi-project" certificate of insurance and a separate certificate of insurance will not be required for each separate agreement.

(F) The following clause must appear on the Certificate of Insurance:

> "Cancellation - Should any of the above described policies be cancelled before the expiration date thereof, the issuing company will endeavor to mail 30 days written notice to the Certificate Holder named."

(G) A statement indicating any services or work included in or required under Agreement Exhibit "A" Scope of Professional Services that is specifically excluded or exempted from coverage under the provisions, terms, conditions or endorsements of the CONSULTANT'S insurance policy(s). A statement which indicates any and all deductible amounts applicable to each type of insurance coverage required. In the absence of any such statements, the COUNTY will proceed with the understanding, stipulation and condition that there are no deductible amount(s), or exclusions or exemptions to the insurance coverage(s) provided.

(6) Each Certificate of Insurance shall be issued by an insurance agent and/or agency duly authorized to do so by and on behalf of the insurance company affording the insurance coverage(s) indicated on each Certificate of Insurance.

(7) If the initial, or any subsequently issued Certificate of Insurance expires prior to the completion of the work or termination of this Agreement, the CONSULTANT shall furnish to the COUNTY renewal or replacement Certificate(s) of Insurance, or Certified Binder(s), not later than fifteen (15) calendar days prior to the date of their expiration. Failure of the CONSULTANT to provide the COUNTY with such renewal certificate(s) shall be considered justification for the COUNTY to terminate this Agreement.

(8) If any of the insurance coverage(s) required by this Agreement shall reach the date of expiration indicated on the approved Certificate(s) of Insurance without the COUNTY having received satisfactory evidence of renewal or replacement, the CONSULTANT shall automatically and without further notice stop performing all previously authorized services and work. During any time period that the CONSULTANT'S services or work is suspended for failure to comply with the insurance requirements set forth in the Agreement, the CONSULTANT shall not be entitled to any additional compensation or time to provide and perform the required services or work and the COUNTY shall not be required to make payment on any invoices submitted by the CONSULTANT. Upon receipt and approval of renewal or replacement Certificates of Insurance, payment for any such invoices shall be made promptly by the COUNTY.

13.03 - INSURANCE COVERAGES REQUIRED

The CONSULTANT shall obtain and maintain the following insurance coverages as provided hereinbefore, and in the type, amounts and in conformance with the following minimum requirements:

(1) WORKERS' COMPENSATION

Coverage to comply for all employees for statutory limits in compliance with the applicable State and Federal laws. In addition, the policy must include the following:

(A) Employer's Liability with a minimum limit per accident in accordance with statutory requirements, or a minimum limit of $100,000 for each accident, whichever limit is greater.

(B) Notice of Cancellation and/or Restriction - The policy must be endorsed to provide the COUNTY with thirty (30) days prior written notice of cancellation and/or restriction.

(2) COMMERCIAL GENERAL LIABILITY

Coverage must be afforded on a form no more restrictive than the last edition of the Commercial General Liability Policy filed by the Insurance Services Office and must include the following:

(A) Minimum limits of $100,000 per occurrence and $300,000 aggregate for Bodily Injury Liability and a minimum limit of $100,000 for Property Damage Liability, or a minimum combined single limit of $300,000.

(2) COMMERCIAL GENERAL LIABILITY (Continued)

(B) Contractual coverage applicable to this specific Agreement including any hold harmless and/or such indemnification agreement.

(C) Such additional requirements as are set forth in Article 13.01 and 13.02 hereinabove.

(3) BUSINESS AUTOMOBILE LIABILITY

Coverage must be afforded on a form no more restrictive than the latest edition of the Business Automobile Liability Policy filed by the Insurance Services Office and must include the following:

(A) Minimum limits of $100,000 per person and $300,000 per accident for Bodily Injury Liability and a minimum limit of $100,000 for Property Damage Liability, or a minimum combined single limit of $300,000.

(B) Coverage shall include owned vehicles, hired and leased, or non-owned vehicles.

(C) Such additional requirements as are set forth in Articles 13.01 and 13.02 hereinabove.

(4) PROFESSIONAL LIABILITY

Coverage must include the following:

(A) A minimum aggregate limit of $1,000,000.00.

(B) Such additional requirements as are set forth in Articles 13.01 and 13.02 hereinabove.

(C) Should the Professional Liability Insurance Policy issued pursuant to the above requirements and limits be written so as to provide an applicable deductible amount, or other exclusion or limitation as to the amount of coverage to be provided within the minimum coverage limits set forth above, the COUNTY shall hold the CONSULTANT responsible and liable for any such difference in the amount of coverage provided by the insurance policy. In the event of any such deductible amount, exclusion or limitation, the CONSULTANT shall be required to provide written documentation that is acceptable to the COUNTY establishing that the CONSULTANT has the financial resources readily available to cover damages, injuries and/or losses which are not covered by the policy's deductible amounts, exclusions and/or limitations as stated above.

ARTICLE 14.00 - DUTIES AND OBLIGATIONS IMPOSED ON THE CONSULTANT

The duties and obligations imposed upon the CONSULTANT by this Agreement and the rights and remedies available hereunder shall be in addition to, and not a limitation of, any otherwise imposed or available by law or statute.

ARTICLE 15.00 - REPRESENTATION OF THE COUNTY

The CONSULTANT in providing and performing the services and work required pursuant to this Agreement thereto shall only represent the COUNTY in the manner and to the extent specifically set forth in writing in this Agreement or thereto, and as provided in any written WORK ORDER(S), SUPPLEMENTAL AGREEMENT(S), SUPPLEMENTAL TASK AUTHORIZATION(S), and CHANGE ORDER(S) issued thereunder.

In the event the CONSULTANT'S services or work involves construction contract administrative support services, the CONSULTANT is not authorized to act on the COUNTY'S behalf, and shall not act on the COUNTY'S behalf, in such a manner as to result in change(s) to (1) the cost or compensation to be paid the construction contractor, or (2) the time for completing the work as required and agreed to in the construction contract, or (3) the scope of the work set forth in the construction contract documents, unless such representation is specifically provided for, set forth and authorized in this Agreement or thereto.

The COUNTY will neither assume nor accept any obligation, commitment, responsibility or liability which may result from representation by the CONSULTANT not specifically provided for and authorized as stated hereinabove.

ARTICLE 16.00 - OWNERSHIP OF DOCUMENTS

All documents such as drawings, tracings, notes, computer files, photographs, plans, specifications, maps, evaluations, reports and other records and data relating to this project, other than working papers, specifically prepared or developed by the CONSULTANT under this Agreement shall be property of the CONSULTANT until the CONSULTANT has been paid for providing and performing the services and work required to produce such documents.

Upon completion or termination of this Agreement, or upon the issuance by the COUNTY of a written Change Order deleting all or portions of the scope of services or task(s) to be provided or performed by the CONSULTANT, all of the above documents, to the extent requested in writing by the COUNTY, shall be delivered by the CONSULTANT to the COUNTY within seven (7) calendar days of the COUNTY making such a request. In the event the COUNTY gives the CONSULTANT a written Notice of Termination of all or part of the services or work required, or upon the issuance to the CONSULTANT by the COUNTY of a written Change Order deleting all or part of the services or work required, the CONSULTANT shall deliver to the COUNTY the requested documents as set forth hereinabove, with the mutual understanding and commitment by the COUNTY that compensation earned or owing to the CONSULTANT for services or work provided or performed by the CONSULTANT prior to the effective date of any such termination or deletion will be paid to the CONSULTANT within thirty (30) calendar days of the date of issuance of the Notice of Termination or Change Order.

The CONSULTANT, at its expense, may make and retain copies of all documents delivered to the COUNTY for reference and internal use. The CONSULTANT shall not, and agrees not to, use any of these documents, and data and information contained therein on any other project or for any other client without the prior expressed written permission of the COUNTY.

ARTICLE 16.00 - OWNERSHIP OF DOCUMENTS (Continued)

Any use by the COUNTY of said documents, and data and information contained therein, obtained by the COUNTY under the provisions of this Agreement for any purpose not within the scope of this Agreement shall be at the risk of the COUNTY, and without liability to the CONSULTANT. The COUNTY shall be liable and agrees to be liable for and shall indemnify, defend and hold the CONSULTANT harmless for any and all claims, suits, judgments or damages, losses and expenses including court costs, expert witness and professional consultation services, and attorneys' fees arising out of the COUNTY'S use of such documents in a manner contrary to the provisions set forth hereinabove. The COUNTY hereby acknowledges receipt of $10.00 (ten and no hundreds dollars) and other good and valuable consideration from the CONSULTANT which has been paid as specific consideration for the indemnification provided herein.

ARTICLE 17.00 - MAINTENANCE OF RECORDS

The CONSULTANT will keep and maintain adequate records and supporting documentation applicable to all of the services, work, information, expense, costs, invoices and materials provided and performed pursuant to the requirements of this Agreement. Said records and documentation will be retained by the CONSULTANT for a minimum of five (5) years from the date of termination of this Agreement.

The COUNTY and its authorized agents shall, with reasonable prior notice, have the right to audit, inspect and copy all such records and documentation as often as the COUNTY deems necessary during the period of this Agreement, and during the period five (5) years thereafter; provided, however, such activity shall be conducted only during normal business hours and at the expense of the COUNTY, and provided further that to the extent provided by law the COUNTY shall retain all such records confidential.

ARTICLE 18.00 - HEADINGS

The HEADINGS of the Articles, Sections, Exhibits, Attachments, Phases or Tasks as contained in this Agreement are for the purpose of convenience only and shall not be deemed to expand, limit or change the provisions contained in such Articles, Sections, Exhibits, Attachments, Phases or Tasks.

ARTICLE 19.00 - ENTIRE AGREEMENT

This Agreement, including referenced Exhibits and Attachments hereto, constitutes the entire Agreement between the parties hereto and shall supercede, replace and nullify any and all prior agreements or understandings, written or oral, relating to the matters set forth herein, and any such prior agreements or understandings shall have no force or effect whatever on this Agreement.

The following listed documents, which are referred to hereinbefore, are attached to and are acknowledged, understood and agreed to be an integral part of this Agreement:

(1) EXHIBIT "A" entitled "Scope of Professional Services" dated _____, 2000.

(2) EXHIBIT "B" entitled "Compensation and Method of Payment" dated _____, 2000.

(3) EXHIBIT "C" entitled "Time and Schedule of Performance" dated _____, 2000.

(4) EXHIBIT "D" entitled "Consultant's Associated Sub-Consultant(s) and SubContractor(s)", dated _____, 2000.

(5) EXHIBIT "E" entitled "Project Guidelines and Criteria", dated _____, 2000.

(6) EXHIBIT "F" entitled "Truth in Negotiation Certificate", dated _____, 2000.

(7) EXHIBIT "G" entitled "Insurance". (Containing copies of applicable Certificates of Insurance)

ARTICLE 20.00 - NOTICES AND ADDRESS OF RECORD

20.01 NOTICES BY CONSULTANT TO COUNTY

All notices required and/or made pursuant to this Agreement to be given by the CONSULTANT to the COUNTY shall be in writing and shall be given by the United States Postal Service Department first class mail service, postage prepaid, addressed to the following COUNTY address of record and sent to the attention of the County's Project Manager:

Lee County Board of County Commissioners
Post Office Box 398
Fort Myers, Florida 33902-0398

20.02 NOTICES BY COUNTY TO CONSULTANT

All notices required and/or made pursuant to this Agreement to be given by the COUNTY to the CONSULTANT shall be made in writing and shall be given by the United States Postal Service Department first class mail service, postage prepaid, addressed to the following CONSULTANT'S address of record:

20.02 NOTICES BY COUNTY TO CONSULTANT (Continued)

URS Corporation Southern
(CONSULTANT'S Business Name)

7650 West Courtney Campbell Causeway
(Street/P.O. Box)

Tampa, Florida, 33607
(City) (State) (Zip Code)

Telephone Number: (813)286-1711
Fax Number: (813)287-8229

ATTENTION: William H. McDaniel,Jr., P.E., Vice President
Project Director

20.03 CHANGE OF ADDRESS OF RECORD

Either party may change its address of record by written notice to the other party given in accordance with the requirements of this Article.

ARTICLE 21.00 - TERMINATION

This Agreement may be terminated by the COUNTY at its convenience, or due to the fault of the CONSULTANT, by the COUNTY giving thirty (30) day written notice to the CONSULTANT.

If the CONSULTANT is adjudged bankrupt or insolvent; if it makes a general assignment for the benefit of its creditors; if a trustee or receiver is appointed for the CONSULTANT or for any of its property; if it files a petition to take advantage of any debtor's act or to reorganize under the bankruptcy or similar laws; if it disregards the authority of the COUNTY'S designated representatives; if it otherwise violates any provisions of this Agreement; or for any other just cause, the COUNTY may, without prejudice to any other right or remedy, and after giving the CONSULTANT a thirty (30) calendar day written notice, terminate this Agreement.

In addition to the COUNTY'S contractual right to terminate this Agreement in its entirety as set forth above, the COUNTY may also, at its convenience, stop, suspend, supplement or otherwise change all, or any part of, the Scope of Professional Services as set forth in Exhibit "A", or the Project Guidelines and Criteria as set forth in Exhibit "E", or as such may be established by Supplemental Agreement or Supplemental Task Authorization or Change Order Agreement. The COUNTY shall provide written notice to the CONSULTANT in order to implement a stoppage, suspension, supplement or change.

ARTICLE 21.00 - TERMINATION (Continued)

The CONSULTANT may request that this Agreement be terminated by submitting a written notice to the COUNTY dated not less than thirty (30) calendar days prior to the requested termination date and stating the reason(s) for such a request. However, the COUNTY reserves the right to accept or not accept the termination request submitted by the CONSULTANT, and no such termination request submitted by the CONSULTANT shall become effective unless and until CONSULTANT is notified, in writing, by the COUNTY of its acceptance.

21.01 CONSULTANT TO DELIVER MATERIAL

Upon termination, the CONSULTANT shall deliver to the COUNTY all papers, drawings, models, and other material in which the COUNTY has exclusive rights by virtue hereof or of any business done, or services or work performed or provided by the CONSULTANT on behalf of the COUNTY.

ARTICLE 22.00 - AMENDMENTS

The covenants, terms and provisions set forth and contained in all of the Articles to this Agreement may be amended upon the mutual acceptance thereof, in writing, by both parties to this Agreement, as evidenced by Exhibit H for amending articles. In the event of any conflicts between the requirements, provisions and/or terms of the Agreement and any written Amendment (Exhibit H), the requirements, provisions and/or terms of the Amendment shall take precedence.

ARTICLE 23.00 - MODIFICATIONS

Modifications to covenants, terms and provisions of this Agreement shall only be valid when issued in writing as a properly executed SUPPLEMENTAL AGREEMENT(S), or WORK ORDER(S) or CHANGE ORDER(S) or SUPPLEMENTAL TASK AUTHORIZATION(S). In the event of any conflicts between the requirements, provisions, and/or terms of this Agreement and any written SUPPLEMENTAL AGREEMENT(S), WORK ORDER(S), CHANGE ORDER(S), and/or SUPPLEMENTAL TASK AUTHORIZATIONS, the latest executed SUPPLEMENTAL AGREEMENT(S), WORK ORDER(S), CHANGE ORDER(S), and/or SUPPLEMENTAL TASK AUTHORIZATION(S) shall take precedence.

In the event the COUNTY issues a purchase order, memorandum, letter, or other instruments covering the professional services, work and materials to be provided and performed pursuant to this Agreement, it is hereby specifically agreed and understood that such purchase order, memorandum, letter or other instruments are for the COUNTY'S internal control purposes only, and any and all terms, provisions and conditions contained therein, whether printed or written, shall in no way modify the covenants, terms and provisions of this Agreement and shall have no force or effect thereon.

No modification, waiver, or termination of the Agreement or of any terms thereof shall impair the rights of either party.

ARTICLE 24.00 - ACCEPTANCE

Acceptance of this Agreement shall be indicated by the signature of the duly authorized representative of the hereinabove named parties in the space provided hereinafter and being attested and witnessed as indicated.

IN WITNESS WHEREOF, the parties hereto, by their duly authorized representatives, have executed this Agreement effective the day and year first written above.

ATTEST:
CLERK OF CIRCUIT COURT
Charlie Green, Clerk

BY: Lisa L Pierce
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS SEAL LEE COUNTY, FLORIDA

COUNTY: LEE COUNTY, FLORIDA
BOARD OF COUNTY COMMISSIONERS

BY: Ray Judah
CHAIRMAN

DATE: 3/18/03

APPROVED AS TO FORM

BY: _____
County Attorney's Office

ATTEST:

Edward [illegible]
(Witness)

Elizabeth Maddux
(Witness)

CORPORATE SEAL:

REV: 10/28/93

URS Corporation Southern

Tampa, Florida
(CONSULTANT)

BY: _____
(Authorized Signature)

Vice President
(Title)

DATE: 02-14-03

EXHIBIT A

Date: 14 February 2003

SCOPE OF PROFESSIONAL SERVICES

for Causeway Reconstruction and Replacement of Structures B and C

Sanibel Island Causeway Improvements

BASIC SERVICES

Section 1. GENERAL SCOPE STATEMENT

The Consultant shall provide and perform the following professional services, which shall constitute the GENERAL SCOPE of the BASIC SERVICES under the covenants, terms, and provisions of this PROFESSIONAL SERVICES AGREEMENT or SERVICE PROVIDER AGREEMENT:

The Consultant shall provide design services to prepare a set of plans and contract specifications for the project. Services include roadway, structures, geotechnical, drainage, traffic control, utilities, environmental, signing and pavement marking, lighting, landscape, aesthetics, design survey, right-of-way, cost estimates, public involvement, and assistance during bidding.

The specific services are more fully detailed in the Scope of Services for this project which is included with and made part of this Exhibit.

Section 2. TASKS

Pursuant to the GENERAL SCOPE of the BASIC SERVICES stated herein above, the CONSULTANT shall perform all services and/or work necessary to complete the following task(s) and/or provide the following item(s) which are enumerated to correspond to the task(s) and/or items set forth in EXHIBIT "B" entitled "COMPENSATION AND METHOD OF PAYMENT".

(Each task or sub-task should be given a title and a numerical identification number, and shall be described in detail sufficient to establish a clear and complete understanding between both parties to the Agreement as to what services or work the COUNTY expects the CONSULTANT to provide or perform, and shall be the basis of establishing the amount of compensation to be paid the CONSULTANT.)

1. **Roadway Plans Package**: This task includes the preparation of the roadway plans package. Included are development of a typical section package, vertical and horizontal alignment, drainage analysis, stormwater permitting, bridge hydraulics and scour, traffic control, stormwater pollution prevention, utilities, environmental mitigation and permitting, and signing and pavement marking.

2. **Structure Plans Package**: This task includes the preparation of bridge replacement plans for Bridges "B" and "C". An abbreviated Bridge Development report will be developed and submitted to the COUNTY. Plans at 30%, 90% and final will be submitted to the COUNTY for review. Plans for retaining walls and seawalls will be prepared as required.

3. **Specification Package**: This task includes the preparation of the specifications for the project as well as the bidding documents and cost estimates.

4. **Signing and Pavement Markings**: This task is included in the Roadway Design Package task.

5. **Lighting**: This task includes the preparation of lighting for in deck and roadway decorative lighting. There is no highway lighting on this project. It is anticipated that lane lines, the enter line and the shoulder lines will be lighted. Consideration will be given to lighting in the bridge barrier.

6. **Aesthetics and Landscaping**: This task includes providing services for Tree Protection and Relocation Plans, Planting Plans, Irrigation Plans, Landscape Maintenance Plans, and Structural Aesthetics Input.

7. **Design / Right-of-Way Surveys**: This task consists of performing the survey services necessary for preparation of right-of-way parcel maps, performance of engineering design, and preparation of construction plans. The survey effort shall include a bridge survey of the existing Bridges "B" and "C".

8. **Right-of-Way Maps**: This task consists of preparing the right-of-maps for any parcel that it is necessary to take for the construction of this project.

9. **Public Information Meetings**: This task includes development of a community awareness program, coordinating with local officials, conducting a public information meeting, and publishing and distributing a newsletter.

10. **Geotechnical Services**: This task consists of performing the field investigation and laboratory testing necessary to provide data for design of the roadway, bridges, and walls. The Consultant shall prepare a roadway and bridge report that includes recommendations for type of foundation elements. Evaluation of methods of roadway scour protection shall be performed. A pile load testing program shall be evaluated and recommendations submitted to the COUNTY.

11. **Project Requirements and Provisions for Work**: This task includes preparation of a project schedule, monthly progress reports and invoices, attendance of meetings, quality control plan, and professional endorsement of construction documents.

12. **Other Special Areas (Miscellaneous Items)**: This task consists of plans updates for changes between submittal of final plans and the contract award date. Also includes are attendance of the Pre-Utility, Pre-Construction and Partnering meetings. Shop Drawing review, site visits during construction, assistance during construction, field design changes, and post-design services are part of this scope but are not included in the fee for this task. The fee for these services will be negotiated at a later date.
13. **Out-of-Pocket Expenses**: These are the normal day to day expenses associated with performing the design services for the project. This item will be paid as a lump sum.
14. **Test Pile Program**: The test pile program will be proposed by the CONSULTANT. A provisional amount is included in the proposed fee but this amount is only to be expended with authorization by the COUNTY.

SCOPE OF SERVICES

Group 3.2, 4.2, 7.1, 8.1, 8.2, 8.4, 9.1, 9.2, 9.4, 9.5

Causeway Reconstruction and Replacement of Structure B and C
Sanibel Island Causeway Improvements
Lee County

FOR

Lee County Board of County Commissioners
Lee County Department of Transportation
P.O. Box 398
Fort Myers, Florida 33902-0398

January 2, 2003
Revised: January 31, 2003
Revised February 14, 2003

PROJECT NUMBER: 5814

SCOPE OF SERVICES FOR CONSULTING ENGINEERING SERVICES
HIGHWAY DESIGN

This Exhibit forms an integral part of the agreement between the Lee County Department of Transportation (hereinafter referred to as the DEPARTMENT) and URS Corporation Southern (hereinafter referred to as the CONSULTANT) relative to the transportation facilities described as follows:

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SECTION I. PURPOSE

The purpose of this Scope is to describe the scope of work and the responsibilities of the CONSULTANT and the DEPARTMENT in connection with the design and preparation of a complete set of construction plans for the proposed improvements to this transportation facility.

The CONSULTANT shall perform those engineering services required to prepare a set of contract plans to include roadway, structures, signing and pavement markings, landscaping and/or right-of-way. It shall be the CONSULTANT's responsibility to use the best engineering judgment, practices and principles possible during the prosecution of the work commissioned under this contract. It will be imperative for the CONSULTANT to display economical structural solutions for the given conditions. The CONSULTANT shall be aware that as the project is developed, certain minor modifications and/or improvements to the original recommendations may be required. The CONSULTANT is to incorporate these refinements into the design and will consider this effort to be an anticipated and integral part of the work. This will not be a basis for any supplemental fee request(s).

The CONSULTANT shall demonstrate good project management practices while working on this project. These include communication with the DEPARTMENT and others as necessary, management of time and resources, and documentation. The CONSULTANT shall set up and maintain throughout the design of the project a contract file in accordance with DEPARTMENT procedures.

The DEPARTMENT will provide contract administration, management services, and technical reviews of all work associated with the development and preparation of the contract plans. The DEPARTMENT will provide job specific information and/or functions as outlined in this contract.

SECTION II. PROJECT OBJECTIVES

A. General Objectives

The general objective is for the CONSULTANT to prepare a set of plans and specifications to be used by the contractor to build the project. Elements of work may include roadways, structures, geotechnical activities, surveys, drainage, signing and pavement markings, utility relocation, landscaping, design surveys, right-of-way surveys, right-of-way maps, maintenance of traffic, cost estimates, environmental permits, environmental mitigation plans, quantity computation booklets, and all necessary incidental items for a complete project.

Close coordination between disciplines must be maintained to produce the most feasible alternatives in the design of the project. This will be an English unit project.

B. Specific Project Objectives

The CONSULTANT shall investigate and review project concepts (typical sections, alignments, etc.) developed from any prior studies including the Sanibel Causeway Improvements Project Development and Environment Study Final Preliminary Engineering Report. These reports may not dictate the final design of this project. The CONSULTANT shall maintain close coordination with the Lee County Department of Transportation Project Manager and Bridge Engineer.

The primary project objective is to design replacements for the existing Sanibel Island Causeway (CR 867) Structure B (Bridge Number 124042) and Structure C (Bridge Number 124041), designing the roadway approaches to the structures, improvements to the roadway between the structures and providing for removal of existing bridges.

Existing Bridge No. 124042 is 1,824 ft. long and existing Bridge No. 124041 is 3,576 ft. long. Both structures are 34'-3'' wide, out-to-out, with a 3'- 1 $^1/_2$" safety curb with post and beam traffic rail on both sides.

The new structures will be on offset alignments (Structure B to the west) (Structure C to the east). The alignment offset shall be determined with consideration to constructability and maintenance of traffic. The structures shall be designed and constructed to place the superstructure out of the splash zone. The low member elevation must be at least twelve feet (12') above the Mean High Water (MHW) elevation as established by the Bridge Hydraulic Report.

Provide at least the minimum sixty-nine foot (69') horizontal and twenty-six foot (26') vertical clearances for the navigation at the Sanibel Channel under Structure C. Structure B does not cross a designated navigation waterway. A crest vertical curve as shown in the Preliminary Engineering Report (PER) may assist in deck drainage. Coordinate with the U.S. Coast Guard, U.S. Army Corp of Engineers and marine users for input regarding the navigation clearances.

The new bridge lengths will be established from recommendations provided in the Bridge Hydraulics Report with considerations for constructability and roadway realignment.

A scour protection plan must be developed for the bridge ends which will be compatible with existing recreational use and minimizes the use of bulkheads and seawalls.

The bridge shall provide two 12 ft. lanes with 8 ft. shoulders for a 40 ft. clear roadway width (no sidewalk shall be provided on the bridge structures).

The design speed for this project is fifty miles per hour (50 mph).

A crash tested open barrier wall similar to the Kansas Corral shall be considered for use on the bridges.

Evaluate methods of "roadway scour protection" to protect the causeway roadway from storm damage and erosion.

Lee County desires to use the debris from the demolition of the existing structures in its artificial reef program. See the Final PER for other commitments that must be met. This includes rumble strips on the bridge shoulders and sea grass mitigation as required for permits. Note, no construction staging shall occur within the limits of the Sanibel Park or within Piping Plover Critical Habitat adjacent to Bridge A.

SECTION III. ROADWAY PLANS PACKAGE

A. General

The CONSULTANT shall prepare the Roadway Plans Package. This work effort includes the roadway design and drainage analysis needed to prepare a complete set of Roadway Plans, Drainage Plans, Traffic Control Plans, Environmental Permits and other necessary documents.

B. Design Analysis

1. Typical Section Package - The CONSULTANT shall prepare a Typical Section Design Package. This package shall include the following:

   - Transmittal letter
   - Location Map(s)
   - Typical Section(s) (including bridge sections)

   The signed and sealed typical section design package shall be submitted to the DEPARTMENT for approval at the earliest possible date and prior to the Phase I roadway plan submittal stage.

2. Geometrics - The CONSULTANT shall design the geometrics for the project using the design standards that are most appropriate. The designer shall place great emphasis on the PD&E however shall address all external influences (including City of Sanibel weigh station and rest room facilities), design consistency and driver expectancy, aesthetics, pedestrian and bicycle use, ADA requirements, elder road user policy, access management, and recreational use.

   The design elements shall include, but are not be limited to, the horizontal and vertical alignments, lane widths, shoulder widths, cross slopes, borders, sight distance, side slopes and ditches, lane transitions, and safety features. The geometric design developed by the CONSULTANT shall be an engineering solution that is not merely an adherence to the minimum AASHTO and/or FDOT standards.

3. Pavement Design Package - The CONSULTANT will be responsible for pavement design.

4. Design Documentation, Computation Book and Quantities - The CONSULTANT shall submit to the DEPARTMENT design notes and computations to document the design conclusions reached during the development of the construction plans.

   The design notes and computations shall be recorded on standard size computation sheets, fully titled, numbered, dated, indexed and signed by the designer and the checker. Computer output forms and other oversized sheets shall be folded to the standard size. The data shall be in a hardback folder.

   One copy of the design notes and computations shall be submitted to the DEPARTMENT with each phase submittal. When the plans are submitted for final review, the design notes and computations corrected according to DEPARTMENT review comments shall be resubmitted. At the project completion, a final set of design notes and computations, signed and sealed by the CONSULTANT, shall be submitted with the record set of plans.

   The design notes and calculations shall include, but are not be limited to the following data:

   a. Design standards used for the project

   b. Geometric design calculations for horizontal alignment that is not included in the quantity computation booklet

   c. Vertical geometry calculations

   d. Traffic, capacity, lane closure analysis and operational analysis

   e. Drainage computations

   f. Earthwork calculations not included in the quantity computation booklet

   g. Calculations showing cost comparisons of various alternatives considered

   h. Documentation of decisions reached resulting from meetings, telephone conversations or site visits

   i. Calculations of quantities

   j. All permit support documentation

   k. Justification for any variation from standards

l. Pavement design calculations

5. Summary of Bid Pay Items and Specifications Package– Florida Department of Transportation pay items may be used for a Summary of Bid Pay Items in the plans. The Phase III submittal shall have all pay items identified with quantities. The Phase IV submittal shall have final quantities with a final construction cost estimate and construction time. The Summary of Bid Pay Items shall provide for each component set of plans (i.e., Roadway, Bridge, Signing and Marking, etc.). The Specification Package must be submitted for review with the Phase III submittal.

C. Drainage Analysis

1. The CONSULTANT shall be responsible for designing a drainage and stormwater management system. All design work shall be in compliance with the FDOT's Drainage Manual and the requirements of the regulatory agencies. This work will include the engineering analysis necessary to design any or all of the following: cross drains, French drains, roadway ditches, outfall ditches, storm sewers, retention/detention facilities, other drainage systems and elements of systems as required for a complete analysis.

2. The objective is to obtain approved stormwater treatment/attenuation design. The exact number of drainage basins, outfalls and water management facilities (retention/detention areas, weirs, skimmers, etc.) will be the CONSULTANT's responsibility.

3. This service shall include, but is not limited to the following:

   a. Determination of the volume of stormwater to be attenuated Locate and assess suitable land areas for stormwater management. Utilize existing ditches and outfalls as much as possible.

   b. Coordinate with local government offices regarding local regulations, restrictions, and possible joint use with the DEPARTMENT. Obtain information concerning present or future development that could impact the design.

   c. Provide preliminary plans during Phase Submittals for review by the DEPARTMENT and revise as necessary.

4. The CONSULTANT shall provide a signed and sealed Drainage Design Report. It shall be a record set of all drainage computations, both hydrologic and hydraulic. The CONSULTANT shall include all support data such as soil borings and percolation tests as provided by the Geotechnical Engineer.

5. The CONSULTANT will be responsible for delineating all wetlands and endangered species habitat as required by the permitting agencies.

6. The CONSULTANT shall furnish to the DEPARTMENT all supporting data (reports, drainage tabulations, risk analysis, related correspondence, etc.) compiled during the performance of services described in this section. The DEPARTMENT will also be notified in adequate time to schedule a representative to attend all related conferences.

7. Bridge Hydraulic Report

   The CONSULTANT shall provide a Bridge Hydraulics Report (BHR) and Bridge Hydraulics Recommendation Sheet (BHRS) for the bridge structures, including a scour analysis. Information from prior studies and reports may be used to assist in the bridge scour analysis.

The BHR and BHRS shall be submitted with the BDR.

The CONSULTANT may use data from the "Modeling 3-D Circulation in Charlotte Harbor Final Report" hydraulic model to model the bridge and waterway. The critical events will be evaluated and the scour analysis shall be performed in accordance with HEC-18. Structure lengths to be considered include: the minimum physical bridge length, the minimum hydraulic length, and length meeting minimum environmental criteria. The recommended bridge and HEC-20 length shall be determined based upon the minimum hydraulic structure, environmental length, safety, maintenance, constructability, and cost. The intent is to obtain a permittable recommended bridge length that meets FHWA and FDOT design criteria.

D. Roadway Plans

The CONSULTANT shall prepare the roadway plans in a standard format. The following will be included: Key Map, Typical Section sheet(s) with notes, Cross Section sheet(s), Summary of Quantities sheet(s), Drainage Structure Sheet(s), Plan/Profile Sheet(s), Intersection Detail sheet(s), Summary of Pay Items, miscellaneous construction details, and any other detail sheets necessary to convey the intent and scope of the project for the purposes of construction.

E. Drainage Plans

The CONSULTANT shall prepare plan sheets, notes, and details to include the following: Drainage Map sheet(s), Drainage Structure sheet(s), Summary of Drainage Structure sheet(s), Lateral Ditch and Outfall Plan sheet(s), Lateral Ditch and Outfall Cross Section sheet(s) if needed, Bridge Hydraulics Recommendation sheet(s), Retention/Detention Plan sheet(s) if needed, Special Drainage Detail sheet(s), and Erosion Control Details.

F. Traffic Control Plan

1. Traffic Control Analysis - The CONSULTANT shall design a safe and effective Traffic Control Plan to move marine, vehicular and pedestrian traffic during <u>all</u> phases of construction. The areas shall include, but are not limited to, construction phasing of roadway base and asphalt, bridge construction, utility relocation, drainage structures, ditches, front slopes, back slopes, drop-offs within clear zone, traffic monitoring sites, ingress and egress to existing property owners and businesses, signing and pavement markings, and signal and detour quantity tabulations. Special consideration shall be given to the construction of the drainage system when developing the construction phases. Positive drainage must be maintained at all times.

   The CONSULTANT shall investigate the need for peak hour constraints when excessive traffic may require the ceasing of construction and/or all lanes remaining open during certain hours of the day, possibility of night work, temporary traffic signals, and the use of materials such as sheet piling in the analysis. The Traffic Control Plan shall be prepared by a certified designer who has completed a FDOT approved training course, and in accordance with the FDOT's Roadway and Traffic Design Standards and the FDOT Plans Preparation Manual.

   The CONSULTANT shall consider the local impact of any lane closures or alternate routes. When the need to close a road is identified during this analysis, the CONSULTANT shall notify the COUNTY's Project Manager as soon as possible. Proposed road closings must be reviewed and approved by the DEPARTMENT. Diligence shall be used to minimize negative impacts by appropriate specifications, recommendations or plans development. Local impacts to consider will be local events, holidays, peak seasons, detour route deterioration and other eventualities. It shall be the CONSULTANT's responsibility to obtain local authorities' permission for use of detour routes not on state highways.

2. Traffic Control Plans - The CONSULTANT shall prepare plan sheets, notes, and details to include the following: Typical Section sheet(s), General Notes and Construction Sequence sheet(s), Typical Detail sheet(s), Tabulation of Quantities sheet(s), Traffic Control Plan sheet(s), Signing and Pavement Marking sheet(s), and Temporary Signalization sheet(s).

   The CONSULTANT shall prepare additional plan sheets such as cross sections, profiles, drainage structures, retaining wall details and sheet piling as necessary for proper construction and implementation of the traffic control plan.

G. Stormwater Pollution Prevention Plans

The CONSULTANT shall prepare plan sheets, notes, and details to include the following: Typical Sections, General Notes and Construction Sequence sheets, Erosion Control Detail Sheets, and tabulation of Quantities. The narrative portion of the SWPPP shall detail appropriate controls needed for each phase of construction. The Erosion Control Details should clearly indicate how and where controls are to be employed. Consideration should be given to issues relating to maintaining work zone drainage. A tabulation of devices and locations shall be provided in the Summary of Quantities. The plans shall be in accordance with the FDOT's procedures, manuals, design memos, and guidelines.

H. Utilities

1. Utility Plans

   a. The CONSULTANT shall furnish two (2) copies of the Phase I (30%) plans for each utility located within the project limits. The Phase I (30%) plans shall depict all existing utilities for the initial contact and verification by each Utility Company in accordance with the s procedure manual, design memorandums and guidelines.

   b. The CONSULTANT shall submit two (2) copies of the Phase II (60%) utility relocation plans for each Utility located within the project limits. The Phase II (60%) plans shall depict all existing utilities from Phase I (30%) contact and drainage design.

   c. The CONSULTANT shall furnish two (2) copies of the Phase III (90%) utility relocation plans for each Utility located within the project limits. One (1) of the sets must be a full set of Phase III (90%) plans and the other can be a partial set, that will include plan and profile, drainage and cross sections.

   d. The CONSULTANT shall furnish two (2) copies of the Phase IV (100%) plans for each Utility located within the project limits.

   e. If revisions to the design are made after the plans have been made available to the Utility Companies, the CONSULTANT is responsible to provide two (2) copies of the revised plans for each Utility Owner located within the project.

   f. Coordination with Utility Companies - After the DEPARTMENT has approved the 60% plans submittal, the DEPARTMENT will then schedule a Utility Pre-Design Conference that the CONSULTANT shall attend and will be responsible for providing technical data. The purpose will be to determine the effects the project has on existing and proposed facilities. This allows the utility representatives to provide input into the development of the roadway plans. The CONSULTANT shall have the minutes of each utility meeting recorded for submission to the DEPARTMENT.

2. Utility Location Services

The CONSULTANT shall provide Levels of locate up through Level "A."

Existing major underground utilities suspected to be located within three (3) ft. of proposed construction operations shall be identified and located. Any underground utility determined to be threatened by construction activities shall be considered for Level "A" locate information. The CONSULTANT shall obtain Level "A" locate from the utility owner for major utilities within three (3) ft.

If the utility owners cannot provide Level "A" locate, they shall provide up through Level "B". Then, it shall be the CONSULTANT's responsibility to provide Level "A" locate information for major utilities identified and include the information in the construction plans.

Among the known utilities with installations along the causeway are:

- Lee County Electric Cooperative
- Media One
- Sprint
- FP&L
- Lee County Utilities

I. Environmental Services / Permits

1. Preliminary Project Research - The CONSULTANT shall perform preliminary project research and shall be responsible for early identification of and coordination with the appropriate regulatory agencies to assure that design efforts are properly directed toward permit requirements.

2. Agency Coordination (Includes all Phases) - The CONSULTANT will be responsible for all coordination work with the permit agencies.

3. Establish Wetland Jurisdictional Lines - The CONSULTANT is responsible for establishing the wetland jurisdictional lines. These lines shall be tied to a baseline for reference and reviewed by the DEPARTMENT and the permitting agency(s). Wetland jurisdictional lines must be confirmed in the field by the regulatory agencies. The wetland jurisdictional lines shall be identified and submitted to the DEPARTMENT for review with the Phase I submittal, and prior to coordinating with the permitting agency(s). A separate set of plans, included in the Construction plans, will be dedicated to clearly show the wetland delineation lines as well as cross-hatched wetland areas that require removal and areas that should remain undisturbed. On projects with utility relocations, the wetland delineation lines and wetland areas (disturbed and undisturbed) must be shown in the plans at the time of the utility pre-design meeting (Phase II Plans). Any mechanical clearing and grubbing in jurisdictional wetlands will require environmental permits.

4. Agency Field Review - The CONSULTANT shall be responsible for coordinating regulatory agency field reviews.

5. Permit Preparation – The CONSULTANT shall prepare Permit Application Packages to include SFWMD Environmental Resource Permit, NPDES/EPA Permit and required plans, FDEP General Permit for Stormwater Discharge from Construction Activities that Disturb Five or More Acres of Land, US Coast Guard Section 9/10 permit, ACOE 404 permit and City of Sanibel development permit (if necessary). The CONSULTANT shall be responsible and accountable for providing all information, signed and sealed plans, documentation, and calculations necessary to secure any required permits including a site-specific erosion control plan.

6. The CONSULTANT shall prepare an erosion control plan that complies with the stormwater permit requirements and Stormwater Pollution Prevention Plan (SWPPP) as required under the National Pollutant Discharge Elimination System (NPDES) and under Chapter 403.0885, Florida Statutes. The CONSULTANT shall refer to Volume 1, Chapter 11 of the FDOT Plans Preparation Manual for information in regards to the SWPPP and FDEP Rule 62-25 (F.A.C.) for requirements of the erosion control plan. Areas especially prone to erosion, such as high fill areas, must be given special attention (i.e. sod, temporary matting, slope drains, etc.) to reduce environmental impacts. Detailed limits of the erosion control items will be necessary.

7. Mitigation Coordination and Meetings - The CONSULTANT shall quantify wetland impacts and bring them to the attention of the Project Manager. Once a mitigation plan has been approved by the Project Manager, the CONSULTANT will be responsible for coordinating the proposed mitigation plan with the environmental agencies.

8. The CONSULTANT shall prepare a mitigation plan to be included as a part of the Environmental Resource and 404 permit applications. Prior to the development of alternatives, the CONSULTANT shall meet with the Project Manager to determine the County's policies in proposing mitigation. The CONSULTANT shall proceed in the development of a mitigation plan based upon the general guidelines provided by the Project Manager.

   The CONSULTANT shall investigate the following methods of mitigation:

   - Monetary participation in offsite regional mitigation plans
   - Monetary participation in a private mitigation bank
   - Creation/restoration on public lands
   - Creation/restoration on right-of-way purchased by the County
   - Creation/restoration on existing County right-of-way

   In the event that physical creation or restoration is the only feasible alternative to offset wetland impacts, the CONSULTANT shall collect all the data and information necessary to prepare alternative mitigation plans that will be acceptable to all permitting agencies and commenting agencies who are processing or reviewing the permit applications for the project.

   Prior to the selection of a final mitigation site(s), the CONSULTANT shall provide the following services in the development of alternative mitigation plans.

   - Preliminary jurisdictional determination for each proposed site
   - Selection of alternative sites
   - Coordination of alternative sites with the Project Manager and environmental agencies
   - Written narrative listing potential sites with justifications for both recommended and non-recommended sites.

9. The CONSULTANT shall develop mitigation plans to be included as part of the construction plans for the overall project. These plans shall include (at a minimum) the following sheets:

   - Cover Sheet
   - Quantities Sheet
   - Typical and Specific Notes Sheets
   - Geometry Plan View Sheet
   - Grading Plan View Sheet
   - Cross-sections Sheet
   - Planting Plan View Sheet
   - Typical Planting Sections Sheet

- Plant Specification and Notes Sheet
- Structures Sheets (if needed)
- Erosion Control Sheet
- Geotechnical Sheets

In addition, the CONSULTANT shall develop Special Provisions and Specifications, as needed, for construction of the mitigation plan. These Provisions and Specifications shall be included in the overall project contract documents.

10. Contamination – The CONSULTANT shall evaluate the project limits for possible contamination sites. All underground fuel tanks and monitoring wells within the proposed right-of-way are to be located and shown on the plans. Throughout the design process, the CONSULTANT shall relay to the DEPARTMENT any findings of contaminated soil, monitoring wells, or any features (particularly springs or sinks) relating to contamination or hazardous material. Any tank indicated to have been properly abandoned according to FDEP and EPA rules must be located within the existing or proposed right-of-way. All piping and pumps in association with the tanks shall also be located and identified by the survey.

11 The CONSULTANT shall be responsible for coordinating with the DEPARTMENT's Project Manager prior to beginning the design plans to determine if any special commitments have been made.

12. At the Pre-Construction Conference, the Engineer-of-Record (EOR) must be prepared to discuss erosion control, environmentally sensitive areas, and any known risk or special permit requirements on sensitive and major projects.

13. The CONSULTANT shall provide for agency coordination and mitigation for project impacts on threatened and endangered species as identified in the Final Preliminary Engineering Report and referenced Biological Assessment Report.

SECTION IV. STRUCTURE PLANS PACKAGE

The CONSULTANT shall prepare a Structures Plans Package. This work effort will utilize the LRFD design method in the analysis and design necessary to evaluate alternatives and prepare a complete set of construction plans and other necessary documents.

A. Bridge Development Memo (BDM):

This activity evaluates and identifies an economical, maintainable, aesthetically pleasing and safe structure. The CONSULTANT shall pick a superstructure type and compare several span lengths to determine an economical span length. The type of foundation element to be used for these bridges shall be based on the geotechnical data and the CONSULTANT's experience with similar type sites and bridges. The CONSULTANT shall consider construction methods, degree of future maintenance required, and aesthetics in determining the type of structure elements he recommends.

BDM Analysis and Memo:

The CONSULTANT shall prepare a Bridge Development Memo. This memo will be an abbreviated version of the Bridge Development Report (BDR) described in Chapter 26 of the FDOT Plans Preparation Manual (Volume 1). This memo shall be neatly written shall summarize the CONSULTANT's recommendations for bridge superstructure and substructure type.

Alternates to be considered include:

a. Superstructure: Prestressed concrete girders (AASHTO, Bulb-Tee)

b. Statical System: Simple spans and continuous spans

c. Foundation: Prestressed Concrete Piles (24"sq. min.)

d. Substructure: Piers
e. Retaining Walls: Consideration shall be given to the use of cast-in-place walls and proprietary wall systems (mechanically stabilized earth, MSE). Type, location, and length of walls should be indicated.

B. 30% Bridge Plans

The CONSULTANT shall prepare 30% plans to be submitted after the BDM approval. The DEPARTMENT shall concur with the recommended structure type before the CONSULTANT prepares 30% plans.

The CONSULTANT shall prepare 30% plan sheets, notes and details to include the following: key map (if not included in roadway plans), general notes, general plan and elevation, bridge hydraulic sheet, typical bridge section, foundation layout sheet, pier sheet and wall control drawings. The 30% Bridge Plans Package shall be when substantially complete for the COUNTY's review and comments

Bridge Geometry and Structure Design Analysis:

The CONSULTANT shall design the geometry for the project using design standards that are most appropriate with proper consideration given to the design traffic volumes, design speed, capacity and levels of service, functional classification, design consistency and driver expectancy, aesthetics, pedestrian and bicycle concerns, ADA requirements, elder road user policy, access management, and the type of construction and/or scope of work. The design elements shall include, but are not be limited to, the horizontal and vertical alignments, lane widths, shoulder widths, cross slopes, front and side slopes, lane transitions, and super-elevation. Structure design analysis elements shall include, but are not be limited to, foundations, end bents, intermediate bents or piers, caps, footings, superstructure elements, traffic railing barriers and walls.

C. 90% Bridge Plans

The 90% Bridge Plans Package shall be prepared by the CONSULTANT and submitted with the Phase III Roadway Package. This work effort includes the design analysis needed to prepare a complete set of 90% Bridge Plans and other necessary documents pursuant to the FDOT Plans Preparation Manual.

The CONSULTANT shall prepare 90% bridge plans for the substructure and superstructure alternative selected by the DEPARTMENT. The 30% bridge plans review comments and written responses shall be documented at the time of Phase III submittal.

The bridge design must include the approach slabs. The CONSULTANT shall prepare an erosion protection plan for bridge approaches, embankments and foundation construction. Wetland jurisdictional lines shall be delineated on the plan and elevation sheet.

D. Final Bridge Plans

The CONSULTANT shall prepare and submit plan sheets, notes, and details to include, but not limited to, the following: key map, general index, structures standard sheets, stage construction sequence sheet, bridge hydraulic recommendation sheet (BHRS), boring log sheet, finished grade sheet, pile layout sheet, end bent sheet, end bent details sheet, intermediate bent sheet, intermediate bent detail sheet, superstructure sheet, superstructure detail sheet, framing plan, prestressed beam and schedule, steel beam sheet, steel beam detail sheet, rebar schedule sheet, miscellaneous detail sheet, and approach slab sheet.

1. Design Calculations

   The CONSULTANT shall submit to the DEPARTMENT all reports, design and quantity calculation prepared during the development of the plans. The design calculations submitted shall adequately address the complete design of all bridge components. These calculations shall be neatly and logically presented on 8½ by 11 inch paper (where possible) and shall be signed and sealed by a registered professional engineer. A cover sheet indexing the contents of the calculations shall be included and all pages must be numbered.

2. Load Ratings

   The CONSULTANT shall be responsible for performing Load Ratings in accordance with AASHTO specifications and FDOT procedure 850-010-035. The FDOT's SALOD and BARS programs may be used for load ratings. Load ratings will be performed for all seven Florida legal truck types and the HS-20 design truck. The CONSULTANT will submit the Load Capacity Information sheet, a hard copy of the data and a copy of the input data on diskette with the 90% plans submittal. At final plans submittal a signed and sealed copy of the load rating shall be sent to the DEPARTMENT for transmittal to the FDOT District 1 Structures and Facilities Maintenance Engineer.

3. Bridge Number

   The CONSULTANT shall request a new bridge number from the FDOT District 1 Structures Facilities and Maintenance Engineer.

E. Retaining Wall Plans

The CONSULTANT shall prepare final plans for permanent retaining walls

SECTION V. SPECIFICATION PACKAGE

The CONSULTANT shall prepare and provide a complete Specifications Package, including Technical Special Provisions for all items of work not covered by the FDOT Standard Specifications, Supplemental Specifications or Recurring Special Provisions. The current Supplemental Specifications and Special Provisions are accessible on the FDOT Internet web site at the State Specifications Office web page (http://www11.myflorida.com/specificationsoffice/) under the Standard Specifications for Road and Bridge Construction & Implemented Modifications.

SECTION VI. SIGNING AND PAVEMENT MARKINGS

The CONSULTANT shall prepare plan sheets, notes, and details to include the following: Key Sheet, Tabulation of Quantities sheet(s), General Note sheet(s), Plan Sheet(s) only as necessary, Guide Sign Detail sheet(s), Metal/Concrete Pole detail(s) as applicable, and Service Point detail(s). Signs and pavement markings shall be designed in accordance with the elder road user policy. Existing roadway signs that are over three (3) years old will

qualify for replacement by the time of construction in accordance with the Routine Maintenance Performing Standards.

The CONSULTANT shall evaluate the use of rumble strips or reflective pavement markings to delineate the travel lanes from the shoulders.

Pavement markings for the project will be detailed through the use of notes and tabulation if the project is consistent of a typical pavement marking. In the event pavement markings are particular to an intersection or urban setting then the CONSULTANT shall detail the markings for that area in a clear manner for construction.

If necessary, the CONSULTANT shall also provide for lighted overhead signing (truss or cantilever) and/or overhead span wire signing, if appropriate.

In an urban setting curb/gutter and signing and pavement markings shall be detailed.

The CONSULTANT shall be responsible for the design of any sign support to be built integrally with the structures included in this Scope. The CONSULTANT shall show all details (anchor bolt size, bolt circle, bolt length, etc.) as well as all design assumptions (wind loads, moments, torsion, etc.) used in arriving at those details.

The FDOT's Structures Design office has computer programs available to the CONSULTANT for the design of cantilever and truss supports.

SECTION VII. LIGHTING

The CONSULTANT shall prepare bridge and roadway lighting plans for the project.

No Lighting Justification Report will be required. The DEPARTMENT desires bridge deck lighting, imbedded in the deck, to light the lane lines, edge of pavement and the gutterlines. Similar lighting is desired in the roadway. The CONSULTANT shall also investigate the use of embedded lighting in the barrier. No below deck lighting will be provided. The limits of lighting shall be discussed with and agreed to with the DEPARTMENT.

Navigational lighting will be required for the channel and fender system under Bridge C. No channel lighting will be required for Bridge B.

A. Lighting Design Analysis Memo

The CONSULTANT shall prepare a lighting design memo that includes the two bridges. The memo shall include the evaluation of various manufacturer's systems for the imbedded lighting. Availability, performance, product cost, maintenance and ease of installation shall be considered and a recommendation of which product(s) to use shall be presented.

B. Voltage Drop Calculations

The CONSULTANT shall submit voltage drop calculations showing the equations used, along with length of each circuit, size conductors used and their ohm resistance values. Load analysis calculations shall be submitted for each branch circuit breaker and main breaker.

C. FDEP Coordination and Report

The CONSULTANT shall coordinate with the Florida Department of Environmental Protection (FDEP) and submit a report to include provisions for preventing the disorientation of sea turtles as required by the FDEP.

D. Design Documentation

The CONSULTANT shall submit a Lighting Design Documentation Book which includes:

- Lightning calculations
- Bid item quantities
- Letter to the power company requesting service
- Power company confirmation letter on requested services
- Voltage drop calculations
- Load analysis calculations

E. Quantities and Cost Estimate

The CONSULTANT shall calculate quantities and prepare cost estimates for the lighting systems.

F. Technical Special Provisions

Any technical special provisions required for the bridge lighting shall be prepared by the CONSULTANT.

SECTION VIII. AESTHETICS AND LANDSCAPING

The Consultant will apply the following scope of services and tasks to approximately 2.4miles of roadway along the Sanibel Causeway from Bridge B to Sanibel Island.

A. Task #1 - Base Plan Preparation

1.1 Consultant will create **new** or **use existing** computer files **if available** for the base plans on this project. The computer files will be in a format acceptable to Lee County Department of Transportation (DOT), and will become the property of DOT for its use on future projects upon completion. The base plans shall be prepared in a manner that can be plotted or reproduce at a scale acceptable to DOT. The base plans shall include the following roadway functions: roadway geometry, centerline survey with 100' station marks and numbers, curbing and type, edge of pavement, berms, sidewalks/bikepaths, signs, pole locations for signals and lighting, equipment boxes, retention/detention ponds, utilities, right-of-way lines, clear zones, design and posted speeds, grading, existing plant material, and all other pertinent elements.

B. Task # 2 - Site Investigation

2.1 Consultant will review all base map information and the project site. The base plans shall be revised to include any changes from the base map information to existing visible on-site conditions.

2.2 Consultant will review the entire project site, and perform an analysis of the existing site features, adjacent land uses, and potential water and power sources. The median openings and roadway intersections shall be considered for sight distance and visibility conflicts with both vehicles and pedestrians during planting design. The analysis shall also include recommendations that may be valuable in reducing maintenance and safety concerns for maintenance workers.

2.3 Consultant will review and adhere to design guidelines pertinent to this specific project and segment of roadway. This shall include the latest edition of the following: LeeScape, Lee County Roadway Landscape Master Plan; Florida Highway Landscape Guide, and Manual of Minimum Standards for Design, Construction, and Maintenance for Streets and Highways by Florida Department of Transportation (FDOT). This may also include Roadway and Traffic Design Standards, and Plan Preparation Manual by FDOT; and A Policy on Geometric Design of Highways and Streets, American Association of State Highway and Transportation Officials (AASHTO).

C. Task # 3 - Conceptual Design (30%)

3.1 Consultant will prepare two design concepts that will illustrate two different types of roadway segments (if applicable). One segment should be an intersection and the other a typical linear section of the roadway. Each design concept will indicate a recommended core level plant palette, plant spacing, and plant group spacing, that is suitable for its location, climate, maintenance, and budget considerations. Each of the design concepts should also include the recommendations generated from the site analysis performed in task 2.2.

3.2 Three sets of the two design concepts and an outline of the anticipated drawing package, proposed scale and sheet layouts will be submitted to staff for review in 11"X17" format.

3.3 Consultant will meet with (DOT) staff to review the concepts and resolve questions.

D. Task #4 - Design Development (60%)

4.1 Consultant will prepare design development drawings (60%) based upon project budget and comments from staff.

4.2 Design concepts and plant material selections will be refined to indicate the actual placement and species of plants and other design elements. Plant sizes will be consistent with Grades and Standards of Nursery Plants. The planting plans shall be prepared in a manner that provides clear visibility of pedestrians and motorists using the corridor.

4.3 Consultant will prepare an estimate of irrigation demand, and suggested water sources. This will include a feasibility study of available water resources suitable for irrigating the proposed plant material. The study will include wells, canals, ponds, re-use, potable water, and other available water resources. The study will evaluate the availability of electrical power sources, applicable hydraulics, suitability of water quality for proposed plant material, and cost feasibility of each resource. The study shall conclude with a recommendation of the most practical method of implementation, including both installation and operating costs over a three year time period following plant installation.

4.4 Consultant will prepare an Opinion of Probable Costs based upon the 60% Design Development drawing package. The Opinion of Costs will include maintenance of the site from the notice-to-proceed date until one year after the substantial completion date (in Operations construction contracts we have modified the contract definitions, where the landscape and irrigation installation is completed at substantial completion, and one year later at the end of the one year maintenance period we have final inspection). The estimate will also include mowing the medians and/or roadsides, if planted during project construction.

4.5 Consultant shall submit to the Project Manager for review three (3) 11"x17" sets of drawings. All sets shall be plotted to scale. Consultant will also submit an Opinion of Probable Cost based upon 60% design development drawings. The 60% plan sets will be distributed by the Project Manager to DOT Operations and Traffic Divisions for review comments. DOT Operations will distribute a set of plans in the upcoming months agenda package, to the members of the Lee County Roadway Landscape Advisory Committee (RLAC) for their review.

4.6 Consultant will present the 60% Design Development Plans to the RLAC at their regular monthly meeting and record pertinent comments. The presentation displays should show all proposed planting and amenity design elements along the entire roadway corridor. (The RLAC normally meets the first Tuesday of each month at 6:00 p.m. in the CD/PW 3rd floor large conference room.) If the RLAC approves the plans at this meeting, the Consultant shall skip task 4.7 and proceed to task #4.8.

4.7 If the RLAC votes to send the plans to a Task Force Subcommittee for further review, the Consultant shall meet once with the subcommittee and review and resolve all conflicts, and record pertinent comments. The task force subcommittee will then make a recommendation to the full RLAC at their next regular meeting (if requested by the subcommittee, another presentation to the full RLAC by the Consultant will be necessary before approval).

4.8 After the RLAC approves the 60% plans, the Consultant shall meet with staff to discuss their project review comments on the plans. Staff and the Consultant shall then work to resolve all outstanding issues.

4.9 Consultant shall then prepare (60%) irrigation plans for the proposed plantings. The irrigation plans shall show water and electrical sources and connections, layout and sizing of piping, sleeves and irrigation heads, valves, and controllers. Irrigation system design shall provide head-to-head coverage for spray heads and rotor zones. Pop-up spray heads shall be 12", placed 18" from the edge of pavement. The system shall be designed in a manner that will avoid wetting the adjacent pavement. Bubblers, spray heads, and rotors should be designed to run on separate zones.

4.10 Consultant shall prepare a cover letter acceptable to DOT, to mail with an 11"X17" plan set to all utility companies with services within the project limits. The letter will request a plan review by the utility company, and a return letter indicating that the utility company does not take exception to the proposed improvements. Copies of all cover letters sent, and responses received by the Consultant, will be provided to the DOT Project Manager. The Consultant and Project Manager will discuss a solution to all known conflicts indicated by the utility companies, and the Consultant will modify the plans accordingly.

4.11 The Consultant will submit applications and obtain permits necessary for construction on DOT's behalf. This may include permits such as SFWMD Water Use Permit and FDOT General Use Permit.

E. Task #5 - Construction Documents (90%)

5.1 Based upon staff approval of 60% Design Development Drawings and Opinion of Cost, Consultant will prepare Construction Documents (90%). Construction documents shall include adjustments for staff and utility company conflicts, and the following:

a. Cover sheet: with project name and limits, location map, and sheet index.

b. Planting Plans: showing plant placements, sizes, and species of plants. Cross sections will be included, as required, to explain placement and clearances.

c. Irrigation Plans: showing water and electrical sources and connections, layout and sizing of piping, sleeves sizes and directional bores, irrigation bubblers, heads, valves, quick couplers, well/pump stations, and all other components such as fencing, pressure tanks, electrical panels and controllers.

d. Standard specifications and technical details from LeeScape will be provided by DOT. Consultant shall prepare all non-standard details and technical specifications. The non-standard specifications will be prepared by the Consultant and inserted into the standard specifications in a format acceptable to the DOT Project Manager.

5.2 Consultant shall submit to the Project Manager for review three (3) full size three (3) 11"x17" sets of drawings. All sets shall be plotted to scale. Consultant will also submit an Opinion of Probable Cost based upon 90% Construction Documents. The 90 % plan sets will be distributed by the Project Manager to DOT Operations and Traffic Divisions for review comments.

5.3 Consultant shall meet with staff to discuss their 90% project review comments. Staff and the Consultant shall then work to resolve all outstanding issues.

F. Task # 6 - Construction Documents (100%)

6.1 Based upon 90% review comments, Consultant will prepare final Construction Documents (100%) consisting of the following:

a. Complete cover sheet.

b. Complete planting plans, details, and specifications.

c. Complete irrigation plans, details and specifications.

d. Complete Bid Schedule in a format acceptable to Lee County Contracts and DOT. The bid schedule shall include the scientific name of all plants, sizes, names, quantities and units of all landscape, irrigation, maintenance,

and other items pertinent to the project. All alternate bid items shall also be included, such as mowing the median and roadsides as separate alternate line items. DOT can furnish a sample bid schedule for the Consultants use.

6.2 Consultant will provide final construction drawings to scale on mylars. Consultant shall furnish a disk of the computer files for the final project drawings to the Project Manager in the approved format. A disk of the bid schedule and all specifications shall also be submitted in a format acceptable to the DOT Project Manager.

G. Task #7 - Bidding Assistance

7.1 Consultant will attend one pre-bid conference at Lee County Offices.

7.2 After the pre-bid meeting, the Consultant will meet with staff and discuss the questions from the meeting. The Consultant will prepare an addendum after this meeting and send it to the Project Manager by 5:00 p.m. the following business day. The Consultant will answer all applicable addendum questions, and consult with the Project Manager on appropriate language. The Consultant will be responsible for preparing all addendums, and furnishing them to the Project Manager by 5:00 p.m. on the next business day following receipt of the questions.

H. Task # 8 - Construction Assistance

8.1 Consultant will attend one pre-construction conference at Lee County Offices.

8.2 If requested, the Consultant will visit the project site to observe construction progress and compliance with the contract documents as follows:
a. Project beginning: to review proposed planting and irrigation equipment locations and resolve conflicts.
b. Midway through installation: to review construction progress, quality of materials, workmanship, and compliance with construction documents.

c. At substantial completion: To review compliance with construction documents, construction installation, quality of materials and workmanship, performance of irrigation system, and prepare punch list items.
All discrepancies with the contract documents and punch list items, will be noted by the Consultant and sent to the Project Manager within 3 days of each site visit.

8.3 The fee for services included in this Task (Task 8) will be negotiated with the Consultant after award of the construction contract.

I. Task #9 – Reimbursables

9.1 Reimbursable expenses such as prints, messenger, courier, disks, special mail services, photography, etc.

J. Task #10 – Structural Aesthetics and Input

The Consultant shall provide aesthetics input for: retaining wall design; colors for bridge and wall structural components; railing colors and finishes; selection and location of site furnishings; and storm water treatment areas. Consideration of the conceptual aesthetics developed in conjunction with public meetings shall be taken into account. Plan sheets, detail sheets, quantities and specifications to be developed by other professional disciplines.

K. Task #11 – Meetings

The Consultant shall prepare renderings for meetings as described in the Public Involvement portion of the project, and shall attend up to three additional meetings.

SECTION IX. DESIGN / RIGHT-OF-WAY SURVEYS

A. General

The CONSULTANT shall perform all survey services necessary to prepare the right-of-way maps, legal descriptions, engineering design and construction plans. Survey services and deliverable data must be in accordance with the DEPARTMENT's current procedures, including special instructions and directions issued in writing by the DEPARTMENT. Survey services must also comply with all pertinent Florida Statutes (F.S.) and applicable rules in the Florida Administrative Code (F.A.C.). All field survey data will be furnished in a digital format, readily available for input and use in CADD Design files.

B. Design/Right-of-Way Survey

Any of the above Survey Services necessary for this project shall be conducted utilizing ENGLISH UNITS, shall be tied to the Florida State Plane coordinate System on N.A.D 1983/90 or later horizontal datum and N.G.V.D. 1929 vertical datum, and shall be performed by the CONSULTANT.

All survey work must be accomplished in accordance with the FDOT's Location Survey Manual. This work must comply with minimum technical standards for surveyors, pursuant to Chapter 472.027, F.S., and any special instructions from the DEPARTMENT. This work also must comply with the FDEP rules, Chapter 18-5 F.A.C., pursuant to Chapter 177 F.S., when applicable.

Unless otherwise directed by the DEPARTMENT, all survey work must be submitted in Electronic Field Book (EFB) Format or Cadastral Electronic Field Book (CEFB) Format.

Original field books shall become the property of the DEPARTMENT upon completion of the project.

C. Certified Right-of-Way Control Survey Drawings

The field right-of-way survey is to be presented in the format of a certified drawing on standard size reproducible film. The CONSULTANT shall certify this drawing as a Right-of-Way Control Survey that meets the Minimum Technical Standards adopted by the Florida Department of Professional Regulation, Board of Land Surveyors, Chapter 61G17-6 of the F.A.C. and FDOT procedure 550-030-015.

These survey drawings, the Key Map and the Detail Map shall be prepared to a scale that is acceptable to the DEPARTMENT.

Unless otherwise directed, the surveyor shall furnish the DEPARTMENT with four (4) signed, sealed and certified copies of the above maps along with the original.

1. The Key Map certified drawing shall depict the following data:

    a. Complete centerline alignment data, including beginning of survey station, all curve data, bearings on all tangent lines along the centerline, all intermediate control point stations, and end of survey station. All control points must be identified as to type of material set at each respective point.

    b. All section lines, all quarter section lines, and all quarter-quarter section lines when pertinent must be shown with the station where their intersection with centerline or baseline of survey occurs, a distance from the nearest corner to centerline, and bearings and distances to all corners. Type of corner, either found or set, should be spelled out or identified by a legend. All ties will be shown to depict a closed traverse to assure acceptable closure.

c. A separate sheet depicting all of the centerline or baseline control reference points and reference points for Public Land Survey corners as per FDOT Rule Chapter 14-47.003 F.A.C., indicating type of material used for each respective reference point. This sheet does not need to be plotted to scale.

d. Sheet 1 of key map should contain all pertinent general survey notes and "certification".

D. Bridge Survey

1. Verify existing plans/drawings. Obtain plans/drawings of existing structures, if available.

2. Verify existing structures and conditions.

3. Verify skew and/or curve from existing plans.

4. Verify vertical and horizontal clearances with existing plans.

5. Locate benchmarks and control points.

6. Reference a minimum of two (2) project alignment points (one beyond each end of the bridge) such as a P.C., P.T., P.I., P.O.T., etc. Place these references safely out of the construction work zone.

7. Profile centerline of bridge at each bent/pier location.

8. The DTM must include side roads within survey project limits.

9. Any bridge data including centerline, profiles, structure details, etc. must be in EFB/CEFB Zone 2. This data will not be included in the DTM.

10. DTM specifications are as follows:

    Collect complete DTM data 2000 ft. (enough to cover tying back to existing alignment) prior to the beginning of the bridge to 2000 ft. beyond the end of the bridge. The DTM should be a minimum of 200 ft. wide.

11. Locate all underground utilities horizontally and vertically within survey project limits and all utilities on/or attached to bridge.

12. Perform standard sectional tie(s), property ties, and T.I.I.T.F. Survey, if required.

13. Establish a channel centerline or channel survey baseline, if applicable, with station and angle ties to the project alignment. Note this channel centerline can be computed from historical survey data, existing channel topography, etc., and initially does not have to be field located.

14. Additional cross section specifications:

    a. Channel cross sections must be taken approximately one (1) times the bridge length upstream and one (1) times bridge length downstream (if not within the previous DTM limits).

    b. Channel cross sections should be perpendicular to the flood plain. The Drainage/Hydraulics Engineer will determine this cross section width. The total cross section width will not be less than 1.5 times the bridge length.

15. Include elevation/soundings at each existing bent on the downstream side in the DTM.

16. Obtain extreme high water elevation in reference to NGVD or NAVD. Also note elevation or height of highest light stain line on bridge piles.

17. Obtain normal high water elevation in reference to NGVD or NAVD. Note elevation or height of heavy stain line on bridge piles.

18. Measure present water level data including elevation, location, date(s), and general flow direction(s).

19. If there is a water level staff gage on or near the bridge, equate an elevation to an even staff gage reading. Example: Elevation 106.0 equals 13.0 staff reading on gage.

E. Specifications

All of the above survey work must be accomplished in accordance with the FDOT's Location Survey Manual. This work must comply with the Minimum Technical Standards for Land Surveyors Rule 61G17-6, F.A.C., pursuant to Section 472.027, F.S. and any special instructions from the DEPARTMENT. This survey also must comply with the Department of Natural Resources Rule, Chapter 18-5, F.A.C, pursuant to Chapter 177, F.S., and the Department of Environmental Regulations State Jurisdiction Boundary Surveys where applicable.

SECTIONX. RIGHT-OF-WAY MAPS

A. General

The CONSULTANT shall be responsible for the complete preparation of right-of-way maps for the project. Complete Right-of-Way Key Maps and Detail Sheets shall be prepared in accordance with the FDOT's Right-of-Way Mapping Procedure 550-030-015. Right-of-Way detail maps shall be line drawings prepared to DEPARTMENT size and format. The CONSULTANT will submit Key Maps, Detail Sheets and Legal Descriptions to the DEPARTMENT for review at stages of completion as specified by the DEPARTMENT.

B. Right-of-Way Coordination

1. Initial Right-of-way Field Review – A field review will be conducted to evaluate the need for minor adjustments to the roadway alignment and the identification of houses, business or other right-of-way parcels requiring special consideration (i.e. access, circulation, parking, deliveries, drainage, etc.).

2. Right-of-Way Review Meeting – A roundtable review meeting will be conducted after the initial right-of-way requirements have been set and reviewed by the CONSULTANT and DEPARTMENT's Project Manager. This meeting will evaluate the right-of-way requirements. All right-of-way issues identified during the meeting shall be resolved prior to final right-of-way submittal.

3. Final Right-of-Way Field Review - A field review will occur after right-of-way requirements and property lines are established (60% - 90% right-of-way maps).

C. Land and R/W Lines Analysis & Calculation

This effort shall be done in accordance with the FDOT's Right-of-Way Mapping Procedure 550-030-015.

D. Right-of-Way Maps

The CONSULTANT shall be responsible for determining and justifying rights-of-way required by his design that is beyond the rights-of-way identified in prior studies and estimates. The CONSULTANT shall make every reasonable effort to minimize the limits of right-of-way acquisition through the creative use of existing right-of-way, especially in areas with right-of-way restrictions. The CONSULTANT shall be responsible for the complete preparation of preliminary and final right-of-way maps for the full length of the project. Complete Right-of-Way Key Maps and Detail Maps shall be prepared in accordance with the FDOT's Right-of-Way Mapping Procedure 550-030-015 and in compliance with the Minimum Technical Standards as set forth by the Florida Board of Land Surveyors, pursuant to Section 472.027, F.S. Right-of-Way Detail Maps shall be line drawings (not on aerial photobase) prepared to FDOT size and format. The CONSULTANT shall identify all areas that require Title Search.

T.I.I.T.F. sketches shall be done to meet F.D.E.P.'s requirements.

The CONSULTANT will submit Key Maps and Detail Maps to the DEPARTMENT for review at the following stages of completion with data as specified.

1. 30% maps

    a. Project alignment with station ties and curve data

    b. All existing rights-of-way, including maintained rights-of-way

    c. All pertinent land lines that include section and quarter section lines, and quarter-quarter section lines where applicable, tied to the baseline of survey and identified as to section, township and range

    d. All subdivision boundaries and blocks tied to the baseline of survey. All blocks, lots and streets within subdivisions that are affected by right-of-way acquisition and/or along the project corridor must be shown.

    e. Subdivision names and limits with recording information

    f. Cross road alignments

    g. Copies of subdivision plats and copies of field survey notes showing alignment, land line ties and improvements (topography)

2. 60% maps

    a. Proposed right-of-way lines and controlling baselines with dimensions

    b. Property lines

    c. Improvements (topography)

The CONSULTANT shall submit the right-of-way requirements, marked up (marked in red or highlighted) on either a right-of-way map or on plan and profile.

3. 90% maps

    a. Dimensions for all takings and remainders

b. Completed tabulation sheet

c. Limits of construction

4. 100% maps - Completed right-of-way Maps and Detail Maps

All maps and sketches must be done on CADD and submitted on disk in microstation.dgn and AUTOCAD format. The guidelines established for right-of-way mapping CADD projects are found in the following documents:

a. Right-of-Way Mapping CADD Handbook

b. Right-of-Way Mapping Handbook

c. Right-of-Way Mapping Procedure (Florida Department of Transportation Document Number 550-30-015)

d. CADD Roadway Standards and Guidelines

SECTION XI. PUBLIC INFORMATION MEETINGS

A. Development of Community Awareness Plan (CAP):

The CONSULTANT will prepare a Community Awareness Plan. The objective of the plan is to notify local governments, affected property owners, tenants, and the public of the DEPARTMENT's proposed construction and the anticipated impact of that construction. In addition to the benefits of advance notification, the process should allow the DEPARTMENT to resolve controversial issues during the design phase.

B. Coordinate Meeting with Local Officials

Meetings shall be held with the City of Sanibel City Council to present the pier, railing and color alternatives. After architectural alternatives have been selected by the City Council, a Public Information Meeting will be scheduled to take input on the alternatives. The results of the public meeting will then be presented to Lee DEPARTMENT Management and Planning for their consideration.

C. Public Information Meeting:

The CONSULTANT shall provide all support necessary for the DEPARTMENT to hold one (1) Public Information meeting. The Public Information meeting will be held to receive input on the pier, railing and color alternatives selected by the Sanibel City Council.

1. The CONSULTANT shall prepare and/or provide:

    a. Agenda for the meetings
    b. Provide three (3) sets of the architectural renderings of the proposed pier spacing, pier, rail and color alternatives for information purposes
    c. Letters for notification of elected and appointed officials/residences/tenants/owners
    d. Letters for notification to impacted residences/tenants/owners
    e. News releases prior to the meeting
    f. Graphics and displays

2. The purpose of the meeting is to solicit public input to develop a consensus on the architectural elements of the bridges.

    This meeting will be advertised and conducted by the CONSULTANT as an information meeting. Any press release will be sent out by the CONSULTANT and will indicate the meeting is a DEPARTMENT activity.

Both the CONSULTANT's and DEPARTMENT's responsibilities are specified for meetings as follows:

a. A copy of the agenda including the project number, date, meeting place, and items to be addressed shall be submitted to the Design Project Manager, the DEPARTMENT's Public Information Director, and incorporated into the project Community Awareness Plan (CAP).

b. All media releases and general (mass) public announcements for property owners and business operators will be prepared by the CONSULTANT and reviewed by the DEPARTMENT's Public Information Director and the Design Project Manager.

c. Notification will be made to elected and appointed officials by personal letter. The CONSULTANT will prepare the letter for signature by the DEPARTMENT's Director. The CONSULTANT will mail the letter no less than 15 days before the meeting. Letters shall be on DEPARTMENT letterhead.

d. Property Owner/Business Operator Notification - An announcement, prepared by the CONSULTANT, will be written and sent no less than 10 days before the meeting to all property owners/business operators whose property or business lies adjacent to the project limits. The CONSULTANT will pay for the postage.

e. News releases will be prepared by the CONSULTANT and shall be published during the week of the Public Information Meeting. Two (2) newspaper ads will be published, the first shall be seven (7) days in advance of and the second will be one (1) day before the meeting. The CONSULTANT shall pay for the ad.

f. The CONSULTANT shall conduct the meeting. The CONSULTANT will provide an overview/description of the type work to be done, impacts to the businesses, and the Maintenance of Traffic Scheme. The public will then have the opportunity to ask questions.

g. The CONSULTANT shall provide three (3) sets of the plans. The meeting will require a knowledgeable CONSULTANT staff to answer questions that may arise.

h. The CONSULTANT shall coordinate all activities listed and actions to be taken with the DEPARTMENT's Public Information Director and the Project Manager.

i. The Public Information Meeting is anticipated to be held after DEPARTMENT review of the 30% submittals.

D. Public Involvement Data Collection

The CONSULTANT will collect the following data:

a. Mailing List Preparation: The CONSULTANT will prepare a mailing list of businesses, public officials, institutions and other interested parties early in the design process. Media to be used for news releases and advertisements will be identified and placed on the list. The mailing list will be submitted to the DEPARTMENT for review or approval. Information from this list will also be used in the CAP plan.

b. Elected and appointed officials (city, state, federal, county) and community leaders in the area will be identified and placed on the mailing list of officials and interested parties. This will include as applicable (but not limited to):
   - Any affected or possibly affected parties
   - Elected and appointed officials in the area(City, County, State)
   - Possible permit and review agencies
   - Media in the project area (to be used for news releases, advertisements or any concerns
   - Any person or institution expressing an interest in the project

c. The CONSULTANT shall be responsible for determining the appropriate meeting site. The site shall meet ADA standards.

Room size will be based on the number of mail outs. The proposed meeting site shall be presented to the DEPARTMENT for approval prior to the CONSULTANT negotiating use of site.

d. The collection of public input occurs throughout the life of the project and requires maintaining of files, newspaper clippings, and letters. In addition to collecting public input data, the CONSULTANT shall assist the DEPARTMENT in preparing responses to any public inquiries as a result of the Public Involvement Process.

E. Newsletter

The CONSULTANT shall prepare three (3) newsletters during the course of the design. The newsletters will be mailed by the CONSULTANT to elected officials, property owners, businesses and interested persons included on a mailing list compiled by the CONSULTANT. The first newsletter will announce the Public Information Meeting. The second newsletter will provide details and renderings of the architectural elements selected for the bridge including an overall rendering of the bridge. The third newsletter will announce receipt of the US Coast Guard permit and anticipated construction date. DEPARTMENT review prior to mailing is required.

F. Correspondence

Within three (3) days of the receipt or mailing of all written correspondence between the CONSULTANT and any party pertaining specifically to this project, copies shall be provided to the DEPARTMENT for their records.

SECTIONXII. GEOTECHNICAL SERVICES

The CONSULTANT shall be responsible for a geotechnical investigation as specified hereinafter. All work performed by the CONSULTANT shall be in accordance with FDOT standards, the Soils and Foundations Handbook, related directives, Federal Highway Administration Checklist and Guidelines for review of Geotechnical Reports and Preliminary Plans and Specifications, FDOT Standard Indexes for Work Zone Traffic Controls and Pavement Coring and Evaluation Procedure.

Prior to beginning the investigation and after the Notice to Proceed is given, the CONSULTANT shall submit a detailed investigation plan and schedule. The CONSULTANT shall schedule a meeting with the DEPARTMENT to finalize the investigation plan one week after its submission. The investigation plan shall include, but is not be limited to, the proposed boring locations and depths, and all existing geotechnical information from available sources to generally describe the surface and subsurface conditions of the projects site. Testing frequencies may vary from the guidelines contained in this section when agreed to by the DEPARTMENT and the Consultant.

The CONSULTANT shall notify the DEPARTMENT in adequate time to schedule a representative to attend all related conferences.

A. Roadway Erosion Control

The CONSULTANT shall evaluate methods of "roadway scour protection" to protect the causeway roadway from storm damage and erosion. The Consultant shall meet with the DEPARTMENT prior to starting the study to establish criteria for storm and erosion events, along with desired levels of protection. Riprap, seawalls, sheet piles and other methods as discussed in the Final PER should be considered. The Consultant shall prepare a report with cost estimates, drawings and recommendations along with the Geotechnical Report.

B. Pile Load Testing Program

The CONSULTANT shall evaluate the necessity of a pile load testing program and provide the DEPARTMENT with written recommendations. The CONSULTANT shall develop a detailed testing program using the available subsurface soil data. The testing program shall consider dynamically and statically load tested piles. A preliminary cost estimate of the pile testing program must also be included in the recommendations. The CONSULTANT shall include an estimated amount in his Fee Proposal to cover the Pile Load Testing Program. This money can only be expended with written approval of the COUNTY.

C. Field Investigation – Roadway

The soils investigation for roadways shall be prepared using the following guidelines:

1. One 5 ft. auger boring per 100 ft. per lane pair. Borings shall be performed along the proposed roadway alignment, proposed detour alignments, approaches to structures and any affected portions of side streets. (New construction and widening of 6 ft. or greater.)

2. One auger boring to 5 ft. below the bottom of cross drain extensions that are 36 in. in diameter or larger.

3. One 20 ft. auger boring per 500 ft. of alignment, if an enclosed storm sewer system is proposed.

4. Soil samples for laboratory soil testing will be obtained on a minimum frequency of 3 samples per stratum per mile.

5. Limerock Bearing Ratio (LBR) samples shall be obtained at a frequency of 3 per mile per stratum.

6. A minimum of two auger borings with a minimum depth of 5 ft. below the deepest elevation of the pond per acre of pond and a minimum of two field permeability tests per pond or one field permeability test per acre of pond (whichever is greater). The tests should be evenly distributed between the anticipated confining strata and the anticipated permeable strata.

7. Double ring infiltrometer tests, as necessary, for proposed swale areas.

8. Auger borings and permeability tests (exfiltration) as necessary in exfiltration trench areas.

9. Use U.S.G.S. and S.C.S. maps to identify areas of organic soils.

10. Determine the vertical and horizontal extent of compressible strata (i.e. muck, peat, clay, etc.).

11. Pavement cores will be obtained as directed at the scope meeting or at 500 feet interval or minimum of three cores, where asphalt pavement rehabilitation is proposed.

For the convenience of the CONSULTANT, continuous SPT borings may be substituted for any auger boring at the contract unit rate for auger borings.

D. Field Investigation – Structures

The geotechnical investigation for structural foundations includes bridges, temporary and permanent retaining walls, temporary and permanent sheet piling, major sign and signal foundations, and high embankment fills. The investigation shall be prepared using the following guidelines:

1. Standard Penetration Test (SPT) borings at each bridge bent/pier location, or at the interval of 100 ft.

2. SPT borings at an interval of 150 ft. along proposed (permanent or temporary) retaining and sheet piling wall locations.

3. At least one SPT boring at proposed major sign and major signal foundations.

4. SPT borings are to be sampled on 2.5 centers. All SPT borings shall include collection of soil consistency data from the ground surface to termination depth. . All soil strata encountered shall be classified using the Unified Soil Classification System.

5. Continuous SPT borings to a depth of 15 ft. below proposed foundation bearing elevation.

6. When cohesive soils are encountered at the bridge approach borings, undisturbed samples of cohesive soils shall be obtained in accordance with FDOT standards.

7. Rock coring when rock is encountered. A SPT shall be performed at the bottom of each core run. Core runs shall be of 4-inch diameter or larger and shall not be longer than 5 ft.

8. Additional specialized field testing as required by needs of project.

Field sampling and testing is also to include the testing of soils and/or water for the determination of environmental class for the substructure and superstructure. However, corrosion series tests will not be performed for mast arm foundations except when high chloride levels are expected.

E. Laboratory Testing

All laboratory testing will be performed in accordance with Florida Sampling and Testing Methods or AASHTO or ASTM or by related directives. Laboratory testing will include the following as required by the needs of the project:

1. Organic Content

2. Moisture Content

3. Sieve Analysis (#10, #40, #60 & #200 for soil survey)

4. Particle Size Analysis with Hydrometer

5. Specific Gravity

6. Torvane Sensitivity and Pocket Penetrometer in all undisturbed samples before sealing the tubes.

7. Atterberg Limits for soil classification

8. Consolidation with an unload/reload cycle near the existing effective overburden pressure

9. Triaxial and/or direct shear

10. Corrosion Series at proposed bridges and for new culverts and storm sewers

11. Limerock Bearing Ratio

12. Aggregate Gradation

13. Unconfined compression and tensile testing of rock cores

F. Roadway Report

The roadway report shall include, but not be limited to:

1. Copies of U.S.G.S. and S.C.S. maps with project limits and beginning/ending station shown

2. A preliminary report of tests sheet which summarizes the laboratory test results, the soil stratification (i.e. soils grouped into layers of similar materials) and construction recommendations relative to the FDOT Standard Indices. The preliminary report shall be submitted as part of the 30% roadway plan submittal.

3. Estimated seasonal high and/or low groundwater levels, as required for design purposes

4. Design LBR

5. A description of the site and subsoil conditions, design recommendations and a discussion of any special considerations (i.e. removal of unsuitable material, recompression of weak soils, estimated settlement time/amount, groundwater control, etc.)

6. Evaluation of embankment slope stability and settlement and the roadway embankment protection from design storm. Scour elevations will be provided by others for use in the embankment protection design.

7. Appendices containing stratified soil boring profiles, laboratory test data sheets, design LBR calculation/graphs, and any other pertinent information

In addition to the roadway report, the roadway design CONSULTANT will also plot the stratified boring profiles on the original roadway cross-sections and have the geotechnical SUBCONSULTANT review for correctness. A Final Report shall be submitted prior to the 90% roadway plan submittal. The Final Report shall include responses to all comments the DEPARTMENT may have had during the review of the Preliminary Report.

G. Structures Report

The structures report shall contain the following discussions as appropriate for the assigned project phase:

1. Summary of structure background data

2. Evaluation of structure foundation alternatives including the following:

   - prestressed concrete piling (24 and 30 inch square)
   - drilled shafts (36 and 48 inch diameter)
   - other feasible foundations types

3. Recommendation for most practical foundations types will be given along with the basis for selection

4. Analysis of allowable and/or ultimate foundation capacity and settlement potential for all feasible alternatives. Foundation capacity analyses shall be performed using FDOT approved methods. For pile foundations, provide graphs of Estimated Davisson Capacity and Ultimate Side Friction versus tip elevation and a preliminary Pile Data Table. For drilled shaft foundations, provide

graphs of Ultimate Capacity and Ultimate Side Friction versus tip elevation and a preliminary Drilled Shaft Data Table. . Design scour elevations will be provided by others for inclusion in the foundation analyses.

5. The structural engineer will evaluate the lateral load analysis. The geotechnical engineer will provide a table containing all geotechnical input parameters necessary for the analyses. The Structural engineer will coordinate with the geotechnical engineer to insure that the geotechnical and structural model is correct.

6. Evaluation of external stability for conventional retaining walls and mechanically/reinforced earth wall systems in accordance with the Structures Design Guidelines

7. Evaluation of temporary or permanent wall systems, if necessary

8. Report of Core Boring sheet(s), including environmental classification and specialized construction requirements

9. Summary of soil test results

10. Evaluation of lateral earth pressures on underground structures, if necessary (i.e. box culverts, retaining wall, etc.)

12. Evaluation of anticipated effects from vibration due to driving of any proposed new piling adjacent to existing structures and/or utilities. This evaluation should also consider the affects of future pile driving operations. If piling for future widening will be required in close proximity to proprietary retaining walls, this piling shall be installed in advance of these walls. The CONSULTANT shall provide recommendations relative to measures to be taken to monitor, reduce and mitigate construction vibration, which may affect surrounding facilities The DEPARTMENT will determine if future widening is needs to be considered.

13. Construction information addressing the following items:

    a. Estimated maximum driving resistance anticipated for pile foundations

    b. Recommendations for footing or shaft installation, or other site preparation soils-related construction considerations with plan sheets, as necessary

14. Preliminary draft special provisions required for construction that are not addressed in the FDOT's Standard Specifications.

15. Appendices containing SPT boring profiles, data from any specialized field tests, laboratory test data sheets, engineering analysis notes/calculations, a complete FHWA check list and any other pertinent information

16. The report shall be clear and easy to follow. All pertinent information shall be easy to find. The text and design summary, tables, shall be in the body of the report. Report of Core Boring sheets and foundation capacity curves along with all other information shall be organized in appendices. A preliminary report for structures shall be submitted with the 30% structures plans. A Final Report for Structures shall be submitted prior to 90% structural plan submittal. It shall contain responses to all comments the DEPARTMENT may have had after reviewing the Preliminary Report for Structures.

H. Plans Review

The prime CONSULTANT shall provide the geotechnical SUBCONSULTANT the opportunity to review plans as they are being developed.

SECTION XIII. PROJECT REQUIREMENTS AND PROVISIONS FOR WORK

A. Governing Regulations

The services performed by the CONSULTANT shall be in compliance with all applicable FDOT Manuals and Guidelines. The FDOT Manuals and Guidelines incorporate, by requirement or reference, all applicable State and Federal regulations. The current edition, including updates, of the following FDOT Manuals and Guidelines shall be used in the performance of this work. It shall be the CONSULTANT's responsibility to acquire and utilize the necessary manuals that apply to the design work required to complete this project.

1. Florida Department of Transportation Plans Preparation Manual
2. Florida Department of Transportation Roadway and Traffic Design Standards
3. Florida Department of Transportation Bicycle Facilities Planning and Design Handbook
4. Florida Department of Transportation Pedestrian Facilities Planning and Design Handbook
5. Florida Department of Transportation Right-of-Way Mapping Handbook
6. Florida Department of Transportation Right-of-Way Mapping CADD Handbook
7. Florida Department of Transportation Location Survey Manual
8. Florida Department of Transportation EFB User Guide (Electronic Field Book)
9. Florida Department of Transportation Drainage Manual
10. Florida Department of Transportation Crossdrain Handbook
11. Florida Department of Transportation Soils and Foundations Handbook
12. Florida Department of Transportation LRFD Structures Design Guidelines
13. Florida Department of Transportation CADD Roadway Standards Manual
14. Florida Department of Transportation Roadway CADD Handbook
15. AASHTO Load and Resistance Factor Design Specifications for Bridges
16. MUTCD
17. American Disabilities Act
18. Elder Road User Act
19. MUTS Manual
20. Florida Department of Transportation Structures CADD Manual

21. Florida Department of Transportation Structures Detailing Manual

22. Florida Department of Transportation Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Street and Highways

23. Florida Department of Transportation Stormwater Management Manual

24. Florida Department of Transportation Basis of Estimates Handbook

25. Florida Department of Transportation Standard Drawings for Structures

26. Federal Highway Administration Best Management Practices for Erosion and Sediment Control

27. Florida Department of Transportation Utility Accommodation Manual

28. Florida Department of Transportation Flexible Pavement Design Manual

The following provisions shall apply:

1. Roadway Improvements

   All plans and design are to be prepared in accordance with the latest standards adopted by AASHTO, FDOT Standard Specifications, FDOT current memorandums, and the current editions of the FDOT Roadway Plans Preparation Manual, FDOT Flexible Pavement Design Manual, FDOT Drainage Manual and shall be accurate, legible, complete in design, and drawn to the appropriate scale, and furnished in reproducible form on material acceptable to the DEPARTMENT.

2. Drainage Services

   All drainage plans and designs are to be prepared in accordance with current FDOT memorandums, FDOT Drainage Manual, 23 CFR 650, and other CONSULTANT Plans Submittal Requirements.

3. Environmental Services

   a. Stormwater and Surface Water

      Plans shall be prepared in accordance with Chapter 62-25 F.A.C., Regulation of Stormwater Discharge. Surface water management aspects of the plans shall be in accordance with Chapter 14-86, F.A.C., as applicable. Chapter 62-25, F.A.C. is administered by the FDEP, and FDOT administers Chapter 14-86, F.A.C.

      The requirements of 40 CFR 122.26 shall also be considered. The Stormwater Pollution Prevention shall meet the requirements of the DEPARTMENT and the Environmental Protection Agency/NPDES (National Pollutant Discharge Elimination System) permit for construction sites.

      In addition to these State and Federal permitting requirements, any stormwater management permitting required by local governments for FDOT and DEPARTMENT projects shall be prepared in accordance with their specific regulations.

   b. Permits

      All applicable data shall be prepared in accordance with Chapter 403, F.S., as implemented in Chapter 62, F.A.C. The data shall also be in accordance with Federal Regulations; Rivers and Harbors Act of 1899; Section 404 of the Clean Water Act; and parts 114 and 115, Title 33, Code of Federal Regulations. In addition to these State and Federal permitting requirements, any dredge and fill permitting required by local

governments for FDOT and DEPARTMENT projects shall be prepared in accordance with their specific regulations.

4. Geotechnical Services

Work shall be performed in accordance with the FDOT Soils and Foundations Handbook with all tests performed as specified in the manual using the appropriate AASHTO and ASTM standard testing methods.

5. Structure Plans

All plans and designs are to be prepared in accordance with the latest AASHTO LRFD Design Specifications, FDOT Standard Specifications, Structures Design Guidelines, Structures Detailing Manual, and directions from the State Structures Design Engineer, FDOT District Structures Design Office and/or Lee County Department of Transportation.

6. Signing and Marking Plans

All plans are to be prepared in accordance with the latest design standards and practices (Manual on Uniform Traffic Control Devices), FDOT Standard Specifications, Indexes, FDOT Plans Preparation Manual, and instructions issued by the DEPARTMENT to the CONSULTANT. All plans shall be accurate, legible, complete in design and drawn to the scale as directed by the DEPARTMENT and furnished in reproducible form.

7. Utilities

All work shall be in accordance with the FDOT's Utility Manual, Standard Specifications, current memorandums, Plans Preparation Manual, and instructions as issued by the DEPARTMENT to the CONSULTANT, and shall be accurate, legible, complete in design, drawn to the appropriate scale and furnished in reproducible form on material acceptable to the DEPARTMENT.

8. Construction Contract Duration

The CONSULTANT shall establish the construction contract duration for the subject project. A guideline has been created by the FDOT and may be used by the CONSULTANT.

9. Structure Load Ratings

At final plans submittal, a signed and sealed copy of load ratings shall be prepared for the FDOT District 7 Structures and Facilities Office and transmitted to the DEPARTMENT Project Manager.

B. Project Schedule

The CONSULTANT shall submit a project schedule as part of the negotiation process to be negotiated and approved by the DEPARTMENT. The project schedule shall consist of the FDOT Activity/Event numbers and descriptions utilizing the Critical Path Method of Scheduling.

C. Key Personnel

The CONSULTANT's work shall be performed and directed by the key personnel identified in the proposal presentations by the CONSULTANT. Any changes in the indicated personnel shall be subject to review and approval by the DEPARTMENT's Project Manager.

D. Progress Reporting

The CONSULTANT may be requested to meet with the DEPARTMENT periodically and to provide written progress reports, which describe the work performed on each task. Progress reports shall be delivered to the DEPARTMENT on a monthly basis. Upon receipt of the monthly invoice, the Project

Manager will make judgment on whether work of sufficient quality and quantity has been accomplished by comparing the reported percent complete against actual work accomplished.

E. Meetings and Presentations

The CONSULTANT shall attend a Notice-To-Proceed Meeting with DEPARTMENT representatives, where relevant project information will be provided by the DEPARTMENT, along with procedures for administering the contract. The CONSULTANT and his staff shall also be available with no more than a five (5) workday notice to attend meetings or make presentations at the request of the DEPARTMENT. Such meetings and presentations may be held at any hour between 8:00 A.M. and 10:00 P.M. on any day of the week. The CONSULTANT shall attend all Pre-Construction and Utility meetings.

F. Quality Control

The CONSULTANT shall be responsible for the professional quality, technical accuracy and coordination of all surveys, designs, drawings, specifications and other services furnished by the CONSULTANT under this contract.

The CONSULTANT shall provide a Quality Control Plan, which describes the procedures to be utilized to verify, independently check, and review all design drawings, specifications, and other documentation prepared as a part of the contract. The CONSULTANT shall submit a Quality Control Plan within 20 (twenty) calendar days of the written Notice to Proceed. The responsible Professional Engineer or Professional Surveyor that performs the Quality Control design review will sign a statement certifying that the review was conducted.

The CONSULTANT shall, without additional compensation, correct all errors or deficiencies in the designs, drawings, specifications and/or other services.

G. Correspondence

Copies of all written correspondence between the CONSULTANT and any party pertaining specifically to this contract shall be provided to the DEPARTMENT for their records within one (1) week of the receipt or mailing of said correspondence.

H. Professional Endorsement

The CONSULTANT shall furnish to the DEPARTMENT, upon final plans acceptance, the original contract plans package, one set of record prints, one set of special provisions and all reference and support documents utilized in the preparation of the contract plans package. The record prints, the special provisions and all reference and support documents shall be professionally endorsed (signed, sealed and certified) by the CONSULTANT's Professional Engineer in responsible charge of the project's design. The professional endorsement shall be performed in accordance with the rules of the Board of Professional Engineers.

I. Liaison Office

The DEPARTMENT and the CONSULTANT will designate a Liaison Office and a Project Manager who shall be the representative of the their respective organization for the Project.

J. Additional Services

At the DEPARTMENT's option, the CONSULTANT may be requested to provide additional services. The fee for these services shall be negotiated in accordance with the terms detailed in the Standard Consultant Agreement or supplemental agreements for a fair, competitive and reasonable cost, considering the scope and complexity of the project(s).

K. Submittals

The CONSULTANT shall be responsible for detailed plans checking as outlined in the FDOT Plans Preparation Manual. This includes showing a checklist of the items listed in the FDOT Plans Preparation Manual for each submittal that has been completed. Plans must meet the minimum contents of a particular phase submittal prior to submission for review. The CONSULTANT shall provide copies of the required documents as directed by the DEPARTMENT.

The CONSULTANT's schedule should allow for a four-week review time for all scheduled submittals.

L. Computer Automation

The project will be developed utilizing Computer Aided Drafting and Design (CADD) systems. The FDOT makes available software to help assure quality and conformance with policy and procedures regarding CADD. It is the responsibility of the CONSULTANT to meet the requirements in the FDOT CADD Manual. The CONSULTANT will submit final documents and files as described therein. Additional related information is found in the FDOT Plans Preparation Manual.

SECTION XIV. METHOD OF COMPENSATION

Payment for the work accomplished will be in accordance with DEPARTMENT procedures for Standard Consultant Agreements for Professional Services. Invoices shall be submitted in a format prescribed by the DEPARTMENT. The DEPARTMENT's Project Manager and the CONSULTANT shall monitor the cumulative invoiced billings to insure the reasonableness of the billings compared to the project schedule and the work accomplished and accepted by the DEPARTMENT.

SECTION XV. OTHER SPECIAL AREAS (MISCELLANEOUS ITEMS)

A. Plans Update and Maintenance

The CONSULTANT shall perform engineering analyses and/or make revisions to original reproducibles or special provisions, as requested by the DEPARTMENT, to reflect additions, deletions and/or modifications prior to and subsequent to letting. Whenever original reproducibles are changed, the CONSULTANT shall submit to the DEPARTMENT one (1) set of signed and sealed prints of the revised sheets with the revised reproducibles. This requirement is in addition to any other reproduction and delivery instruction given by the DEPARTMENT in specific instances.

B. Post-Design Services

These services are intended to address changed conditions that occur following acceptance of final plans. The CONSULTANT shall provide to the DEPARTMENT additional services as required to satisfactorily complete construction. These services are intended to deal with changed conditions or services not covered and are not intended for instances of CONSULTANT errors and/or omissions. The fee(s) for these services shall be established if and when said services are required.

C. Construction Assistance

The CONSULTANT shall provide to the DEPARTMENT qualified representation during the construction phase to deal with issues concerning the intent and interpretation of the construction contract plans and documents prepared in the work. Should changed conditions be encountered in the field and when requested by the DEPARTMENT, the CONSULTANT shall respond in a timely manner with suitable engineering solutions, which take into account the changed conditions.

On site appearance of CONSULTANT shall be made during construction at the request of the DEPARTMENT or its designated representative.

From time to time during construction the CONSULTANT may be requested by the DEPARTMENT or its designated representative to review contractor proposed field changes or to respond with a recommended solution to remedy particular field situations not covered by the plans and specifications.

The CONSULTANT is required to attend Pre-Utility and Pre-Construction meetings on the project. The CONSULTANT may be required to attend Partnering Meetings if the project is identified as a partnering project.

D. Review of Shop Drawings

The CONSULTANT shall review and comment on Shop Drawing submittals until the submittal is in compliance with the design intent.

EXHIBIT B

Date: 14 February 2003

COMPENSATION AND METHOD OF PAYMENT

for Causeway Reconstruction and Replacement of Structures B and C

Sanibel Island Causeway Improvements

Section 1. BASIC SERVICES/TASK(S)

The COUNTY shall compensate the CONSULTANT for providing and performing the Task(s) set forth and enumerated in EXHIBIT "A", entitled "SCOPE OF PROFESSIONAL SERVICES", as follows:

NOTE: A Lump Sum (L.S.) or Not-to-Exceed (N.T.E.) amount of compensation to be paid the CONSULTANT should be established and set forth below for each task or sub-task described and authorized in Exhibit "A". In accordance with Agreement Article 5.02(2) "Method of Payment", tasks to be paid on a Work-in-Progress payment basis should be identified (WIPP).

Task Number	Task Title	Amount of Compensation	Indicate Basis of Compensation LS or NTE	If Applicable Indicate (W.I.P.P.)
1	Roadway Plans Package	$606,184.38	N.T.E.	W.I.P.P.
2	Structure Plans Package	$859,634.66	N.T.E.	W.I.P.P.
3	Specification Package	$56,584.24	N.T.E.	W.I.P.P.
4	Signing and Pavement Marking	incl. In Task 1	N.T.E.	W.I.P.P.
5	Lighting	$77,711.54	N.T.E.	W.I.P.P.
6	Aesthetics and Landscaping	$316,650.03	N.T.E.	W.I.P.P.
7	Design / Right-of-Way Surveys	$205,687.22	N.T.E.	W.I.P.P.
8	Right-of-Way Maps	$32,302.69	N.T.E.	W.I.P.P.
9	Public Information Meetings	$60,851.41	N.T.E.	W.I.P.P.
10	Geotechnical Services	$350,324.71	N.T.E.	W.I.P.P.
11	Project Requirements and Provisions for Work	$138,922.12	N.T.E.	W.I.P.P.
12	Other Special Areas (Miscellaneous Items)	$47,534.01	N.T.E.	W.I.P.P.
13	Out-of-Pocket Expenses	$113,213.53	L.S.	W.I.P.P.
14	Test Pile Program (to be expended only with authorization by the COUNTY)	$ 265,000.00	N.T.E.	W.I.P.P.
TOTAL		$3,130,600.55		

(Unless list is continued on next page)

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Section 2. ADDITIONAL SERVICES

The COUNTY shall compensate the CONSULTANT for such ADDITIONAL SERVICES as are requested and authorized in writing for such amounts or on such a basis as may be mutually agreed to in writing by both parties to this Agreement. The basis and/or amount of compensation to be paid the CONSULTANT for ADDITIONAL SERVICES requested and authorized in writing by the COUNTY shall be as set forth in Article 3.11 of this Agreement.

Should it be mutually agreed to base compensation for ADDITIONAL SERVICES on an hourly rate charge basis for each involved professional and technical employee's wage rate classification, the applicable hourly rates to be charged are as set forth and contained in ATTACHMENT NO. 1 hereto dated 14 February 2003, entitled "CONSULTANT'S PERSONNEL HOURLY RATE SCHEDULE".

Section 3. REIMBURSABLE EXPENSES AND COSTS

When the CONSULTANT'S compensation and method of payment is based on an hourly rate for professional and/or technical personnel, the CONSULTANT shall, in addition to such hourly rates as are set forth in Attachment No. 1 hereto, be entitled to reimbursement of out-of-pocket, non-personnel expenses and costs as set forth in ATTACHMENT NO. 2 hereto dated 14 February 2003, entitled "NON-PERSONNEL REIMBURSABLE EXPENSES AND COSTS".

*

ATTACHMENT NO. 1 TO EXHIBIT B

Date: 14 February 2003

CONSULTANT'S PERSONNEL HOURLY RATE SCHEDULE ***

for Causeway Reconstruction and Replacement of Structures B and C

Sanibel Island Causeway Improvements
(Enter Project Name from Page 1 of the Agreement)

CONSULTANT OR SUB-CONSULTANT NAME: URS Corporation Southern
(A separate Attachment No. 1 should be included for each Sub-Consultant)

(1) Project Position or Classification (Function to be Performed)	(2) Current Direct* Payroll Average Hourly Rate	(3) Multiplier**	(4) Hourly Rate To Be Charged (Column 2x3)
Project Manager	$60.98	2.8774	$175.46
Specification Writer	$35.33	2.8774	$101.66
Cost Estimator	$35.47	2.8774	$102.06
Discipline Leader	$48.77	2.8774	$140.33
Chief Bridge Engineer	$60.53	2.8774	$174.17
Chief Environmentalist	$56.36	2.8774	$162.17
Senior Bridge Engineer	$40.04	2.8774	$115.21
Senior Environmentalist	$45.03	2.8774	$129.57
Senior Engineer	$34.90	2.8774	$100.42
Bridge Engineer	$30.08	2.8774	$86.55
Engineer	$27.06	2.8774	$77.86
Environmentalist	$34.21	2.8774	$98.44
Senior Bridge Technician	$31.31	2.8774	$90.09
Senior Technician	$25.62	2.8774	$73.72
Technician	$19.33	2.8774	$55.62
Administrative	$15.72	2.8774	$45.23

*NOTE: Direct Payroll hourly rate means the actual gross hourly wage paid.

**NOTE: Indicate applicable multiplier for indirect personnel costs, general administrative and overhead costs, and profit.

***NOTE: A separate personnel hourly rate schedule should also be attached for each Sub-Consultant listed in Exhibit "D".

*

ATTACHMENT NO. 1 TO EXHIBIT B

Date: 14 February 2003

CONSULTANT'S PERSONNEL HOURLY RATE SCHEDULE ***

for Causeway Reconstruction and Replacement of Structures B and C

Sanibel Island Causeway Improvements
(Enter Project Name from Page 1 of the Agreement)

CONSULTANT OR SUB-CONSULTANT NAME: Johnson Engineering, Inc.
(A separate Attachment No. 1 should be included for each Sub-Consultant)

(1) Project Position or Classification (Function to be Performed)	(2) Current Direct* Payroll Average Hourly Rate	(3) Multiplier**	(4) Hourly Rate To Be Charged (Column 2x3)
Project Manager	$ 35.90	3.2	$ 115.00
Engineer VIII	$ 43.27	3.1	$ 135.00
Engineer IV	$ 30.50	3.1	$ 95.00
Ecologist IV	$ 37.61	2.8	$ 105.00
CAD Technician IV	$ 19.74	3.4	$ 68.00
Administrative - Clerical	$ 16.30	2.3	$ 38.00
SurveyorII	????	????	85.00
4 man survey crew (daily rate)	---	---	$1120.00/day

*NOTE: Direct Payroll hourly rate means the actual gross hourly wage paid.

**NOTE: Indicate applicable multiplier for indirect personnel costs, general administrative and overhead costs, and profit.

***NOTE: A separate personnel hourly rate schedule should also be attached for each Sub-Consultant listed in Exhibit "D".

**

ATTACHMENT NO. 1 TO EXHIBIT B

Date: 14 February 2003

CONSULTANT'S PERSONNEL HOURLY RATE SCHEDULE ***

for Causeway Reconstruction and Replacement of Structures B and C

Sanibel Island Causeway Improvements
(Enter Project Name from Page 1 of the Agreement)

CONSULTANT OR SUB-CONSULTANT NAME: AIM Engineering and Surveying
(A separate Attachment No. 1 should be included for each Sub-Consultant)

(1) Project Position or Classification (Function to be Performed)	(2) Current Direct* Payroll Average Hourly Rate	(3) Multiplier**	(4) Hourly Rate To Be Charged (Column 2x3)
Senior Professional Land Surveyor	$38.25	3.0166	$115.39
Professional Land Surveyor	$30.05	3.0166	$90.65
CAD Technician	$23.14	3.0166	$69.80
4 man survey crew (daily rate)	---	---	$1138.00/day

*NOTE: Direct Payroll hourly rate means the actual gross hourly wage paid.

**NOTE: Indicate applicable multiplier for indirect personnel costs, general administrative and overhead costs, and profit.

***NOTE: A separate personnel hourly rate schedule should also be attached for each Sub-Consultant listed in Exhibit "D".

*

ATTACHMENT NO. 1 TO EXHIBIT B

Date: 14 February 2003

CONSULTANT'S PERSONNEL HOURLY RATE SCHEDULE ***

for Causeway Reconstruction and Replacement of Structures B and C

Sanibel Island Causeway Improvements
(Enter Project Name from Page 1 of the Agreement)

CONSULTANT OR SUB-CONSULTANT NAME: Universal Engineering Sciences
(A separate Attachment No. 1 should be included for each Sub-Consultant)

(1) Project Position or Classification (Function to be Performed)	(2) Current Direct* Payroll Average Hourly Rate	(3) Multiplier**	(4) Hourly Rate To Be Charged (Column 2x3)
Senior Engineer	31.25	2.9870	$93.35
Staff Engineer	20.67	2.9870	$61.74
Senior Engineering Technician	13.75	2.9870	$41.07
Drafter, CAD	16.25	2.9870	$48.54

*NOTE: Direct Payroll hourly rate means the actual gross hourly wage paid.

**NOTE: Indicate applicable multiplier for indirect personnel costs, general administrative and overhead costs, and profit.

***NOTE: A separate personnel hourly rate schedule should also be attached for each Sub-Consultant listed in Exhibit "D".

Date: 14 February 2003

CONSULTANT'S PERSONNEL HOURLY RATE SCHEDULE ***

for Causeway Reconstruction and Replacement of Structures B and C

Sanibel Island Causeway Improvements
(Enter Project Name from Page 1 of the Agreement)

CONSULTANT OR SUB-CONSULTANT NAME: Cella & Associates
(A separate Attachment No. 1 should be included for each Sub-Consultant)

(1) Project Position or Classification (Function to be Performed)	(2) Current Direct* Payroll Average Hourly Rate	(3) Multiplier**	(4) Hourly Rate To Be Charged (Column 2x3)
Project Manager	$34.69	3.2	$ 111.00
Senior Professional	$28.84	3.2	$ 92.30
Planner	$24.43	3.2	$ 78.18
Technician	$20.97	3.2	$ 67.11
Administration	$18.07	3.2	$ 57.82

*NOTE: Direct Payroll hourly rate means the actual gross hourly wage paid.

**NOTE: Indicate applicable multiplier for indirect personnel costs, general administrative and overhead costs, and profit.

***NOTE: A separate personnel hourly rate schedule should also be attached for each Sub-Consultant listed in Exhibit "D".

Date: 14 February 2003

CONSULTANT'S PERSONNEL HOURLY RATE SCHEDULE ***

for Causeway Reconstruction and Replacement of Structures B and C

Sanibel Island Causeway Improvements
(Enter Project Name from Page 1 of the Agreement)

CONSULTANT OR SUB-CONSULTANT NAME: Hydrosystems Inc.
(A separate Attachment No. 1 should be included for each Sub-Consultant)

(1) Project Position or Classification (Function to be Performed)	(2) Current Direct* Payroll Average Hourly Rate	(3) Multiplier**	(4) Hourly Rate To Be Charged (Column 2x3)
Senior Hydraulic Engineer	$65.88	2.7104	$178.56
Hydraulic Engineer	$34.87	2.7104	$94.51
Senior Field Technician	$22.40	2.7104	$60.71
Engineer	$21.38	2.7104	$57.95
Chief Engineer	$53.99	2.7104	$146.33
Clerical	$12.50	2.7104	$33.88

*NOTE: Direct Payroll hourly rate means the actual gross hourly wage paid.

**NOTE: Indicate applicable multiplier for indirect personnel costs, general administrative and overhead costs, and profit.

***NOTE: A separate personnel hourly rate schedule should also be attached for each Sub-Consultant listed in Exhibit "D".

ATTACHMENT NO. 2 TO EXHIBIT B

Date: 14 February 2003

NON-PERSONNEL REIMBURSABLE EXPENSES AND COSTS

for Causeway Reconstruction and Replacement of Structures B and C

Sanibel Island Causeway Improvements
(Enter Project Name from Page 1 of the Agreement)

CONSULTANT OR SUB-CONSULTANT NAME URS Corporation Southern
(A separate Attachment No. 2 should be included for each Sub-Consultant)

ITEM	BASIS OF CHARGE
~~Telephone (Long Distance)~~	~~Actual Cost~~
~~Postage and Shipping~~	~~Actual Cost~~
~~Commercial Air Travel~~	~~Actual Cost (Coach)~~
~~Vehicle Travel Allowance (or)~~	~~$0.29/Mile~~
~~Vehicle Rental/Gas~~	~~Actual Cost~~
~~Lodging (Per Person)~~	~~Actual Cost or NTE $85.00~~
~~Meals: (Breakfast)~~	~~NTE $3.00~~
~~(Lunch)~~	~~NTE $6.00~~
~~(Dinner)~~	~~NTE $12.00~~
~~Reproduction (Photocopy) 8 ½" x 11"~~	~~$0.15/Page~~
~~8 ½" x 14"~~	~~$0.20/Page~~
~~11" x 14"~~	~~$0.35/Page~~
~~Reproduction (Blue/White Prints)~~	~~$0.20/Sq. Ft.~~
~~Printing/Binding~~	~~Actual Cost~~
~~Mylar Sheets~~	~~Actual Cost~~
~~Photographic Supplies & Services~~	~~Actual Cost~~
~~Tolls~~	~~Actual Cost~~
~~*List other specific project related reimbursables (i.e. film/developing):~~	
LUMP SUM AMOUNT (as agreed to by COUNTY)	**$ 113,213.53**
~~**NOTE: Receipts or in-house logs are required for all non-personnel reimbursable expenses unless exempt (such as meals).**~~	
Administrative Services Fee – Applicable only when specifically authorized by the County, for administering the procurement of special additional services, equipment, reimbursables etc. not covered under the costs and/or changes established in the Agreement.	

NOTE: N.T.E. indicates Not-To-Exceed

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EXHIBIT C

Date: 14 FEBRUARY 2003

TIME AND SCHEDULE OF PERFORMANCE

for Causeway Reconstruction and Replacement of Structures B and C

Sanibel Island Causeway Improvements
(Enter Project Name from Page 1 of the Agreement)

This EXHIBIT C establishes times of completion for the various phases and tasks required to provide and perform the services and work set forth in EXHIBIT "A" of this Agreement. The times and schedule of performance set forth hereinafter is established pursuant to Article 6.00 of this Agreement.

Phase and/or Task Reference As Enumerated in EXHIBIT "A"	NAME OR TITLE Of Phase and/Task	Number Of Calendar Days For Completion Of Each Phase And/or Task	Cumulative Number Of Calendar Days For Completion From Date of Notice to Proceed
1	Roadway Plans Package	450	660
2	Structure Plans Package	540	660
3	Specification Package	90	660
4	Signing and Pavement Markings	60	660
5	Lighting	90	660
6	Aesthetics and Landscaping	300	660
7	Design / Right-of-Way Surveys	120	300
8	Right-of-Way Maps	150	660
9	Public Information Meetings	120	600
10	Geotechnical Services	270	660
11	Project Requirements and Provisions for Work	390	660
12	Other Special Areas (Miscellaneous Items)	90	750
13	Out-of-Pocket Expenses	660	660
14	Pile Test Program	To be determined	To be determined

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EXHIBIT D

Date: 14 FEBRUARY 2003

CONSULTANT'S ASSOCIATED SUB-CONSULTANT(S) AND SUBCONTRACTOR(S)

for Causeway Reconstruction and Replacement of Structures B and C

Sanibel Island Causeway Improvements

(Enter Project Name From Page 1 of This Agreement)

CONSULTANT has identified the following Sub-Consultant(s) and/or SubContractor(s) which may be engaged to assist the CONSULTANT in providing and performing services and work on this Project:

(If none, enter the word "none" in the space below.)

Service and/or Work to be Provided or Performed	Name and Address of Individual or Firm	Disadvantaged, Minority or Women Business Enterprise. (If Yes, Indicate Type)			Sub-Consultant Services are Exempted from Prime Consultant's Insurance Coverage	
		Yes	No	Type	Yes	No
Roadway, Drainage, Utilities, Signing & Pvmt Marking,	Johnson Engineering 2158 Johnson Street Ft. Myers, FL 33902		X		X	
Public Involvement	Cella & Associates 2125 First Street, Suite 201 Ft Myers, FL 33901	X		WBE	X	
Survey, Right-of-Way	AIM Engineering & Survey 500 Lee Boulevard Lehigh Acres, FL 33971-1026		X		X	
Geotechnical	Universal Engineering Sciences 1205-D Elizabeth Street Punta Gorda, FL 33950		X		X	
Hydraulics	Hydrosystems 1221 N. Brightwater Boulevard Tampa, FL 33617-1708		X		X	

CMO:035
09/25/01

EXHIBIT E

Date: 14 FEBRUARY 2003

PROJECT GUIDELINES AND CRITERIA

for Causeway Reconstruction and Replacement of Bridges B and C

Sanibel Island Causeway Improvements
(Enter Project Name from Page 1 of the Agreement)

The COUNTY has established the following Guidelines, Criteria, Goals, Objectives, Constraints, Schedule, Budget and/or Requirements which shall serve as a guide to the CONSULTANT in performing the professional services and work to be provided pursuant to this Agreement:

(If none, enter the word "none" in the space below)

Item No. 1: Out-of-Pocket expenses will be paid as a lump sum agreed to between the COUNTY and the CONSULTANT and shown in Attachment No. 2 to Exhibit B.

Item No. 2: The BDR effort is to be an abbreviated effort from what is normally required by the FDOT. The CONSULTANT shall still evaluate span lengths and prestressed beam types for the most economical. The CONSULTANT shall select what he judges to be the foundation element type most well suited to the project, based on geotechnical information . A comparative financial evaluation of replacement versus rehabilitation will not be necessary due to the discover of several badly deteriorated beams on the bridges and the necessity to recently replace one span on Bridge B.

Item No 3: A test pile program will be investigated by the CONSULTANT and proposed if it is thought that savings in pile cost can be obtained by such a program. The COUNTY will establish a provisional amount for this program; however, before these funds can be expended, the COUTY must approve the pile test program and authorize the CONSULTANT to proceed with it.

CMO:036
09/25/01

EXHIBIT F
DATE: 14 FEBRUARY 2003

TRUTH IN NEGOTIATION CERTIFICATE

This Certificate is executed and given by the undersigned as a condition precedent to entering into a Professional Services Agreement with the Lee County Board of County Commissioners for the project known as: Causewau Reconstruction and Replacement of Structures B and C – Sanibel island Causeway Improvements

(Enter Project Name from Page 1 of Agreement)

Before me, the undersigned authority personally appeared, who having personal knowledge as to the facts and statements contained herein after being duly sworn, deposes and states under oath that:

1. This Certificate shall be attached to and constitute an integral part of the above said Professional Services Agreement as provided in Article 3.11.

2. The undersigned hereby certifies that the wage rates and other factual unit costs supporting the compensation on which this Professional Services Agreement is established are accurate, complete, and current on the date set forth here-in-above.

3. The truth of statements made herein may be relied upon by the County and the undersigned is fully advised of the legal effect and obligations imposed upon him by the execution of this instrument under oath.

Executed on behalf of the Party to the Professional Services Agreement referred to as the CONSULTANT, doing business as:

URS Corporation Southern

BY: M.C. Sperato

TITLE: Regional/Divisional Controller

The foregoing instrument was signed and acknowledged before me this 14 day of February, 03, by Mike Sperato who has produced N/A personally known to me as identification.

(Print or Type Name) (Type of Identification and Number)

Lisa Frattini
Notary Public Signature

Lisa Frattini
Printed Name of Notary Public

11-14-04
Notary Commission Number/Expiration

LISA FRATTINI
Notary Public - State of Florida
My Commission Expires Nov 14, 2004
Commission # CC980602

CMO:
00/00/00

MARSH

CERTIFICATE OF INSURANCE

CERTIFICATE NUMBER
SEA-000641051-02

PRODUCER

MARSH RISK & INSURANCE SERVICES
P.O. BOX 193880
SAN FRANCISCO, CA 94119-3880
CALIFORNIA LICENSE NO. 0437153

URSA-F-ALL-W/PRO- FL TAM URS

INSURED

URS CORPORATION
100 CALIFORNIA STREET
SUITE 500
SAN FRANCISCO, CA 94111

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER OTHER THAN THOSE PROVIDED IN THE POLICY. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES DESCRIBED HEREIN.

COMPANIES AFFORDING COVERAGE

COMPANY A NATIONAL UNION FIRE INS. CO. OF PITTSBURGH, PA.

COMPANY B AMERICAN MANUFACTURERS MUTUAL INSURANCE CO.

COMPANY C AMERICAN INTERNATIONAL SPECIALTY LINES INS. CO.

COMPANY D INSURANCE CO. OF THE STATE OF PA

COVERAGES This certificate supersedes and replaces any previously issued certificate for the policy period noted below. 3

THIS IS TO CERTIFY THAT POLICIES OF INSURANCE DESCRIBED HEREIN HAVE BEEN ISSUED TO THE INSURED NAMED HEREIN FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THE CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, CONDITIONS AND EXCLUSIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
A	**GENERAL LIABILITY**	GL933-1972	04/01/02	04/01/03	GENERAL AGGREGATE	$ 2,000,000
	X COMMERCIAL GENERAL LIABILITY				PRODUCTS - COMP/OP AGG	$ 2,000,000
	CLAIMS MADE X OCCUR				PERSONAL & ADV INJURY	$ 1,000,000
	OWNER'S & CONTRACTOR'S PROT				EACH OCCURRENCE	$ 1,000,000
					FIRE DAMAGE (Any one fire)	$ 1,000,000
					MED EXP (Any one person)	$ 5,000
B	**AUTOMOBILE LIABILITY**	F5Y006395-00 AOS	04/01/02	04/01/03	COMBINED SINGLE LIMIT	$ 1,000,000
B	X ANY AUTO	F5Y006396-00 HI	04/01/02	04/01/03		
B	ALL OWNED AUTOS	F5Y006397-00 VA	04/01/02	04/01/03	BODILY INJURY (Per person)	$
B	SCHEDULED AUTOS	F5Y006398-00 TX	04/01/02	04/01/03		
B	X HIRED AUTOS	X3P084803-00 MASS	04/01/02	04/01/03	BODILY INJURY (Per accident)	$
	X NON-OWNED AUTOS				PROPERTY DAMAGE	$
	GARAGE LIABILITY				AUTO ONLY - EA ACCIDENT	$
	ANY AUTO				OTHER THAN AUTO ONLY:	
					EACH ACCIDENT	$
					AGGREGATE	$
	EXCESS LIABILITY				EACH OCCURRENCE	$
	UMBRELLA FORM				AGGREGATE	$
	OTHER THAN UMBRELLA FORM					$
A	**WORKERS COMPENSATION AND EMPLOYERS' LIABILITY**	708-5561 CA	01/01/03	01/01/04	X WC STATUTORY LIMITS / OTHER	
D		708-5562 AOS	01/01/03	01/01/04	EL EACH ACCIDENT	$ 1,000,000
A	THE PROPRIETOR/ PARTNERS/EXECUTIVE OFFICERS ARE: X INCL / EXCL	708-5563 NY, OH, WA, WI, WV	01/01/03	01/01/04	EL DISEASE-POLICY LIMIT	$ 1,000,000
					EL DISEASE-EACH EMPLOYEE	$ 1,000,000
C	**OTHER** PROF. LIABILITY (E&O) CLAIMS MADE FORM	476-3090	04/01/02	04/01/03	EACH CLAIM AGGREGATE	$1,000,000 $1,000,000

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS

RE: SANIBEL BRIDGE TOLL PLAZA RECONSTRUCTION AND CAPE CORAL BRIDGE TOLL PLAZA RECONSTRUCTION; PROJECT NO. CN-02-23
THE CERTIFICATE HOLDER IS INCLUDED AS AN ADDITIONAL INSURED WHERE REQUIRED BY CONTRACT.

CERTIFICATE HOLDER

LEE COUNTY BOARD OF COUNTY COMMISSIONERS
ATTN: PUBLIC WORKS ADMINISTRATION, CONTRACT MANAGEMENT
P.O. BOX 398
FORT MYERS, FL 33902-0398

CANCELLATION

SHOULD ANY OF THE POLICIES DESCRIBED HEREIN BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE INSURER AFFORDING COVERAGE WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED HEREIN, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER AFFORDING COVERAGE, ITS AGENTS OR REPRESENTATIVES, OR THE ISSUER OF THIS CERTIFICATE.

MARSH USA INC.
BY: Michio Nekota

ADDITIONAL INFORMATION

SEA-000641051-02

DATE (MM/DD/YY) 01/31/03

PRODUCER

MARSH RISK & INSURANCE SERVICES
P.O. BOX 193880
SAN FRANCISCO, CA 94119-3880
CALIFORNIA LICENSE NO. 0437153

URSA-F-ALL-W/PRO- FL TAM URS

COMPANIES AFFORDING COVERAGE

COMPANY E

COMPANY F

COMPANY G

COMPANY H

INSURED

URS CORPORATION
100 CALIFORNIA STREET
SUITE 500
SAN FRANCISCO, CA 94111

TEXT

POLICY NUMBER: GL 933-1972
EFFECTIVE: 04/01/02 TO 04/01/03

COMMERCIAL GENERAL LIABILITY
NATIONAL UNION FIRE INSURANCE COMPANY OF PITTSBURGH

THIS ENDORSEMENT CHANGES THE POLICY, PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED - OWNERS, LESSEE, OR
CONTRACTORS - FORM B

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name or Person or Organization: Any/All person or organization when required by written contract.

If no entry appears below, information required to complete this endorsement will be shown in Declarations as applicable to this endorsement.

WHO IS AN INSURED (Section II) is amended to include as an insured the person or organization shown in the Schedule but only with respect to liability arising out of "your work" for that insured by or for you.

PRIMARY INSURANCE: It is further agreed that such insurance as if afforded by this policy for the benefit of the above Additional Insured(s) shall be primary insurance as respects any claim, loss or liability arising out of the Named Insured's operations, and any other insurance maintained by the Additional Insured(s) shall be excess and non-contributory with the insurance provided hereunder.

CG 20 10 11/85

Note: This fulfills the legal requirement of Form CG2010 11 85.

CERTIFICATE HOLDER

LEE COUNTY BOARD OF COUNTY COMMISSIONERS
ATTN: PUBLIC WORKS ADMINISTRATION, CONTRACT
MANAGEMENT
P.O. BOX 398
FORT MYERS, FL 33902-0398

EXHIBIT F

PROFESSIONAL SERVICES AGREEMENT

This PROFESSIONAL SERVICES AGREEMENT is made and entered into this 11th day of March, 2003, between the Board of County Commissioners of LEE COUNTY, a political subdivision of the STATE OF FLORIDA hereinafter referred to as the "COUNTY", and URS Corporation Southern, Tampa, Florida, hereinafter referred to as the "CONSULTANT".

WITNESSETH

WHEREAS, the COUNTY desires to obtain the professional Architecture and Engineering services of said CONSULTANT to provide and perform professional services as further described hereinafter concerning the Project to be referred to and identified as: Sanibel Bridge Toll Plaza Reconstruction (including a new administration building) and Cape Coral Bridge Toll Plaza Reconstruction
,and

WHEREAS, the CONSULTANT hereby certifies that CONSULTANT has been granted and possesses valid, current licenses to do business in the State of Florida and in Lee County, Florida, issued by the respective State Boards and Government Agencies responsible for regulating and licensing the professional services to be provided and performed by the CONSULTANT pursuant to this Agreement; and

WHEREAS, the CONSULTANT has reviewed the professional services required pursuant to this Agreement and is qualified, willing and able to provide and perform all such services in accordance with the provisions, conditions and terms hereinafter set forth; and

WHEREAS, the selection and engagement of the CONSULTANT has been made by the COUNTY in accordance with the provisions of the Consultants' Competitive Negotiation Act, Chapter 287.055, Florida Statutes, and in accordance with the provisions of the Lee County Contract Manual for Professional Services as approved and put into effect by the Lee County Board of County Commissioners, September 25, 2001, and as subsequently revised.

NOW, THEREFORE, in consideration of the mutual covenants, terms and provisions contained herein, the parties hereto agree that with the mutual acceptance of this Agreement as indicated hereinafter by the execution of this Agreement by both parties that a Contract shall exist between both parties consisting of:

ARTICLE 1.00 - SCOPE OF PROFESSIONAL SERVICES

CONSULTANT hereby agrees to provide and perform the professional services required and necessary to complete the services and work as set forth in EXHIBIT "A", entitled "SCOPE OF PROFESSIONAL SERVICES", which EXHIBIT "A" is attached hereto and made a part of this Agreement.

C9d
3-11-03

ARTICLE 2.00 - DEFINITIONS

The following definition of terms associated with this Agreement is provided to establish a common understanding between both parties to this Agreement as to the intended usage, application, and interpretation of such terms pertaining to this Agreement.

2.01 COUNTY

The term COUNTY shall refer to the Board of County Commissioners of Lee County, a political subdivision of the State of Florida, and any official and/or employees thereof who shall be duly authorized to act on the COUNTY's behalf relative to this Agreement.

2.02 CONSULTANT

The term CONSULTANT shall refer to the individual or firm offering professional services which by execution of this Agreement shall be legally obligated, responsible, and liable for providing and performing any and all of the services, work and materials, including services and/or work of sub-consultants and subcontractors, required under the covenants, terms and provisions contained in this Agreement and any and all Supplemental Agreements or Change Orders thereto.

2.03 PROFESSIONAL SERVICES

The term PROFESSIONAL SERVICES shall refer to all of the services, work, materials and all related professional, technical and administrative activities which are necessary to be provided and performed by the CONSULTANT and its employees and any and all sub-consultants and subcontractors the CONSULTANT may engage to provide, perform and complete the services required pursuant to the covenants, terms and provisions of this Agreement.

2.04 SUB-CONSULTANT

The term SUB-CONSULTANT shall refer to any individual or firm offering professional services which is engaged by the CONSULTANT to assist the CONSULTANT in providing and performing the professional services, work and materials for which the CONSULTANT is contractually obligated, responsible and liable to provide and perform under this Agreement. The COUNTY shall not be a party to, responsible or liable for, or assume any obligation whatever for any Agreement entered into between the CONSULTANT and any SUB-CONSULTANT.

2.05 SUBCONTRACTOR

The term SUBCONTRACTOR shall refer to any individual, company or firm providing other than professional services which is engaged by the CONSULTANT to assist the CONSULTANT in providing and performing services, work and materials for which the CONSULTANT is contractually obligated, responsible, and liable to provide and perform under this Agreement. The COUNTY shall not be a party to, responsible or liable for, or assume any obligation whatever for any Agreement entered into between the CONSULTANT and any SUBCONTRACTOR.

2.06 PROJECT

The term PROJECT shall refer to such facility, system, program or item as described in the summary statement set forth in the Preamble on Page One of this Agreement.

2.07 BASIC SERVICES

The term BASIC SERVICES shall refer to the professional services set forth and required pursuant to this Agreement and as described in further detail in the attached EXHIBIT "A", entitled "SCOPE OF PROFESSIONAL SERVICES", which EXHIBIT "A" is attached hereto and made a part of this Agreement.

2.08 ADDITIONAL SERVICES

The term ADDITIONAL SERVICES shall refer to such professional services as the COUNTY may request and authorize, in writing, the CONSULTANT to provide and perform relative to this Agreement which are not included in the BASIC SERVICES. Additional services shall be authorized by the execution of both parties to this Agreement of either a Supplemental Agreement or a Change Order Agreement.

2.09 SUPPLEMENTAL AGREEMENT

The term SUPPLEMENTAL AGREEMENT shall refer to a written document executed by both parties to this Agreement setting forth and authorizing professional service tasks which were not set forth in and are supplemental to the Scope of Services contained in the initial Professional Services Agreement or other SUPPLEMENTAL AGREEMENTS issued thereto. The SUPPLEMENTAL AGREEMENT, which shall be executed on a Lee County standard form, shall set forth the authorized supplement(s) to the: Scope of the Professional Services tasks, work or materials to be performed or provided by the CONSULTANT; the compensation and method of payment; the schedule or time period for performance and completion; and the guidelines, criteria, or requirements pertaining thereto.

The amount of the change in contract compensation and time set forth in any and all Supplemental Agreements executed and issued under this Agreement shall be understood and agreed by both Parties to this Agreement to be fair, equitable, adequate and complete. The changed

compensation shall be understood and agreed to be the total of all costs associated with or impacted by the Supplemental Agreements including, but not limited to any and all direct costs, indirect costs and associated costs which may result from or be caused by the Supplemental Agreements, and shall be understood and agreed to include a fair, equitable and adequate adjustment to cover the CONSULTANT's general administrative and overhead costs and profit.

2.10 CHANGE ORDER

The term CHANGE ORDER shall refer to a written document, CHANGE ORDER AGREEMENT, executed by both parties to this Agreement setting forth and authorizing changes to the agreed upon Scope of Professional Services and Tasks, Compensation and Method of Payment, Time and Schedule of Performance, or Project Guidelines and Criteria as such were set forth and agreed to in the initial AGREEMENT, SUPPLEMENTAL AGREEMENTS, SUPPLEMENTAL TASK AUTHORIZATION(S), or previous CHANGE ORDERS issued thereto. The CHANGE ORDER document, which shall be executed on a Lee County standard form, shall set forth the authorized changes to the: scope of professional services, tasks, work or materials to be performed or provided by the CONSULTANT; the compensation and method of payment; the schedule or time period for performance and completion, and the guidelines, criteria and requirements pertaining thereto.

The amount of the change in contract compensation and time set forth in any and all Change Orders executed and issued under this Agreement shall be understood and agreed by both Parties to this Agreement to be fair, equitable, adequate and complete. The changed compensation shall be understood and agreed to be the total of all costs associated with or impacted by the Change Order including, but not limited to any and all direct costs, indirect costs and associated costs which may result from or be caused by the Change Order, and shall be understood and agreed to include a fair, equitable and adequate adjustment to cover the CONSULTANT's general administrative and overhead costs and profit.

In the event the County decides to delete all, or portions, of the Scope of Services, Task(s), or Requirements set forth in the initial Agreement, Supplemental Agreements, Supplemental Task Authorizations or previously authorized Change Orders, the COUNTY may do so by the unilateral issuance of a written Change Order to the CONSULTANT. Such a unilaterally issued Change Order shall set forth, if appropriate, (1) an agreement by both the COUNTY and the CONSULTANT establishing changes in the amount of compensation to be paid the CONSULTANT as a result of the deletion or decrease in services required, or (2) in the absence of such an agreement concerning compensation, the unilaterally issued Change Order shall set forth the basis to be used in subsequently considering, and reaching agreement on change(s) in the compensation to be paid the CONSULTANT. The failure on the part of the CONSULTANT to execute a Change Order issued unilaterally by the COUNTY to effect a deletion or decrease in the services required shall have no effect on, or otherwise prevent the COUNTY from exercising its rights to direct the stated deletion or decrease in the services to be provided or performed by the CONSULTANT.

2.11 SUPPLEMENTAL TASK AUTHORIZATION

The term Supplemental Task Authorization as used refers to a written document executed by both parties to an existing Professional Services Agreement, or Service Provider Agreement, setting forth and authorizing a limited number of Professional Services, tasks, or work. Such Supplemental Task Authorizations are consistent with and have previously been included within the scope of services in the initial Professional Services Agreement, or Service Provider Agreement, for which authorization has not been previously given or budgeted.

2.12 WORK ORDER

The term WORK ORDER shall refer to the written document executed by both parties to this Agreement whereby the COUNTY provides authorization and notification to the CONSULTANT, and the CONSULTANT agrees, to proceed to provide or perform certain professional services, tasks or work for which the Scope of Services and Compensation to be paid the CONSULTANT were set forth and agreed to in the initial AGREEMENT, or other SUPPLEMENTAL AGREEMENTS or CHANGE ORDERS or SUPPLEMENTAL TASK AUTHORIZATIONS thereto, such professional services, tasks or work having previously been excluded and not included in written Notice(s) to Proceed issued by the COUNTY to the CONSULTANT. The WORK ORDER document, which shall be executed on a Lee County standard form, shall provide confirmation of the previously agreed to: scope of professional services, tasks, work or materials to be performed or provided by the CONSULTANT; the compensation and method of payment; the schedule or time period for performance and completion; and the guidelines, criteria and requirements pertaining thereto.

2.13 DEPARTMENT DIRECTOR

The term DEPARTMENT DIRECTOR shall refer to the Director of the Department requesting the service, employed by the Lee County Board of County Commissioners to serve and act on the COUNTY'S behalf, as it relates to this Project. The Chairman of the Board of County Commissioners, or his designated representative, shall act on behalf of the COUNTY to execute any and all SUPPLEMENTAL AGREEMENT(S) or CHANGE ORDER(S) or SUPPLEMENTAL TASK AUTHORIZATION(S) approved by the COUNTY and issued to the CONSULTANT pursuant to this Agreement. The DEPARTMENT DIRECTOR, within the authority conferred by the Board of County Commissioners, acting as the COUNTY'S designated representative shall issue written notification to the CONSULTANT of any and all changes approved by the COUNTY in the CONSULTANT'S: (1) compensation (2) time and/or schedule of service delivery; (3) scope of services; or other change(s) relative to BASIC SERVICES and ADDITIONAL SERVICES pursuant to this Agreement, or SUPPLEMENTAL AGREEMENT(S), WORK ORDER(S), or CHANGE ORDER(S) or SUPPLEMENTAL TASK AUTHORIZATION(S) pertaining thereto. The DEPARTMENT DIRECTOR shall be responsible for acting on the COUNTY'S behalf to administer, coordinate, interpret and otherwise manage the contractual provisions and requirements set forth in this Agreement, CHANGE ORDER(S), SUPPLEMENTAL AGREEMENT(S) or WORK ORDER(S) or SUPPLEMENTAL TASK AUTHORIZATION(S) issued thereunder.

2.14 PROJECT MANAGER

The term PROJECT MANAGER shall refer to the person employed or retained by the COUNTY and designated, in writing, to serve and act on the COUNTY'S behalf to provide direct contact and communication between the COUNTY and CONSULTANT with respect to providing information, assistance, guidance, coordination, review, approval and acceptance of the professional services, work and materials to be provided and performed by the CONSULTANT pursuant to this Agreement and such written WORK ORDER(S), SUPPLEMENTAL AGREEMENT(S), SUPPLEMENTAL TASK AUTHORIZATION(S) and CHANGE ORDER(S) as are authorized. The PROJECT MANAGER is not authorized to, and shall not, issue any verbal, or written, request or instruction to the CONSULTANT that would have the effect, or be interpreted to have the effect, of modifying or changing in any way whatever the: (1) Scope of Services to be provided and performed by the CONSULTANT; (2) The time the CONSULTANT is obligated to commence and complete all such services; (3) The amount of compensation the COUNTY is obligated or committed to pay the CONSULTANT. The PROJECT MANAGER shall review and make appropriate recommendations on all requests submitted by the CONSULTANT for payment for services and work provided and performed, and reimbursable costs and expense, as provided for in this Agreement and approved WORK ORDER(S), SUPPLEMENTAL AGREEMENT(S), CHANGE ORDER(S), SUPPLEMENTAL TASK AUTHORIZATION(S) thereto.

2.15 LUMP SUM FEE(S)

Lump Sum Fee(s), hereinafter identified as L.S., are understood and agreed to include all direct and indirect labor costs, personnel related costs, overhead and administrative costs, costs of sub-consultant(s) and/or subcontractor(s), out-of-pocket expenses and costs, professional service fee(s) and any other costs or expenses which may pertain to the services and/or work to be performed, provided and/or furnished by the Consultant as may be required and/or necessary to complete each and every task set forth in the Scope of Professional Services, Exhibit "A", or as may be set forth in subsequent Work Orders, Supplemental Agreements, Supplemental Task Authorizations, and/or Change Orders agreed to in writing by both parties to this Agreement.

2.16 NOT-TO-EXCEED FEE(S)

When all, or any portion, of the CONSULTANT'S compensation to provide and perform the services and work necessary and required pursuant to the Tasks set forth in Agreement Exhibit "A", and any Supplemental Agreements, Change Orders, Supplemental Task Authorizations, and Work Orders authorized thereto, is established to be made on a NOT-TO-EXCEED (N.T.E.) amount basis, it is mutually understood and agreed that such compensation for each completed Task shall be made on the following basis:

For the actual hours necessary, required and expended by the CONSULTANT'S professional and technical personnel, multiplied by the applicable hourly rates for each classification or position as set forth in Attachment No. 1 to Exhibit "B" to the above referenced Agreement and any Supplemental Agreements or Change Orders or Supplemental Task Authorizations authorized thereto; and

For the actual necessary, required and expended non-personnel reimbursable expenses and costs, multiplied by the applicable "Basis of Charges" for each item as set forth in Attachment No. 2 to Exhibit "B" to the above referenced Agreement and any Supplemental Agreements or Change Orders or Supplemental Task Authorizations authorized thereto; and

For the actual, necessary and required hours, and non-personnel expenses and costs, expended by Sub-Consultants and SubContractors engaged by the CONSULTANT, multiplied by such hourly rates and unit costs as are agreed to by the COUNTY and the CONSULTANT and as are set forth as a part of the above referenced Agreement and any Supplemental Agreements or Change Orders or Supplemental Task Authorizations authorized thereto; and

With the understanding and agreement that the COUNTY shall pay the CONSULTANT for all such costs and expenses within the established Not-to-Exceed amount for each Task or Sub-Task subject to the CONSULTANT presenting an itemized and detailed invoice with appropriate supporting documentation attached thereto to show evidence satisfactory to the COUNTY covering all such costs and expenses; and

With the understanding and agreement that the CONSULTANT'S invoices and all payments to be made for all Not-to-Exceed amounts shall be subject to the review, acceptance and approval of the COUNTY; and

With the understanding and agreement that when the CONSULTANT'S compensation is established on a Not-to-Exceed basis for a specific Task(s) or Sub-Task(s) the total amount of compensation to be paid the CONSULTANT to cover all personnel costs, non-personnel reimbursable expenses and costs, and Sub-Consultant and SubContractor costs for any such specific Task(s) or Sub-Task(s) shall not exceed the amount of the total Not-to-Exceed compensation established and agreed to for each specific Task(s) or Sub-Task(s). In the event the amount of compensation for any Task(s) or Sub-Task(s) to which the CONSULTANT is entitled on the Not-to-Exceed basis set forth above is determined to be necessary, required and actually expended and is determined to be actually less than the Not-to-Exceed amount established for the specific Task or Sub-Task, it is understood and agreed that any unexpended amount under a specific Task or Sub-Task may not be used, applied, transferred, invoiced or paid for services or work provided or performed on any other Task(s) or Sub-Task(s).

ARTICLE 3.00 - OBLIGATIONS OF THE CONSULTANT

The obligations of the CONSULTANT with respect to all the BASIC SERVICES and ADDITIONAL SERVICES authorized pursuant to this Agreement shall include, but not be limited to, the following:

3.01 LICENSES

The CONSULTANT agrees to obtain and maintain throughout the period this Agreement is in effect all such licenses as are required to do business in the State of Florida and in Lee County, Florida, including, but not limited to, licenses required by the respective State Boards and other governmental agencies responsible for regulating and licensing the professional services provided and performed by the CONSULTANT pursuant to this Agreement.

3.02 PERSONNEL

(1) QUALIFIED PERSONNEL

The CONSULTANT agrees when the services to be provided and performed relate to a professional service(s) which, under Florida Statutes, requires a license, certificate of authorization or other form of legal entitlement to practice such services, to employ and/or retain only qualified personnel to be in responsible charge of all BASIC SERVICES and ADDITIONAL SERVICES to be provided pursuant to this Agreement.

(2) CONSULTANT'S PROJECT DIRECTOR

The CONSULTANT agrees to employ and designate, in writing, a qualified and, if required by law, a licensed professional to serve as the CONSULTANT'S Project Director. The CONSULTANT'S Project Director shall be authorized and responsible to act on behalf of the CONSULTANT with respect to directing, coordinating and administering all aspects of the services to be provided and performed under this Agreement thereto. The CONSULTANT'S Project Director shall have full authority to bind and obligate the CONSULTANT on any matter arising under this Agreement unless substitute arrangements have been furnished to the COUNTY in writing. The CONSULTANT agrees that the Project Director shall devote whatever time is required to satisfactorily direct, supervise and manage the services provided and performed by the CONSULTANT throughout the entire period this Agreement is in effect. The person selected by the CONSULTANT to serve as the CONSULTANT'S Project Director shall be subject to the prior approval and acceptance of the COUNTY.

(3) REMOVAL OF PERSONNEL

The CONSULTANT agrees, within thirty (30) calendar days of receipt of a written request from the COUNTY, to promptly remove and replace the CONSULTANT'S Project Director, or any other personnel employed or retained by the CONSULTANT, or personnel of the sub-consultant(s) or subcontractor(s) engaged by the CONSULTANT to provide and/or perform services and/or work pursuant to the requirements of this Agreement, who the COUNTY shall request, in writing, be removed, which request may be made by the COUNTY with or without cause.

3.03 TIMELY ACCOMPLISHMENT OF SERVICES

The timely performance and completion of the required services, work and materials is vitally important to the interests of the COUNTY. Time is of the essence for all of the duties and obligations contained in this Agreement thereto. The COUNTY may suffer damages in the event that the CONSULTANT does not accomplish and complete the required services in a timely manner. The CONSULTANT agrees to employ, engage, retain and/or assign an adequate number of personnel throughout the period of this Agreement so that all BASIC SERVICES and ADDITIONAL SERVICES will be provided, performed and completed in a timely and diligent manner throughout.

3.04 STANDARDS OF PROFESSIONAL SERVICE

The work and/or services to be provided and/or performed by the CONSULTANT and by any Sub-Consultant(s) and/or SubContractor(s) engaged by the CONSULTANT as set forth in the Scope of Professional Services, Exhibit "A", shall be done in accordance with the generally accepted standards of professional practice and in accordance with the laws, rules, regulations, ordinances, codes, policies, standards or other guidelines issued by those governmental agencies which have jurisdiction over all or a portion of this project and which are in effect at the time the COUNTY approves this Agreement, or which may subsequently be changed or revised. Any subsequent change or revision to such laws, rules, regulations, ordinances, codes, policies, standards or other guidelines which requires the CONSULTANT to provide and/or perform work and/or services which are significantly different from that set forth in the Scope of Professional Services, Exhibit "A", shall serve as a basis for the COUNTY to consider the development and issuance of a Change Order to provide for a change to, or Additional Services to the services set forth in the Agreement.

3.05 CORRECTION OF ERRORS, OMISSIONS OR OTHER DEFICIENCIES

(1) RESPONSIBILITY TO CORRECT

The CONSULTANT agrees to be responsible for the professional quality, technical adequacy and accuracy, timely completion, and the coordination of all data, studies, surveys, designs, specifications, calculations, estimates, plans, drawings, construction documents, photographs, reports, memoranda, other documents and instruments, and other services, work and materials performed, provided, and/or furnished by CONSULTANT or by any sub-consultant(s) and/or subcontractor(s) retained or engaged by the CONSULTANT pursuant to this Agreement. The CONSULTANT shall, without additional compensation, correct or revise any errors, omissions or other deficiencies in such data, studies, surveys, designs, specifications, calculations, estimates, plans, drawings, construction documents and instruments, and other services, work and materials resulting from the negligent act, errors or omissions or intentional misconduct of CONSULTANT or any sub-consultant(s) or subcontractor(s) engaged by the CONSULTANT.

(2) COUNTY'S APPROVAL SHALL NOT RELIEVE CONSULTANT OF RESPONSIBILITY

Neither review, approval, or acceptance by the COUNTY of data, studies, surveys, designs, specifications, calculations, estimates, plans, drawings, construction documents, photographs, reports, memoranda, other documents and instruments, and incidental professional services, work and materials furnished hereunder by the CONSULTANT, or any sub-consultant(s) or

(2) COUNTY'S APPROVAL SHALL NOT RELIEVE CONSULTANT OF RESPONSIBILITY (Continued)

subcontractor(s) engaged by the CONSULTANT, shall in any way relieve CONSULTANT of responsibility for the adequacy, completeness and accuracy of its services, work and materials and the services, work and materials of any and all sub-consultants and/or subcontractors engaged by the CONSULTANT to provide and perform services in connection with this Agreement. Neither the COUNTY'S review, approval or acceptance of, nor payment for, any of the CONSULTANT'S services, work and materials shall be construed to operate as a waiver of any of the COUNTY'S rights under this Agreement, or any cause of action it may have arising out of the performance of this Agreement.

3.06 LIABILITY

(1) CONSULTANT TO HOLD COUNTY HARMLESS

The CONSULTANT shall be liable and agrees to be liable for and shall indemnify and hold the COUNTY harmless for any and all claims, suits, judgements or damages, losses and expenses including court costs and attorney's fees arising out of the CONSULTANT'S errors, omissions, and/or negligence, or those of any and all sub-consultants and/or subcontractors engaged by the CONSULTANT during the providing, performing and furnishing of services, work and materials pursuant to this Agreement and any and all Supplemental Agreements, Change Orders, Supplemental Task Authorizations thereto. The CONSULTANT shall not be liable to nor indemnify the COUNTY for any portions of damages arising out of any error, omission, and/or negligence of the COUNTY, its employees, agents, or representatives or third parties. The CONSULTANT hereby acknowledges that the compensation to be paid the CONSULTANT by the COUNTY as set forth in Agreement Exhibit "B" entitled "COMPENSATION AND METHOD OF PAYMENT" includes compensation as consideration for the indemnification provided herein.

3.07 NOT TO DIVULGE CERTAIN INFORMATION

CONSULTANT agrees, during the term of this Agreement, not to divulge, furnish or make available to any third person, firm, or organization, without COUNTY'S prior written consent, or unless incident to the proper performance of CONSULTANT'S obligations hereunder, or in the course of judicial or legislative proceedings where such information has been properly subpoenaed, any non-public information concerning the services to be rendered by CONSULTANT or any sub-consultant(s) or subcontractor(s) pursuant to this Agreement. CONSULTANT shall require all of its employees, sub-consultant(s) and subcontractor(s) to comply with the provisions of this paragraph.

3.08 CONSULTANT TO REPAIR PROPERTY DAMAGE CAUSED BY THE CONSULTANT

CONSULTANT agrees to promptly repair and/or replace, or cause to have repaired and/or replaced, at its sole cost and expense and in a manner acceptable to and approved by the COUNTY, any property damage arising out of, or caused by, the willful or negligent acts of the CONSULTANT, or of its sub-consultants and/or subcontractors. This CONSULTANT'S obligation under this sub-article does not apply to property damage caused by any other Consultant or Contractor engaged directly by the COUNTY.

The COUNTY reserves the right, should the CONSULTANT fail to make such repairs and/or replacement within a reasonable period of time, to cause such repairs and/or replacement to be made by others and for all costs and expenses associated with having such repairs and/or replacement done to be paid for by the CONSULTANT, or by the CONSULTANT reimbursing the COUNTY for all such costs and expenses.

3.09 RESPONSIBILITY FOR ESTIMATES

(1) In the event the services required pursuant to this Agreement include the CONSULTANT preparing and submitting to the COUNTY, cost estimates, the CONSULTANT, by exercise of his experience, effort, knowledge and judgment, shall develop such cost estimates as are set forth in, or as may be required under the Agreement and shall be held accountable, responsible and liable for the accuracy, completeness, and correctness of any and all such cost estimates. For purposes of the Liability Provisions of this Article only, the CONSULTANT'S estimate(s) shall be considered valid and effective for a period of six (6) months from the date of the COUNTY'S acceptance of the estimate(s).

(2) The cost estimates of CONSULTANTS or SUB-CONSULTANTS engaged by CONSULTANTS, for the appraisal or valuation of property or easements, or the estimate of damages or costs associated with the acquisition of property or easements are exempted from the provisions of Article 3.09.

(3) Cost Estimates

(A) ORDER OF MAGNITUDE ESTIMATE

This is an approximate estimate made without detailed architect/engineering data. Examples include, but are not limited to, an estimate from cost-capacity curves, an estimate using scale-up or scale-down factors, and an approximate ratio estimate. This type of estimate shall be accurate within plus fifty percent (50.0%). If the bids, as described above, fail to meet this prescribed accuracy, the cost associated with the preparation and development of the ORDER OF MAGNITUDE ESTIMATE shall be recoverable by the COUNTY.

(B) BUDGET ESTIMATE

Budget in this case applies to the COUNTY'S budget and not to the budget as a project controlled document. A budget is prepared with the use of flowsheets, layouts, and equipment details. This type of estimate shall be accurate within plus twenty-five percent (25.0%). If the bids, as described above, fail to meet this prescribed accuracy, the cost associated with the preparation and development of the BUDGET ESTIMATE shall be recoverable by the COUNTY.

(C) CONSTRUCTION COST ESTIMATE.

A construction cost estimate for purposes of this Agreement is an estimate prepared on the basis of well defined engineering/architectural data and on detailed information set forth in specifications, designs or drawings which are to be used as a basis for obtaining bids or price proposals for constructing the project. This type of estimate shall be accurate within plus or minus ten percent (10%) of the cost of the construction of the project. The accuracy and reliability of a CONSTRUCTION COST ESTIMATE is vital to the COUNTY'S interests because it may be used for such purposes as, but not limited to the following; budgeting, obtaining, allocating or obligating funds for the project; evaluating and determining the reasonableness and acceptableness of bids or price proposals for construction projects; or establishing the assessment amounts for Municipal Service Benefit Units (M.S.B.U.).

In the event the COUNTY solicits and receives bids or price proposals from contractors on a construction project based on specifications, design, drawings and a CONSTRUCTION COST ESTIMATE prepared by the CONSULTANT, and the lowest bid or price proposal, submitted by a responsive and responsible bidder or proposer, which bid or price proposal exceeds the amount of the CONSULTANT'S CONSTRUCTION COST ESTIMATE by more than the percent accuracy set forth hereinabove, the CONSULTANT shall, upon notification by the COUNTY, assume responsibility for and proceed to provide and perform the following service without additional compensation:

The CONSULTANT will, subject to the review and approval of the COUNTY, modify at its expense the specifications, design, drawings and related bidding and contract documents to the extent necessary to reduce the anticipated construction costs so that the re-solicitation of bids or price proposals will realize bids or price proposals being received that are within the range of accuracy established for the CONSTRUCTION COST ESTIMATE prepared by the CONSULTANT. Any such modifications made by the CONSULTANT shall not conflict with the functional or operational requirements established by the COUNTY for the project and set forth in the Agreement or Supplemental Agreement(s) or Change Order(s) or Supplemental Task Authorization(s) issued thereto, nor shall any such modifications conflict with established rules, regulations, requirements or professional standards pertaining to the design, specifications or drawings prepared by the CONSULTANT, nor shall such modifications adversely affect the safe use or operation of the constructed project.

(C) CONSTRUCTION COST ESTIMATE. (Continued)

In the event (1) the CONSULTANT's modification of the design, specifications, drawings and related bidding and contract documents, and (2) the re-solicitation of bids or price proposals do not result in bids or price proposals being received from a responsive and responsible bidder or proposer that are within the established percent accuracy of the CONSULTANT'S CONSTRUCTION COST ESTIMATE, the costs associated with the CONSULTANT's preparation and development of the CONSTRUCTION

COST ESTIMATE shall be recoverable by the COUNTY by an appropriate reduction in the CONSULTANT'S invoice requesting payment for services rendered.

For determination of compliance with the accuracy requirement established for the CONSTRUCTION COST ESTIMATE prepared by the CONSULTANT, the amount of the CONSTRUCTION COST ESTIMATE submitted by the CONSULTANT shall be adjusted from the date the CONSTRUCTION COST ESTIMATE was received by the COUNTY until the date bids or price proposals are received by the COUNTY, by applying the percent change in the "20 Cities Cost Index" as published in the ENR (formerly ENGINEERING NEWS-RECORD) a McGraw-Hill, Inc. publication.

If, in response to its solicitation, the COUNTY receives less than three bids or priced proposals for a project, there is the potential that such bids or priced proposals may not be a realistic representation of the costs expected to be associated with the project. If under such circumstances, and if in the professional judgment of the CONSULTANT, the low bid or the low priced proposal received from a responsive bidder or proposer does not realistically represent the costs associated with the project, the CONSULTANT may deem it appropriate to recommend the COUNTY reject any such bid(s) or priced proposal(s). If under such circumstances the COUNTY concurs with the CONSULTANT'S recommendation and rejects the bid(s) or priced proposal(s), the COUNTY will not hold the CONSULTANT responsible to, nor will the COUNTY require the CONSULTANT to, modify the specifications, design, drawings and related bidding and contract documents as set forth hereinbefore.

3.10 PERMITS

The CONSULTANT will be responsible for preparing and submitting all required applications and other supportive information necessary to assist the COUNTY in obtaining all reviews, approvals and permits, with respect to the CONSULTANT'S design, drawings and specifications required by any governmental body having authority over the project. Any fees required for such reviews, approvals or permits will be covered by a check issued by the COUNTY and made payable to the respective governmental body upon the CONSULTANT furnishing the COUNTY satisfactory documentation of such fees. The CONSULTANT will be similarly responsible for preparing and submitting all required applications and other supportive information necessary to assist the COUNTY in obtaining any renewals and/or extensions of reviews, approvals or permits that may be required while this Agreement is in effect. The COUNTY shall, at the CONSULTANT'S request, assist in obtaining required signatures and provide the CONSULTANT with all information known to be available to the COUNTY so as to assist the CONSULTANT in the preparation and submittal of any original, renewal or extension of required reviews, approvals or permits.

3.11 ADDITIONAL SERVICES

Should the COUNTY request the CONSULTANT to provide and perform professional services for this project which are not set forth in EXHIBIT "A", the CONSULTANT agrees to provide and perform such ADDITIONAL SERVICES as may be agreed to in writing by both parties to this Agreement.

Such ADDITIONAL SERVICES shall constitute a continuation of the professional services covered under this Agreement and shall be provided and performed in accordance with the covenants, terms, and provisions set forth in this Agreement thereto.

ADDITIONAL SERVICES shall be administered and authorized as "SUPPLEMENTAL AGREEMENTS", "SUPPLEMENTAL TASK AUTHORIZATIONS" or "CHANGE ORDERS" under the Agreement. The CONSULTANT shall not provide or perform, nor shall the COUNTY incur or accept any obligation to compensate the CONSULTANT for any ADDITIONAL SERVICES unless and until a written "SUPPLEMENTAL AGREEMENT", "SUPPLEMENTAL TASK AUTHORIZATIONS" or "CHANGE ORDER" shall have been agreed to and executed by both parties.

Each such "SUPPLEMENTAL AGREEMENT", "SUPPLEMENTAL TASK AUTHORIZATION" or "CHANGE ORDER" shall set forth a comprehensive, detailed description of: (1) the Scope of the ADDITIONAL SERVICES requested; (2) the basis of compensation; and (3) the period of time and/or schedule for performing and completing said ADDITIONAL SERVICES.

3.12 TRUTH-IN-NEGOTIATIONS CERTIFICATE

The COUNTY may request the CONSULTANT to execute a Truth-in-Negotiations Certificate ("Certificate"), in a form attached as EXHIBIT "F". The Certificate shall state that wage rates and other factual unit costs supporting the compensation are accurate, complete and current at the time this Agreement is executed. The original contract price and any additions thereto shall be adjusted to exclude any significant sums by which the COUNTY determines the contract price was increased due to inaccurate, incomplete or noncurrent wage rates or other factual unit costs.

3.13 COMPLETION OF TASKS

Unless otherwise set forth in the Agreement the CONSULTANT shall be responsible for providing and performing whatever services, work, equipment, material, personnel, supplies, facilities, transportation and administrative support that are necessary and required to complete all of the tasks set forth in Agreement Exhibit "A" entitled "Scope of Professional Services" and Supplemental Agreements, Change Orders, Supplemental Task Authorizations and Work Orders authorized. The compensation to be paid the CONSULTANT as set forth in Agreement Exhibit "B" entitled "Compensation and Method of Payment" and Supplemental Agreements, Change Orders, Supplemental Task Authorizations, and Work Orders authorized thereto shall be understood and agreed to adequately and completely compensate the CONSULTANT for providing and performing whatever services,work, equipment, material, personnel, supplies, facilities, transportation and administrative support that are necessary and required to complete the tasks set forth in Agreement Exhibit "A" and Supplemental Agreements, Change Orders, Supplemental Task Authorizations, and Work Orders authorized thereto as stated above."

3.14 AFFIRMATIVE ACTION BY CONSULTANT WHEN ENGAGING SUB-CONSULTANTS

Florida Statute #287.042(4)(f) establishes that agencies, including Lee County, are encouraged to spend twenty-five (25%) percent of the monies actually spent for contractual services for the purpose of entering into contracts with certified Minority Business Enterprises. Accordingly, the CONSULTANT is encouraged, when selecting or engaging the services of sub-consultants or subcontractors pursuant to this Agreement, to spend twenty-five (25%) percent of the amount of compensation established in this Agreement and in subsequent SUPPLEMENTAL AGREEMENTS, CHANGE ORDERS, SUPPLEMENTAL TASK AUTHORIZATIONS, and WORK ORDERS authorized thereto for the engagement of the services of certified Minority Business Enterprise sub-consultants or subcontractors.

In furtherance of this statutory goal the COUNTY expects the CONSULTANT to take affirmative action towards achieving this goal. "Affirmative Action" as used herein shall constitute a good faith effort by the CONSULTANT to achieve the stated goal of engaging certified Minority Business Enterprise sub-consultants or subcontractors to provide or perform services and/or work pursuant to the SCOPE OF SERVICES required under this Agreement. Efforts taken by the CONSULTANT to assist the COUNTY in meeting this statutory goal must be documented in detail, records of sub-consultants or subcontractors contacted maintained, including negotiation efforts, and written Agreements maintained for services or work awarded to sub-consultants or subcontractors.

The CONSULTANT, upon receipt of a written request by the COUNTY, shall within ten (10) calendar days thereafter submit to the COUNTY copies of records and supporting documentation to show evidence of its affirmative action efforts to achieve the above stated goal.

The CONSULTANT is encouraged to contact the Lee County Department of Equal Opportunity for information and assistance regarding the COUNTY'S Minority Business Enterprise certification program and listing of certified Minority Business Enterprises.

ARTICLE 4.00 - OBLIGATIONS OF THE COUNTY

4.01 DESIGNATION OF PROJECT MANAGER

The COUNTY agrees after the execution of this Agreement to promptly advise the CONSULTANT, in writing, of the person designated to serve and act as the COUNTY'S PROJECT MANAGER pursuant to the provisions of Article 2.13 of this Agreement. Such notification shall be provided to the CONSULTANT by the COUNTY'S DEPARTMENT DIRECTOR.

4.02 AVAILABILITY OF COUNTY INFORMATION

(1) PROJECT GUIDELINES AND CRITERIA

Guidelines to the CONSULTANT regarding requirements the COUNTY has established or suggests relative to the Project including, but not limited to such items as: goals, objectives, constraints, and any special financial, budgeting, space, site, operational, equipment, technical, construction, time and scheduling criteria are set forth in EXHIBIT "E", entitled "PROJECT GUIDELINES AND CRITERIA", which EXHIBIT "E" is attached hereto and made a part of this Agreement.

(2) COUNTY TO PROVIDE PERTINENT REFERENCE MATERIAL

At the CONSULTANT'S request, the COUNTY agrees to provide to the CONSULTANT, at no cost to the CONSULTANT, all pertinent information known to be available to the COUNTY to assist the CONSULTANT in providing and performing the required professional services. Such information may include, but not be limited to: previous reports; plans, drawings and specifications; maps; property, boundary, easement, right-of-way, topographic, reference monuments, control points, plats and related survey data; data prepared or services furnished by others to the COUNTY such as sub-surface investigations, laboratory tests, inspections of natural and man-made materials, property appraisals, studies, designs and reports.

4.03 AVAILABILITY OF COUNTY'S DESIGNATED REPRESENTATIVES

The COUNTY agrees that the DEPARTMENT DIRECTOR and the PROJECT MANAGER shall be available within a reasonable period of time, with reasonable prior notice given by the CONSULTANT, to meet and/or consult with the CONSULTANT on matters pertaining to the services to be provided and performed by the CONSULTANT. The COUNTY further agrees to respond within a reasonable period of time to written requests submitted by the CONSULTANT.

4.04 ACCESS TO COUNTY PROPERTY

The COUNTY agrees, with reasonable prior written notice given by the CONSULTANT, to provide the CONSULTANT with access within a reasonable period of time to COUNTY property, facilities, buildings and structures to enable the CONSULTANT to provide and perform the required professional services and work pursuant to this Agreement. Such rights of access shall not be exercised in such a manner or to such an extent as to impede or interfere with COUNTY operations, or the operations carried on by others under a lease, or other contractual arrangement with the COUNTY, or in such a manner as to adversely affect the public health and safety. Such access may, or may not be, within the CONSULTANT'S normal office and/or field work days and/or work hours.

ARTICLE 5.00 - COMPENSATION AND METHOD OF PAYMENT

5.01 BASIC SERVICES

The COUNTY shall pay the CONSULTANT for all requested and authorized BASIC SERVICES rendered hereunder by the CONSULTANT and completed in accordance with the requirements, provisions, and/or terms of this Agreement and accepted by the COUNTY in accordance with the provisions for compensation and payment of said BASIC SERVICES set forth and prescribed in EXHIBIT "B", entitled "COMPENSATION AND METHOD OF PAYMENT", which EXHIBIT "B" is attached hereto and made a part of this Agreement, or on the basis of such changes to the established compensation as may be mutually agreed to by both parties to this Agreement as evidenced by a written Supplemental Agreement or Change Order executed by both parties.

5.02 ADDITIONAL SERVICES

The COUNTY shall pay the CONSULTANT for all such ADDITIONAL SERVICES as have been requested and authorized by the COUNTY and agreed to, in writing, by both parties to this Agreement and which have been rendered as ADDITIONAL SERVICES by the CONSULTANT and completed in accordance with the requirements, provisions, and/or terms of this Agreement and accepted by the COUNTY in accordance with the provisions for compensation and payment of said ADDITIONAL SERVICES as set forth and prescribed in EXHIBIT "B", entitled "COMPENSATION AND METHOD OF PAYMENT", which EXHIBIT "B" is attached hereto and made a part of this Agreement, or on the basis of such changes to the established compensation as may be mutually agreed to by both parties to this Agreement as evidenced by a written Supplemental Agreement or Change Order or Supplemental Task Authorization executed by both parties.

5.03 METHOD OF PAYMENT

(1) MONTHLY STATEMENTS

The CONSULTANT shall be entitled to submit not more than one invoice statement to the COUNTY each calendar month covering services rendered during the preceding calendar month. The CONSULTANT'S invoice statement(s) shall be itemized to correspond to the basis of compensation as set forth in the Agreement, or SUPPLEMENTAL AGREEMENT(S), CHANGE ORDER(S), SUPPLEMENTAL TASK AUTHORIZATION(S), and/or WORK ORDER(S) thereunder. The CONSULTANT'S invoice statements shall contain a breakdown of charges, description of service(s) and work provided and/or performed, and where appropriate, supportive documentation of charges consistent with the basis of compensation set forth in the Agreement, or in SUPPLEMENTAL AGREEMENT(S), CHANGE ORDER(S), SUPPLEMENTAL TASK AUTHORIZATION(S) and/or WORK ORDER(S) thereunder.

(2) PAYMENT FOR SERVICES PERFORMED

The COUNTY shall pay the CONSULTANT for services performed using either of the following methods, or using a combination thereof:

(A) The COUNTY shall pay the CONSULTANT on the basis of services completed for tasks set forth in Exhibits "A" and "B", as evidenced by work products such as reports, drawings, specifications, etc., submitted by the CONSULTANT and accepted by the COUNTY. No payments shall be made for CONSULTANT's Work-in-Progress until service items for which payment amounts have been established and set forth in this Agreement have been completed by the CONSULTANT and accepted by the COUNTY. Whenever an invoice statement covers services for which no work product is required to be furnished by the CONSULTANT to the COUNTY, the COUNTY reserves the right to retain ten percent (10%) of the amount invoiced until such service requirements are fully completed.

(2) PAYMENT FOR SERVICES PERFORMED (Continued)

(B) The COUNTY shall pay the CONSULTANT for services performed for tasks set forth in Exhibits "A" and "B" on the basis of an invoice statement covering CONSULTANT'S Work-in-Progress expressed as a percentage of the total cost of the service and/or work required for each task invoiced in this manner. All such Work-in-Progress percentages are subject to the review and approval of the COUNTY. The decision of the COUNTY shall be final as to the Work-in-Progress percentages paid. Payment by the COUNTY for tasks on a Work-in-Progress percentage basis shall not be deemed or interpreted in any way to constitute an approval or acceptance by the COUNTY of any such service or Work-in-Progress. The CONSULTANT shall be responsible for correcting, re-doing, modifying or otherwise completing the services and work required for each task before receiving final, full payment whether or not previous Work-in-Progress payments have been made. All tasks to be paid for on a Work-in-Progress percentage basis shall be agreed to by both parties to the Agreement and each task to be paid in this manner shall be identified in Exhibit "B" with the notation (WIPP). Only tasks so identified will be paid on a Work-in-Progress percentage basis. The COUNTY reserves the right to retain ten percent (10%) of the amount invoiced until such service requirements are fully completed.

(3) PAYMENT SCHEDULE

The COUNTY shall issue payment to the CONSULTANT within thirty (30) calendar days after receipt of an invoice statement from the CONSULTANT in an acceptable form and containing the requested breakdown and detailed description and documentation of charges. Should the COUNTY object or take exception to the amount of any CONSULTANT'S invoice statement, the COUNTY shall notify the CONSULTANT of such objection or exception within the thirty (30) calendar day payment period set forth hereinbefore. If such objection or exception remains unresolved at the end of said thirty (30) calendar day period, the COUNTY shall withhold the disputed amount and make payment to the CONSULTANT of the amount not in dispute. Payment of any disputed amount, or adjustments thereto, shall be made within thirty (30) calendar days of the date such disputed amount is resolved by mutual agreement of the parties to this Agreement.

5.04 PAYMENT WHEN SERVICES ARE TERMINATED AT THE CONVENIENCE OF THE COUNTY

In the event of termination of this Agreement at the convenience of the COUNTY, not at the fault of the CONSULTANT, the COUNTY shall compensate the CONSULTANT only for: (1) all services performed prior to the effective date of termination; (2) reimbursable expenses then due; and (3) reasonable expenses incurred by the CONSULTANT in affecting the termination of services and work, and incurred by the submittal to the COUNTY of project drawings, plans, data, and other project documents.

5.05 PAYMENT WHEN SERVICES ARE SUSPENDED

In the event the COUNTY suspends the CONSULTANT'S services and work on all or part of the services required to be provided and performed by the CONSULTANT pursuant to this Agreement, the COUNTY shall compensate the CONSULTANT only for the services performed prior to the effective date of suspension and reimbursable expenses then due and any reasonable expenses incurred or associated with, or as a result of such suspension.

5.06 NON-ENTITLEMENT TO ANTICIPATED FEES IN THE EVENT OF SERVICE TERMINATION, SUSPENSION, ELIMINATION, CANCELLATION AND/OR DECREASE

In the event the services required pursuant to this Agreement are terminated, eliminated, canceled, or decreased due to: (1) termination; (2) suspension in whole or in part; and (3) and/or are modified by the subsequent issuance of SUPPLEMENTAL AGREEMENT(S), SUPPLEMENTAL TASK AUTHORIZATION(S) and/or CHANGE ORDER(S), other than receiving the compensation set forth in Sub-Articles 5.04 and 5.05, the CONSULTANT shall not be entitled to receive compensation for anticipated professional fees, profit, general and administrative overhead expenses or for any other anticipated income or expense which may be associated with the services which are terminated, suspended, eliminated, canceled or decreased.

ARTICLE 6.00 - TIME AND SCHEDULE OF PERFORMANCE

6.01 NOTICE TO PROCEED

Following the execution of this Agreement by both parties, and after the CONSULTANT has complied with the insurance requirements set forth hereinafter, the COUNTY shall issue the CONSULTANT a WRITTEN NOTICE TO PROCEED. Following the issuance of such NOTICE TO PROCEED the CONSULTANT shall be authorized to commence work and the CONSULTANT thereafter shall commence work promptly and shall carry on all such services and work as may be required in a timely and diligent manner to completion.

6.02 TIME OF PERFORMANCE

The CONSULTANT agrees to complete the services required pursuant to this Agreement within the time period(s) for completion of the various phases and/or tasks of the project services set forth and described in this Agreement, as set forth in EXHIBIT "C", entitled "SCHEDULE OF PERFORMANCE, which EXHIBIT "C" is attached hereto and made a part of this Agreement.

Should the CONSULTANT be obstructed or delayed in the prosecution or completion of its obligations under this Agreement as a result of causes beyond the control of the CONSULTANT, or its sub-consultant(s) and/or subcontractor(s), and not due to their fault or neglect, the CONSULTANT shall notify the COUNTY, in writing, within five (5) calendar days after the commencement of such delay, stating the cause(s) thereof and requesting an extension of the CONSULTANT'S time of performance. Upon receipt of the CONSULTANT'S request for an extension of time, the COUNTY shall grant the extension if the COUNTY determines the delay(s) encountered by the CONSULTANT, or its sub-consultant(s) and/or subcontractor(s), is due to unforeseen causes and not attributable to their fault or neglect.

6.03 CONSULTANT WORK SCHEDULE

The CONSULTANT shall be required as a condition of this Agreement to prepare and submit to the COUNTY, on a monthly basis, commencing with the issuance of the NOTICE TO PROCEED, a CONSULTANT'S WORK SCHEDULE. The WORK SCHEDULE shall set forth the time and manpower scheduled for all of the various phases and/or tasks required to provide, perform and complete all of the services and work required completion of the various phases and/or tasks of the project services set forth and described in this Agreement, as set forth in EXHIBIT "C", pursuant to this Agreement in such a manner that the CONSULTANT'S planned and actual work progress can be readily determined. The CONSULTANT'S WORK SCHEDULE of planned and actual work progress shall be updated and submitted by the CONSULTANT to the COUNTY on a monthly basis.

6.04 FAILURE TO PERFORM IN A TIMELY MANNER

Should the CONSULTANT fail to commence, provide, perform and/or complete any of the services and work required pursuant to this Agreement in a timely and diligent manner, the COUNTY may consider such failure as justifiable cause to terminate this Agreement. As an alternative to termination, the COUNTY at its option, may, upon written notice to the CONSULTANT, withhold any or all payments due and owing to the CONSULTANT, not to exceed the amount of the compensation for the work in dispute, until such time as the CONSULTANT resumes performance of his obligations in such a manner as to get back on schedule in accordance with the time and schedule of performance requirements set forth in this Agreement, or any WORK ORDER(S), SUPPLEMENTAL AGREEMENT(S), CHANGE ORDER(S), SUPPLEMENTAL TASK AUTHORIZATION(S) issued thereto.

ARTICLE 7.00 - SECURING AGREEMENT

The CONSULTANT warrants that the CONSULTANT has not employed or retained any company or person other than a bona fide, regular, full time employee working for the CONSULTANT to solicit or secure this Agreement and that the CONSULTANT has not paid or agreed to pay any person, company, corporation or firm other than a bona fide employee working solely for the CONSULTANT any fee, commission, percentage, gift or any other consideration contingent upon or resulting from the award or making of this Agreement.

ARTICLE 8.00 - CONFLICT OF INTEREST

The CONSULTANT represents that it presently has no interest and shall acquire no interest, either direct or indirect, which would conflict in any manner with the performance of services required hereunder. The CONSULTANT further agrees that no person having any such interest shall be employed or engaged by the CONSULTANT for said performance.

If CONSULTANT, for itself and on behalf of its subconsultants, is about to engage in representing another client, which it in good faith believes could result in a conflict of interest with the work being performed by CONSULTANT or such sub-consultant under this Agreement, then it will promptly bring such potential conflict of interest to the COUNTY'S attention, in writing. The COUNTY will advise the CONSULTANT, in writing, within ten (10) calendar days as to the period of time required by the COUNTY to determine if such a conflict of interest exists. If the COUNTY determines that there is a conflict of interest, CONSULTANT or such sub-consultant shall decline the representation upon written notice by the COUNTY.

ARTICLE 8.00 - CONFLICT OF INTEREST (Continued)

If the COUNTY determines that there is not such conflict of interest, then the COUNTY shall give its written consent to such representation. If CONSULTANT or sub-consultant accepts such a representation without obtaining the COUNTY'S prior written consent, and if the COUNTY subsequently determines that there is a conflict of interest between such representation and the work being performed by CONSULTANT or such sub-consultant under this Agreement, then the CONSULTANT or such sub-consultant agrees to promptly terminate such representation. CONSULTANT shall require each of such sub-consultants to comply with the provisions of this Section.

Should the CONSULTANT fail to advise or notify the COUNTY as provided hereinabove of representation which could, or does, result in a conflict of interest, or should the CONSULTANT fail to discontinue such representation, the COUNTY may consider such failure as justifiable cause to terminate this Agreement.

ARTICLE 9.00 - ASSIGNMENT, TRANSFER AND SUBCONTRACTS

The CONSULTANT shall not assign or transfer any of its rights, benefits or obligations hereunder, except for transfers that result from: (1) the merger or consolidation of CONSULTANT with a third party; or (2) the disestablishment of the CONSULTANT'S professional practice and the establishment of a successor consultant, or consulting organization. Nor shall the CONSULTANT subcontract any of its service obligations hereunder to third parties, except as otherwise authorized in this Agreement thereto, without prior written approval of the COUNTY. The CONSULTANT shall have the right, subject to the COUNTY'S prior written approval, to employ other persons and/or firms to serve as sub-consultants and/or subcontractors to CONSULTANT in connection with CONSULTANT providing and performing services and work pursuant to the requirements of this Agreement. The COUNTY shall have the right and be entitled to withhold such approval. Such approval shall not be unreasonably withheld.

In providing and performing the services and work required pursuant to this Agreement, CONSULTANT intends to engage the assistance of the sub-consultant(s) and/or subcontractor(s) set forth in EXHIBIT "D", entitled "CONSULTANT'S ASSOCIATED SUB-CONSULTANTS AND SUBCONTRACTORS", which EXHIBIT "D" is attached hereto and made a part of this Agreement.

ARTICLE 10.00 - APPLICABLE LAW

Unless otherwise specified, this Agreement shall be governed by the laws, rules, and regulations of the State of Florida, or the laws, rules, and regulations of the United States when providing services funded by the United States government.

ARTICLE 11.00 - COVENANTS AGAINST DISCRIMINATION

11.01 FOR PROJECTS WITH FUNDS APPROPRIATED FROM GENERAL LEE COUNTY REVENUES

The CONSULTANT for itself, its successors in interest, and assigns as part of the consideration thereof, does hereby covenant and agree that in the furnishing of services to COUNTY hereunder, no person on the grounds of race, color, national origin, handicap, or sex shall be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination. The CONSULTANT shall comply with Lee County's Affirmative Action Plan or state laws in the hiring of sub-consultants. CONSULTANTS who are uncertain of their obligation must obtain a copy of all relevant guidelines concerning Lee County's Affirmative Action Plan from the Lee County Department of Equal Opportunity.

11.02 FOR PROJECTS WITH FUNDS APPROPRIATED EITHER IN PART OR WHOLLY FROM FEDERAL OR STATE SOURCES

The CONSULTANT for itself, its successors in interest, and assigns as part of the consideration thereof, does hereby covenant and agree that in the furnishing of services to COUNTY hereunder, no person on the grounds of race, color, national origin, handicap, or sex shall be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination. The CONSULTANT shall make every effort to comply with any Disadvantaged Business Enterprise goals which have been established for this project. CONSULTANTS who are uncertain of their obligations regarding Disadvantaged Business Enterprises for this project must obtain a copy of all relevant federal or state guidelines from the Lee County Department of Equal Opportunity. The failure of the CONSULTANT to adhere to relevant guidelines shall subject the CONSULTANT to any sanctions which may be imposed upon the COUNTY.

ARTICLE 12.00 - WAIVER OF BREACH

Waiver by either party of a breach of any provision of this Agreement shall not be deemed to be a waiver of any other breach and shall not be construed to be a modification of the terms of this Agreement.

ARTICLE 13.00 - INSURANCE

13.01 INSURANCE COVERAGE TO BE OBTAINED

(1) The CONSULTANT shall obtain and maintain such insurance as will protect him from: (1) claims under workers' compensation laws, disability benefit laws, or other similar employee benefit laws; (2) claims for damages because of bodily injury, occupational sickness or disease or death of his employees including claims insured by usual personal injury liability coverage; (3) claims for damages because of bodily injury, sickness or disease, or death of any person other than his employees including claims insured by usual personal injury liability coverage; and (4) from claims for injury to or destruction of tangible property including loss or use resulting therefrom; any or all of which claims may arise out of, or result from, the services, work and operations carried out pursuant to and under the requirements of this Agreement, whether such services, work and operations be by the CONSULTANT, its employees, or by any sub-consultant(s), subcontractor(s), or anyone employed by or under the supervision of any of them, or for whose acts any of them may be legally liable.

(2) The insurance protection set forth hereinabove shall be obtained and written for not less than the limits of liability specified hereinafter, or as required by law, whichever is greater.

(3) The CONSULTANT, throughout the time this Agreement is in effect, shall require and ensure that any and all of its Sub-Consultants and/or SubContractors obtain, have, and maintain the insurance coverages required by law to be provided.

(4) The CONSULTANT shall obtain, have and maintain during the entire period of this Agreement all such insurance policies as are set forth and required herein.

(5) In the event that the CONSULTANT engages Sub-Consultants or SubContractors to assist the CONSULTANT in providing or performing services or work pursuant to the requirements of this Agreement, the insurance coverages required under Article 13.03 to be provided by the CONSULTANT shall cover all of the services or work to be provided or performed by all of the Sub-Consultants or SubContractors engaged by the CONSULTANT. However, in the event the services or work of Sub-Consultants or SubContractors engaged by the CONSULTANT is not covered by the CONSULTANT'S INSURANCE POLICY(s), it shall be the responsibility of the CONSULTANT to ensure that all Sub-Consultants or SubContractors have fully complied with the COUNTY insurance requirements for: (1) Worker's Compensation; (2) Comprehensive General Liability; (3) Comprehensive Automobile Liability; or (4) Professional Liability as required and set forth in Agreement Article 13.00.

The services or work to be provided or performed by the following Sub-Consultant(s) or SubContractor(s) identified in Agreement Exhibit "D" are exempted and excluded from the Professional Liability insurance coverage requirements set forth in this Agreement:

Service and/or work to be Provided and/or Performed	Indicate Name of Individual or Firm

(If none, enter the word "none" in the space below.)

Historic Resource / Parks & Recreation Facilities Archaeology	Archaeological Consultants Inc.
Public Involvement	Cella & Associates
Toll Equipment, Systems & Integration	Transcore

13.01 INSURANCE COVERAGE TO BE OBTAINED Continued

(6) The insurance coverage to be obtained by the CONSULTANT or by Sub-Consultants or SubContractors engaged by the CONSULTANT, as set forth in Agreement Article 13.03 for: (1) Workers' Compensation; (2) Comprehensive General Liability; (3) Comprehensive Automobile Liability; or (4) Professional Liability is understood and agreed to cover any and all of the services or work set forth in Agreement Exhibit "A" and all subsequent Change Order(s), Supplemental Agreement(s), Work Assignment(s), Supplemental Task Authorization(s), or Work Order(s). In the event the COUNTY shall execute and issue a written Change Order(s), or Work Order(s) or Supplemental Task Authorization(s) authorizing the CONSULTANT to provide or perform services or work in addition to those set forth in Agreement Exhibit "A", it is agreed that the COUNTY has the right to change the amount of insurance coverages required to cover the additional services or work. If the additional insurance coverages established exceeds the amount of insurance coverage carried by the CONSULTANT, the compensation established for the Change Order(s), Supplemental Agreement(s), Work Assignment(s), Supplemental Task Authorization(s), or Work Order(s) shall include consideration of any increased premium cost incurred by the CONSULTANT to obtain same.

13.02 CONSULTANT REQUIRED TO FILE INSURANCE CERTIFICATE(S)

(1) The CONSULTANT shall submit to PUBLIC WORKS ADMINISTRATION, CONTRACTS MANAGEMENT all insurance certificates which are required under this Agreement for review and approval with respect to compliance with the insurance requirements. After approval the COUNTY will execute this Agreement and issue a written Notice to Proceed. The CONSULTANT may then commence with any service or work pursuant to the requirements of this Agreement.

(2) All such insurance certificates shall be in a form and underwritten by an insurance company(s) acceptable to the COUNTY and licensed in the State of Florida.

(3) Each Certificate of Insurance submitted to the COUNTY shall be an original and shall be executed by an authorized representative of the insurance company affording coverage.

(4) Each Certificate of Insurance shall be addressed to the Lee County Board of County Commissioners, Attention: Public Works Administration, Contracts Management, P O Box 398, Fort Myers, Florida 33902-0398.

(5) Each Certificate of Insurance shall specifically include all of the following:

(A) The name and type of policy and coverages provided; and

(B) The amount or limit applicable to each coverage provided and the deductible amount, if any, applicable to each type of insurance coverage being provided; and

(C) The date of expiration of coverage; and

(D) The designation of the Lee County Board of County Commissioners both as an additional insured and as a certificate holder. (This requirement is excepted for Professional Liability Insurance and for Workers' Compensation Insurance); and

(E) A specific reference to this Agreement and the Project to which it pertains. (This requirement may be excepted for Professional Liability Insurance); or

In the event the CONSULTANT has, or expects to enter into an agreement for professional services other than those provided for in this Agreement, the CONSULTANT may elect to submit a certificate of insurance containing the following statement:

> "This policy covers the services or work provided or performed by the Named Insured for any and all projects undertaken for Lee County pursuant to one or more written Professional Services Agreements, or written Supplemental Agreements or Supplemental Task Authorizations, or Change Orders thereto, and the limit(s) of liability shown shall not be intended or construed as applying to only one project."

Upon receipt and approval of such a certificate of insurance the COUNTY will administer the insurance required for all such agreements utilizing the single "multi-project" certificate of insurance and a separate certificate of insurance will not be required for each separate agreement.

(F) The following clause must appear on the Certificate of Insurance:

> "Cancellation - Should any of the above described policies be cancelled before the expiration date thereof, the issuing company will endeavor to mail 30 days written notice to the Certificate Holder named."

(G) A statement indicating any services or work included in or required under Agreement Exhibit "A" Scope of Professional Services that is specifically excluded or exempted from coverage under the provisions, terms, conditions or endorsements of the CONSULTANT'S insurance policy(s). A statement which indicates any and all deductible amounts applicable to each type of insurance coverage required. In the absence of any such statements, the COUNTY will proceed with the understanding, stipulation and condition that there are no deductible amount(s), or exclusions or exemptions to the insurance coverage(s) provided.

(6) Each Certificate of Insurance shall be issued by an insurance agent and/or agency duly authorized to do so by and on behalf of the insurance company affording the insurance coverage(s) indicated on each Certificate of Insurance.

(7) If the initial, or any subsequently issued Certificate of Insurance expires prior to the completion of the work or termination of this Agreement, the CONSULTANT shall furnish to the COUNTY renewal or replacement Certificate(s) of Insurance, or Certified Binder(s), not later than fifteen (15) calendar days prior to the date of their expiration. Failure of the CONSULTANT to provide the COUNTY with such renewal certificate(s) shall be considered justification for the COUNTY to terminate this Agreement.

(8) If any of the insurance coverage(s) required by this Agreement shall reach the date of expiration indicated on the approved Certificate(s) of Insurance without the COUNTY having received satisfactory evidence of renewal or replacement, the CONSULTANT shall automatically and without further notice stop performing all previously authorized services and work. During any time period that the CONSULTANT'S services or work is suspended for failure to comply with the insurance requirements set forth in the Agreement, the CONSULTANT shall not be entitled to any additional compensation or time to provide and perform the required services or work and the COUNTY shall not be required to make payment on any invoices submitted by the CONSULTANT. Upon receipt and approval of renewal or replacement Certificates of Insurance, payment for any such invoices shall be made promptly by the COUNTY.

13.03 - INSURANCE COVERAGES REQUIRED

The CONSULTANT shall obtain and maintain the following insurance coverages as provided hereinbefore, and in the type, amounts and in conformance with the following minimum requirements:

(1) WORKERS' COMPENSATION

Coverage to comply for all employees for statutory limits in compliance with the applicable State and Federal laws. In addition, the policy must include the following:

(A) Employer's Liability with a minimum limit per accident in accordance with statutory requirements, or a minimum limit of $100,000 for each accident, whichever limit is greater.

(B) Notice of Cancellation and/or Restriction - The policy must be endorsed to provide the COUNTY with thirty (30) days prior written notice of cancellation and/or restriction.

(2) COMMERCIAL GENERAL LIABILITY

Coverage must be afforded on a form no more restrictive than the last edition of the Commercial General Liability Policy filed by the Insurance Services Office and must include the following:

(A) Minimum limits of $100,000 per occurrence and $300,000 aggregate for Bodily Injury Liability and a minimum limit of $100,000 for Property Damage Liability, or a minimum combined single limit of $300,000.

(2) COMMERCIAL GENERAL LIABILITY (Continued)

(B) Contractual coverage applicable to this specific Agreement including any hold harmless and/or such indemnification agreement.

(C) Such additional requirements as are set forth in Article 13.01 and 13.02 hereinabove.

(3) BUSINESS AUTOMOBILE LIABILITY

Coverage must be afforded on a form no more restrictive than the latest edition of the Business Automobile Liability Policy filed by the Insurance Services Office and must include the following:

(A) Minimum limits of $100,000 per person and $300,000 per accident for Bodily Injury Liability and a minimum limit of $100,000 for Property Damage Liability, or a minimum combined single limit of $300,000.

(B) Coverage shall include owned vehicles, hired and leased, or non-owned vehicles.

(C) Such additional requirements as are set forth in Articles 13.01 and 13.02 hereinabove.

(4) PROFESSIONAL LIABILITY

Coverage must include the following:

(A) A minimum aggregate limit of $1,000,000.00.

(B) Such additional requirements as are set forth in Articles 13.01 and 13.02 hereinabove.

(C) Should the Professional Liability Insurance Policy issued pursuant to the above requirements and limits be written so as to provide an applicable deductible amount, or other exclusion or limitation as to the amount of coverage to be provided within the minimum coverage limits set forth above, the COUNTY shall hold the CONSULTANT responsible and liable for any such difference in the amount of coverage provided by the insurance policy. In the event of any such deductible amount, exclusion or limitation, the CONSULTANT shall be required to provide written documentation that is acceptable to the COUNTY establishing that the CONSULTANT has the financial resources readily available to cover damages, injuries and/or losses which are not covered by the policy's deductible amounts, exclusions and/or limitations as stated above.

ARTICLE 14.00 - DUTIES AND OBLIGATIONS IMPOSED ON THE CONSULTANT

The duties and obligations imposed upon the CONSULTANT by this Agreement and the rights and remedies available hereunder shall be in addition to, and not a limitation of, any otherwise imposed or available by law or statute.

ARTICLE 15.00 - REPRESENTATION OF THE COUNTY

The CONSULTANT in providing and performing the services and work required pursuant to this Agreement thereto shall only represent the COUNTY in the manner and to the extent specifically set forth in writing in this Agreement or thereto, and as provided in any written WORK ORDER(S), SUPPLEMENTAL AGREEMENT(S), SUPPLEMENTAL TASK AUTHORIZATION(S), and CHANGE ORDER(S) issued thereunder.

In the event the CONSULTANT'S services or work involves construction contract administrative support services, the CONSULTANT is not authorized to act on the COUNTY'S behalf, and shall not act on the COUNTY'S behalf, in such a manner as to result in change(s) to (1) the cost or compensation to be paid the construction contractor, or (2) the time for completing the work as required and agreed to in the construction contract, or (3) the scope of the work set forth in the construction contract documents, unless such representation is specifically provided for, set forth and authorized in this Agreement or thereto.

The COUNTY will neither assume nor accept any obligation, commitment, responsibility or liability which may result from representation by the CONSULTANT not specifically provided for and authorized as stated hereinabove.

ARTICLE 16.00 - OWNERSHIP OF DOCUMENTS

All documents such as drawings, tracings, notes, computer files, photographs, plans, specifications, maps, evaluations, reports and other records and data relating to this project, other than working papers, specifically prepared or developed by the CONSULTANT under this Agreement shall be property of the CONSULTANT until the CONSULTANT has been paid for providing and performing the services and work required to produce such documents.

Upon completion or termination of this Agreement, or upon the issuance by the COUNTY of a written Change Order deleting all or portions of the scope of services or task(s) to be provided or performed by the CONSULTANT, all of the above documents, to the extent requested in writing by the COUNTY, shall be delivered by the CONSULTANT to the COUNTY within seven (7) calendar days of the COUNTY making such a request. In the event the COUNTY gives the CONSULTANT a written Notice of Termination of all or part of the services or work required, or upon the issuance to the CONSULTANT by the COUNTY of a written Change Order deleting all or part of the services or work required, the CONSULTANT shall deliver to the COUNTY the requested documents as set forth hereinabove, with the mutual understanding and commitment by the COUNTY that compensation earned or owing to the CONSULTANT for services or work provided or performed by the CONSULTANT prior to the effective date of any such termination or deletion will be paid to the CONSULTANT within thirty (30) calendar days of the date of issuance of the Notice of Termination or Change Order.

The CONSULTANT, at its expense, may make and retain copies of all documents delivered to the COUNTY for reference and internal use. The CONSULTANT shall not, and agrees not to, use any of these documents, and data and information contained therein on any other project or for any other client without the prior expressed written permission of the COUNTY.

ARTICLE 16.00 - OWNERSHIP OF DOCUMENTS (Continued)

Any use by the COUNTY of said documents, and data and information contained therein, obtained by the COUNTY under the provisions of this Agreement for any purpose not within the scope of this Agreement shall be at the risk of the COUNTY, and without liability to the CONSULTANT. The COUNTY shall be liable and agrees to be liable for and shall indemnify, defend and hold the CONSULTANT harmless for any and all claims, suits, judgments or damages, losses and expenses including court costs, expert witness and professional consultation services, and attorneys' fees arising out of the COUNTY'S use of such documents in a manner contrary to the provisions set forth hereinabove. The COUNTY hereby acknowledges receipt of $10.00 (ten and no hundreds dollars) and other good and valuable consideration from the CONSULTANT which has been paid as specific consideration for the indemnification provided herein.

ARTICLE 17.00 - MAINTENANCE OF RECORDS

The CONSULTANT will keep and maintain adequate records and supporting documentation applicable to all of the services, work, information, expense, costs, invoices and materials provided and performed pursuant to the requirements of this Agreement. Said records and documentation will be retained by the CONSULTANT for a minimum of five (5) years from the date of termination of this Agreement.

The COUNTY and its authorized agents shall, with reasonable prior notice, have the right to audit, inspect and copy all such records and documentation as often as the COUNTY deems necessary during the period of this Agreement, and during the period five (5) years thereafter; provided, however, such activity shall be conducted only during normal business hours and at the expense of the COUNTY, and provided further that to the extent provided by law the COUNTY shall retain all such records confidential.

ARTICLE 18.00 - HEADINGS

The HEADINGS of the Articles, Sections, Exhibits, Attachments, Phases or Tasks as contained in this Agreement are for the purpose of convenience only and shall not be deemed to expand, limit or change the provisions contained in such Articles, Sections, Exhibits, Attachments, Phases or Tasks.

ARTICLE 19.00 - ENTIRE AGREEMENT

This Agreement, including referenced Exhibits and Attachments hereto, constitutes the entire Agreement between the parties hereto and shall supercede, replace and nullify any and all prior agreements or understandings, written or oral, relating to the matters set forth herein, and any such prior agreements or understandings shall have no force or effect whatever on this Agreement.

The following listed documents, which are referred to hereinbefore, are attached to and are acknowledged, understood and agreed to be an integral part of this Agreement:

ARTICLE 19.00 - ENTIRE AGREEMENT (Continued)

(1) EXHIBIT "A" entitled "Scope of Professional Services" dated July 5, 2002.

(2) EXHIBIT "B" entitled "Compensation and Method of Payment" dated January 28, 2003.

(3) EXHIBIT "C" entitled "Time and Schedule of Performance" dated January 20, 2003.

(4) EXHIBIT "D" entitled "Consultant's Associated Sub-Consultant(s) and SubContractor(s)", dated January 20, 2003.

(5) EXHIBIT "E" entitled "Project Guidelines and Criteria", dated July 5, 2002.

(6) EXHIBIT "F" entitled "Truth in Negotiation Certificate", dated January 31, 2003.

(7) EXHIBIT "G" entitled "Insurance". (Containing copies of applicable Certificates of Insurance)

ARTICLE 20.00 - NOTICES AND ADDRESS OF RECORD

20.01 NOTICES BY CONSULTANT TO COUNTY

All notices required and/or made pursuant to this Agreement to be given by the CONSULTANT to the COUNTY shall be in writing and shall be given by the United States Postal Service Department first class mail service, postage prepaid, addressed to the following COUNTY address of record and sent to the attention of the County's Project Manager:

Lee County Board of County Commissioners
Post Office Box 398
Fort Myers, Florida 33902-0398

20.02 NOTICES BY COUNTY TO CONSULTANT

All notices required and/or made pursuant to this Agreement to be given by the COUNTY to the CONSULTANT shall be made in writing and shall be given by the United States Postal Service Department first class mail service, postage prepaid, addressed to the following CONSULTANT'S address of record:

20.02 NOTICES BY COUNTY TO CONSULTANT (Continued)

URS Corporation Southern
(CONSULTANT'S Business Name)

7650 West Courtney Campbell Causeway
(Street/P.O. Box)

Tampa, Florida, 33607
(City) (State) (Zip Code)

Telephone Number: (813)286-1711
Fax Number: (813)287-8229

ATTENTION: Jamshid Raoofi, P.E.
Project Director

20.03 CHANGE OF ADDRESS OF RECORD

Either party may change its address of record by written notice to the other party given in accordance with the requirements of this Article.

ARTICLE 21.00 - TERMINATION

This Agreement may be terminated by the COUNTY at its convenience, or due to the fault of the CONSULTANT, by the COUNTY giving thirty (30) day written notice to the CONSULTANT.

If the CONSULTANT is adjudged bankrupt or insolvent; if it makes a general assignment for the benefit of its creditors; if a trustee or receiver is appointed for the CONSULTANT or for any of its property; if it files a petition to take advantage of any debtor's act or to reorganize under the bankruptcy or similar laws; if it disregards the authority of the COUNTY'S designated representatives; if it otherwise violates any provisions of this Agreement; or for any other just cause, the COUNTY may, without prejudice to any other right or remedy, and after giving the CONSULTANT a thirty (30) calendar day written notice, terminate this Agreement.

In addition to the COUNTY'S contractual right to terminate this Agreement in its entirety as set forth above, the COUNTY may also, at its convenience, stop, suspend, supplement or otherwise change all, or any part of, the Scope of Professional Services as set forth in Exhibit "A", or the Project Guidelines and Criteria as set forth in Exhibit "E", or as such may be established by Supplemental Agreement or Supplemental Task Authorization or Change Order Agreement. The COUNTY shall provide written notice to the CONSULTANT in order to implement a stoppage, suspension, supplement or change.

ARTICLE 21.00 - TERMINATION (Continued)

The CONSULTANT may request that this Agreement be terminated by submitting a written notice to the COUNTY dated not less than thirty (30) calendar days prior to the requested termination date and stating the reason(s) for such a request. However, the COUNTY reserves the right to accept or not accept the termination request submitted by the CONSULTANT, and no such termination request submitted by the CONSULTANT shall become effective unless and until CONSULTANT is notified, in writing, by the COUNTY of its acceptance.

21.01 CONSULTANT TO DELIVER MATERIAL

Upon termination, the CONSULTANT shall deliver to the COUNTY all papers, drawings, models, and other material in which the COUNTY has exclusive rights by virtue hereof or of any business done, or services or work performed or provided by the CONSULTANT on behalf of the COUNTY.

ARTICLE 22.00 - AMENDMENTS

The covenants, terms and provisions set forth and contained in all of the Articles to this Agreement may be amended upon the mutual acceptance thereof, in writing, by both parties to this Agreement, as evidenced by Exhibit H for amending articles. In the event of any conflicts between the requirements, provisions and/or terms of the Agreement and any written Amendment (Exhibit H), the requirements, provisions and/or terms of the Amendment shall take precedence.

ARTICLE 23.00 - MODIFICATIONS

Modifications to covenants, terms and provisions of this Agreement shall only be valid when issued in writing as a properly executed SUPPLEMENTAL AGREEMENT(S), or WORK ORDER(S) or CHANGE ORDER(S) or SUPPLEMENTAL TASK AUTHORIZATION(S). In the event of any conflicts between the requirements, provisions, and/or terms of this Agreement and any written SUPPLEMENTAL AGREEMENT(S), WORK ORDER(S), CHANGE ORDER(S), and/or SUPPLEMENTAL TASK AUTHORIZATIONS, the latest executed SUPPLEMENTAL AGREEMENT(S), WORK ORDER(S), CHANGE ORDER(S), and/or SUPPLEMENTAL TASK AUTHORIZATION(S) shall take precedence.

In the event the COUNTY issues a purchase order, memorandum, letter, or other instruments covering the professional services, work and materials to be provided and performed pursuant to this Agreement, it is hereby specifically agreed and understood that such purchase order, memorandum, letter or other instruments are for the COUNTY'S internal control purposes only, and any and all terms, provisions and conditions contained therein, whether printed or written, shall in no way modify the covenants, terms and provisions of this Agreement and shall have no force or effect thereon.

No modification, waiver, or termination of the Agreement or of any terms thereof shall impair the rights of either party.

ARTICLE 24.00 - ACCEPTANCE

Acceptance of this Agreement shall be indicated by the signature of the duly authorized representative of the hereinabove named parties in the space provided hereinafter and being attested and witnessed as indicated.

IN WITNESS WHEREOF, the parties hereto, by their duly authorized representatives, have executed this Agreement effective the day and year first written above.

ATTEST:
CLERK OF CIRCUIT COURT
Charlie Green, Clerk

BY: Michele G Cooper
Deputy Clerk

COUNTY: LEE COUNTY, FLORIDA
BOARD OF COUNTY COMMISSIONERS

BY: Ray Judah
CHAIRMAN

DATE: 3/11/03

APPROVED AS TO FORM

BY: Andrea R. Fraser
County Attorney's Office

ATTEST:

(Witness)

(Witness)

URS Corporation Southern

Tampa, Florida
(CONSULTANT)

BY: _____
(Authorized Signature)

Vice President
(Title)

DATE: _____

CORPORATE SEAL:

REV:10/28/93

EXHIBIT A

Date: 7/5/02

SCOPE OF PROFESSIONAL SERVICES

for

Sanibel bridge toll plaza reconstruction (including a new administration building) and Cape Coral bridge toll plaza reconstruction

BASIC SERVICES

Section 1. GENERAL SCOPE STATEMENT

The Consultant shall provide and perform the following professional services which shall constitute the GENERAL SCOPE of the BASIC SERVICES under the covenants, terms and provisions of this PROFESSIONAL SERVICES AGREEMENT.

The CONSULTANT shall conduct surveys, prepare an environmental impact summary, develop traffic data, final plans and specifications, coordinate all utility system adjustments, prepare cost estimates, bid documents, contract documents, all government permit applications which may be required from the U.S. Army Corp. of Engineers, the Florida Department of Environmental Protection, Florida Department of Transportation, the E.P.A., the South Florida Water Management District and Lee County Department of Community Development (Development Order) for the following roadway project:

The Scope of this project will encompass the reconstruction of Summerlin Rd. from 600' East of the Directional median opening directly east of the Sanibel Toll Plaza to the approach slab of Span "A" of the Sanibel Bridge to include the elevation and/or hardening of the roadway to withstand a category 3 hurricane storm surge. Additionally this project will include the reconstruction of the toll plaza itself as well as the administration building in a manner and location to be negotiated with the selected consultant.

The project will also consist of milling and resurfacing College parkway from the East end of the approach slab of the Cape Coral Bridge to the west end of the barrier wall on the McGregor overpass, as well as the reconstruction of the toll plaza itself.

This Contract Document does not entitle any firm to exclusive rights to County contracts. The County reserves the right to perform any and all required work in house or by any means it so desired.

Section 2. TASKS

Pursuant to the General Scope of the Basic Services stated hereinabove, the CONSULTANT shall perform all services and/or work necessary to complete the following tasks(s) and/or provide the following item(s) which are enumerated to correspond to the task(s) and/or item(s) set forth in EXHIBIT "B" entitled "COMPENSATION AND METHOD OF PAYMENT."

TASK INDEX

1.00 Architecture Development
2.00 Engineering & Land Surveys
3.00 Geotechnical Services
~~4.00 Environmental Inventory and Impact Summary~~
5.00 Traffic Data
6.00 Roadway Plans
7.00 Utility Relocation Plans
9.00 Lighting Plans
10.00 Signing and Pavement Marking Plans
11.00 Permits
12.00 Final Bidding and Contract Documents
13.00 Advisory Services During Bidding
14.00 Construction Contract Administration Support Services
15.00 Expenses – L.S.

TASK 1.00 – Archetecture Development

Phase I - 30% Design Development

After receipt of written authorization to proceed from the Department and based on the approvals and any authorized adjustments to the Project Scope, Project Schedule or Budget, the Design Professional shall prepare, submit and present for approval by the Department, Phase I (30%) documents, comprised of but not limited to the following:

b) Documents

- Architectural and Civil site and roadway plan(s) showing, in addition to site survey requirements, landscaping, drainage, water retention ponds, sewage disposal and water-supply system, chilled water supply and return piping and such physical features that may adversely affect or enhance the safety, health, welfare, visual environment, or comfort of the occupants.
- A statement on the site plan signed and dated by the Design Professional or his designated Sub-Consultant, identifying the number of existing trees, the number and size of required trees, and the number of proposed trees to be planted and other relevant features.
- Soil testing results including a copy of the Geotechnical Engineer's report on the site, and proposed method of treatment when unusual soil conditions or special foundation problems are indicated.

c) Drawing(s) to include as a minimum, the following deliverables:

- Floor plan drawn at an architectural scale that will allow the entire facility to be shown on one sheet, without breaklines, and which indicates project phasing as applicable to the Scope.

- Floor plans drawn at 1/8 inch or larger scale showing typical occupied spaces or special rooms with dimensions, sanitary facilities, stairs, elevators, identification of accessible areas for the disabled and other program requirements.
- Floor plans drawn at 1/4 inch or larger scale showing typical spaces or special rooms with dimensions, indicating door and window layouts and other relevant features.
- For alterations or additions to an existing facility: Indicate the connections and tie-ins to the existing facilities, including all existing spaces, exits, plumbing fixtures and locations and any proposed changes thereto. Distinguish between new and existing areas for renovation, remodeling, or an addition and show demolition plans of areas to be removed.
- Furniture and Equipment plans drawn at 1/4 inch or larger scale showing typical spaces or special rooms with dimensions, equipment and furnishing layouts and other relevant features.
- Reflected ceiling plans drawn at 1/4 inch or larger scale showing typical spaces or special rooms with dimensions, lighting equipment and ceiling panel layouts.
- Roof and miscellaneous plans to be drawn at 1/8 inch or larger scale showing dimensioned features penetrations, equipment and other relevant features.
- Plumbing fixture locations and fixture unit calculations, isometrics, one line diagram and riser details, schedule and other relevant features.
- All exterior building elevations to illustrate and indicate the scale, finish, size and detail of the facility.
- Sufficient building and wall sections to show dimensions, proposed construction material, and relationship of finished floor to finished grades.
- Preliminary Structural Drawings to include plans and sections indicating systems, connections and foundations.
- Mechanical Drawings to include ceiling plans with a single line duct layout, location of grease trap(s), LP gas tank location, natural gas piping to existing utilities. Provide narrative description to include a description of proposed HVAC system equipment including the chiller, pumps, AHUs, cooling tower, electric duct heaters and other relevant features.
- Electrical Drawings include plans with lighting layouts for outdoors and interior spaces, and a single-line diagram of the electrical distribution and electrical outlets for all spaces. Provide layout for energy management, computer networking and security systems, and show location of all the main components of the electrical system, transformers, panels, main switchboard, emergency generator, intercom console and fire alarm panel. Also show locations of mechanical equipment such as chillers, compressors and air handler units and their respective electrical connections and other relevant features.

- Equipment and Furnishing Schedules to indicate equipment that will be provided by the Contractor and those that will be provided by the Department or others.

d) Life-Safety plans to show exit strategy, rated doors, emergency wall openings, range and fume hoods, eye wash, emergency showers, ~~ramps, vertical lifts and other relevant features.~~

- By symbol, indicate fire extinguishers, fire alarm equipment, smoke vents, master valves and emergency disconnects, emergency lighting, emergency power equipment, fire sprinklers, exit signs, smoke and fire dampers, and other life-safety equipment relevant to the facility.
- By symbol, indicate connections and tie-ins to existing equipment.

e) For existing facilities where remodeled or renovated spaces are required and where an ADA and code conforming ramp cannot be utilized, document proposed vertical platform lifts or inclined wheelchair lifts and provide the following documents as part of or in addition to the required life safety plans:

- Floor plans of proposed vertical platform lifts including layout drawings showing corridor widths and exiting from the affected facility.
- Sketches of proposed inclined wheel chair lift to include layout drawings showing clear and affected areas of the following conditions stairway width in the folded and unfolded position, the upper and lower platform storage locations, and the means of egress from the affected areas of the facility.

f) Outline specifications:

- Organized to conform to the formats for outline specifications as established by the Construction Specifications Institute's current edition of Master Format on the date of execution of the Contract.
- Complete for Divisions 2 through 16 for finishes, material, and systems including civil, structural, HVAC, electrical, plumbing and specialty items, including fire sprinklers, alarm systems, electronic controls and computer networking components.

g) Other Requirements:

- Provide a Life-Cycle Cost Analysis (LCCA) for review and approval. LCCA shall be by a commercially available life-cycle cost analysis program and as required by the State of Florida and the Department.
- Deign to meet or exceed Florida Energy Efficiency Code for Building Construction (FEEC). Submit completed FEEC forms, including calculations for mechanical systems, documenting energy efficiency ratio rating of HVAC equipment, electrical systems, insulation, and

- building envelope shall be submitted to the Department for review and approval.
- The Design Professional shall advise the Department of any adjustments to the budget and shall submit a fully detailed Phase I estimate of probable construction cost, projected to the expected time of bid and containing sufficient detail to provide information necessary to evaluate compliance with the Construction Budget set for this project. Format estimate and provide detail matching the organization and content of the project's Outline Specifications complete for Divisions 2 through 16.
- Provide an updated Project Development Schedule reflecting development and anticipated schedules for all subsequent project activities.
- A letter indicating, the extent of any known or suspected asbestos containing materials or other potentially hazardous materials which might require mitigation by the Owner prior to or during construction of the Project. Establish and confirm responsibility for removing the asbestos or other hazardous materials in the design development documents and coordinate with Project Development Schedule, Statement of Probable Construction Cost and other documentation.
- Preliminary color boards to review two color selection schemes.

h) Staff from each of the Design Professional's major technical disciplines, and Sub-Consultants shall attend coordination, review and presentation meetings with the Owner to explain the design concept and technical resolution of their respective building or site systems.

i) The Design Professional shall submit five (5) sets of all documents required under this phase without additional charge, for approval by the Owner. The Design Professional shall not proceed with the next phase until the completion of all required presentations and reports and receipt of a written Authorization to Proceed with the next phase.

Phase II – 60% Documents:

After written Authorization to Proceed from Department and based on the approved Phase I documents-and any adjustments in the scope or quality of the project or in the Fixed Limit of Construction Cost authorized by Department, the Design Professional shall prepare for approval by Department, Phase II (60% Construction) Documents setting forth in detail the requirements for the construction of the Project: The Design Professional is responsible for the full compliance of the design with all applicable codes. Phase II documents comprised of but not limited to the following:

j) Documents

- Updated Florida Energy Efficiency Code for Building Construction (FEEC) compliance forms.
- Calculations: Provide preliminary calculations for structural, mechanical and electrical systems.

k) Drawings

Site Plan(s) and detailing which, in addition to the Phase I requirements, indicate the following:

- Spot elevations, based on the civil grading plan, for the perimeter of the new construction, sidewalk, or any other areas pertinent to the drainage of rainwater.
- Location of storm water service for new construction roof drainage.
- Parking lot lighting poles, location and type.
- Final location for manholes, handholds, pull boxes.
- Layout of underground distribution systems (normal power emergency power, fire alarm, master clock, intercommunication, television, telephone, security, control and spares).
- Locations of all site improvements, playground and equipment, street furniture, planters and other features.
- Details of all curbing, typical parking spaces (regular and handicap accessible), handicap ramps, directional signage, site lighting, flagpole and fence foundations, and any other site conditions pertinent to the scope of work.

l) A plan to delineate, staging, areas, site barriers, and other area designations to control the public from construction activities and traffic.

m) Landscape plazas and detail including, a plant list clearly noted and cross-referenced in accordance with Lee County standards, details for shrub and tree plantings, identification of plants and trees to remain, be removed or relocated, and other necessary documentation.

n) Irrigation plans and details delineating the entire area of the project, and addressing necessary connections, alteration, repair or replacement of any existing irrigation.

o) Floor plans to include the following:

- All dimensions and any cross references explaining the extent of work, wall types, or other component, assembly or direction regarding the Construction.
- Wall chases, floor drains and rainwater leaders.
- Show structural tie columns and coordinate with the floor plan.
- Cross referenced interior elevations.
- Delineate and note all built-in cabinetry or equipment.
- Identify room and door numbers with all doors having individual numbers.

p) Demolition Plans: Indicate required demolition activities.

- Provide separate demolition plan(s) and other drawings (elevations, sections, etc.) if the scope of work includes demolition which is too excessive to indicate in drawings depicting new construction.
- Indicate notes on the extent of the demolition: address dimensions at locations where partial walls are being removed or altered, existing room names and numbers, existing partitions, equipment, plumbing, HVAC or electrical elements,
- Include notes dealing with protection of existing areas as a result of demolition.
- Delineate any modifications to existing buildings involving structural elements within the structural documents rather than on the architectural.

q) Building elevations developed further than at Phase II and including delineation of building joints (including dimensionally located stucco control joints), material locations, elevation height, and other building features.

r) Building and wall sections to establish vertical controls and construction types. Include clear graphic, and notes on construction assemblies and systems to be used, dimensions, heights. Provide, associated detailing to delineate solutions for difficult connections.

s) Reflected ceiling plans to indicate ceiling types, heights, light fixture types, mechanical diffuser and return location, and sprinkler heads if area is sprinklered. Delineate and detail any dropped soffits or joint conditions between different materials. Coordinate with architectural, electrical, mechanical and plumbing disciplines.

t) Roof Plans

- Indicate all roof penetrations, including drains, scuppers, exhaust fans any other equipment on the roof. Show direction of roof slopes with elevations at the high and low points, type of roofing system to be used, expansion joints, typical parapet and flashing details.
- Provide dimensions to locate all penetrations, and cross-reference details.

u) Large scale building details as appropriate to this level of document development and as required to establish vertical controls for the Project, Include clear graphics, and notes on construction assemblies and systems to be used, dimensions heights. Provide associated detailing to delineate solutions for difficult connections.

v) Interior elevations of all rooms including cross references of cabinetry details, dimensions and heights, notes indicating type of equipment (and whether equipment is in or out of contract), wall materials, finishes, and classroom equipment and accessories.

w) Details of casework as necessary to appropriately delineate custom or pre-manufactured casework. Provide appropriate schedules referencing manufacturer's numbers or catalogs, finishes, hardware and other construction characteristics.

x) Details of the following:

- Door jamb, head and sill conditions.
- Wall and partition types.
- Window head, sill and jamb conditions, and anchorage methods shown, in lieu of referencing to manufacturer's standards.
- Interior signage to include classroom and building identification, emergency exiting and equipment signs, and any other items pertinent to the identification of the project. Coordinate with electrical discipline.
- Interior and exterior expansion control connections.
- Any other specialized items necessary to clearly express the intent of the project design.

y) Room finishes and door schedules coordinated with the floor plans, developed to 60% completion

z) Structural foundation and framing plans, with associated diagrams, schedules, notes, detailing and section drawings completed sufficiently to communicate the design intent and coordination with other disciplines.

aa) Mechanical Drawings

- Provide double line ductwork layout and HVAC equipment layout drawings with related diagrams and schematic diagrams, schedules,. notes, detailing and section drawings completed sufficiently to communicate the design intent and coordination with other disciplines.
- Provide plumbing equipment, and fixture drawings with related diagrams, schedules, notes, detailing and section drawings completed sufficiently to communicate the design intent and coordination with other disciplines.
- Provide dimensioned 1/2 inch scale plans, elevations and sections of the mechanical rooms showing service, clearance, room openings, nominal equipment size, ceiling height, duct clearance between bottom of joist and top of ceiling and any ceiling mounted lighting fixtures, electrical equipment or other building assembly or component, etc.

bb) Electrical: Provide drawings for the following systems:

- Lighting including, circuiting and luminaire identification and switching. Also provide illuminance computer print out for all indoor typical indoor spaces and parking lots.
- Convenience outlets and circuiting, special outlets and circuiting, and power systems and equipment. Provide riser diagrams for all ~~electrical systems including master clock, intercom, fire alarm, ITV,~~ computer networking/telephone. Also, provide for emergency and normal power distribution. Provide light fixture schedule.
- Panel schedule may be in preliminary form but circuitry must be included.
- Applicable installation details.
- General legend and list of abbreviations.
- Voltage drop computations for all main feeders.
- Short circuit analysis
- Provide 1/2" scale floor plan and wall elevations for all electrical rooms.
- Indicate surge protector for main switchboard and electrical panels.

cc) Specifications

- Provide preliminary Project Manual including front-end documents. Completion of fill-in items in Bidding documents and other "Division 0"documents is not required.
- Provide a preliminary Division 1 based upon the standard documents provided by the Owner and edited by the Design Professional after consultation with the Owner to establish project specific requirements.
- Include progress set of all other Sections in Divisions 2-16 with each section developed to demonstrate to the Owner an understanding of the project and an appropriate level of developmental progress comparable to that of the drawings.
- Specification sections shall be organized to follow the Construction Specification Institute's (CSI) current edition of Master Format with each section developed to include CSI's standard 3-part section and page formats with full paragraph numbering.

dd) An updated Project Development Schedule, formatted as a preliminary construction schedule reflecting continued Project development and illustrating anticipated schedules for all subsequent project activities including permitting and submittal coordination with all agencies having jurisdiction on the Project, project phasing, site, mobilization, temporary facilities, general construction sequencing, anticipated substantial completion dates, Department occupancy, and all other significant Project events.

ee) Colorboards illustrating color selections, finishes, textures and aesthetic qualities for all finish materials for final review and approval by the

Department, and to establish a final palette of material selections for development of subsequent specifications, schedules and other requirements for incorporation into the Contract Documents.

ff) A letter from the Design Professional and each of the major technical disciplines and any necessary Sub-Consultants or explaining how each previous comment concerning the project has been addressed or corrected.

gg) Staff from each of the Design Professional's major technical disciplines, and Sub-Consultants shall attend coordination, review and presentation meetings with the Owner to explain the design concept and technical resolution of their respective building or site systems.

hh) The Design Professional shall submit five (5) sets of all documents required under this phase without additional charge, for approval by the Owner. The Design Professional shall not proceed with the next phase until the completion of all required presentations and reports and receipt of a written Authorization to Proceed with the next phase.

Phase III - 100% Construction Documents Submittal:

After written Authorization to Proceed from Department and based on the approved Phase II documents and any adjustments in the scope or quality of the project or in the Fixed Limit of Construction Cost authorized by Department, the Design Professional shall prepare for approval by Department, Phase III (100% Construction) Documents setting forth in detail the requirements for the construction of the Project: The Design Professional is responsible for the full compliance of the design with all applicable codes. Phase III documents, comprised of but not limited to the following:

a) General Requirements

- Updated Florida Energy Efficiency Code for Building Construction (FEEC) compliance forms. Submit five (5) copies signed and sealed by a State of Florida registered design professional.
- Signed and Sealed/Statements of Compliance: Only complete documents, properly signed and sealed by the Project Consultant and respective Sub-Consultants, will be accepted for review; in addition, these documents shall contain a statement of compliance by the architect or engineer of record as follows: "To the best of my knowledge and belief these drawings, and the project manual are complete, and comply with the Department of Transportation Requirements".
- Submit engineering calculations for mechanical, electrical, and structural systems in a separately bound manual.

ii Drawings

The drawings shall include, all previous phase review requirements and the Phase III, 100% document requirements specified above, along with the following:

- Site plans including, but not limited to, area location map, legal description of property, demolition, excavation, utilities, finish grading, landscaping, mechanical, electrical, civil/structural, and architectural site plans:
- Drawings include at a minimum, the following:
- Key sheets including a table of contents and statement of compliance by the design professional. Each discipline shall have a list of abbreviations, schedule of material indications, and schedule of notations and symbols at the beginning of their section of the plans.
- Architectural drawings including floor plans, door, window and finish schedules, roof plans, elevations, sections, and details.
- Civil/Structural drawings including paving, traffic loops, service drives, parking; drainage; foundation plans; floor plans; roof plans; structural plans; sections; details; and, pipe, culvert, beam and column schedules.
- Mechanical drawings including floor plans; sections; details; riser diagrams; kitchen exhaust hoods; and, equipment, fan, and fixture schedules.
- Electrical drawings including floor plans; sections; details; riser diagrams, and fixture and panel schedules.
- The drawings should indicate that the approved mechanical/electrical systems, from the previous phases FEEC/LCCA analysis, have been incorporated into the documents.

i. Staff from each of the Design Professional's major technical disciplines, and Sub-Consultants shall attend coordination, review and presentation meetings with the Owner to explain the design concept and technical resolution of their respective building or site systems.

ii. The CONSULTANT shall undertake a Public Involvement program which shall include the following:

Develop and maintain a mailing list of elected and appointed officials in the local area, permit and review agencies, property owners, and any other interested parties.

Prepare a written narrative suitable for hand-out at the Public Information meeting and for general information. The narrative shall address the following topics.

i) Description of the Proposed Project.
ii) Description of proposed maintenance of traffic.

iii. The Design Professional shall submit five (5) sets of all documents required under this phase without additional charge, for approval by the Owner. The Design Professional shall not proceed with the next phase until the completion of all required presentations and reports and receipt of a written Authorization to Proceed with the next phase.

Phase IV Final Construction Documents Submittal:

After written Authorization to Proceed from Department and based on the approved Phase III documents and any adjustments in the scope or quality of the project or in the Fixed Limit of Construction Cost authorized by Department, the Design Professional shall prepare for approval by Department, Phase IV (Final Construction) Documents setting forth in detail the requirements for the construction of the Project: The Design Professional is responsible for the full compliance of the design with all applicable codes. Phase IV documents, comprised of but not limited to the following:

iv. General Requirements.

- This submittal is the official record set and shall be the bid documents.
- Signed and Sealed/Statements of Compliance: Only complete documents, properly signed and sealed by the Project Consultant and respective Sub-Consultants, will be accepted for review; in addition, these documents shall contain a statement of compliance by the architect or engineer of record as follows: "To the best of my knowledge and belief these drawings, and the project manual are complete, and comply with the Department of Transportation Requirements".
- Submit engineering calculations for mechanical, electrical, and structural systems in a separately bound manual.

v. Drawings

The drawings shall include, all previous phase review requirements and the Phase IV, final document requirements specified above, along with the following:

- Site plans including, but not limited to, area location map, legal description of property, demolition, excavation, utilities, finish grading, landscaping, mechanical, electrical, civil/structural, and architectural site plans:
- Drawings include at a minimum, the following:

-
- Key sheets including a table of contents and statement of compliance by the design professional. Each discipline shall have a list of abbreviations, schedule of material indications, and schedule of notations and symbols at the beginning of their section of the plans.
- Architectural drawings including floor plans, door, window and finish schedules, roof plans, elevations, sections, and details.
- Civil/Structural drawings including paving, traffic loops, service drives, parking; drainage; foundation plans; floor plans; roof plans; structural plans; sections; details; and, pipe, culvert, beam and column schedules.
- Mechanical drawings including floor plans; sections; details; riser diagrams; kitchen exhaust hoods; and, equipment, fan, and fixture schedules.
- Electrical drawings including floor plans; sections; details; riser diagrams, and fixture and panel schedules.
- The drawings should indicate that the approved mechanical/electrical systems, from the previous phases FEEC/LCCA analysis, have been incorporated into the documents.

vi. Upon completion of the Final Construction Documents, the Design Professional shall submit to the Owner five (5) copies of the Drawings, Specifications, reports, programs, a final up dated Project Development Schedule, a final up-dated Statement of Probable Construction Cost and such other documents as reasonably required by Owner.

vii. All documents for this phase shall be provided in both hard copy and in electronic media. The Department will approve Phase IV documents for submission to the Department for review and approval.

TASK 2.00 - ENGINEERING AND LAND SURVEYS

The CONSULTANT shall perform engineering, land survey, and aerial photography services necessary for the subject project as outlined; reference all centerline survey control points; establish the bench line on NGVD (1929) throughout the project and tie property lines to comply with Florida Department of Natural Resources Rule, Florida Administrative Code Chapter 16 Q-3 (Florida Status 177 - Part Two). Horizontal data will be referenced to the State plane coordinate system, Florida West Zone, NAD 1983, 1990 adjustment.

Survey work shall be performed under the responsible charge of a Professional Land Surveyor registered in the State of Florida and shall be accomplished in accordance with the Florida Department of Transportation Policy 760,000-760.012, and Florida Department of Transportation Location Manual. Work must comply with the minimum technical standards for Land Surveyors Rule 2IHH-6, Florida Statute 472.027; measurements of regular roadway cross-sections may be recorded on electronic data

collection equipment.

Task 2.01 Roadway Survey

Provide engineering and land surveys necessary to establish the roadway alignment within the project limits and obtain topography, cross sections, underground utilities, right-of-way, land ties and required drainage information for existing and proposed drainage systems and in accordance with the master drainage plan/storm run-off treatment areas.

Task 2.02 Underground Utilities

Field locate existing underground utilities, as deemed necessary to identify conflicts or potential conflicts with existing utilities during roadway and drainage construction. Horizontal and vertical location of underground utilities will be obtained prior to completion of Task 6.02. This task includes coordination with various utility companies and assumes that the respective utility shall be responsible for "pot holing" said underground systems. The horizontal and vertical location of each utility will be documented, based on the "pot-holing" performed by the respective utility company or the consultant.

Task 2.03 Jurisdictional Wetlands Survey

After jurisdictional wetland lines have been flagged and verified by the agencies, the jurisdictional line will be surveyed.

Task 2.04 Planimetric

The Consultant shall provide planimetrics of the project area sufficient to define topographical (three dimensional) details along the proposed roadway for the width of the right of way and adjacent county owned property.

TASK 3.00 - GEOTECHNICAL SERVICES

The CONSULTANT shall furnish soils investigation and analysis necessary for the design and preparation of construction plans for this project. A report shall be prepared with recommendations, and pertinent soils data, including the water table, and shall be submitted to the COUNTY for its record.

Task 3.01 Soil Borings and Laboratory Testing

a) Soil Auger Borings shall be obtained on a 200' grid over the project area not paved. Auger Borings shall be minimum of 5 feet deep with soil classifications. All auger borings are to stop if rock is encountered.

b) In areas where unsuitable material, such as muck, is found, borings shall be taken at each station every 25 feet across the

entire width of the proposed right-of-way to determine the extent of the unsuitable stratum.

c) A minimum of two deep test borings complete with soil classifications and blow counts will be obtained within the construction limits of the structures.

d) Laboratory testing, sufficient to enable a Geotechnical Engineer ~~registered in the State of Florida, to analyze subsurface soil~~ conditions and make design recommendations, shall be performed. Such tests may include, but shall not be limited to, grain size analysis, Atterberg limits, organic content, etc.

Task 3.02 Reports

Prepare a report summarizing the findings and provide recommendations or roadway and bridge foundation design.

TASK 4.00 - ENVIRONMENTAL INVENTORY

The CONSULTANT shall furnish a report summarizing the impact of the project on Hydrology, Vegetation, Wildlife, Wetlands, Floodplains or Riverine Areas, Land Use, Parks and Recreation areas and Archaeology of the area. The report shall contain the following:

Task 4.01 Hydrology

a) A diagram depicting the hydrology of the area.

b) A description of the potential impact to ground and surface water resulting from the project.

Task 4.02 Vegetation

a) A listing of vegetation found within the project limits.

b) An aerial map of the vegetation associations.

Task 4.03 Wildlife

a) An inventory of wildlife found within the project limits as well as the habitat type and species associated with that habitat and an assessment of potential impacts both direct and secondary.

Task 4.04 Wetlands

a) An aerial of the wetland area within and adjacent to the project limits. Jurisdictional limits of permitting agencies such as, but not necessarily limited to, the Florida Department of Environmental Regulation and United States Army Corp. of Engineers shall be shown as well as the extent of Resource Protection Areas as defined by the

b) A description of the impact on wetland by the project and mitigation requirements to offset adverse impacts.

Task 4.05 Floodplains or Riverine Areas

a) An aerial map showing the extent of floodplains or riverine areas impacted by the project.

b) A description of the impact on floodplains or riverine areas by the project and mitigation requirements to offset adverse impacts.

Task 4.06 Land Use

a) A description of any variances that may be required from provisions of the Lee County Comprehensive Plan.

Task 4.07 Historic Resources/Parks and Recreation Facilities

a) A description of Historic Resources and any Parks or Recreation Facilities located within or adjacent to project limits.

b) A description of potential adverse impacts on these resources as a result of the project and what actions will be taken to avoid or minimize these impacts.

Task 4.08 Archaeology

a) An aerial map showing the location of any archaeological sites that are within or adjacent to the project limits.

b) A description of the archaeological site(s), any adverse impacts created by the project and mitigation requirements to offset the adverse impacts.

TASK 5.00 - TRAFFIC DATA AND GEOMETRIC CONCEPTS

The CONSULTANT shall obtain and develop the traffic data needed to design the project from data available from the COUNTY (existing lane volumes - most current Annual Average Daily Traffic (AADT) supplemented by hourly machine counts over a 24-hour period and/or manual counts as required. The CONSULTANT shall:

Task 5.01 Establish Lane assignments - With consideration of available right-of-way, in accordance with design and safety criteria.

Task 5.02 Establish at-grade geometry for the project.

TASK 6.00 - ROADWAY PLANS

The Consultant shall furnish design services necessary to perform project design and prepare roadway and culvert construction plans and specifications in accordance with the highway design and plans preparation standards in effect on the date this Agreement is approved by the COUNTY as set forth in the Florida Department of Transportation Standard Specifications, Florida Department of Transportation Roadway Plans Preparation Manual, Drainage Manual, and Federal Highway Planning Manual, 6-7-3-2. Plans shall be accurate, legible and complete in design.

Roadway plans shall be prepared to include: plotting of survey data; establishment of profile grades; preparation of key map, plan-profile sheets (including geometric calculations), typical section sheets, summary of quantities (including computation booklet), maintenance of traffic plans, cross-section sheets (including earthwork computations) and other detail sheets necessary to convey the intent of the design for the Scope of Services outlined herein.

The CONSULTANT shall submit design notes and computations to document the design conclusions reached during the development of the final construction plans.

The design notes and computations shall be recorded in 8-1/2" x 11" computation sheets, fully titled, numbered, dated, indexed, and signed by the designer and checker. Computer output forms and other oversized sheets shall be folded or otherwise reduced to 8-1/2" x 11" size. The data shall be bound for submittal to the County.

One copy of the appropriate design notes and computations shall be submitted to the COUNTY at each plan review stage. When the plans are submitted for final review, the design notes and computations, corrected for any COUNTY comments, shall be resubmitted. At the project completion, a final set of the design notes and computations shall be submitted with the record set of plans and tracings.

The design notes and calculations shall include, but not be limited to, the following data:

1. Design criteria used for this project.

2. Geometric design calculations for horizontal alignment that is not included in the quantity computation booklet.

3. Vertical geometry calculations with rationale for establishment of minimum pavement elevations.

4. Drainage computations.

5. Earthwork calculations not included in the quantity computation booklet.

6. Documentation of decisions reached resulting from meetings, telephone conversations or site visits.

7. Calculations of quantities for all items set forth in the Bid Form.

8. Pavement design.

Each drawing of each submittal shall be signed by the appropriate Professional Engineer for the type of work depicted on the drawings. Each set of plans and each page of the design computations and quantity computation booklet shall be signed and ~~checked by an appropriate design professional in accordance with the Florida~~ Department of Transportation's Roadway Plan Preparation Manual. Each submittal called for below shall be delivered with a transmittal letter signed by the CONSULTANT's Project Manager stating that the submittal package is complete. Work may not proceed on the next submittal until written review comments from the COUNTY have been given to the CONSULTANT and appropriate modifications have been made by the CONSULTANT to the plans, designs, etc.

The CONSULTANT shall conduct project plan reviews with the COUNTY, as a minimum, at the Grades and Geometrics (30%), Basic Plan (60%), and Detail Plan (90%) stages. Plan development at the respective submittal stages shall conform to the following:

Task 6.01 Grades and Geometrics (30%)

The CONSULTANT shall submit to the COUNTY five (5) sets of prints for review purposes. The plans shall depict existing topographical features, existing right-of-way and easement lines and shall contain the following:

a) Plan and Profile Sheets (1" = 40').

b) Existing project cross-section sheets (100' intervals).

c) Drainage maps depicting existing drainage areas, existing drainage structures, and existing flow patterns (1" = 200').

d) Proposed typical section or sections.

e) Proposed preliminary horizontal geometry.

f) Proposed preliminary vertical alignment.

g) Plan showing type, size, typical section, elevation and location of any proposed culvert(s).

The CONSULTANT shall submit an ORDER OF MAGNITUDE ESTIMATE of the cost of constructing the project. No design notes are required for this submittal.

Task 6.02 Basic Plans (60%)

The CONSULTANT shall submit to the COUNTY five (5) sets of prints and draft contract documents. The submittal shall reflect development of:

a. Design Cross Sections.

b. Storm Drainage System

c. Drainage Structures and Drainage Outfalls.

d. Draft Contract Documents.

e. Draft Maintenance of Traffic Plan.

f. Draft Construction Phasing Plan.

g. Reports and calculations required to document design decisions reached during development of plans.

h. Drafts of all Environmental Permits required by various permit agencies complete with required sketches, drawings and description.

The submittal shall include all drainage calculations, stormwater attenuation/detention requirements, storm sewer tabulation sheets, and a BUDGET ESTIMATE of the cost of constructing the project. All known utility conflicts shall be identified and the CONSULTANT shall notify affected utilities in accordance with Task 7.00, Utility Relocation Plan.

The draft bid documents shall be reviewed by the COUNTY's Project Sponsoring Department, Public Works, Legal Department and Division of Risk Management for compliance with the County's procurement policies and practices, insurance requirements and other regulations or requirements.

Task 6.03 Detail Plans (90%)

The CONSULTANT shall submit five (5) sets of prints to the COUNTY for review. The plans shall be complete construction plans, including a plan for maintenance of traffic, construction phasing and utility adjustments, quantity computation booklet and summary of quantities of all items required for the construction of project and made a part of the final contract documents. Reports and calculations required to document design decisions reached during the development of plans shall be submitted along with the plans.

TASK 7.00 - UTILITY RELOCATION PLANS

The requirements of the various utility services shall be recognized and properly coordinated by the CONSULTANT during the project design. The CONSULTANT shall provide to the COUNTY such representation and technical assistance as may be necessary for coordination and/or negotiation with utility owners or other public agencies affected by the

project. Utility adjustment plans shall be prepared on the roadway and bridge plans to show the proposed utility locations when adjustment is required. The required utility adjustments will be designed by each utility and provided by the affected utilities (water, sanitary sewer, power, gas, electrical, telephone, cablevision, etc.) on prints of roadway and bridge plans provided to the utility by the CONSULTANT after the basic plan review. The contract schedule (Exhibit "C") is based upon receipt of the relocation design from the utilities within 90 calendar days (or a time span negotiated with each Supplement) from submission of the roadway and bridge Basic Plans to the utilities for their use in showing their proposed adjustments. Copies of all correspondence to or from all utilities shall be supplied by the CONSULTANT to the COUNTY. Work under this task shall include the following:

Task 7.01 Utility Notification

Upon completion of the Grades and Geometrics (30%) plans review, the Consultant will transit a copy to the utility companies requesting their submittal of a marked-up plan of their existing facilities, by field location, along with their comments and proposed relocations relative to the proposed project.

Task 7.02 Utility Coordination

The CONSULTANT shall, by certified, return receipt requested mail, send Basic Roadway Plans (60%) to each utility for their review requesting them to return plans showing additions or corrections to existing facilities and their proposed relocations where adjustments are necessary.

Task 7.03 Final Utility Relocation Plans

Upon receipt of plans reviewed and signed off by the utilities within 90 calendar days (or a project-specific time frame) after written request is made, any additions and/or corrections will be made to the roadway and bridge plans. Utility adjustments provided by the utilities will be shown in the CONSULTANT's Detail Plans submittal. If no response is received by the CONSULTANT by an agreed upon time limit after submission to the utilities, the CONSULTANT shall so notify the COUNTY. The COUNTY shall then, by certified, return receipt requested mail notify said utilities that the future costs of relocation, delays or redesign necessitated by their failure to respond shall be borne solely by them. Copies of such letters shall be given to the CONSULTANT.

The 90% plan will show the existing and proposed location of the utilities provided to the Consultant by the utility company.

TASK 9.00 - LIGHTING PLANS

The CONSULTANT shall furnish design services and prepare a complete set of

construction plans for the lighting of the project. Plans will be prepared in accordance with the Florida Department of Transportation Plans Preparation Manual, criteria for Providing Illumination of Toll Facilities and the American Association of State Highway and Transportation Officials "Guide to Roadway Lighting," and submitted for review as follows:

Task 9.01 Basic Plans

The CONSULTANT shall submit to the COUNTY five (5) sets of prints of the preliminary plans for review. Plans will include:

a) Plan sheet showing poles, luminaries and appurtenances.

b) Copies of illumination intensity and capacity analysis.

These plans will be submitted with the Basic Plans 60% under Task

Task 9.02 Detail Plans

The consultant shall submit to the COUNTY five (5) sets of prints of the final lighting plans with the Details Plans (90%) under Task 6.03 for review.

TASK 10.00 - SIGNING AND PAVEMENT MARKING PLANS

The CONSULTANT shall furnish design services and prepare construction plans for traffic signs and pavement markings for the entire project. Plans (5 sets) shall be submitted with the 60% and 90% review stages as with the final roadway plans in accordance with the Florida Department of Transportation Roadway and Traffic Design Standards for review.

TASK 11.00 - PERMITS

The CONSULTANT shall prepare permit applications, data and drawings required for submittal by the COUNTY to all local, state and federal agencies having permit jurisdiction including, but not limited to, the Lee County Department of Community Development, U.S. Army Corp. of Engineers, Florida Department of Environmental Protection, the E.P.A., the South Florida Water Management District and Florida Department of Transportation.

Drainage design shall include stormwater treatment and attenuation required to comply with rules of the Florida Department of Environmental Protection and the South Florida Water Management District (S.F.W.M.D.). The prerequisite stormwater permit applications shall be prepared in accordance with Chapter 17-25, REGULATION OF STORMWATER DISCHARGE, FLORIDA ADMINISTRATIVE CODE, and Chapters 40E-4 an 40E-40 of S.F.W.M.D. The COUNTY shall review the permit applications and shall have a representative at all conferences between the CONSULTANT and the permitting agency and shall be copied on all correspondence between the CONSULTANT and the permitting agencies.

The Coordination and Permitting process shall be as follows:

Task 11.01 Permit Application and Initial Meeting with Permitting Agencies

Permitting agencies shall be notified of the proposed project prior to submittal of Grades and Geometrics (30%) design. A meeting will be held with representatives of the agencies to review the proposed project ~~in the field and to obtain their comments and areas of concern which~~ shall be included in the Grades and Geometrics plans review with the COUNTY.

Task 11.02 Permit Applications

Permit application form including required design information and data shall be completed by the CONSULTANT thirty (30) calendar days prior to the Basic Plans (60%) review, and submitted to the COUNTY for its approval and appropriate signature. The CONSULTANT shall then submit the Permit Application to the appropriate agencies after COUNTY approval of the Basic Plans (60%). The CONSULTANT shall advise the COUNTY well in advance of the application as to the amount of the permit fee so as not to delay the submission.

Task 11.03 Permit Revisions

The CONSULTANT shall respond to agency review comments, revise applications and Basic Plans, submit additional material required to support the proposed design if required, and coordinate with the COUNTY and permitting agencies to obtain approval of the permits. Such response shall be made within thirty (30) calendar days subsequent to the agency requests. Requirements of permitting agencies shall be incorporated into final contract documents including storm water treatment and attenuation as may be required.

TASK 12.00 - FINAL BIDDING AND CONTRACT DOCUMENTS

Once the final roadway and bridge plans and signalization, street lighting and signing and pavement marking plans or other plans have been approved by the COUNTY, a final set of bidding and contract documents will be prepared for the construction of the improvement. This task will include the following:

Task 12.01 Final roadway and bridge plans, a quantity computation booklet and summary of quantities, and CONSTRUCTION COST ESTIMATE.

Task 12.02 Final signalization, signing and marking plans, or other plans, summary of quantities and CONSTRUCTION COST ESTIMATE.

Task 12.03 Special provisions and other appropriate contract documents for incorporating Florida Department of Transportation specifications, U.S. Army Corps. of Engineers, Department of Environmental Protection and South Florida Water Management District or D.O. permit

requirements in the bid documents.

Task 12.04 Complete bidding and contract documents ready for bid including all forms, general conditions, all approved permits and other material required by the Lee County Contract Manual, the Department of Public Works, Legal Department and Risk Management.

TASK 13.00 - ADVISORY SERVICES DURING BIDDING

After approval of construction plans and bidding documents by the COUNTY, the CONSULTANT shall perform the following services:

Task 13.01 Attend and participate with the COUNTY in scheduling and presenting a Pre-Bid Conference. Provide the COUNTY with six (6) sets of complete bidding and contract documents for its use.

Task 13.02 Issue complete bidding and contract documents to all prospective bidders from the CONSULTANT's office or provide reproducible plans to the COUNTY, however it is negotiated. A non-refundable fee may be charged to the prospective bidder for this service to cover costs. This fee is subject to approval by the COUNTY.

Task 13.03 Respond to Bidders' inquiries and prepare addenda for issuance by the COUNTY.

Task 13.04 Evaluate the bids received by the COUNTY and provide written recommendations to the COUNTY.

Task 14.00 Construction Contract Administrative Support Services

14.01 Pre-Construction Conference: The CONSULTANT shall coordinate with the Construction Manager to conduct a pre-construction conference in a timely manner consistent with awarding of sub-contracts.

14.02 Construction Progress Meetings: The CONSULTANT shall attend Construction Progress meetings on a weekly basis during the construction period. The CONSULTANT shall coordinate with the Construction Manager to record the meeting activities and issue detailed minutes to all interested parties. Included in the progress meeting will be a tour of the site for the purpose of evaluating the work progress and solving problems associated with the construction.

14.03 Site Visits: In addition to the weekly meetings, the CONSULTANT shall make site visits to provide construction observations, determine if the construction is proceeding in substantial accordance with the contract documents, assist in solving problems that may arise concerning the installation of the improvements on the construction plans, and endeavor to guard the COUNTY against defects and deficiencies in work or delays of the Construction Manager.

Written reports will be submitted to the COUNTY within four (4) working days after each site visit which shall occur on a weekly average during the active construction period by the CONSULTANT.

The CONSULTANT will not be responsible for the construction means, methods, techniques, sequences, procedures, or for safety precautions and programs in connection with the work and will not be responsible for the Construction

Manager's failure to carry out the work in accordance with the contract documents.

14.04 Shop Drawings/Change Orders: The CONSULTANT shall review and take appropriate action on shop drawings, requests for substitution and change orders supplied by the Construction Manager or COUNTY only for conformance with the design concept of the project and with the information and requirements set forth in the contract documents. This task shall include preparation of change orders on forms supplied by the COUNTY.

14.05 Required Tests: The CONSULTANT shall prepare and submit to the COUNTY a list of required tests, review and monitor testing laboratory reports and make recommendations to the COUNTY as appropriate based on the test reports.

14.06 Inspection with COUNTY: The CONSULTANT shall conduct an inspection with the COUNTY after substantial completion of the project, issue recommendations in writing to the COUNTY regarding acceptability of the substantially completed facility and prepare a list of items ("punch list") for correction or completion.

14.07 Final Inspection with COUNTY: The CONSULTANT shall conduct a final inspection with the COUNTY to verify that the "punch list" items are satisfactorily completed, and if appropriate, issue a certification of completion, which recommends final payment. Prepare and submit a letter of substantial compliance with the Lee County Building Department to the Lee County Department of Construction and Design.

14.08 Project Close-Out: The CONSULTANT shall receive and review for completeness as-built information from the Construction Manger and submit to the COUNTY a complete set of reproducible (Mylar/sepia) record drawings. A copy of the complete record drawings shall be submitted on 3.5" diskette(s) on AutoCAD Release 13. Provide certifications to regulatory agencies as required by permits.

SECTION PUBLIC INFORMATION MEETINGS

A. Coordination Meeting with Local Officials

Meetings shall be held with the City of Sanibel. Fort Myers and Cape Coral City Councils to present the toll plaza (re) designs alternatives. After architectural alternatives have been selected by the City Councils, a Public Information Meeting will be scheduled to take input on the alternatives. The results of the public meeting will then be presented to Lee County Management and Planning for their consideration.

B. Public Information Meeting:

The CONSULTANT shall provide all support necessary for the DEPARTMENT to hold one (1) Public Information meeting. The Public Information meeting will be held to receive input on the toll plaza design alternatives selected by the City Councils

1. The CONSULTANT shall prepare and/or provide:

    a. Agenda for the meetings
    b. Provide three (3) sets of the renderings of the toll plaza alternatives for information purposes
    c. Letters for notification of elected and appointed officials
    d. Letters for notification to impacted residences/tenants/owners
    e. News releases prior to the meeting
    f. Graphics and displays

2. The purpose of the meeting is to solicit public input to develop a consensus on the architectural elements of the Plazas.

    This meeting will be advertised and conducted by the CONSULTANT as an information meeting. Any press release will be sent out by the CONSULTANT and will indicate the meeting is a DEPARTMENT activity.

Both the CONSULTANT'S and DEPARTMENT'S responsibilities are specified for meetings as follows:

a. A copy of the agenda including the project number, date, meeting place, and items to be addressed shall be submitted to the Design Project Manager, the DEPARTMENT'S Public Information Director, and incorporated into the project Community Awareness Plan (CAP).

b. All media releases and general (mass) public announcements for property owners and business operators will be prepared by the CONSULTANT and reviewed by the DEPARTMENT'S Public Information Director and the Design Project Manager.

c. Notification will be made to elected and appointed officials by personal letter. The CONSULTANT will prepare the letter for signature by the DEPARTMENT'S Director. The CONSULTANT will mail the letter no less than 15 days before the meeting. Letters shall be on DEPARTMENT letterhead.

d. Property Owner/Business Operator Notification - An announcement, prepared by the CONSULTANT, will be written and sent no less than 10 days before the meeting to all property owners/business operators whose property or business lies adjacent to the project limits. The CONSULTANT will pay for the postage.

e. News releases will be prepared by the CONSULTANT and shall be published during the week of the Public Information Meetings. Newspaper ads will be published seven (7) days in advance of the meetings. The CONSULTANT shall pay for the ad.

f. The CONSULTANT shall conduct the meeting. The CONSULTANT will provide an overview/description of the type work to be done, impacts to the businesses, and the Maintenance of Traffic Scheme. The public will then have the opportunity to ask questions.

g. The CONSULTANT shall provide three (3) sets of alternative plans. The meeting will require a knowledgeable CONSULTANT staff to answer questions that may arise.

h. The CONSULTANT shall coordinate all activities listed and actions to be taken with the DEPARTMENT'S Public Information Director and the Project Manager.

C. Public Involvement Data Collection

The CONSULTANT will collect the following data:

a. Mailing List Preparation: The CONSULTANT will prepare a mailing list of businesses, public officials, institutions and other interested parties early in the design process. Media to be used for news releases and advertisements will be identified and placed on the list. The mailing list will be submitted to the DEPARTMENT for review or approval.

a. Elected and appointed officials (city, state, federal, county) and community leaders in the area will be identified and placed on the mailing list of officials and interested parties. This will include as applicable (but not limited to):

- Any affected or possibly affected parties
- Elected and appointed officials in the area (City, County, State)
- Possible permit and review agencies
- Media in the project area (to be used for news releases, advertisements or any concerns)
- Any person or institution expressing an interest in the project

The CONSULTANT shall be responsible for determining the appropriate meeting site. The site shall meet ADA standards.

Room size will be based on the number of mail outs. The proposed meeting site shall be presented to the DEPARTMENT for approval prior to the CONSULTANT negotiating use of site.

c. The collection of public input occurs throughout the life of the project and requires maintaining of files, newspaper clippings, and letters. In addition to collecting public input data, the CONSULTANT shall assist the COUNTY in preparing responses to any public inquiries as a result of the Public Involvement Process.

D. Newsletter

The CONSULTANT shall prepare one (2) newsletters during the course of the design. The newsletters will be mailed by the CONSULTANT to elected officials, property owners, businesses and interested persons included on a mailing list compiled by the CONSULTANT. The first newsletter will announce the Public Information Meeting. The second newsletter will reveal the selected design alternatives for the Sanibel and Cape Coral toll plazas. COUNTY review prior to mailing is required.

E. Correspondence

Within three (3) days of the receipt or mailing of all written correspondence between the CONSULTANT and any party pertaining specifically to this project, copies shall be provided to the COUNTY for their records.

F. Unscheduled Meetings and Presentations

The CONSULTANT shall attend a Notice-To-Proceed Meeting with COUNTY representatives, where relevant project information will be provided by the COUNTY, along with procedures for administering the contract. The CONSULTANT and his staff shall also be available with no more than a five (5) workday notice to attend meetings or make presentations at the request of the COUNTY. Such meetings and presentations may be held at any hour between

8:00 A.M. and 12:00 midnight on any day of the week. The CONSULTANT may be called upon to provide maps, press releases, advertisements, audiovisual displays and similar material for such meetings. No more than six such meetings are anticipated. The CONSULTANT shall attend all Pre-Construction and Utility Meetings. The CONSULTANT shall be available for coordination meetings with local governments and/or the consultant preparing the design documents for the adjoining project.

The Consultant will apply the following scope of services and tasks to approximately ___miles of roadway along_____from_____to_____.

Task #1 - Base Plan Preparation

1.1 Consultant will create **new** or **use existing** computer files **if available** for the base plans on this project. The computer files will be in a format acceptable to Lee County Department of Transportation (DOT), and will become the property of DOT for its use on future projects upon completion. The base plans shall be prepared in a manner that can be plotted or reproduce at a scale acceptable to DOT. The base plans shall include the following roadway functions: roadway geometry, centerline survey with 100' station marks and numbers, curbing and type, edge of pavement, berms, sidewalks/bikepaths, signs, pole locations for signals and lighting, equipment boxes, retention/detention ponds, utilities, right-of-way lines, clear zones, design and posted speeds, grading, existing plant material, and all other pertinent elements.

Task # 2 - Site Investigation

2.1 Consultant will review all base map information and the project site. The base plans shall be revised to include any changes from the base map information to existing visible on-site conditions.

2.2 Consultant will review the entire project site, and perform an analysis of the existing site features, adjacent land uses, and potential water and power sources. The median openings and roadway intersections shall be considered for sight distance and visibility conflicts with both vehicles and pedestrians during planting design. The analysis shall also include recommendations that may be valuable in reducing maintenance and safety concerns for maintenance workers.

2.3 Consultant will review and adhere to design guidelines pertinent to this specific project and segment of roadway. This shall include the latest edition of the following: LeeScape, Lee County Roadway Landscape Master Plan; Florida Highway Landscape Guide, and Manual of Minimum Standards for Design, Construction, and Maintenance for Streets and Highways by Florida Department of Transportation (FDOT). This may also include Roadway and Traffic Design Standards, and Plan Preparation Manual by FDOT; and A Policy on Geometric Design of Highways and Streets, American Association of State Highway and Transportation Officials (AASHTO).

Task # 3 - Conceptual Design (30%)

3.1 Consultant will prepare two design concepts that will illustrate two different types of roadway segments (if applicable). One segment should be an intersection and the other a typical linear section of the roadway. Each design concept will indicate a recommended core level plant palette, plant spacing, and plant group spacing, that is suitable for its location, climate, maintenance, and budget considerations. Each of the design concepts should also include the recommendations generated from the site analysis performed in task 2.2.

3.2 Three sets of the two design concepts and an outline of the anticipated drawing package, proposed scale and sheet layouts will be submitted to staff for review in both 11"X17" and 24"X36" format.

3.3 Consultant will meet with (DOT) staff to review the concepts and resolve questions.

Task #4 - Design Development (60%)

4.1 Consultant will prepare design development drawings (60%) based upon project budget and comments from staff.

4.2 Design concepts and plant material selections will be refined to indicate the actual placement and species of plants and other design elements. Plant sizes will be consistent with Grades and

Standards of Nursery Plants. The planting plans shall be prepared in a manner that provides clear visibility of pedestrians and motorists using the corridor.

4.3 Consultant will prepare an estimate of irrigation demand, and suggested water sources. This will include a feasibility study of available water resources suitable for irrigating the proposed plant material. The study will include wells, canals, ponds, re-use, potable water, and other available water resources. The study will evaluate the availability of electrical power sources, applicable hydraulics, suitability of water quality for proposed plant material, and cost feasibility of each resource. The study shall conclude with a recommendation of the most practical method of implementation, including both installation and operating costs over a three year time period following plant installation.

4.4 Consultant will prepare an Opinion of Probable Costs based upon the 60% Design Development drawing package. The Opinion of Costs will include maintenance of the site from the notice-to-proceed date until one year after the substantial completion date (in Operations construction contracts we have modified the contract definitions, where the landscape and irrigation installation is completed at substantial completion, and one year later at the end of the one year maintenance period we have final inspection). The estimate will also include mowing the medians and/or roadsides, if planted during project construction.

4.5 Consultant shall submit to the Project Manager for review three (3) full size (24"x36") sets of drawings, and three (3) 11"x17" sets. All sets shall be plotted to scale. Consultant will also submit an Opinion of Probable Cost based upon 60% design development drawings. The 60% plan sets will be distributed by the Project Manager to DOT Operations and Traffic Divisions for review comments. DOT Operations will distribute a set of plans in the upcoming months agenda package, to the members of the Lee County Roadway Landscape Advisory Committee (RLAC) for their review.

4.6 Consultant will present the 60% Design Development Plans to the RLAC at their regular monthly meeting and record pertinent comments. The presentation displays should show all proposed planting and amenity design elements along the entire roadway corridor. (The RLAC normally meets the first Tuesday of each month at 6:00 p.m. in the CD/PW 3rd floor large conference room.) If the RLAC approves the plans at this meeting, the Consultant shall skip task 4.7 and proceed to task #4.8.

4.7 If the RLAC votes to send the plans to a Task Force Subcommittee for further review, the Consultant shall meet once with the subcommittee and review and resolve all conflicts, and record pertinent comments. The task force subcommittee will then make a recommendation to the full RLAC at their next regular meeting (if requested by the subcommittee, another presentation to the full RLAC by the Consultant will be necessary before approval).

4.8 After the RLAC approves the 60% plans, the Consultant shall meet with staff to discuss their project review comments on the plans. Staff and the Consultant shall then work to resolve all outstanding issues.

4.9 Consultant shall then prepare (60%) irrigation plans for the proposed plantings. The irrigation plans shall show water and electrical sources and connections, layout and sizing of piping, sleeves and irrigation heads, valves, and controllers. Irrigation system design shall provide head-to-head coverage for spray heads and rotor zones. Pop-up spray heads shall be 12", placed 18" from the edge of pavement. The system shall be designed in a manner that will avoid wetting the adjacent pavement. Bubblers, spray heads, and rotors should be designed to run on separate zones.

4.10 Consultant shall prepare a cover letter acceptable to DOT, to mail with an 11"X17" plan set to all utility companies with services within the project limits. The letter will request a plan review by the utility company, and a return letter indicating that the utility company does not take exception to the proposed improvements. Copies of all cover letters sent, and responses received by the Consultant, will be provided to the DOT Project Manager. The Consultant and Project Manager will discuss a solution to all known conflicts indicated by the utility companies, and the Consultant will modify the plans accordingly.

4.11 The Consultant will submit applications and obtain permits necessary for construction on DOT's behalf. This may include permits such as SFWMD Water Use Permit and FDOT General Use Permit.

Task #5 - Construction Documents (90%)

5.1 Based upon staff approval of 60% Design Development Drawings and Opinion of Cost, Consultant will prepare Construction Documents (90%). Construction documents shall include adjustments for staff and utility company conflicts, and the following:

a. Cover sheet: with project name and limits, location map, and sheet index.

b. Planting Plans: showing plant placements, sizes, and species of plants. Cross sections will be included, as required, to explain placement and clearances.

c. Irrigation Plans: showing water and electrical sources and connections, layout and sizing of piping, sleeves sizes and directional bores, irrigation bubblers, heads, valves, quick couplers, well/pump stations, and all other components such as fencing, pressure tanks, electrical panels and controllers.

d. Standard specifications and technical details from LeeScape will be provided by DOT. Consultant shall prepare all non-standard details and technical specifications. The non-standard specifications will be prepared by the Consultant and inserted into the standard specifications in a format acceptable to the DOT Project Manager.

5.2 Consultant shall submit to the Project Manager for review three (3) full size (24"x36") sets of drawings, and three (3) 11"x17" sets. All sets shall be plotted to scale. Consultant will also submit an Opinion of Probable Cost based upon 90% Construction Documents. The 90 % plan sets will be distributed by the Project Manager to DOT Operations and Traffic Divisions for review comments.

5.3 Consultant shall meet with staff to discuss their 90% project review comments. Staff and the Consultant shall then work to resolve all outstanding issues.

Task # 6 - Construction Documents (100%)

6.1 Based upon 90% review comments, Consultant will prepare final Construction Documents (100%) consisting of the following:

a. Complete cover sheet.

b. Complete planting plans, details, and specifications.

c. Complete irrigation plans, details and specifications.

d. Complete Bid Schedule in a format acceptable to Lee County Contracts and DOT. The bid schedule shall include the scientific name of all plants, sizes, names, quantities and units of all landscape, irrigation, maintenance, and other items pertinent to the project. All alternate bid items shall also be included, such as mowing the median and roadsides as separate alternate line items. DOT can furnish a sample bid schedule for the Consultants use.

6.2 Consultant will provide final construction drawings to scale on mylars. Consultant shall furnish a disk of the computer files for the final project drawings to the Project Manager in the approved format. A disk of the bid schedule and all specifications shall also be submitted in a format acceptable to the DOT Project Manager.

Task #7 - Bidding Assistance

7.1 Consultant will attend one pre-bid conference at Lee County Offices.

7.2 After the pre-bid meeting, the Consultant will meet with staff and discuss the questions from the meeting. The Consultant will prepare an addendum after this meeting and send it to the Project Manager by 5:00 p.m. the following business day. The Consultant will answer all applicable addendum questions, and consult with the Project Manager on appropriate language. The Consultant

will be responsible for preparing all addendums, and furnishing them to the Project Manager by 5:00 p.m. on the next business day following receipt of the questions.

Task # 8 - Construction Assistance

8.1 Consultant will attend one pre-construction conference at Lee County Offices.

8.2 If requested, the Consultant will visit the project site to observe construction progress and compliance with the contract documents as follows:
a. Project beginning: to review proposed planting and irrigation equipment locations and resolve conflicts.
b. Midway through installation: to review construction progress, quality of materials, workmanship, and compliance with construction documents.

c. At substantial completion: To review compliance with construction documents, construction installation, quality of materials and workmanship, performance of irrigation system, and prepare punch list items.
All discrepancies with the contract documents and punch list items, will be noted by the Consultant and sent to the Project Manager within 3 days of each site visit.

Task #9 – Reimbursables

9.1 Reimbursable expenses such as prints, messenger, courier, disks, special mail services, photography, etc.

Scope of Services
Location Study
Sanibel Bridge Toll Plaza Reconstruction (including a new administration building) and Cape Coral Bridge Toll Plaza Reconstruction.

Prior to the preparation of any toll facility plans, the Consultant shall prepare a "Location Study". This study shall be supplemental to any other study or report previously prepared for the County or other agencies in connection with this project. The items to be addressed include

- Plaza Siting and Layout
  - ADA Accessibility
  - Parking
  - Auxiliary Power
  - Utilities
  - Traffic Operation Impacts
- Toll Plaza aesthetics, interior and exterior
- Roadway Design Considerations and Impacts
- Environmental and Permitting Considerations including Drainage and Stormwater Management
- Signage Requirements
  - Approaching the plaza
  - Departing the Plaza
  - At the Plaza
- Landscaping
- Construction and Constructibility Issues
  - Staging Areas
  - Access
  - Maintenance of Toll Operations
  - Maintenance of Traffic

The Consultant shall prepare a draft study report for review and comment by the County. Upon receipt of the County's comments, the Consultant shall prepare responses to those comments and resolve any outstanding issues related to those comments. Upon mutually satisfactory resolution of the review comments, the Consultant shall prepare and submit the final study report to the County. the acceptance of the final study report by the County is the Consultant's authorization to proceed with the preparation of the toll facility plans base on the recommendations contained in the report.

A separate study report shall be prepared for each toll plaza location involved in this project.

EXHIBIT B

Date: January 28, 2003

COMPENSATION AND METHOD OF PAYMENT

for: **Sanibel Bridge Toll Plaza Reconstruction (including a new administration building) and Cape Coral Bridge Toll Plaza Reconstruction**

(Enter Project Name from Page 1 of the Agreement)

Section 1. BASIC SERVICES/TASK(S)

The COUNTY shall compensate the CONSULTANT for providing and performing the Task(s) set forth and enumerated in EXHIBIT "A", entitled "SCOPE OF PROFESSIONAL SERVICES", as follows:

NOTE: A Lump Sum (L.S.) or Not-to-Exceed (N.T.E.) amount of compensation to be paid the CONSULTANT should be established and set forth below for each task or sub-task described and authorized in Exhibit "A". In accordance with Agreement Article 5.02(2) "Method of Payment", tasks to be paid on a Work-in-Progress payment basis should be identified (WIPP).

Task Number	Task Title	Amount of Compensation	Indicate Basis of Compensation LS or NTE	If Applicable Indicate (W.I.P.P.)
1.00	Architectural Development	$642,762.71	NTE	WIPP
2.00	Engineering & Land Surveys	$ 65,432.00	NTE	WIPP
3.00	Geotechnical Services	$37,488.22	NTE	WIPP
4.00	Environmental Inventory & Impact Summary	$30,043.12	NTE	WIPP
5.00	Traffic Data	$109,783.84	NTE	WIPP
6.00	Roadway Plans	$349,624.60	NTE	WIPP
7.00	Utility Relocation Plans	$4,711.32	NTE	WIPP
9.00	Lighting Plans	$53,614.82	NTE	WIPP
10.00	Signing & Pavement Marking Plans	$41,776.40	NTE	WIPP
11.00	Permits	$38,149.27	NTE	WIPP
12.00	Final Bidding & Contract Documents	$183,901.96	NTE	WIPP
13.00	Advisory Services During Bidding	$22,919.07	NTE	WIPP
14.00	Construction Contract Administration Support Services	$147,875.40	NTE	WIPP
15.00	Expenses	$76,895.24	LS	WIPP
TOTAL		$1,804,977.97		

(Unless list is continued on next page)

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Section 2. ADDITIONAL SERVICES

The COUNTY shall compensate the CONSULTANT for such ADDITIONAL SERVICES as are requested and authorized in writing for such amounts or on such a basis as may be mutually agreed to in writing by both parties to this Agreement. The basis and/or amount of compensation to be paid the CONSULTANT for ADDITIONAL SERVICES requested and authorized in writing by the COUNTY shall be as set forth in Article 3.11 of this Agreement.

Should it be mutually agreed to base compensation for ADDITIONAL SERVICES on an hourly rate charge basis for each involved professional and technical employee's wage rate classification, the applicable hourly rates to be charged are as set forth and contained in ATTACHMENT NO. 1 hereto dated January 28, 2003, entitled "CONSULTANT'S PERSONNEL HOURLY RATE SCHEDULE".

Section 3. REIMBURSABLE EXPENSES AND COSTS

When the CONSULTANT'S compensation and method of payment is based on an hourly rate for professional and/or technical personnel, the CONSULTANT shall, in addition to such hourly rates as are set forth in Attachment No. 1 hereto, be entitled to reimbursement of out-of-pocket, non-personnel expenses and costs as set forth in ATTACHMENT NO. 2 hereto dated January 20, 2003, entitled "NON-PERSONNEL REIMBURSABLE EXPENSES AND COSTS".

ATTACHMENT NO. 1 TO EXHIBIT B

Date: January 28, 2003

CONSULTANT'S PERSONNEL HOURLY RATE SCHEDULE ***

for **Sanibel Bridge Toll Plaza Reconstruction (including a new administration building) and Cape Coral Bridge Toll Plaza Reconstruction**
(Enter Project Name from Page 1 of the Agreement)

CONSULTANT OR SUB-CONSULTANT NAME **URS Corporation Southern**
(A separate Attachment No. 1 should be included for each Sub-Consultant)

(1) Project Position or Classification (Function to be Performed)	(2) Current Direct* Payroll Average Hourly Rate	(3) Multiplier**	(4) Hourly Rate To Be Charged (Column 2x3)
Project Manager	$50.50	2.8774	145.31
Chief Engineer / Architect	$47.54	2.8774	$136.79
Senior Engineer / Architect	$34.23	2.8774	$98.50
Engineer/ Architect	$27.01	2.8774	$77.72
Senior Technician	$25.74	2.8774	$74.06
Technician	$20.11	2.8774	$57.86
Clerical	$17.29	2.8774	$49.75

*NOTE: Direct Payroll hourly rate means the actual gross hourly wage paid.

**NOTE: Indicate applicable multiplier for indirect personnel costs, general administrative and overhead costs, and profit.

***NOTE: A separate personnel hourly rate schedule should also be attached for each Sub-Consultant listed in Exhibit "D".

ATTACHMENT NO. 1 TO EXHIBIT B

Date: January 20, 2003

CONSULTANTS PERSONNEL HOURLY RATE SCHEDULE***

for **SANIBEL BRIDGE TOLL PLAZA RECONSTRUCTION (including a new Administration Building) and CAPE CORAL BRIDGE TOLL PLAZA RECONSTRUCTION.**

(Enter Project Name from Page 1 of the Agreement)

CONSULTANT OR SUB-CONSULTANT NAME **JOHNSON ENGINEERING, INC.**
(A separate Attachment No. 1 should be included for each Sub-Consultant)

PROFESSIONAL SERVICES

Principal	$ 145.00	Per Hour
Engineer VIII	$ 135.00	Per Hour
Engineer VII	$ 125.00	Per Hour
Engineer VI	$ 115.00	Per Hour
Engineer V	$ 105.00	Per Hour
Engineer IV	$ 95.00	Per Hour
Engineer III	$ 85.00	Per Hour
Engineer II	$ 75.00	Per Hour
Engineer I	$ 65.00	Per Hour
Project Director	$ 125.00	Per Hour
Senior Designer	$ 105.00	Per Hour
Designer	$ 85.00	Per Hour
Technician IV	$ 68.00	Per Hour
Technician III	$ 58.00	Per Hour
Technician II	$ 48.00	Per Hour
Technician I	$ 38.00	Per Hour
Hydrogeologist II	$ 80.00	Per Hour
Hydrogeologist I	$ 70.00	Per Hour
Principal Planner II	$ 110.00	Per Hour
Principal Planner I	$ 95.00	Per Hour
Environmental Planner	$ 90.00	Per Hour
Planner II	$ 65.00	Per Hour
Planner I	$ 45.00	Per Hour
Planning Technician	$ 45.00	Per Hour
Landscape Architect III	$ 125.00	Per Hour
Landscape Architect II	$ 80.00	Per Hour
Landscape Architect I	$ 60.00	Per Hour
Ecologist IV	$ 105.00	Per Hour
Ecologist III	$ 95.00	Per Hour
Ecologist II	$ 85.00	Per Hour
Ecologist I	$ 73.00	Per Hour
Expert Witness	$ 200.00	Per Hour

Surveyor and Mapper IV	$ 110.00	Per Hour
Surveyor and Mapper III	$ 100.00	Per Hour
Surveyor and Mapper II	$ 85.00	Per Hour
Surveyor and Mapper I	$ 75.00	Per Hour
Two Man Field Party	$ 94.00	Per Hour
Three Man Field Party	$ 120.00	Per Hour
Four Man Field Party	$ 140.00	Per Hour
GPS Mapping Grade: One Man Party	$ 62.00	Per Hour
GPS Mapping Grade: Two Man Party	$ 100.00	Per Hour
GPS Mapping Grade: Three Man Party	$ 130.00	Per Hour
GPS Surveying Grade: One or Two Man Party	$ 135.00	Per Hour
GPS Surveying Grade: Three Man Party	$ 145.00	Per Hour
Three Man Vac-Tron Crew (4 hour minimum)	$ 190.00	Per Hour
Geographic Information Systems Consultant	$ 105.00	Per Hour

CONSTRUCTION OBSERVATION SERVICES

Senior Project Engineer	$ 135.00	Per Hour
Construction Observation Services Manager	$ 110.00	Per Hour
Project Engineer	$ 98.00	Per Hour
Office Engineer	$ 88.00	Per Hour
Senior Construction Observer	$ 68.00	Per Hour
Construction Observer III	$ 58.00	Per Hour
Construction Observer II	$ 48.00	Per Hour
Construction Observer I	$ 38.00	Per Hour
Resident Compliance Officer (RSO)	$ 48.00	Per Hour

REIMBURSABLE EXPENSES

Materials	Cost + 10%
Sub-Consultant Services	Cost + 10%

ATTACHMENT NO. 1 TO EXHIBIT B

Date: January 28, 2003

CONSULTANT'S PERSONNEL HOURLY RATE SCHEDULE ***

for **Sanibel Bridge Toll Plaza Reconstruction (including a new administration building) and Cape Coral Bridge Toll Plaza Reconstruction**
(Enter Project Name from Page 1 of the Agreement)

CONSULTANT OR SUB-CONSULTANT NAME **Archaelogical Consultants, Inc.**
(A separate Attachment No. 1 should be included for each Sub-Consultant)

(1) Project Position or Classification (Function to be Performed)	(2) Current Direct* Payroll Average Hourly Rate	(3) Multiplier**	(4) Hourly Rate To Be Charged (Column 2x3)
Project Manager	$43.30	3.0014	129.96
Principal Investigator	$43.30	3.0014	$129.96
Architectectural Historian	$20.00	3.0014	$60.03
Project Archaeologist	$20.81	3.0014	$62.46
Design Technician	$18.35	3.0014	$55.08
Technician	$13.32	3.0014	$39.98
Clerical	$14.05	3.0014	$42.17

*NOTE: Direct Payroll hourly rate means the actual gross hourly wage paid.

**NOTE: Indicate applicable multiplier for indirect personnel costs, general administrative and overhead costs, and profit.

***NOTE: A separate personnel hourly rate schedule should also be attached for each Sub-Consultant listed in Exhibit "D".

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09/25/01

ATTACHMENT NO. 1 TO EXHIBIT B

Date: January 28, 2003

CONSULTANT'S PERSONNEL HOURLY RATE SCHEDULE ***

for **Sanibel Bridge Toll Plaza Reconstruction (including a new administration building) and Cape Coral Bridge Toll Plaza Reconstruction**
(Enter Project Name from Page 1 of the Agreement)

CONSULTANT OR SUB-CONSULTANT NAME **Universal Engineering**
(A separate Attachment No. 1 should be included for each Sub-Consultant)

(1) Project Position or Classification (Function to be Performed)	(2) Current Direct* Payroll Average Hourly Rate	(3) Multiplier**	(4) Hourly Rate To Be Charged (Column 2x3)
Staff Engineer	$31.25	2.9870	$93.35
Staff Engineer	$20.67	2.9870	$61.74
Senior Engineering Technician	$13.75	2.9870	$41.07
Drafting	$16.25	2.9870	$48.54

*NOTE: Direct Payroll hourly rate means the actual gross hourly wage paid.

**NOTE: Indicate applicable multiplier for indirect personnel costs, general administrative and overhead costs, and profit.

***NOTE: A separate personnel hourly rate schedule should also be attached for each Sub-Consultant listed in Exhibit "D".

ATTACHMENT NO. 1 TO EXHIBIT B

Date: January 28, 2003

CONSULTANT'S PERSONNEL HOURLY RATE SCHEDULE ***

for **Sanibel Bridge Toll Plaza Reconstruction (including a new administration building) and Cape Coral Bridge Toll Plaza Reconstruction**
(Enter Project Name from Page 1 of the Agreement)

CONSULTANT OR SUB-CONSULTANT NAME **DENI ASSOCIATES, INC**
(A separate Attachment No. 1 should be included for each Sub-Consultant)

(1) Project Position or Classification (Function to be Performed)	(2) Current Direct* Payroll Average Hourly Rate	(3) Multiplier**	(4) Hourly Rate To Be Charged (Column 2x3)
Professional Surveyor and Mapper (PLS/PSM)	$32.73	2.75	$90.00
Survey Technician	$22.55	2.75	$62.00
CADD Technician	$18.19	2.75	$50.00
Survey Field Crew			
2 Person	$29.10	2.75	$80.00
3 Person	$38.18	2.75	$105.00
4 Person	$47.28	2.75	$130.00

*NOTE: Direct Payroll hourly rate means the actual gross hourly wage paid.

**NOTE: Indicate applicable multiplier for indirect personnel costs, general administrative and overhead costs, and profit.

***NOTE: A separate personnel hourly rate schedule should also be attached for each Sub-Consultant listed in Exhibit "D".

ATTACHMENT NO. 1 TO EXHIBIT B

Date: January 28, 2003

CONSULTANT'S PERSONNEL HOURLY RATE SCHEDULE ***

for **Sanibel Bridge Toll Plaza Reconstruction (including a new administration building) and Cape Coral Bridge Toll Plaza Reconstruction**
(Enter Project Name from Page 1 of the Agreement)

CONSULTANT OR SUB-CONSULTANT NAME **Cella & Associates**
(A separate Attachment No. 1 should be included for each Sub-Consultant)

(1) Project Position or Classification (Function to be Performed)	(2) Current Direct* Payroll Average Hourly Rate	(3) Multiplier**	(4) Hourly Rate To Be Charged (Column 2x3)
Project Manager	$34.69	3.2	$111.00
Senior Professional	$28.84	3.2	$92.30
Planner	$24.43	3.2	$78.18
Technician	$20.97	3.2	$67.11
Administrative	$18.09	3.2	$57.82

*NOTE: Direct Payroll hourly rate means the actual gross hourly wage paid.

**NOTE: Indicate applicable multiplier for indirect personnel costs, general administrative and overhead costs, and profit.

***NOTE: A separate personnel hourly rate schedule should also be attached for each Sub-Consultant listed in Exhibit "D".

ATTACHMENT NO. 1 TO EXHIBIT B

Date: January 28, 2003

CONSULTANT'S PERSONNEL HOURLY RATE SCHEDULE ***

for **Sanibel Bridge Toll Plaza Reconstruction (including a new administration building) and Cape Coral Bridge Toll Plaza Reconstruction**
(Enter Project Name from Page 1 of the Agreement)

CONSULTANT OR SUB-CONSULTANT NAME **TransCore**
(A separate Attachment No. 1 should be included for each Sub-Consultant)

(1) Project Position or Classification (Function to be Performed)	(2) Current Direct* Payroll Average Hourly Rate	(3) Multiplier**	(4) Hourly Rate To Be Charged (Column 2x3)
Engineering Support	$38.72	2.97	$115.00
Technician Support	$21.88	2.97	$ 65.00

*NOTE: Direct Payroll hourly rate means the actual gross hourly wage paid.

**NOTE: Indicate applicable multiplier for indirect personnel costs, general administrative and overhead costs, and profit.

***NOTE: A separate personnel hourly rate schedule should also be attached for each Sub-Consultant listed in Exhibit "D".

EXHIBIT C

Date: January 20,2003

TIME AND SCHEDULE OF PERFORMANCE

For: Sanibel Bridge Toll Plaza Replacement (including a new administration building) and Cape Coral Bridge Toll Plaza Reconstruction.
(Enter Project Name from Page 1 of the Agreement)

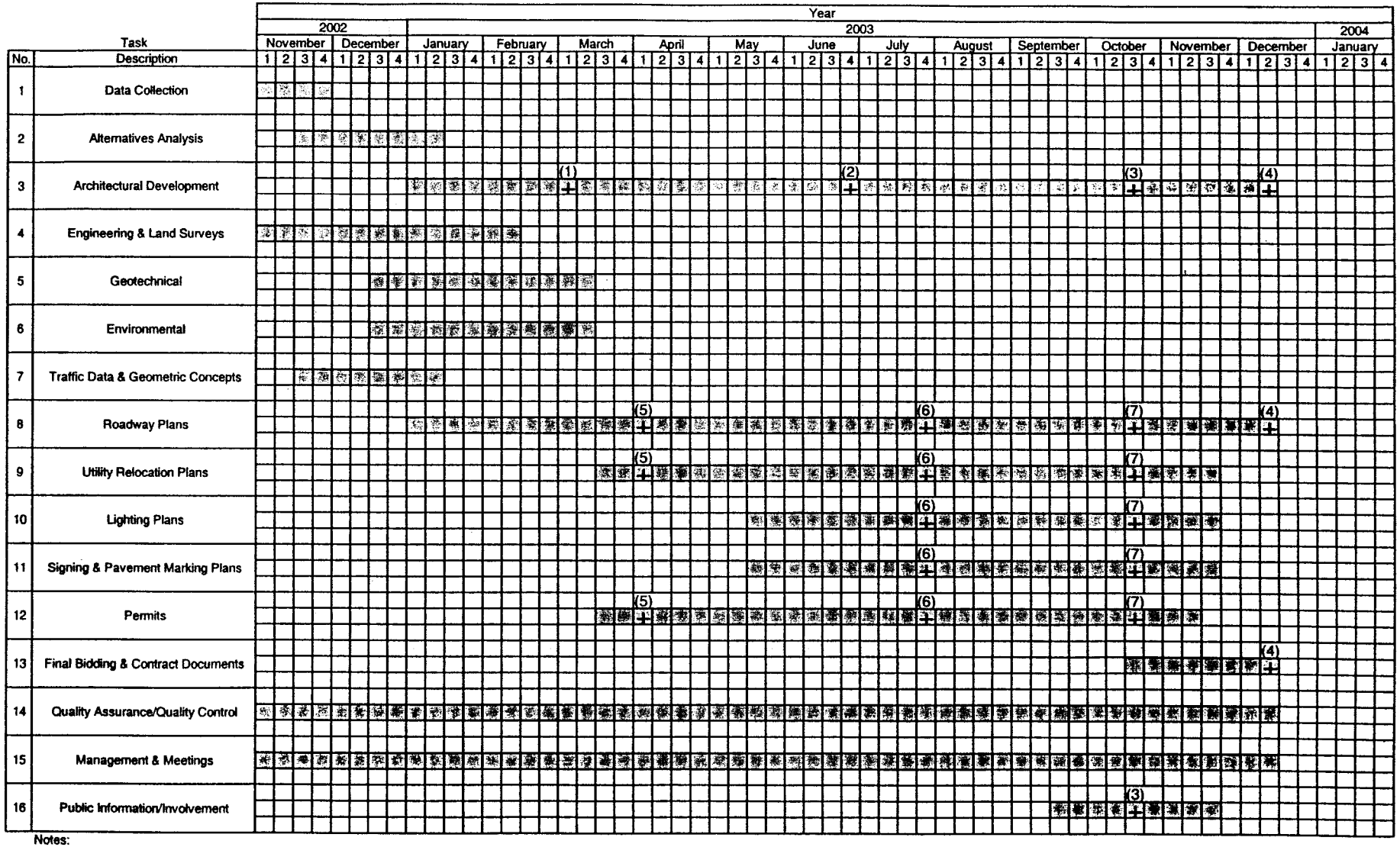
This EXHIBIT C establishes times of completion for the various phases and tasks required to provide and perform the services and work set forth in EXHIBIT "A" of this Agreement. The times and schedule of performance set forth hereinafter is established pursuant to Article 6.00 of this Agreement.

Phase and/or Task Reference As Enumberated in EXHIBIT "A"	NAME OR TITLE Of Phase and/Task	Number Of Calendar Days For Completion Of Each Phase And/or Task	Cumulative Number Of Calendar Days For Completion From Date of Notice to Proceed
	Data Collection	30	30
	Alternatives Analysis	61	76
	Traffic Data & Geometric Concepts	61	76
	Engineering & Land Surveys	106	106
	Geotechncial	91	137
	Environmental	91	137
	Public Involvement	68	387
	Lighting Plans	190	387
	Signing & Pavement Marking Plans	190	387
	Utility Relocation Plans	250	387
	Permits	250	387
	Final Bidding & Contract Documents	61	411
	Architectural Development	350	411
	Roadway Plans	350	411
	Quality Assurance / Quality Control	411	411
	Management & Meetings	411	411

See Attached Bar Chart Schedule (Page C2 of C2)

CMO:034
09/25/01

Proposed Design Schedule - Cape Coral and Sanibel Toll Facilities Replacements



Notes:
(1) 30% Architectural Submittal
(2) 60% ArchitecturalSubmittal
(3) 100% Architectural Submital
(4) Final Plans
(5) Grades and Geometrics Submittal
(6) Basic Plans Submittal
(7) Detail Plans Submittal

SHEET 02 OF 02

EXHIBIT D

Date: January 20, 2003

CONSULTANT'S ASSOCIATED SUB-CONSULTANT(S) AND SUBCONTRACTOR(S)

for: Sanibel Bridge Toll Plaza Reconstruction (including a new administration building) and Cape Coral Bridge Toll Plaza Reconstruction

(Enter Project Name From Page 1 of This Agreement)

CONSULTANT has identified the following Sub-Consultant(s) and/or SubContractor(s) which may be engaged to assist the CONSULTANT in providing and performing services and work on this Project:

(If none, enter the word "none" in the space below.)

Service and/or Work to be Provided or Performed	Name and Address of Individual or Firm	Disadvantaged, Minority or Women Business Enterprise. (If Yes, Indicate Type)			Sub-Consultant Services are Exempted from Prime Consultant's Insurance Coverage	
		Yes	No	Type	Yes	No
Engineering & Land Surveys, Environmental Inventory, Utility Relocation Plans, Permits	Johnson Engineering Inc. 2518 Johnson Street Fort Myers, FL 33901		X			X
Historic Resources/Park's Recreation Facilities, Archaelogy	Archaelogical Consultants Inc. 8110 Blaikie Court, Suite A Sarasota, FL 34240	X		WBE	X	
Public Involvement	Cella & Associates Inc. 2125 First Street, Suite 201 Fort Myers, FL 33901	X			X	
Geological	Universal Engineering 1205 D Elizabeth Street Punta Gorda, FL 33950		X			X
Engineering & Land Surveys	Deni Associates, Inc 6241 Arc Way Fort Myers, FL 33912	X		WBE		X
Toll Systems Equipment & Integration	Transcore 5744 South Semoran Blvd. Orlando, FL 32822		X		X	

CMO:035
09/25/01

Dated: July 5, 2002

EXHIBIT "E"
PROJECT GUIDELINES & CRITERIA FOR

~~Sanibel bridge toll plaza reconstruction (including a new administration~~
building) and Cape Coral bridge toll plaza reconstruction

Lee County Department of Transportation

It is the intention of Lee County to accept letters of interest for the design of these facilities. The shortlisted consultants will be asked to prepare design proposals conveying their concept of complete and functioning facilities including the toll collection system. This will include a preliminary site plan, architectural rendering, and flow charts which reflect the designers concept of the way the facilities will function as a whole. The team will be expected to detail the proposed technology and how they will integrate it into the system to achieve the design solutions requested in the Letter of Interest.

Cape Coral Toll Facility

Services will include redesign of all traveled lanes for a complete reconstruction of all traveled lanes and related facilities including, but not limited to, islands, toll booths, coin machines, canopies, and all equipment relating to electronic toll collection (ETC). Reconstruction shall be performed under traffic, and services will include a maintenance of traffic plan designed to maximize safety for both the motorist as well as toll personnel. The plan shall take into account facility capacity while under construction, and innovative solutions to maintain the facility's capacity while under construction are encouraged.

EXISTING CONDITIONS/DESIGN CONSIDERATIONS

The existing toll plaza is comprised of 10 physical traveled lanes. Travel on the facility occurs to the east and to the west with 5 lanes normally in use in each direction. Some lanes as described below are reversible, and it is normal procedure for the facility to reverse lanes during peak periods. The lanes are numbered starting at the north from 1 through 10, with 11 through 14 used to indicate lanes operating in a reverse mode. The two outside lanes on each end (1&2, and 9&10) are attended lanes and the 6 interior lanes are automatic coin machine (ACM) lanes. The four centermost lanes (4 through 7) can be reversed. All lanes accommodate payment by Lee County's Electronic Toll Collection (ETC) system, LeeWay. Static signage is provided to identify lane use. Two signal sections are provided above each lane indicating an open lane (illuminated green), or closed (illuminated red). Traffic at the plaza, particularly westbound traffic is heavily influenced by the urban interchange at McGregor Boulevard and College Parkway to the east of the toll facility. Currently, weaving movements

resulting from the interchange adversely impact traffic. The redesign of the facility should minimize these weaving movements to the extent practical. It is anticipated that the existing administration building located to the north of the traveled lanes, along with its parking facilities will remain as is.

PROPOSED CONDITIONS

The proposed toll plaza would also be comprised of 10 physical traveled lanes. The two outside lanes in each direction would remain attended lanes. The two centermost lanes would be converted to attended lanes, both of which would accommodate reverse operation. Consideration will also be given to possibility of incorporating ACMs into the attendant booths, particularly in the center lanes, to allow them to operate in either an ACM or attended mode. The remaining four lanes, two in each direction are anticipated to operate in an express mode without gates. The County anticipates building the reconstructed toll plaza within the existing right of way. While this will limit the potential for widening the overall facility, the potential for eliminating the islands between the two express lanes in each direction will be analyzed and the resulting potential for lane widening will be evaluated. Possibilities for processing bicycle traffic outside of the normal traveled lanes will also be evaluated.

Incorporation of LeeWay's ETC program in all lanes including ETC as well as other than applicable elements such as automatic vehicle classification (AVC) and a video violation enforcement system (VES) are included as part of the redesign. Due to the rapid advances occurring in toll collection technology, the selected consultant should plan to evaluate then existing technologies for inclusion into the design. These considerations may include, but are not limited to, the potential for implementation of open road tolling at the Cape Coral facility and achieving compatibility with Sunpass.

Appropriate message signs will be incorporated into the design including signage to identify the function of each lane and whether the lane is open to traffic. It is anticipated that signs will be designed for placement over each lane and that these signs will be dynamic message signs to allow changes in lane use, such as attended or unattended operation for the centermost lanes, and to allow provision of appropriate messages in unusual conditions such as hurricane evacuation.

To facilitate safe movement in the facility, a walkway above or below the lanes is contemplated in the design. The selected consultant will work closely with the county to determine the desirability of such a facility, the number of access points to the lanes, and the method of access for each access point. Compliance with the Americans with Disabilities Act (ADA) will be fully taken into account during design. If an elevated walkway is used, it may be possible for it to act as part of a covering canopy. Whether by use of an overhead walkway or other means, protection from the elements for toll collectors, customers, and equipment will be incorporated into the design.

To facilitate the physical movement of coins within the facility, alternatives to traditional ACM vaults will be investigated. Security and auditing considerations will be included in the design of any alternatives.

In addition to design of the toll facility as described above, services will also include traffic operational analysis of the proposed lane use plan. The selected consultant will be expected to work closely with the county to develop an optimal design for the toll facility from both a safety (motorist and toll attendant) standpoint, as well as a vehicle throughput standpoint.

Sanibel Facility (includes a new administration building)

Services will include redesign of all traveled lanes for a complete reconstruction of all traveled lanes and related facilities including, but not limited to islands, toll booths, coin machines, canopies, and all equipment relating to electronic toll collection (ETC) as well as reconstruction of the administrative facility. Due to the susceptibility of the facility to flooding during predicted storm events, consideration is to be given to construction of the administrative facility over the traveled lanes. Whether by over-lane construction or by other means, consideration will be given to protecting the administration facility from flood conditions. Further, the potential for elevating/hardening the entire facility to the extent practical will be examined as a part of this redesign. Reconstruction shall be performed under traffic, and services will include a maintenance of traffic plan designed to maximize safety for both the motorist as well as toll personnel. The plan shall also take into account facility capacity while under construction.

EXISTING CONDITIONS

In the Sanibel facility, tolls are collected in one direction only, westbound, onto Sanibel Island. There are three traveled lanes in the facility westbound, and one lane eastbound (not tolled). Two of the tolled lanes are attended and a third is currently an ACM lane. All three toll lanes accommodate payment by Lee County's Electronic Toll Collection (ETC) system, LeeWay. The existing lane widths are not sufficient to handle wide load traffic, and such traffic currently must be diverted from the traveled road and routed around the north side of the administrative building. Static signage is provided to identify lane use. Two signal sections are provided above each lane indicating an open lane (illuminated green), or closed (illuminated red). The existing administration building is located to the north of the traveled lanes. Parking is provided to the east of the administration building.

PROPOSED CONDITIONS

The proposed toll plaza would also be comprised of three physical traveled lanes. As currently configured, two lanes will remain as attended lanes. Due to the make up of the Sanibel Causeway traffic stream, it is unlikely that

consideration will be given to possibility of incorporating ACMs into the attendant booths to allow them to operate in either an ACM or attended mode. The third lane will be converted to ETC only, and consideration will be given to converting this lane to un-gated express operation. The potential for accommodating wide loads on the facility's traveled lanes will also be considered.

Incorporation of LeeWay's ETC program in all lanes including ETC as well as other then applicable elements such as automatic vehicle classification (AVC) and a video violation enforcement system (VES) are included as part of the redesign. Due to the rapid advances occurring in toll collection technology, the selected consultant should plan to evaluate then existing technologies for inclusion into the design. These considerations may include, but are not limited to, the potential for implementation of open road tolling at the Sanibel facility and achieving compatibility with Sunpass.

Appropriate message signs will be incorporated into the design including signage to identify the function of each lane and whether the lane is open to traffic. It is anticipated that signs will be designed for placement over each lane. Use of dynamic signs to facilitate appropriate messages in unusual conditions such as hurricane evacuation will be considered.

Provision will be made in the design to allow future implementation of an ETC reader in the outbound lane. Provisions will include both design considerations to allow for the physical placement of such equipment as well as appropriate provisions for equipment installation and wiring.

The selected consultant will be expected to work closely with the county to develop an optimal design for the toll facility from both a safety (motorist and toll attendant) standpoint, as well as a vehicle throughput standpoint. Further, as the Sanibel facility is located near recreational facilities, particularly the Punta Rassa Boat Ramp, consideration will be given to working with the County Parks and Recreation Department to accommodate overflow parking from the boat ramp and improving roadway access to this area.

This Contract Document does not entitle any firm to exclusive rights to County contracts. The County reserves the right to perform any and all required work in house or by any means it so desired.

EXHIBIT F
DATE: January 31,2003

TRUTH IN NEGOTIATION CERTIFICATE

This Certificate is executed and given by the undersigned as a condition precendent to entering into a Professional Services Agreement with the Lee County Board of County Commissioners for the project known as: Sanibel Bridge Toll Plaza Reconstruction (including a new administration building) and Cape Coral Bridge toll Plaza Reconstruction

(Enter Project Name from Page 1 of Agreement)

Before me, the undersigned authority personally appeared, who having personal knowledge as to the facts and statements contained herein after being duly sworn, deposes and states under oath that:

1. This Certificate shall be attached to and constitute an integral part of the above said Professional Services Agreement as provided in Article 3.11.

2. The undersigned hereby certifies that the wage rates and other factual unit costs supporting the compensation on which this Professional Services Agreement is established are accurate, complete, and current on the date set forth here-in-above.

3. The truth of statements made herein may be relied upon by the County and the undersigned is fully advised of the legal effect and obligations imposed upon him by the execution of this instrument under oath.

Executed on behalf of the Party to the Professional Services Agreement referred to as the CONSULTANT, doing business as:

URS Corporation Southern

BY: [signature]

TITLE: Vice - President

The foregoing instrument was signed and acknowledged before me this 31 day of January, 2003, by Bill McDaniel who has produced _____ as
(Print or Type Name) (Type of Identification and Number)
identification.

[signature]
Notary Public Signature

Michelle Greene
Printed Name of Notary Public

DD 010189 3/19/05
Notary Commission Number/Expiration

MICHELLE GREENE
My Comm Exp. 3/19/05
No. DD 010189
[X] Personally Known [ ] Other I.D.

CMO:
00/00/00

MARSH

CERTIFICATE OF INSURANCE

CERTIFICATE NUMBER
SEA-000641051-02

PRODUCER
MARSH RISK & INSURANCE SERVICES
P.O. BOX 193880
SAN FRANCISCO, CA 94119-3880
CALIFORNIA LICENSE NO. 0437153

LEE COUNTY RECEIVED
03 FEB -4 AM 10: 15

URSA-F-ALL-W/PRO- FL TAM URS

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER OTHER THAN THOSE PROVIDED IN THE POLICY. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES DESCRIBED HEREIN.

COMPANIES AFFORDING COVERAGE

COMPANY A NATIONAL UNION FIRE INS. CO. OF PITTSBURGH, PA.

COMPANY B AMERICAN MANUFACTURERS MUTUAL INSURANCE CO.

COMPANY C AMERICAN INTERNATIONAL SPECIALTY LINES INS. CO.

COMPANY D INSURANCE CO. OF THE STATE OF PA

INSURED
URS CORPORATION
100 CALIFORNIA STREET
SUITE 500
SAN FRANCISCO, CA 94111

COVERAGES This certificate supersedes and replaces any previously issued certificate for the policy period noted below. 3

THIS IS TO CERTIFY THAT POLICIES OF INSURANCE DESCRIBED HEREIN HAVE BEEN ISSUED TO THE INSURED NAMED HEREIN FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THE CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, CONDITIONS AND EXCLUSIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
A	GENERAL LIABILITY	GL933-1972	04/01/02	04/01/03	GENERAL AGGREGATE	$ 2,000,000
	X COMMERCIAL GENERAL LIABILITY				PRODUCTS - COMP/OP AGG	$ 2,000,000
	CLAIMS MADE X OCCUR				PERSONAL & ADV INJURY	$ 1,000,000
	OWNER'S & CONTRACTOR'S PROT				EACH OCCURRENCE	$ 1,000,000
					FIRE DAMAGE (Any one fire)	$ 1,000,000
					MED EXP (Any one person)	$ 5,000
B	AUTOMOBILE LIABILITY	F5Y006395-00 AOS	04/01/02	04/01/03	COMBINED SINGLE LIMIT	$ 1,000,000
B	X ANY AUTO	F5Y006396-00 HI	04/01/02	04/01/03		
B	ALL OWNED AUTOS	F5Y006397-00 VA	04/01/02	04/01/03	BODILY INJURY (Per person)	$
B	SCHEDULED AUTOS	F5Y006398-00 TX	04/01/02	04/01/03		
B	X HIRED AUTOS	X3P084803-00 MASS	04/01/02	04/01/03	BODILY INJURY (Per accident)	$
	X NON-OWNED AUTOS				PROPERTY DAMAGE	$
	GARAGE LIABILITY				AUTO ONLY - EA ACCIDENT	$
	ANY AUTO				OTHER THAN AUTO ONLY:	
					EACH ACCIDENT	$
					AGGREGATE	$
	EXCESS LIABILITY				EACH OCCURRENCE	$
	UMBRELLA FORM				AGGREGATE	$
	OTHER THAN UMBRELLA FORM					$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY	708-5561 CA	01/01/03	01/01/04	X WC STATUTORY LIMITS / OTHER	
D		708-5562 AOS	01/01/03	01/01/04	EL EACH ACCIDENT	$ 1,000,000
A	THE PROPRIETOR/ PARTNERS/EXECUTIVE OFFICERS ARE: X INCL / EXCL	708-5563 NY, OH, WA, WI, WV	01/01/03	01/01/04	EL DISEASE-POLICY LIMIT	$ 1,000,000
					EL DISEASE-EACH EMPLOYEE	$ 1,000,000
C	OTHER PROF. LIABILITY (E&O) CLAIMS MADE FORM	476-3090	04/01/02	04/01/03	EACH CLAIM AGGREGATE	$1,000,000 $1,000,000

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS

RE: SANIBEL BRIDGE TOLL PLAZA RECONSTRUCTION AND CAPE CORAL BRIDGE TOLL PLAZA RECONSTRUCTION; PROJECT NO. CN-02-23
THE CERTIFICATE HOLDER IS INCLUDED AS AN ADDITIONAL INSURED WHERE REQUIRED BY CONTRACT.

CERTIFICATE HOLDER

LEE COUNTY BOARD OF COUNTY COMMISSIONERS
ATTN: PUBLIC WORKS ADMINISTRATION, CONTRACT MANAGEMENT
P.O. BOX 398
FORT MYERS, FL 33902-0398

CANCELLATION

SHOULD ANY OF THE POLICIES DESCRIBED HEREIN BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE INSURER AFFORDING COVERAGE WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED HEREIN, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER AFFORDING COVERAGE, ITS AGENTS OR REPRESENTATIVES, OR THE ISSUER OF THIS CERTIFICATE.

MARSH USA INC.
BY: Michio Nekota

ADDITIONAL INFORMATION

SEA-000641051-02

DATE (MM/DD/YY) 01/31/03

PRODUCER

MARSH RISK & INSURANCE SERVICES
P.O. BOX 193880
SAN FRANCISCO, CA 94119-3880
CALIFORNIA LICENSE NO. 0437153

URSA-F-ALL-W/PRO- FL TAM URS

COMPANIES AFFORDING COVERAGE

COMPANY E

COMPANY F

COMPANY G

COMPANY H

INSURED

URS CORPORATION
100 CALIFORNIA STREET
SUITE 500
SAN FRANCISCO, CA 94111

TEXT

POLICY NUMBER: GL 933-1972
EFFECTIVE: 04/01/02 TO 04/01/03

COMMERCIAL GENERAL LIABILITY
NATIONAL UNION FIRE INSURANCE COMPANY OF PITTSBURGH

THIS ENDORSEMENT CHANGES THE POLICY, PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED - OWNERS, LESSEE, OR
CONTRACTORS - FORM B

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name or Person or Organization: Any/All person or organization when required by written contract.

If no entry appears below, information required to complete this endorsement will be shown in Declarations as applicable to this endorsement.

WHO IS AN INSURED (Section II) is amended to include as an insured the person or organization shown in the Schedule but only with respect to liability arising out of "your work" for that insured by or for you.

PRIMARY INSURANCE: It is further agreed that such insurance as if afforded by this policy for the benefit of the above Additional Insured(s) shall be primary insurance as respects any claim, loss or liability arising out of the Named Insured's operations, and any other insurance maintained by the Additional Insured(s) shall be excess and non-contributory with the insurance provided hereunder.

CG 20 10 11/85

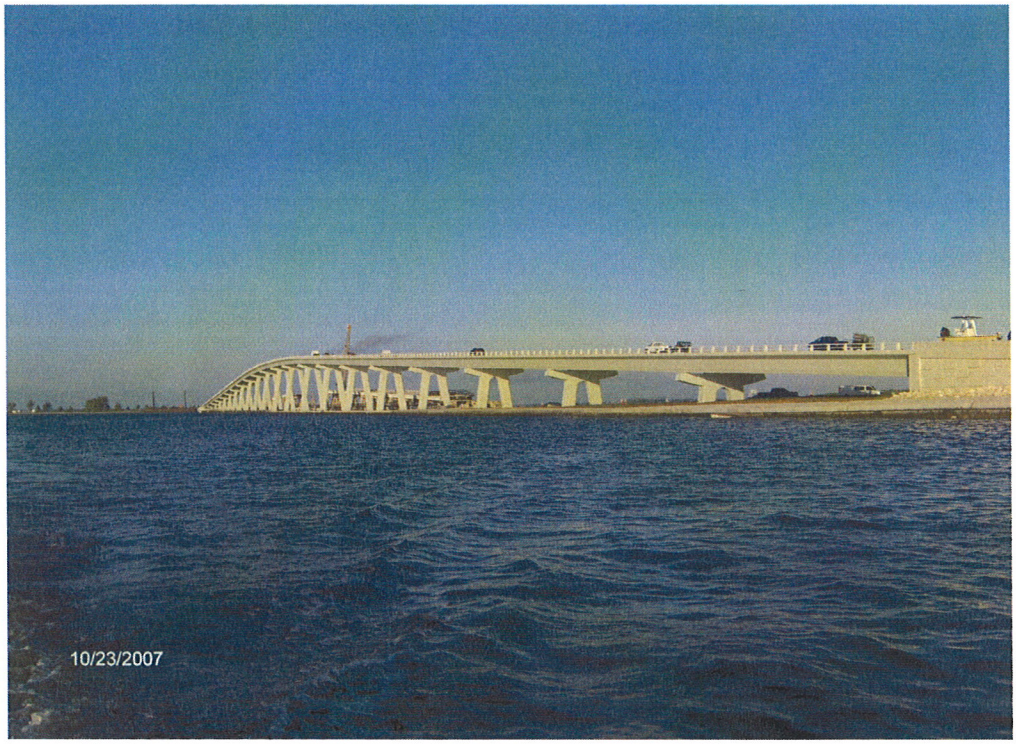
Note: This fulfills the legal requirement of Form CG2010 11 85.

CERTIFICATE HOLDER

LEE COUNTY BOARD OF COUNTY COMMISSIONERS
ATTN: PUBLIC WORKS ADMINISTRATION, CONTRACT
MANAGEMENT
P.O. BOX 398
FORT MYERS, FL 33902-0398

EXHIBIT G

BRIDGE RECORD



BRIDGE NUMBER: 124116
BRIDGE NAME: STRUCTURE A SANIBEL CAUSEWAY

BRIDGE RECORD CONTENTS

I. Inspection Reports - This section contains periodic bridge inspection reports, bridge repair work orders, and accident reports.

II. Inventory - contained in this section is the following bridge information: photographs, location map, detailed data, history, load carrying capacity, inspection preparation, and drawings.

III. Communications - Correspondence such as letters, memorandums, and notices directly related to this bridge are contained in this section.

SECTION I

BRIDGE INSPECTION REPORTS

I. INSPECTION REPORTS

BRIDGE NUMBER: 124116
BRIDGE NAME: STRUCTURE A SANIBEL CAUSEWAY

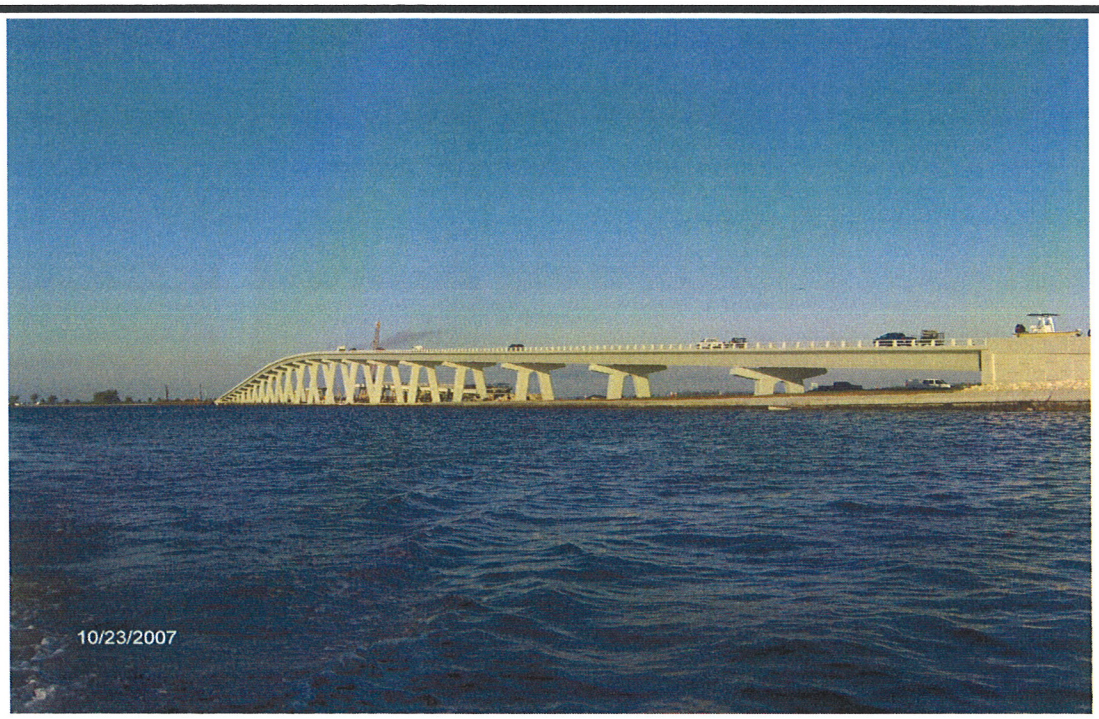
DOCUMENT LOG	
Type of Inspection Report or Document	Date Inspected
Initial Inspection Report	11/15/07

BRIDGE INSPECTION REPORT

PREPARED FOR:
FLORIDA DEPT. OF TRANSPORTATION
OWNER: LEE COUNTY

VOLKERT & ASSOCIATES, INC.

BRIDGE NO. 124116 INSPECTION DATE: 11/15/07



STRUCTURE A SANIBEL CAUSEWAY

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM

Inspection Report
(INITIAL INSPECTION)

BY: Volkert & Associates
OWNER: 2 County Hwy Agency
MAINTAINED BY: 2 County Hwy Agency
STRUCTURE TYPE: 6 P/S Conc Continuous 02 Stringer/Girder
LOCATION: 1ST STRCT S/O TOLL PLAZA
SERVICE TYPE ON: 1 Highway
SERV TYPE UND: 5 Waterway

BRIDGE NAME: STRUCTURE A SANIBEL CAUSEW/
YEAR BUILT: 2007
SECTION NO.: 12 000 000
MP: 0
ROUTE: 00867
FACILITY CARRIED: CR 867
FEATURE INTERSECTED: SAN CARLOS BAY

- [ ] THIS BRIDGE CONTAINS FRACTURE CRITICAL COMPONENTS
- [ ] THIS BRIDGE IS SCOUR CRITICAL
- [ ] THIS REPORT IDENTIFIES DEFICIENCIES WHICH REQUIRE PROMPT CORRECTIVE ACTION

- [ ] FUNCTIONALLY OBSOLETE
- [ ] STRUCTURALLY DEFICIENT

TYPE OF INSPECTION: Regular NBI
DATE FIELD INSPECTION WAS COMPLETED: ABOVE WATER: 11/15/2007 UNDERWATER: 10/02/2007

SMART FLAGS:
None

OVERALL NBI RATINGS:
DECK: 8 Very Good
SUPERSTRUCTURE: 6 Satisfactory
SUBSTRUCTURE: 5 Fair
CHANNEL: 8 Protected
CULVERT: N N/A (NBI)

SUFFICIENCY RATING: 68.0
HEALTH INDEX: 99.82

FIELD PERSONNEL / TITLE / NUMBER	INITIALS
Wolfe, Wade - Bridge Inspector (CBI #00382) (lead)	W
Morris, Stephen - Certified Bridge Inspector (CBI #00441)	
Brewer, James - Technician	
Hoogland, Keith - Bridge Inspection (CBI#00341)	
Schmidt, Kyle - Diver	
Brewer, James - Diver	
McCranie, Orion - Diver	

REVIEWING BRIDGE INSPECTION SUPERVISOR:

Rucks, Edward - CBI (#00273) EK

CONFIRMING REGISTERED PROFESSIONAL ENGINEER:

Harrigan, Robert - Professional Engineer (PE #45236)
Volkert & Associates
3409 W. Lemon Street
CERTIFICATE OF AUTHORIZATION #4641
Tampa, FL 33609

SIGNATURE: Robert J. Harrigan, Jr.

DATE: DEC 20 2007

All Elements

UNIT: Structure Unit 1 DECKS

ELEMENT/ENV: 12/4 Bare Concrete Deck 129408 sf. ELEM CATEGORY: Decks/Slabs

CONDITION STATE (5)	DESCRIPTION	QUANTITY
1	The surface of the deck has no repaired areas, there are no spalls/delaminations in the deck surface or underside and the only cracking is superficial.	129408 sf.

ELEMENT/ENV: 300/4 Strip Seal Exp Joint 345 lf. ELEM CATEGORY: Joints

CONDITION STATE (3)	DESCRIPTION	QUANTITY
1	The element shows minimal deterioration. There is no leakage at any point along the joint. Gland is secure and has no defects. Debris in joint is not causing any problems. The adjacent deck and/or header is sound.	345 lf.

ELEMENT INSPECTION NOTES:
NOTE: This element quantifies joints 1, 4, 7, 10, 13, 16, 19 and 22.

ELEMENT/ENV: 334/4 Metal Rail Coated 6005 lf. ELEM CATEGORY: Railing

CONDITION STATE (5)	DESCRIPTION	QUANTITY
1	There is no evidence of active corrosion. Protective coating is sound and functioning as intended to protect the element.	6005 lf.

ELEMENT INSPECTION NOTES:
NOTE: Barriers meet NCHRP TL4 criteria and meet SIA Item 36 standards.

CS1: There are several tire marks on the barriers.

ELEMENT/ENV: 109/4 P/S Conc Open Girder 12010 lf. ELEM CATEGORY: Superstructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without effect on strength and/or serviceability.	11998 lf.

All Elements

UNIT: Structure Unit 1 SUPERSTRUCTURE

ELEMENT/ENV: 109/4 P/S Conc Open Girder 12010 lf. ELEM CATEGORY: Superstructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
2	Minor cracks and spalls may be present, and there may be exposed reinforcing with no evidence of corrosion. There is no exposure of the prestress system.	12 lf.

ELEMENT INSPECTION NOTES:

CS1: The beams have between 3 and 5 diagonal web cracks up to 4ft long x less than 1/64in wide, within 5ft of the bearings.

The east face of beam 14-4 has a 10in x 1/64in vertical bottom flange crack, 3in from the bearing.

The left top flange of beam 17-4 has wide spread longitudinal hairline cracking with efflorescence and some cracks up to 1/64in wide near pier 18.

CS2: There are beam end /closure pour delaminations and spalls at pier 11 as follows:
10/11-1, east and west faces, delamination, 10in x 5in;
10/11-2, west face, spall with no exposed steel, delamination, 24in x 4in x 2in;
10/11-3, west face, spall with no exposed steel, 10in x 10in x 1/2in;
10/11-4, west face, delamination, 6in x 5in;
10/11-4, east face, spall with exposed steel, 42in x 12in x 5in. Refer to Photo 1. REPAIR ALL

There are minor bottom flange spalls with no exposed steel as follows:
Beam 15-1, east face near pier 16, 6in x 2in x 1/2in;
Beam 15-3, east face at 7/8pt, 4in x 4in x 1in;
Beam 15-4, west face at 1/2pt, 16in x 4in x 1in.

ELEMENT/ENV: 397/4 Drain. Syst Metal 20 ea. ELEM CATEGORY: Superstructure

CONDITION STATE (5)	DESCRIPTION	QUANTITY
1	There is no evidence of active corrosion and the paint system is sound and functioning as intended to protect the metal surface. Drainage system is functioning as intended.	20 ea.

ELEMENT INSPECTION NOTES:

CS1: Most scupper down spouts are not properly shimmed or anchored to the beams. Refer to Photo 2. REPAIR

ELEMENT/ENV: 310/4 Elastomeric Bearing 168 ea. ELEM CATEGORY: Bearings

CONDITION STATE (3)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. Shear deformations are correct for existing temperatures.	168 ea.

All Elements

UNIT: Structure Unit 1 SUPERSTRUCTURE

ELEMENT/ENV: 563/4 Acc Ladd & Plat 16 ea. ELEM CATEGORY: Movable

CONDITION STATE (5)	DESCRIPTION	QUANTITY
1	There is no evidence of active corrosion, and the paint system is sound and functioning as intended to protect the metal surface.	16 ea.

ELEMENT INSPECTION NOTES:
NOTE: Quantity includes eight ladders and eight platforms including two fender access walkways.

ELEMENT/ENV: 580/4 Navigational Lights 1 ea. ELEM CATEGORY: Movable

CONDITION STATE (3)	DESCRIPTION	QUANTITY
1	Lights are operational, lenses are clean and not broken, there is no evidence of corrosion.	1 ea.

ELEMENT INSPECTION NOTES:
NOTE: Element includes six fender lights, two clearance gauge lights and two swing lights. Only temporary lighting was in place at time of inspection.

ELEMENT/ENV: 205/4 R/Conc Column 40 ea. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without effect on strength and/or serviceability.	40 ea.

ELEMENT/ENV: 207/4 P/S Conc Holl Pile 224 ea. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	220 ea.
2	Minor cracks, spalls and scaling may be present and there may be exposed reinforcing with no evidence of corrosion. There is no exposure of the prestress system.	2 ea.

All Elements

UNIT: Structure Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 207/4 P/S Conc Holl Pile 224 ea. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
4	Severe cracks, spalls, scaling, delaminations, and corrosion of non-prestressed reinforcement are prevalent. There may also be exposure and deterioration of the prestress system (manifested by loss of bond, broken strands or wire, failed anchorages, etc)	2 ea.

ELEMENT INSPECTION NOTES:

CS2: Pile 11-1 has two spalls with no exposed steel up to 6in x 6in x 1-1/2in.

Pile 17-10 has an intermittent 13ft x 12in x 3in spall with no exposed steel on the NE corner beginning 2ft below the footer.

CS4: The upper 7ft of piles 11-8 and 11-15 are fractured and all prestress strands are exposed. Refer to Sketch 1. REPAIR

ELEMENT/ENV: 215/4 R/Conc Abutment 70 lf. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without effect on strength and/or serviceability.	70 lf.

ELEMENT/ENV: 220/4 R/C Sub Pile Cap/Ftg 20 ea. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without effect on strength and/or serviceability.	19 ea.
2	Minor cracks and spalls may be present, but there is no exposed reinforcing or surface evidence of rebar corrosion.	1 ea.

ELEMENT INSPECTION NOTES:

CS2: Footer 17 has two spalls with no exposed steel up to 12in x 12in x 2in on the northeast and southeast corners.

All Elements

UNIT: Structure Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 234/4 R/Conc Cap 862 lf. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without effect on strength and/or serviceability.	862 lf.

ELEMENT INSPECTION NOTES:
CS1: Both shear blocks in span 10 at pier 10 and the right block in span 11 at pier 12 are fractured. Refer to Photo 3. REPAIR

ELEMENT/ENV: 387/4 P/S Fender/Dolphin 588 lf. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	588 lf.

ELEMENT INSPECTION NOTES:
NOTE: Quantity includes dolphins. Fenders and dolphins incomplete at time of inspection.

ELEMENT/ENV: 396/4 Other Abut Slope Pro 2500 sf. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	There is little or no deterioration. Surface defects only are in evidence. Random open joints may exist.	2500 sf.

ELEMENT INSPECTION NOTES:
NOTE: Element includes rock rubble rip rap and articulating concrete block mats. Under construction at time of inspection.

ELEMENT/ENV: 321/4 R/Conc Approach Slab 2 ea. ELEM CATEGORY: Other Elements

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The slab has not settled and shows no sign of deterioration other than superficial surface cracks.	2 ea.

All Elements

UNIT: Structure Unit 1 MISCELLANEOUS

ELEMENT/ENV: 478/4 MSE Walls **120 lf.** **ELEM CATEGORY:** Other Elements

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	There is little or no deterioration. Surface defects only are in evidence.	120 lf.

ELEMENT INSPECTION NOTES:
NOTE: Quantity refers to 30LF at each corner.

ELEMENT/ENV: 290/4 Channel **1 ea.** **ELEM CATEGORY:** Channel

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The channel is in good condition, channel banks are protected or well vegetated, river control devices and embankment protection are not required or are in good condition.	1 ea.

Structure Notes

OWNER: LEE COUNTY

TRAFFIC RESTRICTION: Based on the load rating analysis dated 8/1/07, the structure does not require posting. The structure is not posted.

Structure inventoried from south to north on a west to east leg of a south to north roadway. Direction of stationing is used to describe deficiency locations. (Left is West).

This structure replaces a bascule bridge 124043. The nearest structures are also on the causeway and are numbered 124114 and 124115.

Lane shift required for underbridge inspection vehicle. Power boat with fathometer used for groundline measurements.

INSPECTION NOTES: GPFO 11/15/2007

Sufficiency Rating Calculation Accepted by KNVOLCW-P at 2007-12-13 11:47:06
Sufficiency Rating Calculation Accepted by KNVOLCW-P at 2007-12-04 11:53:05

LOAD CAPACITY EVALUATION:
The load rating dated 8/1/07 applies to the current condition of this bridge.

Construction of fenders, dolphins, slope protection and navigation lighting still in progress. Demolition of replaced structure ongoing. Left side groundline measurements not taken due to demolition.

Structure sustained damage due to demolition of replaced structure. Refer to Elements 109 P/S Conc Open Girder, 207 P/S Conc Holl Pile and 234 R/Conc Cap.

PHOTO 1: 109/4 P/S CONC OPEN GIRDER

Spall with exposed closure pour /diaphragm steel, beam 10/11-4 east face at pier 11.

REPAIR RECOMMENDATION:
Repair spalls and delaminations on all beams over pier 11. Suggest in depth inspection on blast damaged beams. 0.25CY 20MH

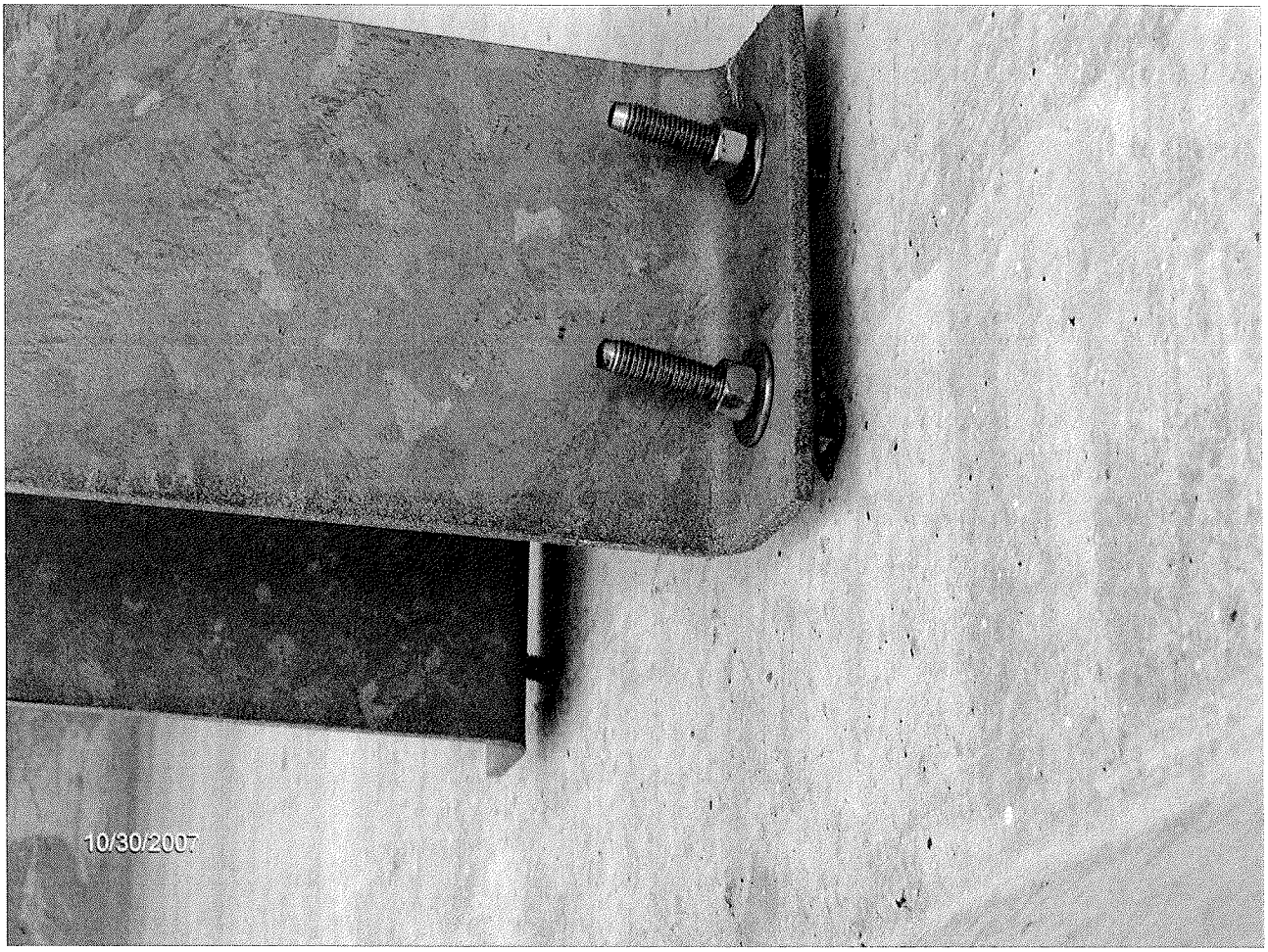


PHOTO 2: 397/4 DRAIN SYST METAL

Drain system down spout improperly anchored to beam, bay 4-1 near pier 4 - typical.

REPAIR RECOMMENDATION:
Properly shim and anchor all drain system downspouts. 100MH

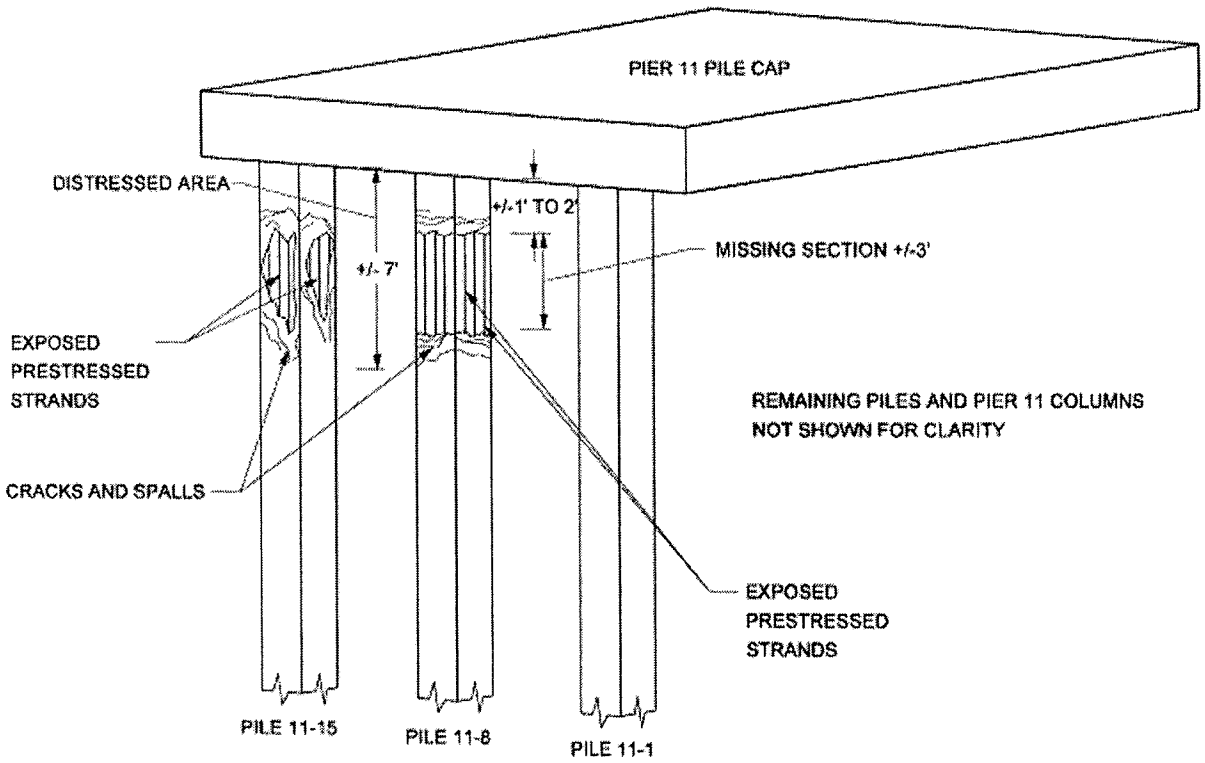
PHOTO 3: 234/4 R/CONC CAP

Fractured left shear key span 10, pier 10 - typical.

REPAIR RECOMMENDATION:
Replace both shear keys span 1- pier 10 and right block span 11 at pier 12. Consider in depth inspection of areas possibly affected by blast. 100MH

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
BRIDGE INSPECTION REPORT ADDENDUM

BRIDGE ID: 124116 PAGE: A1 OF A5
DISTRICT: 01 BARTOW INSPECTION DATE: 11/15/07



SKETCH 1: 207/4 P/S CONC HALL PILE

Fractured pile 11-8 with missing section and all prestressed strands exposed – typical.

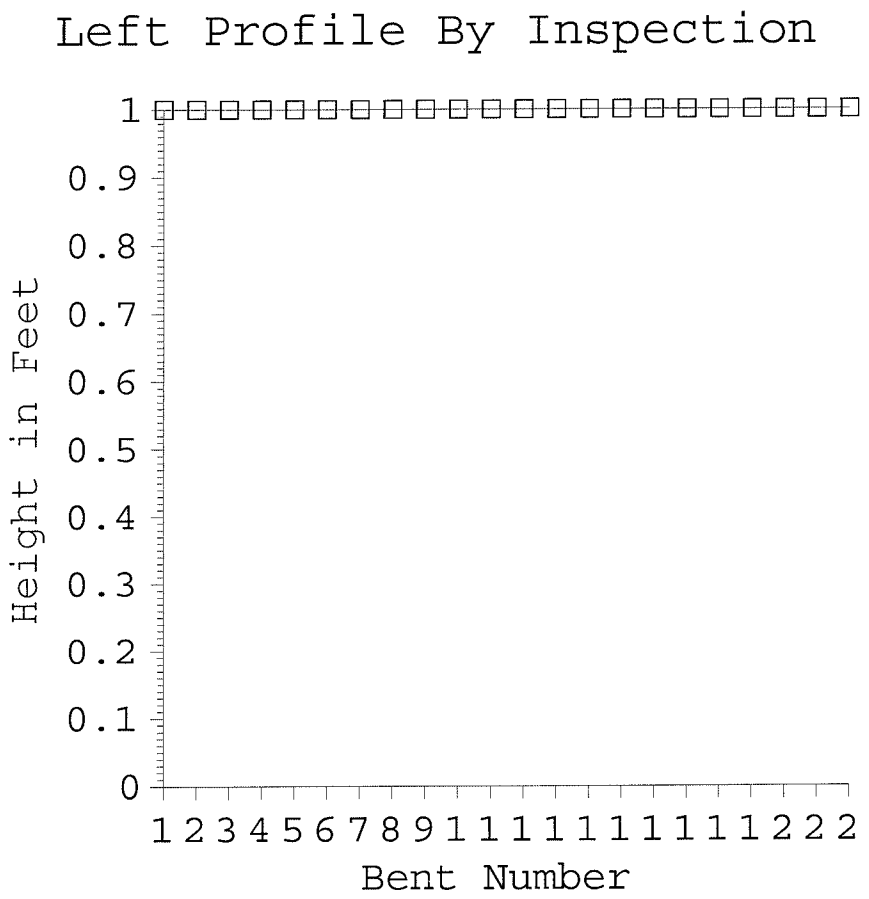
WORK ORDER RECOMMENDATION:

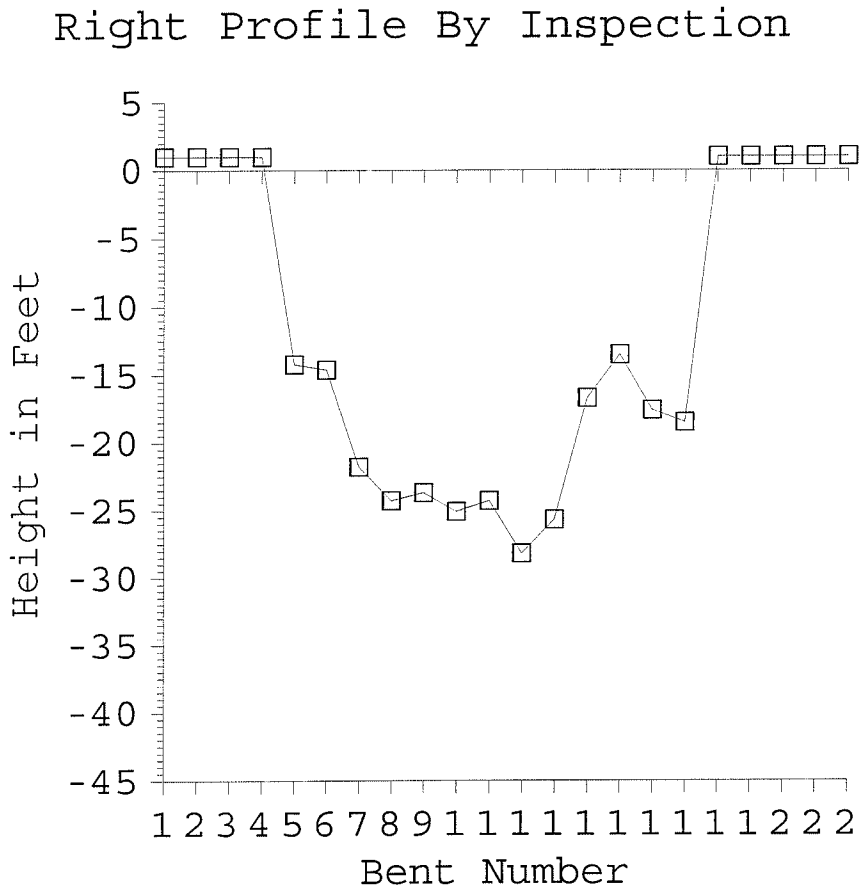
Repair or replace pile 11-8 and 11-15. Consider performing in depth inspection of all substructure elements possibly affected by the demolition blast. 400MH

FLORIDA DEPARTMENT OF TRANSPORTATION BRIDGE MANAGEMENT SYSTEM
Bridge Profile Report

REPORT ID: INVT016
Structure #: 124116

DATE PRINTED: 12/13/2007





Profile Data - Numerical Summary

Inspection Date and Key: 11/15/2007 GPFO

(All Heights Are In Feet)

Bent #	Left Height	Right Height
1	-1	-1
2	-1	-1
3	-1	-1
4	-1	-1
5	-1	14.2
6	-1	14.6
7	-1	21.8
8	-1	24.3
9	-1	23.7
10	-1	25.1
11	-1	24.3
12	-1	28.2
13	-1	25.7
14	-1	16.7
15	-1	13.5
16	-1	17.6
17	-1	18.5
18	-1	-1
19	-1	-1
20	-1	-1
21	-1	-1
22	-1	-1

Air Temp:

Profile Notes:

Measurements referenced to top of pier 4 footer.
Waterline: 3.0ft

No left side measurements taken due to ongoing demolition.
Bents 1 - 4 and 18 - 22 are on dryland.

BOLT
UNDERWATER SERVICES
7946 62ND STREET NORTH
PINELLAS PARK, FL 33781

Initial Underwater Bridge Inspection Report for Volkert & Associates, Inc.

Bridge ID: **124116** Underwater Date (93): 10/02/07
Location (9): First Structure from the east Toll Booth
Featured Intersected (6): Sanibel Causeway " Structure A"
Special Crew Hours: 28.0 Max. Depth: 28ft.
District: 01 South Lee County

FIELD PERSONNEL/TITLE/NUMBER

Hoogland, Keith S. – Diver / Inspector (CBI#00341) (lead)	DIVE	KSH
Schmidt, Kyle A. – Diver / Inspector	DIVE	
Brewer, James D. – Diver / Inspector	DIVE	
McCranie, Orion P. – Diver / Inspector	TEND/BOAT	

PILING/COLUMNS
ELEMENT: 207 HLW CORE **224**: ea.
NCR: **7**

Recommended Feasible Action:
Do Nothing

Footer 17, Pile 10: NE corner 24in. below footer, intermittent SPL, no steel, 13ft. x 12in. x 3in. *New.*

NOTE: Piles 5-6, 5-7, 5-13, 5-14, 5-20, 5-21, 6-4, 6-5, 6-13, 6-14, 6-20, 6-21, 7-6, 7-7, 7-13, 7-20, 7-21, 8-1, 8-2, 8-3, 8-4, 8-5, 8-6, 8-7, 8-12, 8-13, 8-14, 8-19, 8-20, 8-21, 9-1, 9-2, 9-8, 9-9, 9-16 and all deficiencies were cleaned.

SUBMERGED FOOTER
ELEMENT: 220 R/CONCRETE **14**: ea.
NCR: **7**

Recommended Feasible Action:
Do Nothing

There are random minor spalls. *New.*
The footers have concrete formed sides that have vertical cracks with no CBO up to 1/16in. wide x full height. Several cracks have efflorescence. *New.*

NOTE: No cleaning was done due to forms still being in place.

CHANNEL
ELEMENT: 290 **1**: ea.
NCR: **7**

Recommended Feasible Action:
Do Nothing

The seawalls were in a construction area and not inspected due to safety concerns.
There is scattered timber debris from the previous fender system along the new fender system.
On Bents 14 through 17, the groundline slopes upward going away from the piling up to 4ft. high on one or more sides.
Several piling had minimal marine growth on the bottom 4in. to 6in. *New.*

BOLT UNDERWATER SERVICES, INC.

Bridge ID: 124116
District: 01 South

Inspection Date: 10/02/07

FENDER SYSTEM
ELEMENT: 387 P/S CONCRETE **256ft.**

Recommended Feasible Action:
Do Nothing

The fender system is not complete due to removal of old structure.

INSPECTION NOTES: Boat & Motor
STRUCTURE NOTES: Divers inspected two hundred twenty-four 30in. piling in Bents 4 through 17.

PHOTO LOG – None

SECTION II

INVENTORY

II. INVENTORY

Inventory Topics **Page**

A. Photo Inventory ..... A1 – A5

B. Location Map B1

C. Condensed Inspection Data Report (SI&A) C1

D. Load Capacity Information D1

E. Bridge History E1

F. Field Preparation F1
   1. Tools and Equipment
   2. Services
   3. Scheduling
   4. Site Conditions

G. Bridge Description and Drawings ..... G1 – G17

*H. Identification of Fracture Critical Components

I. Channel and Scour Information ..... I1 – I3
   1. Channel Profile
   *2. Scour Screening and In-Depth Scour Evaluation

*Not included in this report.

TOPIC A

PHOTO INVENTORY

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
BRIDGE INSPECTION REPORT

Bridge No.: 124116
Inspection Date: 11/15/07

South Approach Looking North

South Approach Looking South

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
BRIDGE INSPECTION REPORT

Bridge No.: 124116
Inspection Date: 11/15/07

North Approach Looking South

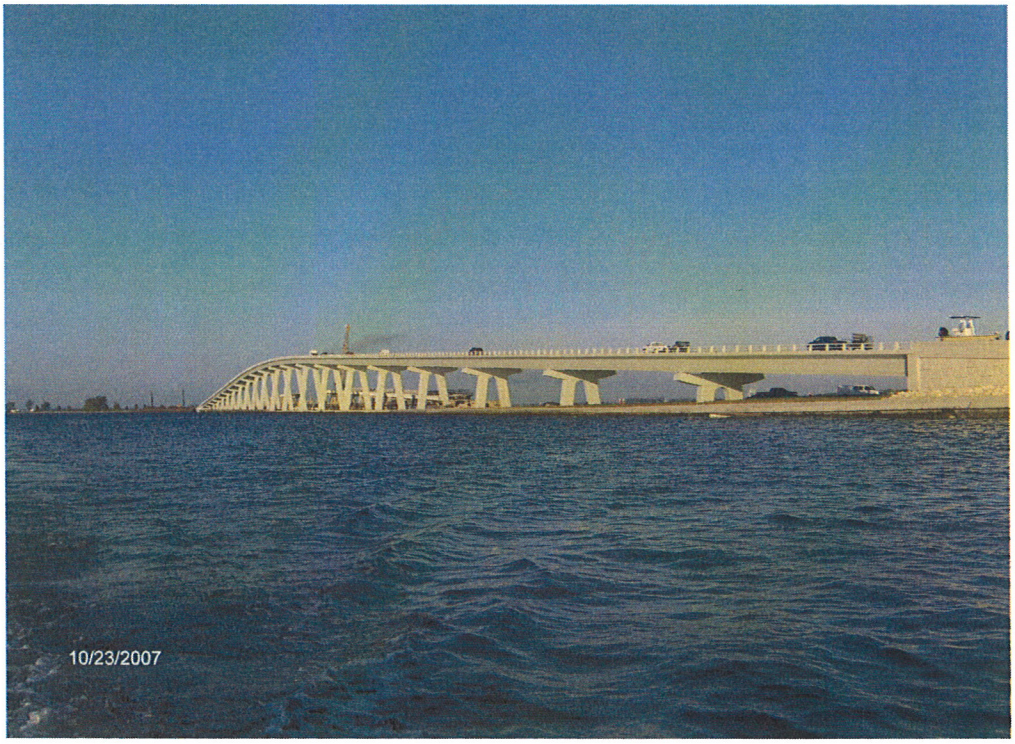
North Approach Looking North

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
BRIDGE INSPECTION REPORT

Bridge No.: 124116
Inspection Date: 11/15/07

West Elevation

East Elevation



FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
BRIDGE INSPECTION REPORT

Bridge No.: 124116
Inspection Date: 11/15/07

Bridge Number

Bridge Rail

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
BRIDGE INSPECTION REPORT

Bridge No.: 124116
Inspection Date: 11/15/07

Approach Guardrail Transition

Underside

TOPIC B

BRIDGE LOCATION MAP

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
BRIDGE INSPECTION REPORT

Bridge No.: 124116
Inspection Date: 11/15/07

LOCATION MAP

***No Detour Route**

TOPIC C

DATA FILES AND REPORTS

4 Description

Structure Unit Identification

Bridge/Unit Key: 124116 1
Structure Name: STRUCTURE A SANIBEL CAUSEWAY
Description:
Type: M Main

Roadway Identification:

NBI Structure No (8) 124116
Position/Prefix (5) Route On Structure
Kind Hwy (Rte Prefix) 4 County Hwy
Design Level of Service 1 Mainline
Route Number/Suffix 00867/ 0 N/A (NBI)
Feature Intersect (6) SAN CARLOS BAY
Critical Facility Not Defense-crit
Facility Carried (7) CR 867
Mile Point (11) 0
Latitude (16) 026d28'56" Long (17) 082d01'03"

Roadway Traffic and Accidents

Lanes (28) 2 Medians 0 Speed 35 mph
ADT Class ADT Class 4
Recent ADT (29) 19000 Year (30) 2007
Future ADT (114) 22900 Year (115) 2027
Truck % ADT (109) 7
Detour Length (19) 99.0 mi
Detour Speed -1 mph
Accident Count -1 Rate -1

Roadway Classification

Nat. Hwy Sys (104) 0 Not on NHS
National base Net (12) Not on Base Network
LRS Inventory Rte (13a) 12 000 000 Sub Rte (13b) 00
Functional Class (26) 16 Urban Minor Arterial
On Federal Aid System Y
Defense Hwy (100) 0 Not a STRAHNET hwy
Direction of Traffic (102) 2 2-way traffic
Emergency ☑

Roadway Clearances

Vertical (10) 99.99 ft Appr. Road (32) 40 ft
Horiz. (47) 40 ft Roadway (51) 40 ft
Truck Network (110) 0 Not part of natl netwo
Toll Facility (20) 2 On toll road
Fed. Lands Hwy (105) 0 N/A (NBI)
School Bus Route ☑
Transit Route ☑

VOLKERT & ASSOCIATES
3409 W. LEMON STREET STE 1
TAMPA, FL 33609
CERT. OF AUTHORIZATION NUMBER 4641
ROBERT J. HARRIGAN
PE# 45236

Robert J. Harrigan, P.E.
DEC 20 2007

Structure Identification

Admin Area Lee County
District (2) D1 - Bartow
County (3) (12)Lee
Place Code (4) Sanibel
Location (9) 1ST STRCT S/O TOLL PLAZA
Border Br St/Reg (98) Not Applicable (P) Share 0 %
Border Struct No (99)
FIPS State/Region (1) 12 Florida Region 4-Atlanta
NBIS Bridge Len (112) Meets NBI Length
Parallel Structure (101) No || bridge exists
Temp. Structure (103) Not Applicable (P)
Maint. Resp. (21) 2 County Hwy Agency
Owner (22) 2 County Hwy Agency
Historic Signif. (37) 5 Not eligible for NRHP

Geometrics

Spans in Main Unit (45) 21
Approach Spans (46) 0
Length of Max Span (48) 144.2 ft
Structure Length (49) 3002.5 ft
Deck Area 129408 sqft
Structure Flared (35) 0 No flare

Age and Service

Year Built (27) 2007
Year Reconstructed (106)
Type of Service On (42a) 1 Highway
Under (42b) 5 Waterway
Fracture Critical Details Not Applicable

Structure Type and Material

Curb/Sidewalk (50): Left 0 ft Right 0 ft
Bridge Median (33): 0 No median
Main Span Material (43A): 6 P/S Conc Continuous
Appr Span Material (44A): Not Applicable (P)
Main Span Design (43B): 02 Stringer/Girder
Appr Span Design (44B): Not Applicable (P)

Deck Type and Material

Deck Width (52): 43.1
Skew (34): 0
Deck Type (107): 1 Concrete-Cast-in-Place
Surface (108): 0 None
Membrane: 0 None
Deck Protection: None

3 Appraisal

Structure Appraisal

Open/Posted/Closed (41) A Open, no restriction
Deck Geometry (68) 5 Above Tolerable
Underclearances (69) N Not applicable (NBI)
Approach Alignment (72) 9-No Speed Red No Curve
Bridge Railings (36a) 1 Meets Standards
Transitions (36b) 1 Meets Standards
Approach Guardrail (36c) 1 Meets Standards
Approach Guardrail ends (36d) 1 Meets Standards
Scour Critical (113) T Tidal, Low Risk

Navigation Data

Navigation Control (38) Permit Required
Nav Vertical Clr (39) 70 ft
Nav Horizontal Clr (40) 111.2 ft
Min Vert Lift Clr (116) 0 ft
Pier Protection (111) 2 In-Place, Functioning

NBI Condition Rating

Sufficiency Rating 68
Health Index 99.82
Structural Eval (67) 5 Above Min Tolerable
Deficiency Not Deficient

Minimum Vertical Clearance

Over Structure (53) 99.99 ft
Under (reference) (54a) N Feature not hwy or RR
Under (54b) 0 ft

Minimum Lateral Underclearance

Reference (55a) N Feature not hwy or RR
Right Side (55b) 0 ft
Left Side (56) 0 ft

Load Rating

Design Load (31) HL 93
Rating Date 8/1/2007 Initials RS
Posting (70) 5 At/Above Legal Loads

Operating Type (63) 3 LRFR Load & Res. Fact
Operating rating (64) 60.9 tons Alternate -1
Inventory Type (65) 3 LRFR Load & Res. Fact
Inventory Rating (66) 47.7 tons Alternate -1
Alt Meth -1

6 Schedule

Current Inspection

Inspection Date: 11/15/2007
Inspector: KN738WW-P - Wade Wolfe
Bridge Group: BD523
Primary Type: Regular NBI
Review Required: ☑

Next Inspection Date Scheduled

NBI: 11/15/2009
Element: 11/15/2009
Fracture Critical:
Underwater: 11/15/2009
Other/Special:

6 Schedule Cont.

Inspection Types Performed NBI ☑ Element ☑ Fracture Critical ☐ Underwater ☑ Other Special ☐

Inspection Intervals	Required (92)	Frequency (92)	Last Date (93)
Fracture Critical	☐	mos	
Underwater	☑	24 mos	10/02/2007
Other Special	☐	mos	
NBI		24 mos (91)	11/15/2007 (90)

Inspection Resources

Crew Hours	40
Flagger Hours	0
Helper Hours	0
Snooper Hours	6
Special Crew Hours	32
Special Equip Hours	12

5 Custom

General Bridge Information

Parallel Bridge Seq	0000
Channel Depth	25.2 ft
Radio Frequency	-1
Phone Number	(000) 000-0000
Exception Date	
Exception Type	Unknown
Accepted By Maint	00/00/0000
Warranty Expiration	00/00/0000
Bridge Rail 1	Steel barrier
Bridge Rail 2	Not applicable-No rail
Electrical Devices	Navigation lights only
Culvert Type	Not applicable
Maintenance Yard	0
FIHS ON / OFF	No Routes on FIHS
Previous Structure	124043

Bridge Load Rating Information

HS20 Govr. Span Length	144 ft
L-Rating Origination	Design Plans
Load Rating Date	08/01/2007
Method Calculation	AASHTO formula
Load Dist. Factor	0.982
Impact Factor	1
Design Method	LRFD (Load & Res Factor)
Design Measure	English
Recommend SU Posting	99 tons
Recommend C Posting	99 tons
Recommend T Posting	99 tons
Gov FB Span	0 ft
Gov FB Spacing	0 ft
FB HS20 Rating	0
FB SU4 Rating	0 tons
FB Present	N
FB INV Rating Factor	0
FB OPR Rating Factor	0
FB FL 120	0 tons
Single Unit Truck 2 Axles	-1 tons
Single Unit Truck 3 Axles	-1 tons
Single Unit Truck 4 Axles	-1 tons
Combination Unit Truck 3 Axles	-1 tons
Combination Unit Truck 4 Axles	-1 tons
Combination Unit Truck 5 Axles	-1 tons
Truck Trailer 5 Axles	-1 tons
Posting Weight	99 tons
Actual SU Posting	99 tons
Actual C Posting	99 tons
Actual T Posting	99 tons
FL 120 Long Gov Span	110 tons
FL 120 Trans	-1 tons
Single Axle Trans	-1 tons
Tandem Axle Trans	-1 tons
Wing Span	-1 ft
Web to Web Span	-1 ft
HS20 OPR Rating Max Span	-1 tons
FL120 Long Max Span	110 tons

Bridge Scour and Storm Information

Pile Driving Record	All pile driving records
Foundation Type	Foundation details
Mode of Flow	Tidal
Rating Scour Eval	Low Risk - High
Highest Scour Eval	No phase completed
Scour Recommended I	No recommendation
Scour Recommended II	No recommendation
Scour Recommended III	No recommendation
Scour Elevation	999
Action Elevation	999
Storm Frequency	100

1 Condition

NBI Rating

Channel (61)	8 Protected
Deck (58)	8 Very Good
Superstructure (59)	6 Satisfactory
Substructure (60)	5 Fair
Culvert (62)	N N/A (NBI)
Waterway (71)	8 Equal Desirable
Unrepaired Spalls	-1
Review Required	☑

Elements

Inspection Date: 11/15/2007 GPFO

Span Id	Elem/En	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structure l	12/4	Bare Concrete Deck	129408	100.	0	.	0	.	0	.	0	.	**129408 sf.**

Notes

Structure l	300/4	Strip Seal Exp Joint	345	100.	0	.	0	.	0	.	0	.	**345 lf.**

Notes NOTE: This element quantifies joints 1, 4, 7, 10, 13, 16, 19 and 22.

Structure l	334/4	Metal Rail Coated	6005	100.	0	.	0	.	0	.	0	.	**6005 lf.**

Notes NOTE: Barriers meet NCHRP TL4 criteria and meet SIA Item 36 standards.

CS1: There are several tire marks on the barriers.

Structure l	109/4	P/S Conc Open Girder	11998	99.9	12	.1	0	.	0	.	0	.	**12010 lf.**

Notes CS1: The beams have between 3 and 5 diagonal web cracks up to 4ft long x less than 1/64in wide, within 5ft of the bearings.

The east face of beam 14-4 has a 10in x 1/64in vertical bottom flange crack, 3in from the bearing.

The left top flange of beam 17-4 has wide spread longitudinal hairline cracking with efflorescence and some cracks up to 1/64in wide near pier 18.

CS2: There are beam end /closure pour delaminations and spalls at pier 11 as follows:
10/11-1, east and west faces, delamination, 10in x 5in;
10/11-2, west face, spall with no exposed steel, delamination, 24in x 4in x 2in;
10/11-3, west face, spall with no exposed steel, 10in x 10in x 1/2in;
10/11-4, west face, delamination, 6in x 5in;
10/11-4, east face, spall with exposed steel, 42in x 12in x 5in. Refer to Photo 1. REPAIR ALL

There are minor bottom flange spalls with no exposed steel as follows:
Beam 15-1, east face near pier 16, 6in x 2in x 1/2in;
Beam 15-3, east face at 7/8pt, 4in x 4in x 1in;
Beam 15-4, west face at 1/2pt, 16in x 4in x 1in.

Structure l	397/4	Drain. Syst Metal	20	100.	0	.	0	.	0	.	0	.	**20 ea.**

Notes CS1: Most scupper down spouts are not properly shimmed or anchored to the beams. Refer to Photo 2. REPAIR

Structure l	310/4	Elastomeric Bearing	168	100.	0	.	0	.	0	.	0	.	**168 ea.**

Notes

Structure l	563/4	Acc Ladd & Plat	16	100.	0	.	0	.	0	.	0	.	**16 ea.**

Notes NOTE: Quantity includes eight ladders and eight platforms including two fender access walkways.

Structure l	580/4	Navigational Lights	1	100.	0	.	0	.	0	.	0	.	**1 ea.**

Notes NOTE: Element includes six fender lights, two clearance gauge lights and two swing lights. Only temporary lighting was in place at time of inspection.

Structure l	205/4	R/Conc Column	40	100.	0	.	0	.	0	.	0	.	**40 ea.**

Notes

Elements

Inspection Date: 11/15/2007 GPFO

Span Id	Elem/En	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structure l	207/4	P/S Conc Holl Pile	220	98.21	2	.89	0	.	2	.89	0	.	**224 ea.**

Notes CS2: Pile 11-1 has two spalls with no exposed steel up to 6in x 6in x 1-1/2in.

Pile 17-10 has an intermittent 13ft x 12in x 3in spall with no exposed steel on the NE corner beginning 2ft below the footer.

CS4: The upper 7ft of piles 11-8 and 11-15 are fractured and all prestress strands are exposed. Refer to Sketch 1. REPAIR

Structure l	215/4	R/Conc Abutment	70	100.	0	.	0	.	0	.	0	.	**70 lf.**

Notes

Structure l	220/4	R/C Sub Pile Cap/Ftg	19	95.	1	5.	0	.	0	.	0	.	**20 ea.**

Notes CS2: Footer 17 has two spalls with no exposed steel up to 12in x 12in x 2in on the northeast and southeast corners.

Structure l	234/4	R/Conc Cap	862	100.	0	.	0	.	0	.	0	.	**862 lf.**

Notes CS1: Both shear blocks in span 10 at pier 10 and the right block in span 11 at pier 12 are fractured. Refer to Photo 3. REPAIR

Structure l	387/4	P/S Fender/Dolphin	588	100.	0	.	0	.	0	.	0	.	**588 lf.**

Notes NOTE: Quantity includes dolphins. Fenders and dolphins incomplete at time of inspection.

Structure l	396/4	Other Abut Slope Pro	2500	100.	0	.	0	.	0	.	0	.	**2500 sf.**

Notes NOTE: Element includes rock rubble rip rap and articulating concrete block mats. Under construction at time of inspection.

Structure l	290/4	Channel	1	100.	0	.	0	.	0	.	0	.	**1 ea.**

Notes

Structure l	321/4	R/Conc Approach Slab	2	100.	0	.	0	.	0	.	0	.	**2 ea.**

Notes

Structure l	478/4	MSE Walls	120	100.	0	.	0	.	0	.	0	.	**120 lf.**

Notes NOTE: Quantity refers to 30LF at each corner.

Total Number of Elements: 18

Inspection Information

Inspection Date: 11.15.2007 **Type:** Regular NBI

Inspector: KN738WW-P - Wade Wolfe

Inspection Notes: Sufficiency Rating Calculation Accepted by KNVOLCW-P at 2007-12-13 11:47:06
Sufficiency Rating Calculation Accepted by KNVOLCW-P at 2007-12-04 11:53:05

LOAD CAPACITY EVALUATION:
The load rating dated 8/1/07 applies to the current condition of this bridge.

Construction of fenders, dolphins, slope protection and navigation lighting still in progress. Demolition of replaced structure ongoing. Left side groundline measurements not taken due to demolition.

Structure sustained damage due to demolition of replaced structure. Refer to Elements 109 P/S Conc Open Girder, 207 P/S Conc Holl Pile and 234 R/Conc Cap.

Structure Notes

OWNER: LEE COUNTY

TRAFFIC RESTRICTION: Based on the load rating analysis dated 8/1/07, the structure does not require posting. The structure is not posted.

Structure inventoried from south to north on a west to east leg of a south to north roadway. Direction of stationing is used to describe deficiency locations. (Left is West).

This structure replaces a bascule bridge 124043. The nearest structures are also on the causeway and are numbered 124114 and 124115.

Lane shift required for underbridge inspection vehicle. Power boat with fathometer used for groundline measurements.

TOPIC D

LOAD CAPACITY INFORMATION

Form Revision: 27-Jun-07

BRIDGE LOAD RATING SUMMARY FORM

BRIDGE DATA

Bridge Number:	124116
Struct. Type Main [Item 43] @:	602
Struct. Type Appr. [Item 44] @:	602

POSTING DATA

Current Restrictions	
Item 41 @:	Open, No Restrictions
Is Posting Needed:	No
Proposed Restrictions	
Item 70 @:	At/Above Legal Loads

PROGRAM USED

ConSpan

BASIS FOR ANALYSIS

Design Drawings:	Yes
As-Built Drawings:	No
Shop Drawings:	No
Field Measurements:	No
Coupon Testing:	No
Other:	

LIVE LOAD DISTRIBUTION

AASHTO LFD:	
AASHTO LRFD:	X
SALOD:	
BRUFEM:	
Finite Element on Grillage:	

LONGITUDINAL GOVERNING COMPONENT

Main/Approach Span:	Approach
Description:	Multi-Beam
Material:	Prestressed Conc
Simple/Continuous Span:	Continuous
Span Length:	144'-0"
Flexure, Shear or Principal Tension:	Flexure

TRANSVERSE GOVERNING COMPONENT

Main/Approach Span:	Approach
Description:	Slab
Material:	Concrete
Deck, Box or Substructure:	Deck
Flexure, Shear or Principal Tension:	Flexure

OTHER SPAN OF INTEREST
(If Applicable)

OTHER SPAN OF INTEREST
(If Applicable)

PONTIS DATABASE INPUT

PONTIS APPRAISAL TAB

Description (NBIS Code)	Value	
Design Load (31) @	HL93	
HL93, M9 (H10), M13.5 ((H15), M13.5 (HS15), M18 (H20), MS18 (HS20), MS18 (HS20)+Mod, Pedestrian, Railroad, MS22.5 (HS25), Unknown (NBI), Unknown (P), Not Applicable (P)		
Operating Type (63) @	Load & Resistance Factor	
Unknown, Load Factor, Allowable Stress, Load & Resistance Factor, Load Test, No Rating, Unknown (NBI), Not Applicable (P)		
Operating Rating (64)* @ ( )	47.7	Tons
Inventory Type (65) @	Load & Resistance Factor	
Unknown, Load Factor, Allowable Stress, Load & Resistance Factor, Load Test, No Rating, Unknown (NBI), Not Applicable (P)		
Inventory Rating (66)* @ ( )	60.9	Tons

LEGEND

- * If rating is provided as a factor from an LRFR analysis, multiply the rating factor by 36 tons
- ** If not calculated, enter "-1"
- # LRFR Rating Only
- ## If Posting is not required, enter "99"
- @ BMS Coding Manual available on the FDOT Office of Maintenance website
- ( ) List Controlling Member & (M=moment, V=shear, pt=post-tensioning) for this Rating

PONTIS LOAD RATING 1 TAB

Description (NBIS Code)	Value	
HS 20/HL 93 Governing Span Length	144'	FT
Load Rating Origination	Design Plans	
Unknown, Design Plans, As-Built Plans, Field Measurements		
Load Rating Date	01-Aug-07	
Method Calculation	AASHTO Formula	
Unknown, AASHTO Formula, SALOD, BRUFEM, Other		
Load Distribution Factor	0.9820	
Impact Factor	1.33	
Design Method	LRFD	
Unknown, Working Stress, Load Factor, LRFD, Others		
Design Measure	English	
Unknown, English, Systeme International		

TRUCK OPERATING RATINGS

SU 2**	Enter Contr. Mem. ( )	-1.0	Tons
SU 3**	Enter Contr. Mem. ( )	-1.0	Tons
SU 4**	Enter Contr. Mem. ( )	-1.0	Tons
C 3**	Enter Contr. Mem. ( )	-1.0	Tons
C 4**	Enter Contr. Mem. ( )	-1.0	Tons
C 5**	Enter Contr. Mem. ( )	-1.0	Tons
ST 5**	Enter Contr. Mem. ( )	-1.0	Tons
Recommended SU Posting ##		99	Tons
Recommended C Posting ##		99	Tons
Recommended ST Posting ##		99	Tons

PONTIS LOAD RATING 2 TAB

Description (NBIS Code)	Value	
FL 120 Longitudinal Governing Span Rating	110.0	Tons

SEGMENTAL

FL 120 Transverse Rating (Segmental)**	-1.0	Tons
Single Axle Transverse Rating**	-1.0	Tons
Tandem Axle Transverse Rating**	-1.0	Tons
Wing Span**	-1.00	FT
Web-to-Web Span**	-1.00	FT

MAXIMUM SPAN

HS 20 Operating Rating Maximum Span**	-1.0	Tons
FL 120 Longitudinal Maximum Span #	110.0	Tons

FLOOR BEAM

Floor Beam Present	No = Stop Yes = Continue	
Governing Floor Beam Span**		FT
Governing Floor Beam Spacing**		FT
Floor Beam HS 20 Rating**		Tons
Floor Beam SU 4 Rating**		Tons
Floor Beam Inventory Rating Factor** #		
Floor Beam Operating Rating Factor **#		
Floor Beam FL 120 Rating #		Tons

COMMENTS BY ENGINEER

Responsible Engineer: Ronald Sanchez
FL P.E. #: 58923
Date: 01-Aug-07
Address: 1000 Sawgrass Corporate Pkwy
Sunrise, FL 33322

COMPUTATIONS

Performed By:	Ronald Sanchez	Date:	10-Oct-03
Checked By:	Jose R. Vazquez	Date:	20-Oct-03
Reviewed By:	Steve Hedge	Date:	08-Aug-07

TOPIC E

BRIDGE HISTORY

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
BRIDGE INSPECTION REPORT

Bridge No.: 124116
Inspection Date: 11/15/07

BRIDGE HISTORY

This structure was built in 2007 for Lee County.

The structure was completed under Lee County Project No. 5807, Lee County Contract No. 2318.

The structure was designed by Hardesty & Hanover; the contractor was Boh Brothers Construction Co.

TOPIC F

FIELD PREPARATION

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
BRIDGE INSPECTION REPORT

Bridge No.: 124116
Inspection Date: 11/15/07

FIELD PREPARATION

1. Tools and Equipment:
   Normal Bridge Inspection Tools

2. Services:
   N/A

3. Scheduling:
   Daytime Hours

4. Site Conditions:
   Traffic – Estimated A.D.T. 19,000 Estimated % of Truck Traffic: 7
   Stream Flows: Moderate
   Vegetation Conditions: None
   Waterway: Good
   Embankment Conditions: Good

5. Traffic Control Requirements:
   Lane Shift for Underbridge Inspection

6. Underwater Inspection Requirements:
   Scuba

7. Special Access Requirements:
   Underbridge Snooper, Power boat

8. Manhours:
   Travel to and from site: 3 hours x 2 people = 6
   Inspection hours: 20 hours x 2 people = 40

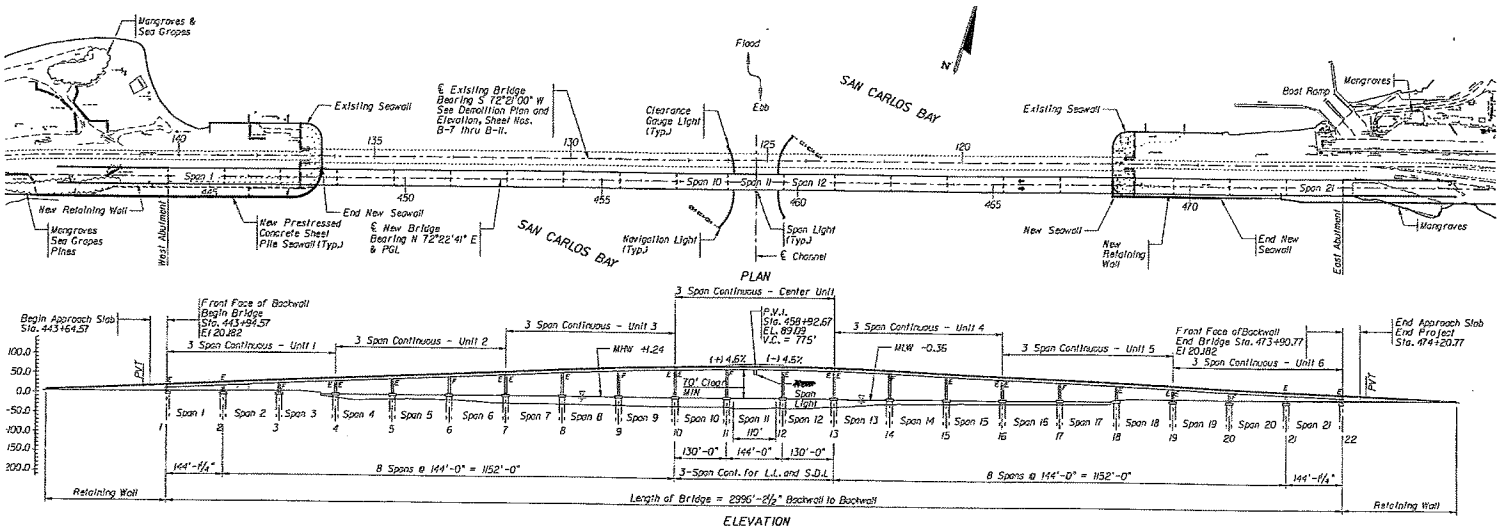
9. Plans Available:
   Yes

TOPIC G

BRIDGE DESCRIPTION AND DRAWINGS

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
BRIDGE INSPECTION REPORT

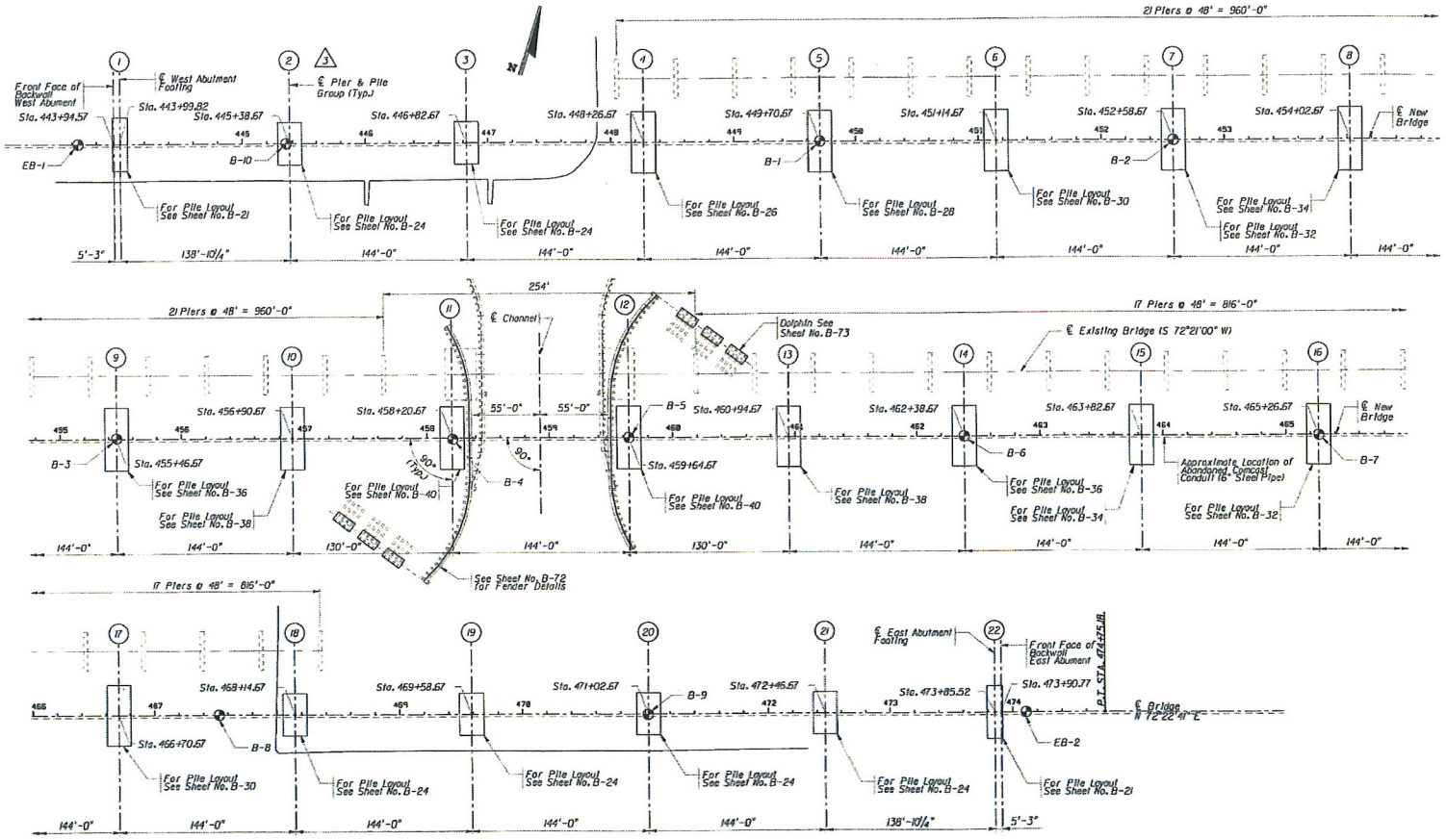
Bridge No.: 124116
Inspection Date: 11/15/07



PLAN & ELEVATION

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
BRIDGE INSPECTION REPORT

Bridge No.: 124116
Inspection Date: 11/15/07



FOUNDATION LAYOUT

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
BRIDGE INSPECTION REPORT

Bridge No.: 124116
Inspection Date: 11/15/07

GENERAL STRUCTURAL NOTES:

A. DESIGN LOADS

1. DEAD LOADS:
   A. UNIT WEIGHT OF REINFORCED CONCRETE 150 PCF
   B. UNIT WEIGHT FOR UTILITIES IS 50 PLF PER BEAM
   C. UNIT WEIGHT OF STRUCTURAL STEEL IS 490 PCF.

2. LIVE LOADS: DESIGN LIVE LOAD IS HL-93 AS PER AASHTO.

LIVE LOAD DISTRIBUTION FACTORS		
	MOMENT	SHEAR
EXTERIOR BEAM	1.006	1.006
INTERIOR BEAM	0.830	1.047

3. WIND LOADS: WIND LOADS HAVE BEEN COMPUTED WITH THE AASHTO LRFD SPECIFICATION USING A 100 MPH BASE DESIGN WIND VELOCITY AND "OPEN COUNTRY" CLASSIFICATION.

4. EARTHQUAKE: THE BRIDGE HAS BEEN DESIGNED TO MEET THE MINIMUM BEARING SUPPORT LENGTH DIMENSION DEFINED BY SECTION 4.7.4.4. OF THE ASSHTO LRFD SPECIFICATIONS.

5. THERMAL FORCES:

   A. SEASONAL VARIATION:
      1. TEMPERATURE RANGE FOR DESIGN OF STRUCTURE:
         TEMPERATURE RISE = 30 F
         TEMPERATURE FALL = 40 F

      2. SIZING BEARING AND JOINTS:
         TEMPERATURE RISE = 25 F
         TEMPERATURE FALL = 25 F

   B. MEAN TEMPERATURE = 70 F
   C. THERMAL COEFFICIENT = 0.000006 PER DEGREE F

6. CREEP AND SHRINKAGE:

   STRAINS ARE AS PER AASHTO AND THE FDOT LRFD STRUCTURES DESIGN GUIDELINES.
   ULTIMATE CONCRETE SHRINKAGE COEFFICIENT = 0.0004 IN/IN

7. SHIP VESSEL IMPACT: VESSEL IMPACT FORCES BASED ON AASHTO LRFD METHOD II AND PAST POINT 21. FORCES ARE APPLIED TO PIERS AND FENDER SYSTEM PARALLEL TO TIDAL FLOW.

PIER	IMPACT FORCE
11,12	1200 KIPS
8,9,10,13,14,15	1000 KIPS
5,6,7,16,17	800 KIPS
4	500 KIPS

8. FOUNDATION ELEMENT:

   30" SQUARE, PRECAST PRESTRESSED VOIDED DRIVEN PILES. PILE DATA CAN BE FOUND ON SHEET NO. B-16

9. ENVIRONMENT:

   SUPERSTRUCTURE: CORROSIVE (EXTREMELY AGGRESSIVE)
   SUBSTRUCTURE: CORROSIVE (EXTREMELY AGGRESSIVE)
   LOCATION: COASTAL SALTWATER

10. STAY-IN-PLACE FORMS ARE NOT PERMITTED DUE TO EXTREMELY AGGRESSIVE ENVIRONMENT.

11. SCOUR HAS BEEN CONSIDERED IN THE DESIGN OF THE PILES AND ARE BASED ON THE FLOOD DATA SHOWN ON THE BRIDGE HYDRAULIC RECOMMENDATION SHEET (SHEET NO. G-1).

B. ALLOWABLE STRESSES/LOADS:

1. REINFORCED CONCRETE: AS PER AASHTO.

2. PRESTRESSED CONCRETE:

   CONCRETE STRENGTH AT TRANSFER, $f'ci = 0.8f'c =$ 6.8 KSI
   CONCRETE STRENGTH AT 28 DAYS, $f'c =$ 8.5 KSI

   TEMPORARY STRESSES BEFORE LOSSES:

   COMPRESSION = $0.60f'ci$
   TENSION (WITHOUT BONDED REINFORCEMENT) = 0.200 KSI
   TENSION (WITH BONDED REINFORCEMENT) = 0.625 KSI

   SERVICE LIMIT STATES AFTER LOSSES, FULLY PRESTRESSED:

   DUE TO EFFECTIVE PRESTRESS AND PERMANENT LOADS = $0.45f'c$ (3.82 KSI)

   DUE TO LL AND 1/2 THE SUM OF EFFECTIVE PREST. AND PERMANENT LOADS = $0.40f'c$ (3.40 KSI)

   DUE TO PRESTRESS, PERMANENT AND TRANSIENT/LIVE LOAD = $0.6f'c$ (5.10 KSI)
   TENSION (UNLESS OTHERWISE NOTED) $3\sqrt{f'c}$ (0.28 KSI)
   OUTER 15% @ TOP OF BEAM $6\sqrt{f'c}$ (0.56 KSI)

C. MATERIALS:

1. CONCRETE: (28 DAY CYLINDER STRENGTH AS NOTED):

   A. PRESTRESSED CONCRETE BEAMS (FLORIDA TEE-BEAMS) CLASS VI 8,500 PSI

   B. CAST IN PLACE SUPERSTRUCTURE (BRIDGE DECK, DIAPHRAGMS, SHEAR BLOCKS, SEAWALL CAPS AND BARRIERS): CLASS IV 5,500 PSI.

   C. CAST IN PLACE SUPERSTRUCTURE (APPROACH SLABS): CLASS II (BRIDGE DECK) 4,500 PSI

   D. CAST IN PLACE SUBSTRUCTURE (ABUTMENTS, FOOTINGS, PIERS INCLUDING COLUMNS, CAPS, PEDESTALS AND SHEAR BLOCKS) : CLASS IV 5,500 PSI.

   E. PRESTRESSED CONCRETE PILES, CONCRETE SHEET PILES, AND SEAWALL CAP: CLASS V SPECIAL 6,000 PSI

   F. MAXIMUM AGGREGATE SIZE FOR PRECAST MEMBERS = 3/4"

   G. CORROSION PROTECTION REQUIREMENTS:
      MICROSILICA IS REQUIRED IN THE CONCRETE AT THE FOLLOWING LOCATIONS:
      ALL PIERS ABOVE PILE CAP, SEAWALL CAP AND PRECAST CONCRETE SHEET PILES.

   H. PROVIDE 3/4" CHAMFERS ON ALL EXPOSED EDGES, UNLESS OTHERWISE NOTED.

   I. CONSTRUCTION JOINTS WILL BE PROVIDED ONLY AT LOCATIONS INDICATED IN THE PLANS. ADDITIONAL CONSTRUCTION JOINTS OR ALTERATIONS TO THOSE SHOWN SHALL REQUIRE WRITTEN APPROVAL OF THE ENGINEER.

2. REINFORCING STEEL:
   A. ASTM A 615, GRADE 60, UNLESS OTHERWISE NOTED.
   B. CONCRETE COVERS SHALL BE AS FOLLOWS (UNLESS OTHERWISE NOTED):

   SUPERSTRUCTURE (PRECAST):
   PRESTRESSED BEAMS: 2"
   PRESTRESSED BEAMS - TOP OF TOP FLANGE: 1"
   TOP DECK SURFACE: 2 1/2"
   ALL OTHER SURFACES: 2"

   SUBSTRUCTURE:
   EXTERNAL SURFACES AGAINST EARTH AND WATER: 4 1/2"
   EXTERNAL SURFACE FORMED: 4"
   TOP OF BEAM PEDESTALS: 2"
   SEAWALL CAPS: 4"
   PRESTRESSED PILES & CONCRETE SHEET PILES: 3"

   CONCRETE COVER SHOWN IN THE PLANS DO NOT INCLUDE REINFORCEMENT PLACEMENT AND FABRICATION TOLERANCES UNLESS SHOWN AS "MINIMUM COVER". SEE SPECIFICATIONS FOR ALLOWABLE REINFORCEMENT PLACEMENT TOLERANCES.

   C. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.

3. PRESTRESSING STEEL: (PRESTRESSED CONCRETE BEAMS ONLY)

   STRAND ASTM A 416 GRADE 270, LOW RELAXATION
   PRESTRESSING PARAMETERS (STRAND):

   APPARENT MODULUS: 28,000 KSI
   MAXIMUM JACKING STRESS: 216 KSI (80% ULTIMATE)
   MAXIMUM ANCHORING STRESS AT ANCHOR:
   202 KSI (75% ULTIMATE) FOR PRETENSIONING
   STRAND DIAMETER 0.60"

GENERAL NOTES:

1. GENERAL SPECIFICATIONS:

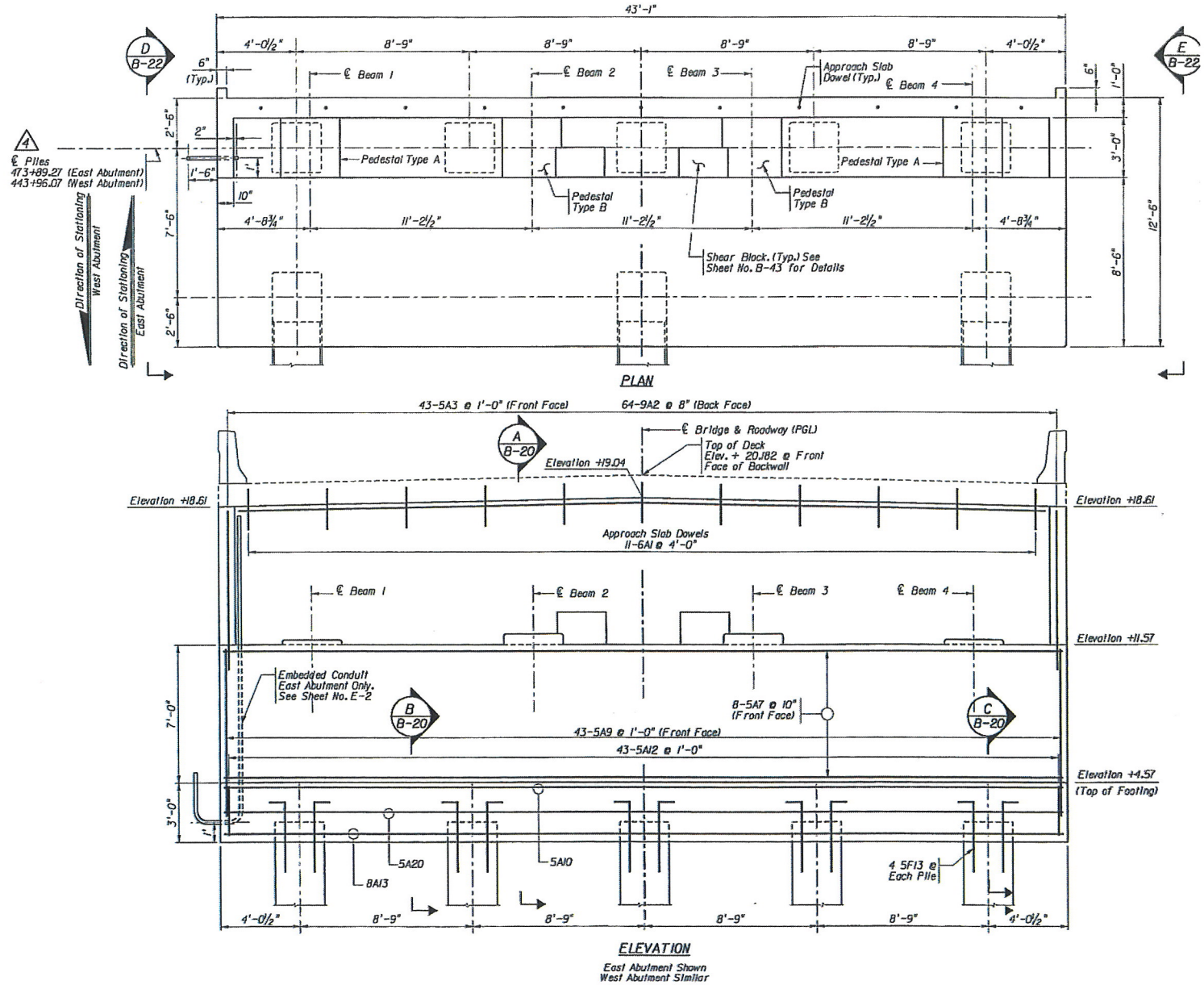
   FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2004 EDITION, INCLUDING ALL SUPPLEMENTAL AND SPECIAL PROVISIONS THERETO.

2. DESIGN SPECIFICATIONS

   A. AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) LRFD BRIDGE SPECIFICATIONS (SECOND EDITION, 1998) AND APPLICABLE INTERIMS THROUGH 2003.
   B. FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS, JANUARY 2004 EDITION.
   C. FDOT STRUCTURES DESIGN GUIDELINES FOR LOAD AND RESISTANCE FACTOR DESIGN, JANUARY 1, 2003.
   D. FDOT STRUCTURES DETAILING MANUAL, JANUARY 1, 1999.

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
BRIDGE INSPECTION REPORT

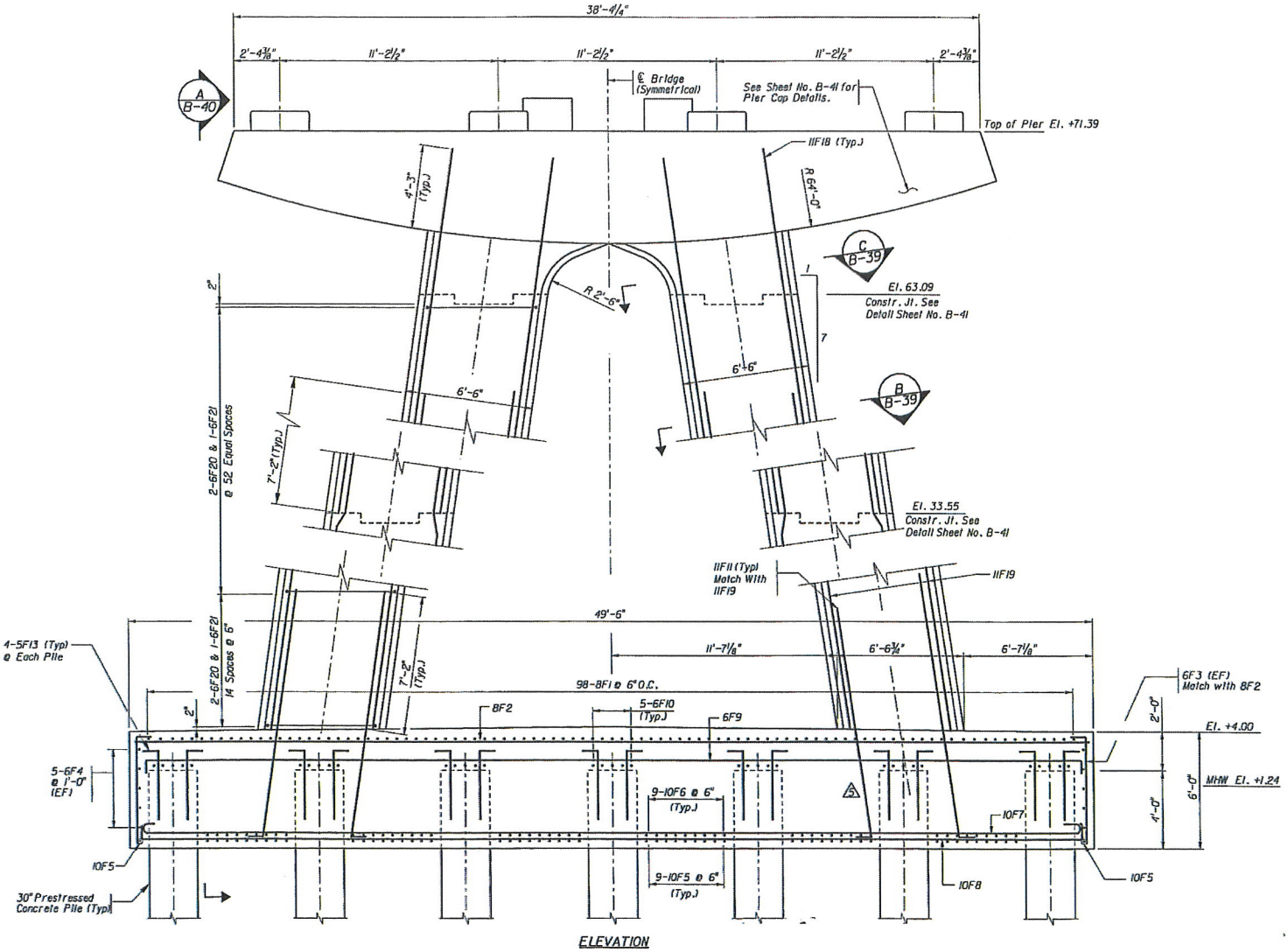
Bridge No.: 124116
Inspection Date: 11/15/07



TYPICAL ABUTMENT: PLAN & ELEVATION

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
BRIDGE INSPECTION REPORT

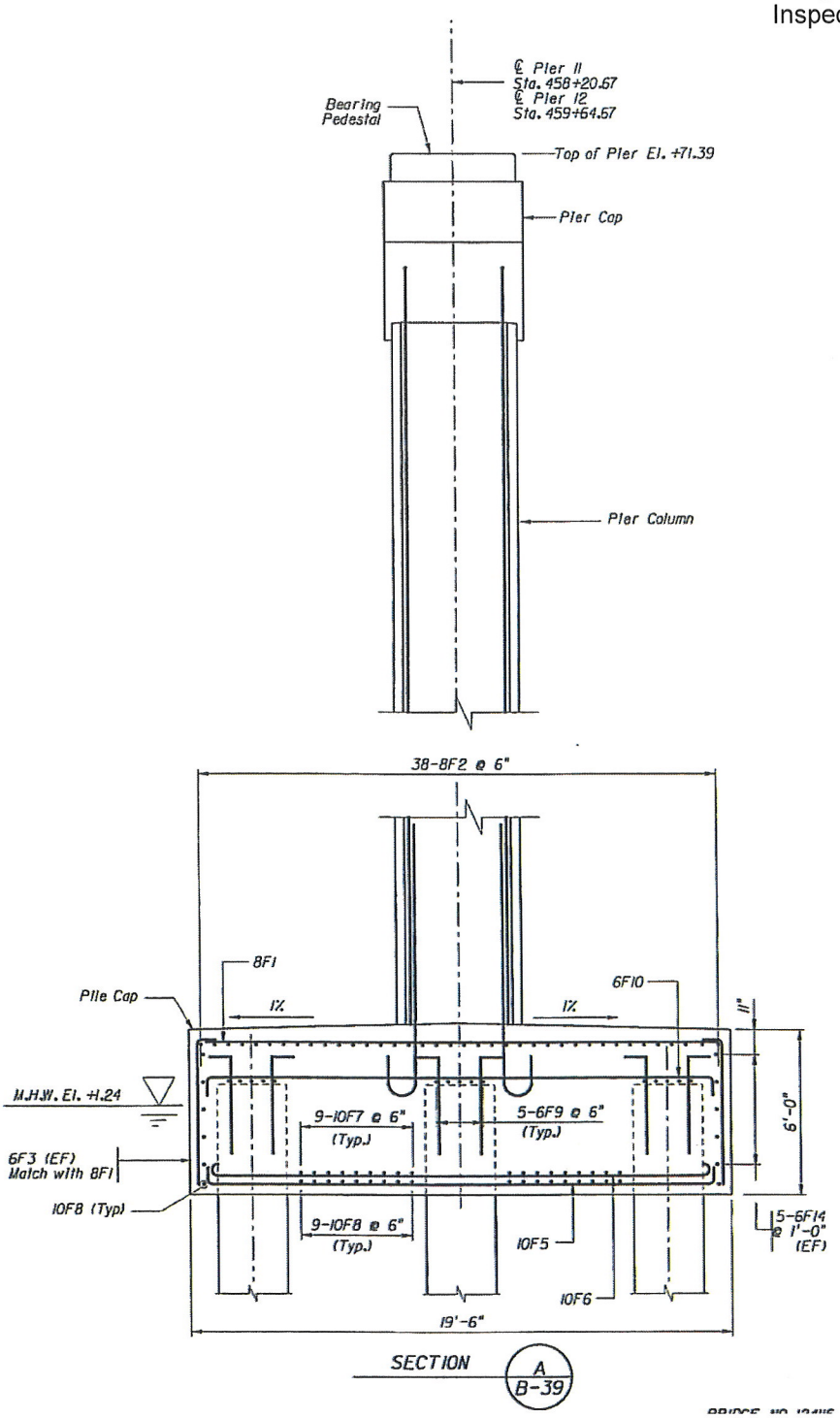
Bridge No.: 124116
Inspection Date: 11/15/07



TYPICAL INTERMEDIATE PIER ELEVATION

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
BRIDGE INSPECTION REPORT

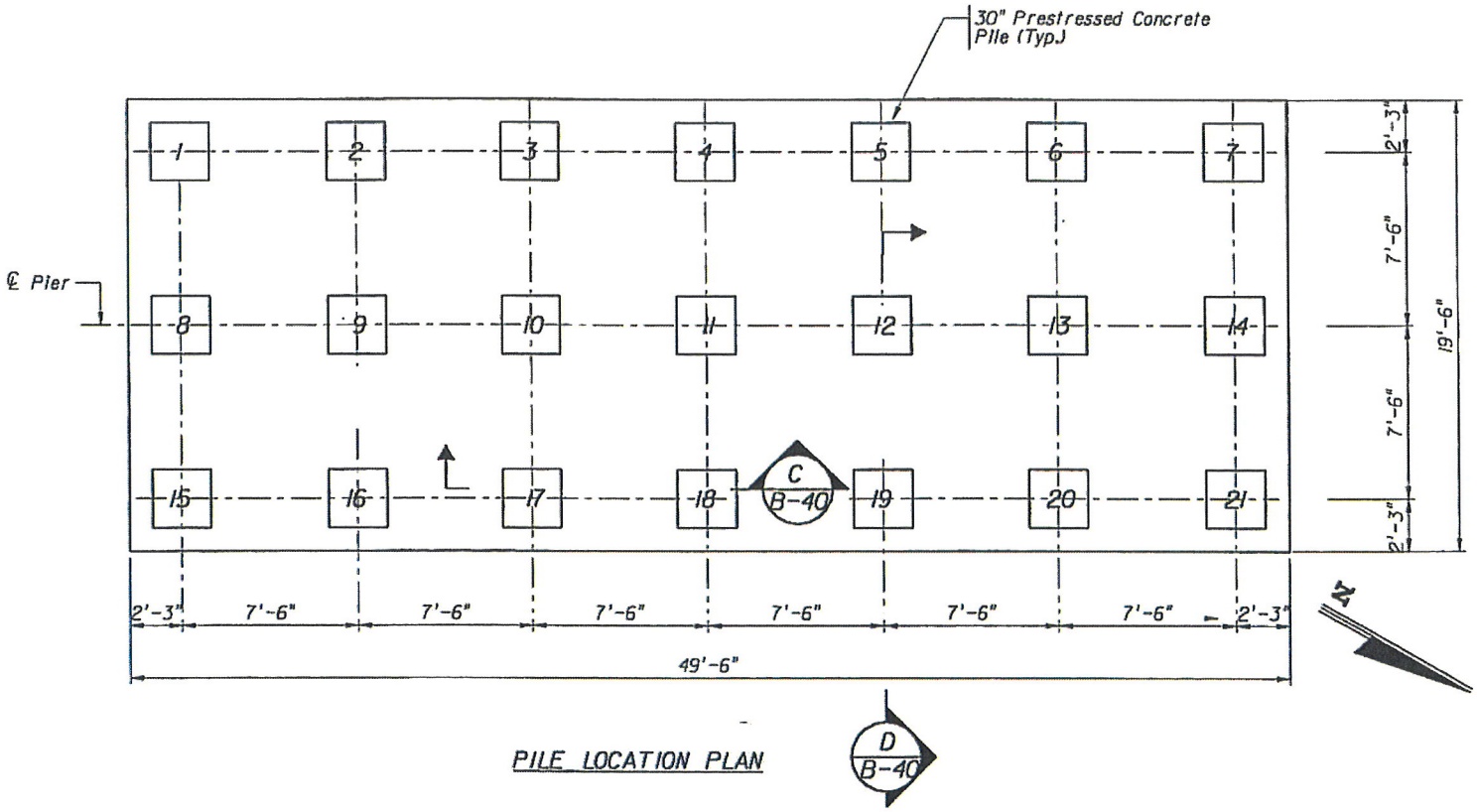
Bridge No.: 124116
Inspection Date: 11/15/07



TYPICAL INTERMEDIATE PIER SECTION

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
BRIDGE INSPECTION REPORT

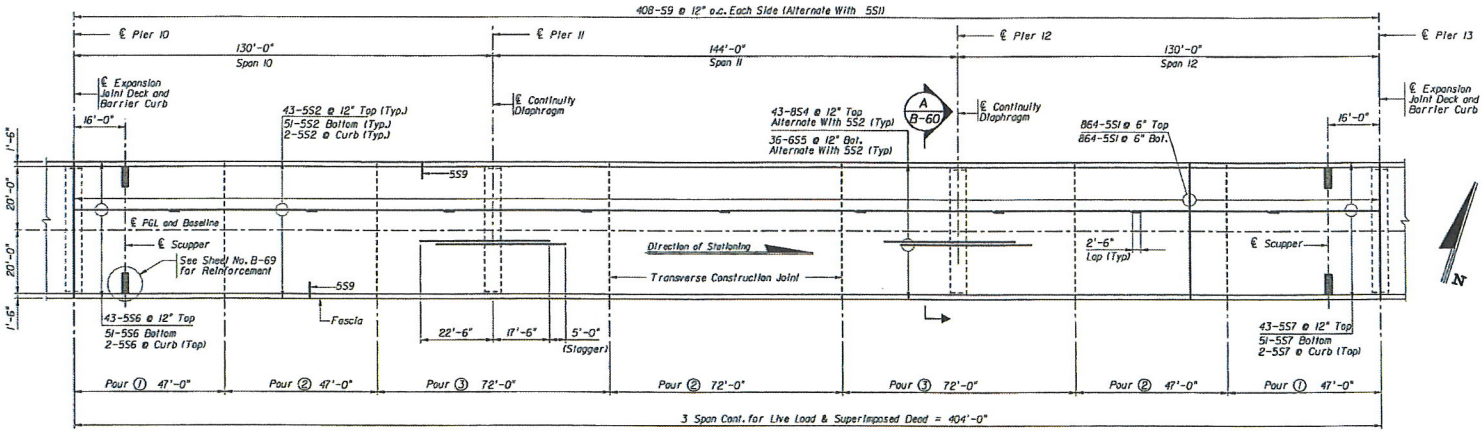
Bridge No.: 124116
Inspection Date: 11/15/07



TYPICAL INTERMEDIATE PIER PILE LOCATION PLAN

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
BRIDGE INSPECTION REPORT

Bridge No.: 124116
Inspection Date: 11/15/07

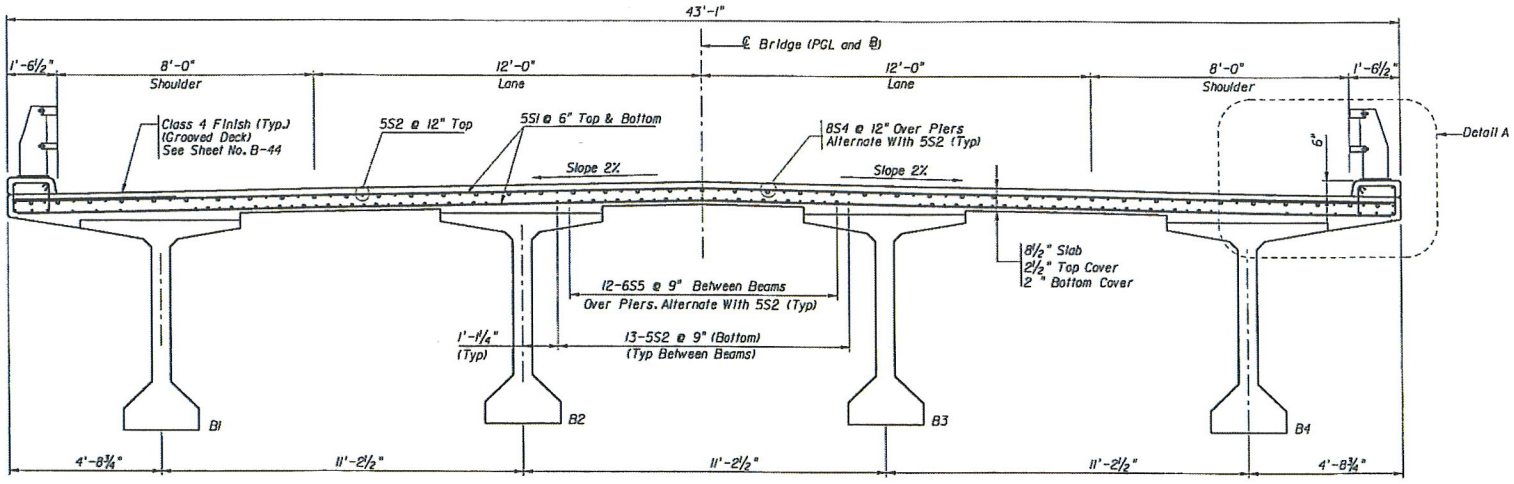


DECK PLAN - CENTER UNIT (1 UNIT REQUIRED)

SUPERSTRUCTURE PLAN

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
BRIDGE INSPECTION REPORT

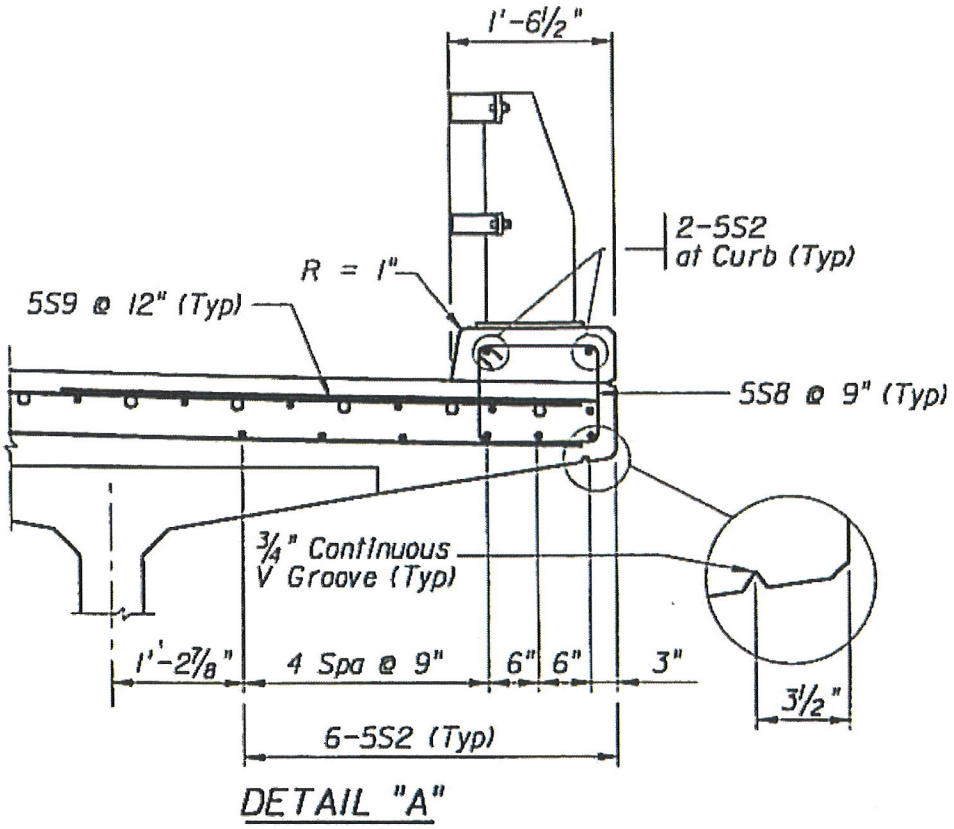
Bridge No.: 124116
Inspection Date: 11/15/07



SUPERSTRUCTURE SECTION

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
BRIDGE INSPECTION REPORT

Bridge No.: 124116
Inspection Date: 11/15/07

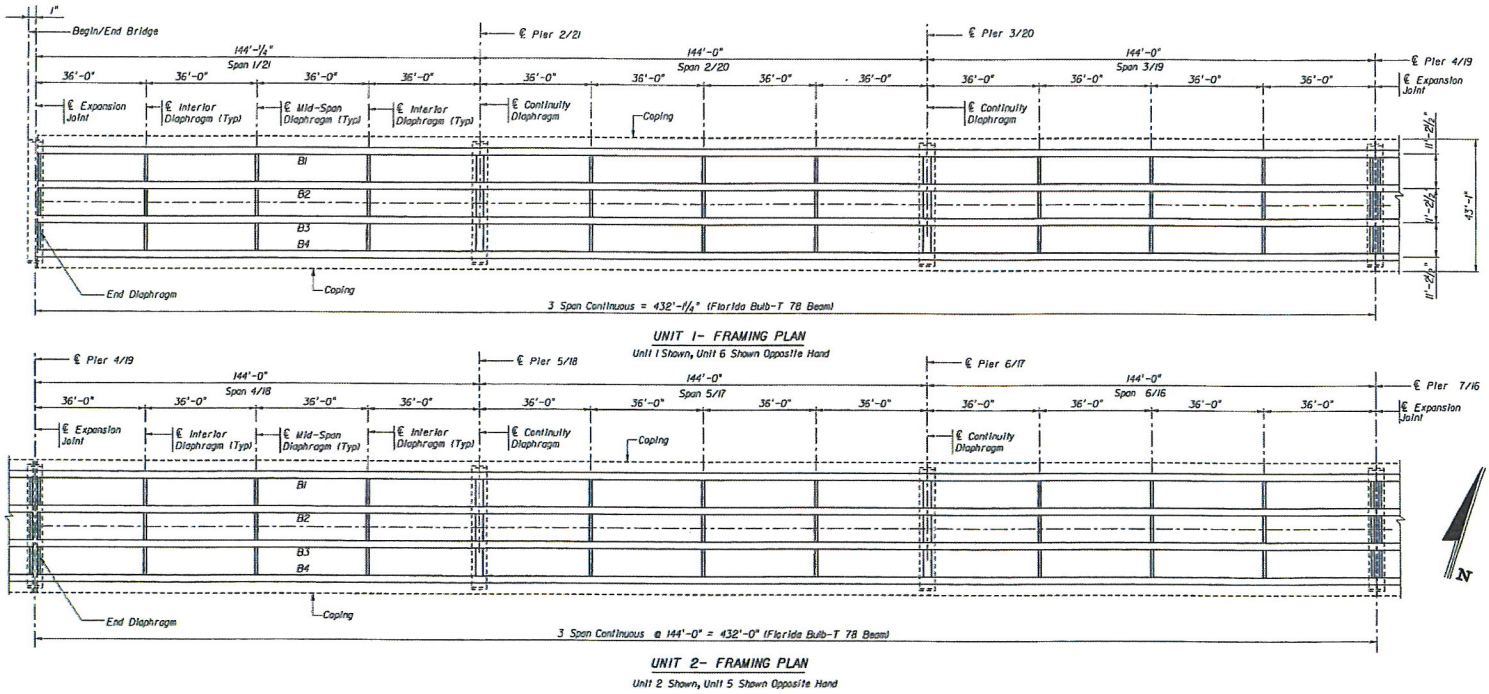


DETAIL "A"

SUPERSTRUCTURE DETAILS

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
BRIDGE INSPECTION REPORT

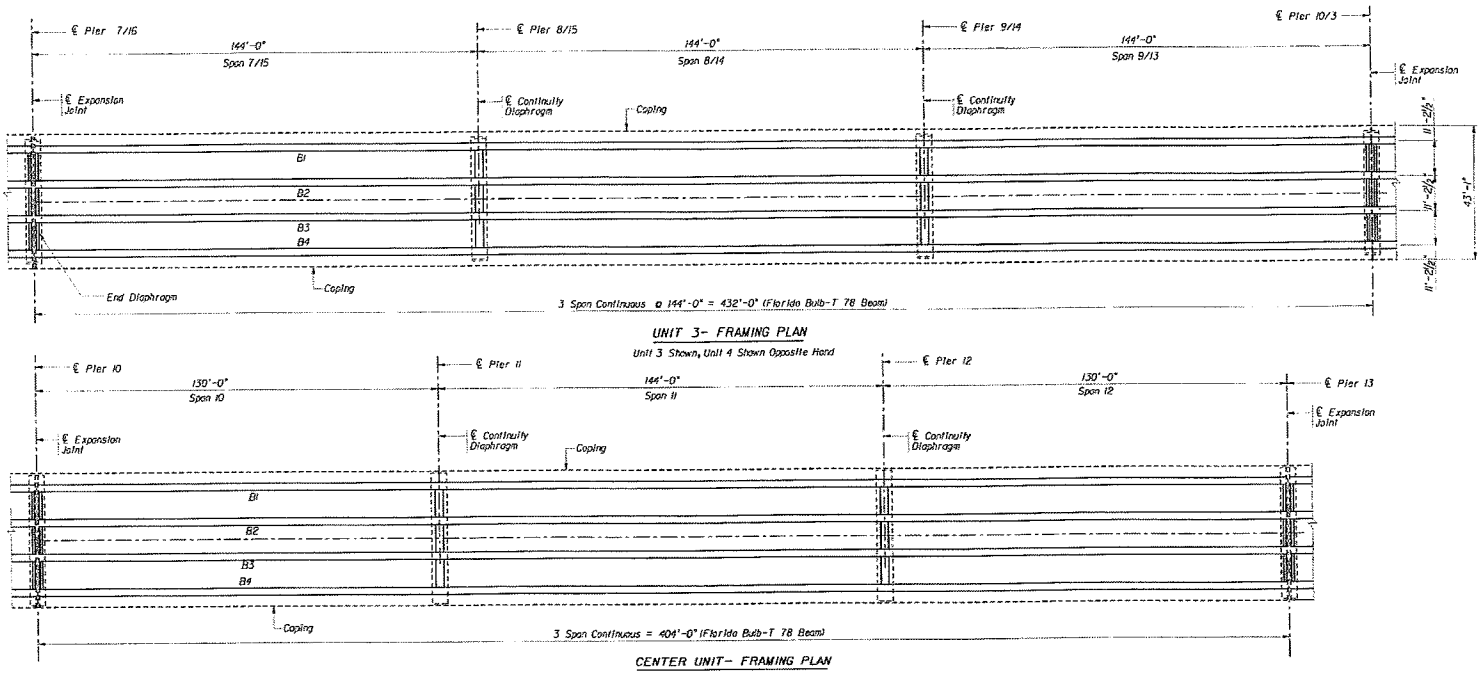
Bridge No.: 124116
Inspection Date: 11/15/07



PARTIAL FRAMING PLAN (1 OF 2)

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
BRIDGE INSPECTION REPORT

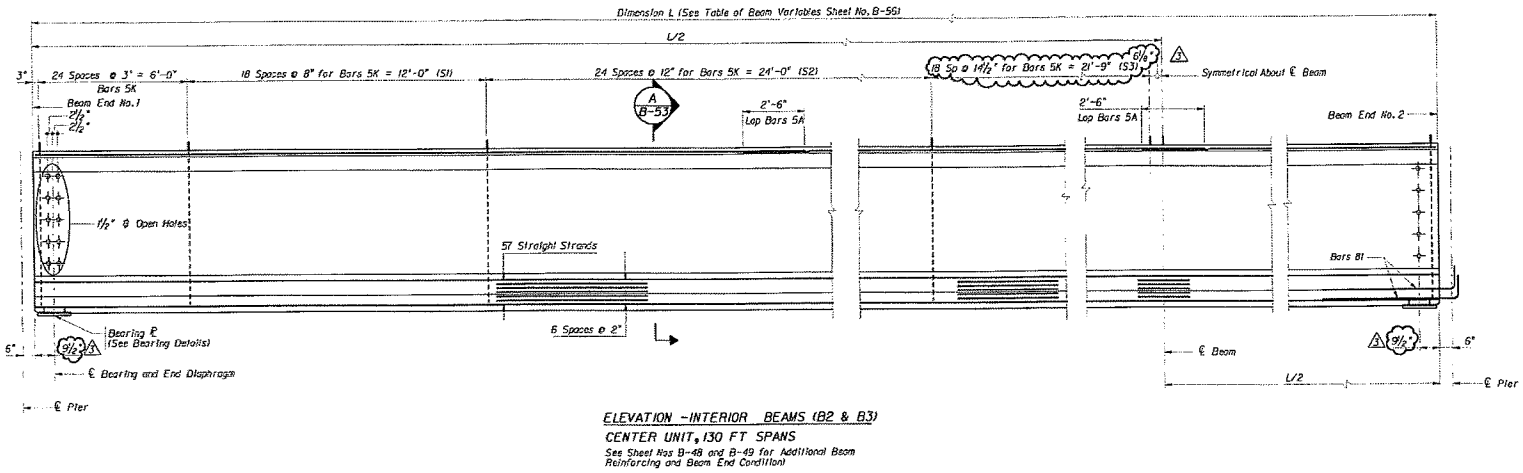
Bridge No.: 124116
Inspection Date: 11/15/07



PARTIAL FRAMING PLAN (2 OF 2)

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
BRIDGE INSPECTION REPORT

Bridge No.: 124116
Inspection Date: 11/15/07

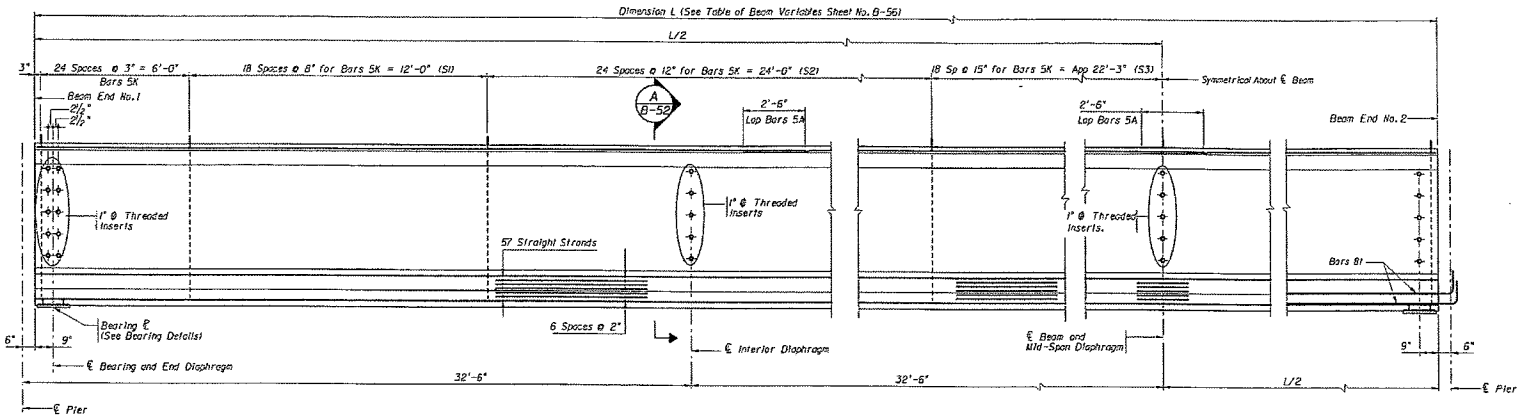


ELEVATION - INTERIOR BEAMS (B2 & B3)
CENTER UNIT, 130 FT SPANS
See Sheet Nos B-48 and B-49 for Additional Beam Reinforcing and Beam End Condition

TYPICAL INTERIOR BEAM ELEVATION

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
BRIDGE INSPECTION REPORT

Bridge No.: 124116
Inspection Date: 11/15/07

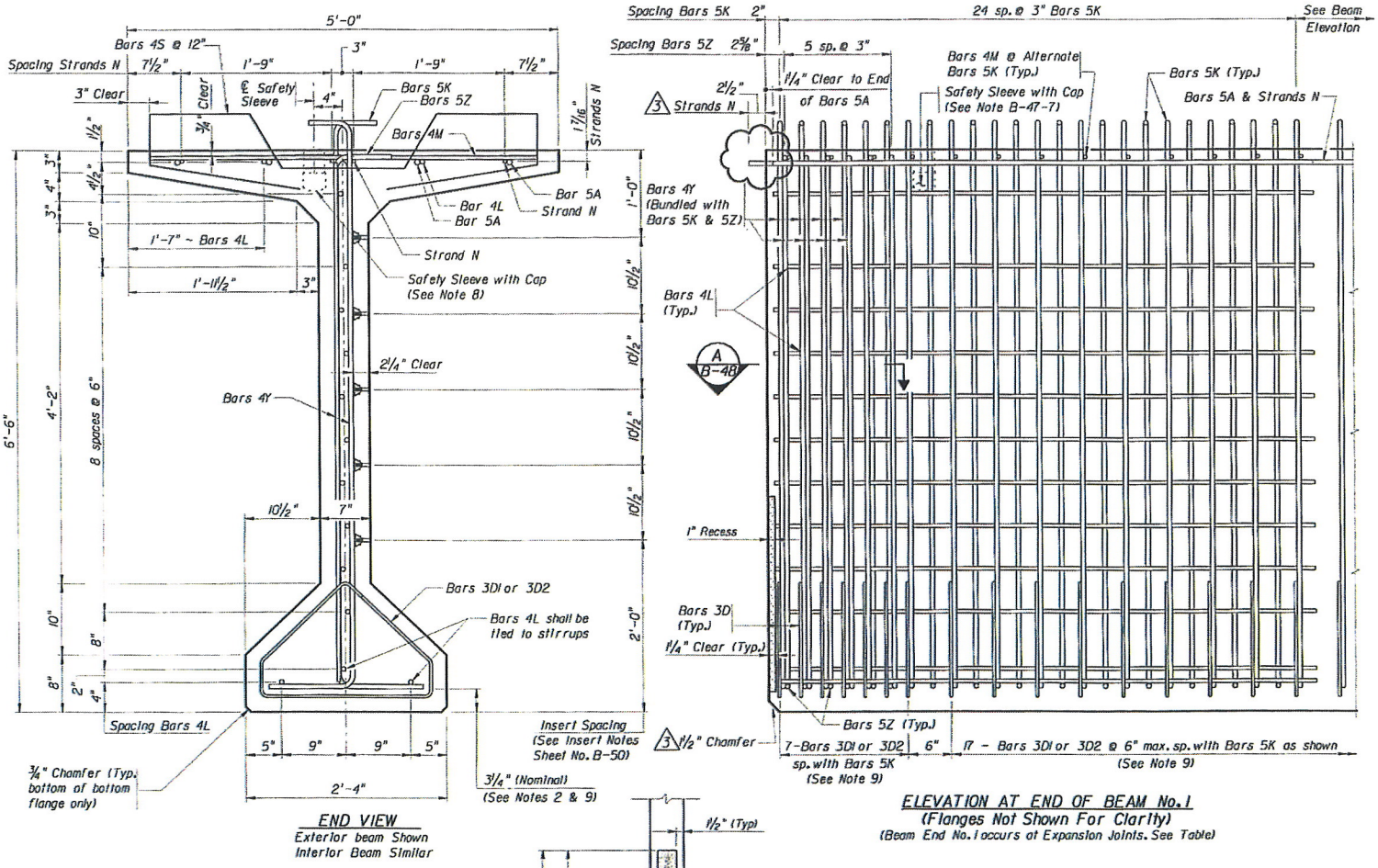


ELEVATION -EXTERIOR BEAMS (B1 & B4)
CENTER UNIT, 130 FT SPANS
See Sheet Nos B-48 and B-49 for Additional Beam Reinforcing and Beam End Condition)

TYPICAL EXTERIOR BEAM ELEVATION

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
BRIDGE INSPECTION REPORT

Bridge No.: 124116
Inspection Date: 11/15/07



NOTES:

Work this sheet with the following drawings:
Sheet No. B-47 to B-57 typical beam details and notes

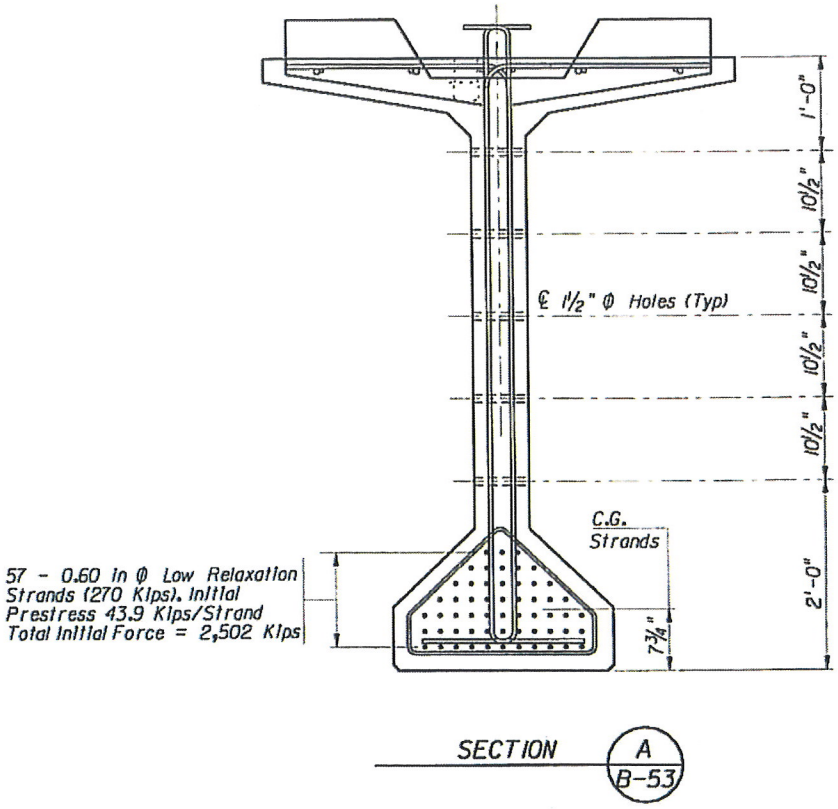
See Table of Beam Variables, Sheet No. B-56.

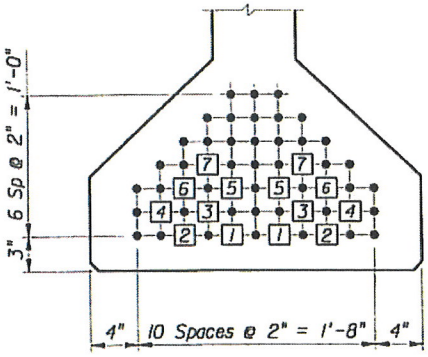
See notes on Sheet No. B-47.

BEAM DETAILS (1 OF 2)

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
BRIDGE INSPECTION REPORT

Bridge No.: 124116
Inspection Date: 11/15/07





STRAND PATTERN

- • No Debonding
- [1] Debonded from End of Beam to 45'-0"
- [2] Debonded from End of Beam to 30'-0"
- [3] Debonded from End of Beam to 25'-0"
- [4] Debonded from End of Beam to 20'-0"
- [5] Debonded from End of Beam to 15'-0"
- [6] Debonded from End of Beam to 10'-0"
- [7] Debonded from End of Beam to 5'-0"

BEAM DETAILS (2 OF 2)

Bridge No.: 124116
Inspection Date: 11/15/07

BEAM NOTES

1. All bar dimensions are out-to-out.

2. Place one (1) Bar 5K or 4Z at each location as detailed alternating the direction of the ends for each bar (see "ELEVATION AT END OF BEAM").

3. Bars 4L shall be bent prior to the beam leaving the prestressing yard. Bars 4L shall be bent parallel to the ends of the beams.

4. Caution should be used with Bars 4L in the ends of exterior beams to assure the bent portion of the bar is properly oriented so that the bar will be embedded in the diaphragm concrete.

5. Strands N shall be either ASTM A416, Grade 270, seven-wire strands 3/8" Φ or larger, stressed to 10,000 lbs. each.

6. Unless otherwise noted, the minimum concrete cover for reinforcing steel shall be 2".

7. Install Safety Sleeves 1'-10" from ends of beam and spaced on 8'-0" (Max.) centers. Shift Bars 5K locally to allow placement. Safety Sleeves shall be 2 1/2" NPS x 5" Sch. 40 PVC Pipe with Cap. Holes shall be free of debris and water prior to casting deck.

8. Placement of Bars 3D1, 3D2, 4M1 and 4M2 correspond to END 1 and END 2 respectively, as shown in the beam "ELEVATION". Placement for bars 3D3 and 4M3 corresponds to center of span For Bars 3D1 and 3D2, Dimension B and the overall length shall be adjusted to fit the width of the bottom flange measured parallel to the skew. Fan Bars 4M1 and 4M2 as needed to maintain minimum clearance (1 1/2") between the bars at the transition to Bars 4M3 and field cut to length to maintain minimum cover.

9. Bars 5K and 5Z shall be placed and tied to the fully bonded strands in the bottom row (See Beam elevations for bars 5K spacing).

10. See Sheet Nos. B-48 Thru B-57 for additional beam details.

TOPIC I

CHANNEL AND SCOUR INFORMATION

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
BRIDGE INSPECTION REPORT

Bridge No.: 124116
Inspection Date: 11/15/07

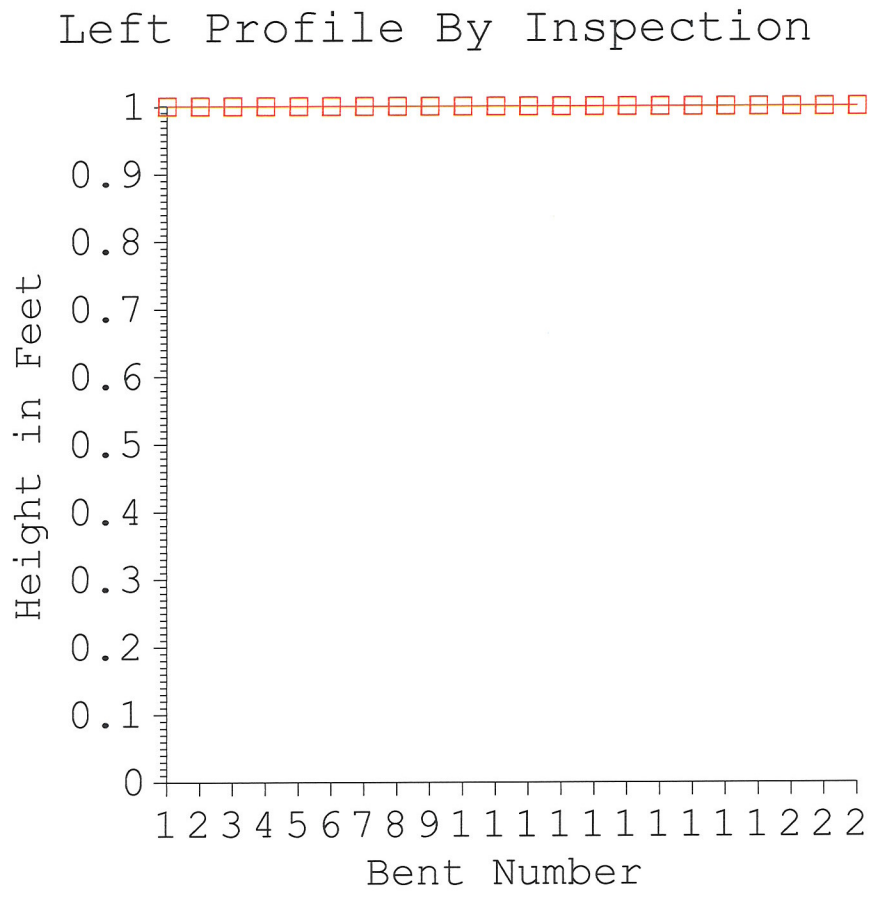
Channel Looking West

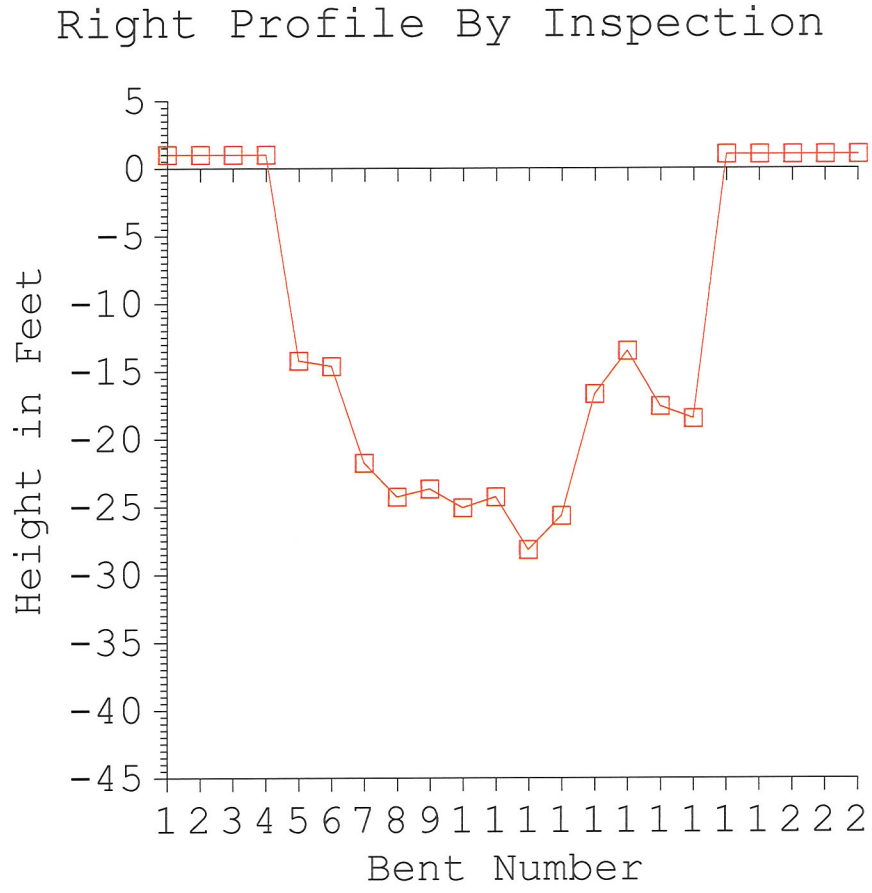
Channel Looking East

FLORIDA DEPARTMENT OF TRANSPORTATION BRIDGE MANAGEMENT SYSTEM
Bridge Profile Report

REPORT ID: INVT016
Structure #: 124116

DATE PRINTED: 12/14/2007





I2

REPORT ID: INVT016

DATE PRINTED: 12/14/2007

Structure #: 124116

Profile Data - Numerical Summary

Inspection Date and Key: 11/15/2007 GPFO

(All Heights Are In Feet)

Bent #	Left Height	Right Height
1	-1	-1
2	-1	-1
3	-1	-1
4	-1	-1
5	-1	14.2
6	-1	14.6
7	-1	21.8
8	-1	24.3
9	-1	23.7
10	-1	25.1
11	-1	24.3
12	-1	28.2
13	-1	25.7
14	-1	16.7
15	-1	13.5
16	-1	17.6
17	-1	18.5
18	-1	-1
19	-1	-1
20	-1	-1
21	-1	-1
22	-1	-1

Air Temp:

Profile Notes:

Measurements referenced to top of pier 4 footer.
Waterline: 3.0ft

No left side measurements taken due to ongoing demolition.
Bents 1 - 4 and 18 - 22 are on dryland.

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SECTION III

COMMUNICATIONS

III. COMMUNICATIONS

BRIDGE NUMBER: 124116
BRIDGE NAME: STRUCTURE A SANIBEL CAUSEWAY

DOCUMENT LOG	
Type of Communication	Date Published

EXHIBIT H

BRIDGE INSPECTION REPORT

PREPARED FOR: FLORIDA DEPARTMENT OF TRANSPORTATION

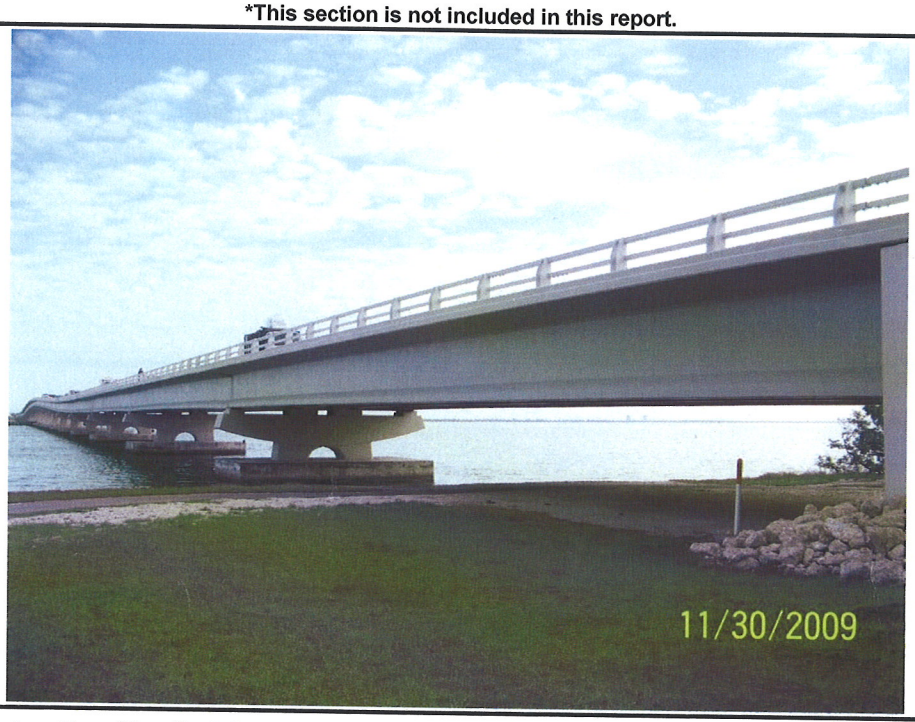
BRIDGE OWNER: LEE COUNTY

INSPECTED BY:

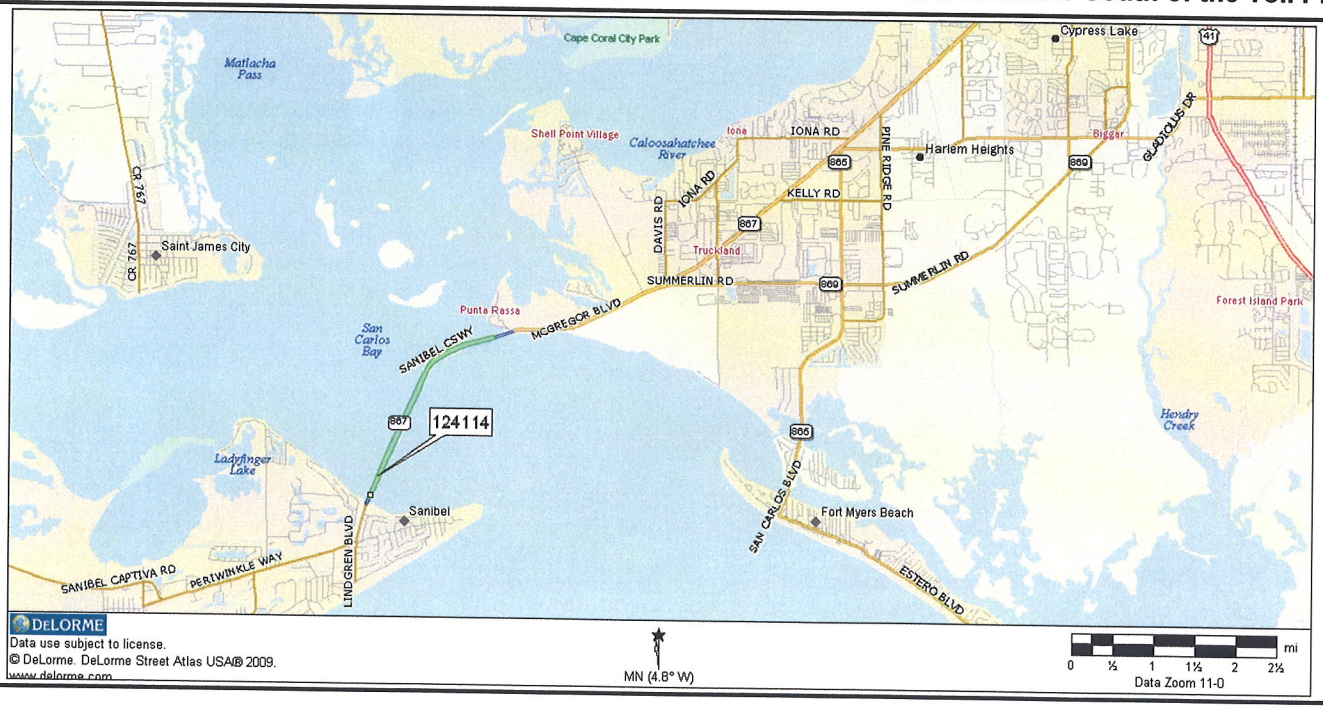
BRIDGE NO. 124114 **CONTENTS OF REPORT** **INSPECTION DATE:** 11/30/2009

- Pontis Report
- CIDR
- Scour Elevation (Profile)
- * Addendum (Element Notes & Photos/Sketches)
- U/W Inspection Report
- * Fracture Critical Data
- * Load Rating Analysis Summary

*This section is not included in this report.



CR-867 over San Carlos Bay (Sanibel Structure C) **Third Structure South of the Toll Plaza**



FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
Inspection Report with PDF attachment(s)

BRIDGE ID: 124114
DISTRICT: 01 Bartow

INSPECTION DATE: 11/30/2009 SJCS

BY: KCA
OWNER: 2 County Hwy Agency
MAINTAINED BY: 2 County Hwy Agency
STRUCTURE TYPE: 6 P/S Conc Continuous 02 Stringer/Girder
LOCATION: 3RD STRUCT S OF TOLL PLAZ
SERVICE TYPE ON: 1 Highway
SERV TYPE UND: 5 Waterway

STRUCTURE NAME: STRUCTURE C SANIBEL CAUSE\
YEAR BUILT: 2007
SECTION NO.: 12 000 000
MP: 0
ROUTE: 00867
FACILITY CARRIED: CR-867
FEATURE INTERSECTED: SAN CARLOS BAY

☐ FUNCTIONALLY OBSOLETE ☐ STRUCTURALLY DEFICIENT

TYPE OF INSPECTION: Regular NBI
DATE FIELD INSPECTION WAS PERFORMED: ABOVE WATER: 11/30/2009 UNDERWATER: 10/05/2009

SUFFICIENCY RATING: 79.0
HEALTH INDEX: 99.06

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FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
Inspection Report with PDF attachment(s)

BRIDGE ID: 124114
DISTRICT: 01 Bartow

INSPECTION DATE: 11/30/2009 SJCS

BY: KCA
OWNER: 2 County Hwy Agency
MAINTAINED BY: 2 County Hwy Agency
STRUCTURE TYPE: 6 P/S Conc Continuous 02 Stringer/Girder
LOCATION: 3RD STRUCT S OF TOLL PLAZ
SERVICE TYPE ON: 1 Highway
SERV TYPE UND: 5 Waterway

STRUCTURE NAME: STRUCTURE C SANIBEL CAUSE\
YEAR BUILT: 2007
SECTION NO.: 12 000 000
MP: 0
ROUTE: 00867
FACILITY CARRIED: CR-867
FEATURE INTERSECTED: SAN CARLOS BAY

☐ THIS BRIDGE CONTAINS FRACTURE CRITICAL COMPONENTS
☐ THIS BRIDGE IS SCOUR CRITICAL
☐ THIS REPORT IDENTIFIES DEFICIENCIES WHICH REQUIRE PROMPT CORRECTIVE ACTION
☐ FUNCTIONALLY OBSOLETE ☐ STRUCTURALLY DEFICIENT

TYPE OF INSPECTION: Regular NBI
DATE FIELD INSPECTION WAS PERFORMED: ABOVE WATER: 11/30/2009 UNDERWATER: 10/05/2009

SMART FLAGS:
None

OVERALL NBI RATINGS:
DECK: 8 Very Good
SUPERSTRUCTURE: 7 Good
SUBSTRUCTURE: 7 Good
CHANNEL: 7 Minor Damage
CULVERT: N N/A (NBI)
SUFFICIENCY RATING: 79.0
HEALTH INDEX: 99.06
PERFORMANCE RATING: Good

FIELD PERSONNEL / TITLE / NUMBER	INITIALS
O'Grady, John - Bridge Inspector (CBI# 00344) (lead)	
Carreno, Fernando - BI Tech	
Hays, Stephen - Bridge Inspector (CBI#00438)/Lead Diver	
Myers, Jared - Diver/Inspector	
Harris, Scott - Diver/Inspector	

REVIEWING BRIDGE INSPECTION SUPERVISOR:
Crissey, Dave - Bridge Inspector (CBI #00321)

CONFIRMING REGISTERED PROFESSIONAL ENGINEER:
LoCicero, Thomas - PE #31136
Kisinger Campo & Associates
9270 Bay Plaza Blvd., Suite 605
Certificate of Authorization #2317
Tampa, FL 33619

SIGNATURE: Thomas G. LoCicero
DATE: 1/8/10

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All Elements

UNIT: Unit 1 DECKS

ELEMENT/ENV: 12/4 Bare Concrete Deck 166651 sf. ELEM CATEGORY: Decks/Slabs

CONDITION STATE (5)	DESCRIPTION	QUANTITY
1	The surface and underside of the deck have few repaired areas, there are few spalls/delaminations in the deck surface or underside and the only cracking is superficial or surface map cracking. The combined distressed area is 2% or less of the deck area.	166651 sf.

ELEMENT INSPECTION NOTES:

Note: Two 4-1/2in. diameter fiberglass conduits and one 3-1/2in. diameter PVC conduit are suspended from hangers anchored to the underside of Bay 1 in all spans. Refer to photo 1. The type of anchorage for the hangers is unknown.

CS1 = There is a light accumulation of dirt and debris in the shoulder areas - NEW.

The undersides of the overhangs have full width x up to 1/64in. wide transverse cracks, some with efflorescence - NEW.

ELEMENT/ENV: 300/4 Strip Seal Exp Joint 431 lf. ELEM CATEGORY: Joints

CONDITION STATE (3)	DESCRIPTION	QUANTITY
1	The element shows minimal deterioration. There is no leakage at any point along the joint. Gland is secure and has no defects. Debris in joint is not causing any problems. The adjacent deck and/or header is sound.	431 lf.

ELEMENT INSPECTION NOTES:

Note: Joints are present at Abutments 1 and 28 and at Piers 4, 7, 10, 13, 16, 19, 22 and 25.

CS1 = The joints are filling with dirt and debris, but are functioning as intended at this time - NEW. Refer to photo 2.

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All Elements

UNIT: Unit 1 SUPERSTRUCTURE

ELEMENT/ENV: 334/4 Metal Rail Coated 7734 lf. ELEM CATEGORY: Railing

CONDITION STATE (5)	DESCRIPTION	QUANTITY
1	There is no evidence of active corrosion. Protective coating is sound and functioning as intended to protect the element.	7734 lf.

ELEMENT INSPECTION NOTES:

Note: Barriers meet NCHRP TL4 criteria and meet standards for SIA Item #36. standards

CS1 = The bridge rails have minor impact related scrapes at random locations - NEW.

ELEMENT/ENV: 109/4 P/S Conc Open Girder 15467 lf. ELEM CATEGORY: Superstructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	15464 lf.
3	Some delaminations and/or spalls may be present. There may be minor exposure but no deterioration of the prestress system. Corrosion of non-prestressed reinforcement may be present but loss of section is incidental and does not significantly affect the strength and/or serviceability of either the element or the bridge.	3 lf.

ELEMENT INSPECTION NOTES:

CS1 = The beams have multiple diagonal web cracks of various lengths up to 4ft. long x 1/64in. wide near the bearing areas, extending up and away from the supports. Refer to photo 3.

CS3 = The west face of the bottom flange of Beam 6-4 at Pier 7 has a 30in. x 12in. delamination - NEW. Refer to photo 4. REPAIR

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All Elements

UNIT: Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 310/4 Elastomeric Bearing 216 ea. ELEM CATEGORY: Bearings

CONDITION STATE (3)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. Shear deformations are correct for existing temperatures.	216 ea.

ELEMENT/ENV: 563/4 Acc Ladd & Plat 8 ea. ELEM CATEGORY: Movable

CONDITION STATE (5)	DESCRIPTION	QUANTITY
1	There is no evidence of active corrosion, and the paint system is sound and functioning as intended to protect the metal surface.	8 ea.

ELEMENT INSPECTION NOTES:

Note: The quantity includes four fender access ladders and four platforms/walkways.

ELEMENT/ENV: 580/4 Navigational Lights 1 ea. ELEM CATEGORY: Movable

CONDITION STATE (3)	DESCRIPTION	QUANTITY
1	Lights are operational, lenses are clean and not broken, there is no evidence of corrosion.	1 ea.

ELEMENT INSPECTION NOTES:

Note: This element represents six fender lights, two clearance at centerline of channel gauge lights and two centerline of channel swing lights.

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All Elements

UNIT: Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 205/4 R/Conc Column 52 ea. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	52 ea.

ELEMENT INSPECTION NOTES:

CORRECTIVE ACTION TAKEN:
The previously noted lifting eyes have been removed since the previous inspection.

ELEMENT/ENV: 207/4 P/S Conc Holl Pile 360 ea. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	359 ea.
2	Minor cracks, spalls and scaling may be present and there may be exposed reinforcing with no evidence of corrosion. There is no exposure of the prestress system.	1 ea.

ELEMENT INSPECTION NOTES:

Note: The divers cleaned Piles 6-1 thru 6-8, 6-13 thru 6-15, 22-1 thru 22-15, 23-1 thru 23-3, 23-5 thru 23-10, 23-14 and all deficiencies. The divers noted that no piles are visible under Footers 2 and 27.

The following was noted by the underwater inspectors:
CS1 = Pile 11-6, previously noted as Pile 10-6, has a corrugated metal pipe sleeve around it with no fill material, starting 24in. below the footer and extending to the groundline.

CS2 = The northeast corner of Pile 6-4 has a 3ft. 7in. x 10in. x 2-1/2in. spall with no exposed steel, 28in. below the footer - INCREASE. This was previously noted as Pile 16-1.

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All Elements

UNIT: Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 215/4 R/Conc Abutment 70 lf. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	70 lf.

ELEMENT/ENV: 220/4 R/C Sub Pile Cap/Ftg 26 ea. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	13 ea.

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All Elements

UNIT: Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 220/4 R/C Sub Pile Cap/Ftg 26 ea. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
2	Minor cracks, spalls and scaling may be present but there is no exposed reinforcing or surface evidence of rebar corrosion.	13 ea.

ELEMENT INSPECTION NOTES:

Note: The divers cleaned Footers 3, 4, 5 and all deficiencies.

CS2 = The following footers have spalls with no exposed steel up to 24in. x 12in. x 8in.;
Footer 4, northeast corner
Footer 5, northeast corner
Footer 6, southeast and northeast corners
Footer 7, southeast and northeast corners
Footer 8, northeast corner
Footer 9, northeast corner
Footer 14, northeast corner - NEW.
Footer 19, southeast corner
Footer 22, southeast and northeast corners
Footer 23, southeast corner

The following was noted by the underwater inspectors:
The northeast corner of Footer 5 has a 30in. x 10in. x 2in. spall with no exposed steel, 3ft. below the top of the footer.
The southeast corner of Footer 19 has a 25in. x 15in. x 2-1/2in. spall with no exposed steel, 27in. below the top of the footer.
Footers 25, 26 and 27 have a different construction with concrete formed sides. The sides have vertical cracks up to 1/16in. wide to full height with efflorescence.

CORRECTIVE ACTION TAKEN:
The previously noted lifting eyes in-place on the footers have been removed since the previous inspection. Also, the spalls in Footers 3 and 16 have been repaired since the previous inspection.

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All Elements

UNIT: Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 234/4 R/Conc Cap 1121 lf. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	1121 lf.

ELEMENT/ENV: 387/4 P/S Fender/Dolphin 384 lf. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	384 lf.

ELEMENT INSPECTION NOTES:

The following was noted by the underwater inspectors:
CS1 = The lower connecting hardware has light corrosion with no measurable section loss - NEW.

ELEMENT/ENV: 393/4 Blkhd Sewl Any Mater 350 ft ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	There is little or no deterioration. Surface defects only are in evidence. Random open joints may exist.	350 ft

ELEMENT INSPECTION NOTES:

Note: This element represents the north bulkhead constructed with concrete sheet piling and a concrete cap.

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All Elements

UNIT: Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 396/4 Other Abut Slope Pro 2500 sf. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	There is little or no deterioration. Surface defects only are in evidence. Random open joints may exist.	2500 sf.

ELEMENT INSPECTION NOTES:
Note: This element includes the rock rubble rip rap and concrete block mats.

ELEMENT/ENV: 321/4 R/Conc Approach Slab 2 ea. ELEM CATEGORY: Other Elements

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The slab has not settled and shows no sign of deterioration other than superficial surface cracks.	2 ea.

ELEMENT INSPECTION NOTES:
Note: The approach slabs are not visible due to an overlay of asphalt.

ELEMENT/ENV: 478/4 MSE Walls 120 lf. ELEM CATEGORY: Other Elements

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	There is little or no deterioration. Surface defects only are in evidence.	120 lf.

ELEMENT INSPECTION NOTES:
Note: This element quantifies 30lf at each corner.

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All Elements

UNIT: Unit 1 MISCELLANEOUS

ELEMENT/ENV: 290/4 Channel **1 ea.** **ELEM CATEGORY:** Channel

CONDITION STATE (4)	DESCRIPTION	QUANTITY
2	Bank protection is in need of minor repairs, bank may be beginning to slump, minor stream bed movement may be evident or debris may be present.	1 ea.

ELEMENT INSPECTION NOTES:

CS2 = Some channel measurements have a 2ft. or greater change since the previous inspection. The reason for the changes may be due to the strong currents altering the channel bottom.

Some channel measurements have a 2ft. or greater change since the previous inspection. Reason for change may be due to the strong current and/or ongoing demolition of the old structures during the previous inspection, altering the channel bottom.

Structure Notes

BRIDGE OWNER: LEE COUNTY

TRAFFIC STATEMENT: According to the load rating dated 4/13/04, the structure does not require posting. This structure is not posted.

Structure was inventoried from south to north.

This structure replaced Bridge No. 124041.

Lane shift required for underbridge inspection vehicle.
A power boat was used for groundline measurements and substructure inspection.

Owner provided 2008 ADT.

INSPECTION NOTES: SJCS 11/30/2009

Sufficiency Rating Calculation Accepted by KNKCARL-P at 2010-01-07 15:13:08

LOAD CAPACITY EVALUATION:
The findings of this inspection reveal no reason to warrant a new analysis; therefore, the current load rating results still govern.

Note: Pontis Element 393 Blkhd Sewl Any Mater was created in this inspection report.

Note: NBI Item #58 Superstructure was changed from an 8 to a 7 due to the diagonal cracks in the webs of the beams. NBI Item #61 Channel was changed form an 8 to a 7 due to the changes of 2ft. or greater in the channel measurements at some locations.

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FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
Inspection Report with PDF attachment(s)

BRIDGE ID: 124114
DISTRICT: 01 Bartow

INSPECTION DATE: 11/30/2009 SJCS

Photo 1 - Element 12 Bare Concrete Deck

View of utilities in Bay 1 of all spans

REPAIR RECOMMENDATION:
None

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FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
Inspection Report with PDF attachment(s)

BRIDGE ID: 124114
DISTRICT: 01 Bartow

INSPECTION DATE: 11/30/2009 SJCS

Photo 2 - Element 300 Strip Seal Exp Joint

Typical view of dirt and debris in the joints (Abutment 1 joint shown)

REPAIR RECOMMENDATION:
None

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Photo 3 - Element 109 P/S Conc Open Girder

Typical view of diagonal web cracks in the beams

REPAIR RECOMMENDATION:
None

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FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
Inspection Report with PDF attachment(s)

BRIDGE ID: 124114
DISTRICT: 01 Bartow

INSPECTION DATE: 11/30/2009 SJCS

Photo 4 - Element 109 P/S Conc Open Girder

Delamination in the west face of the bottom flange of Beam 6-4 at Pier 7

REPAIR RECOMMENDATION:
Repair the delamination in the west face of the bottom flange of Beam 6-4 at Pier 7.

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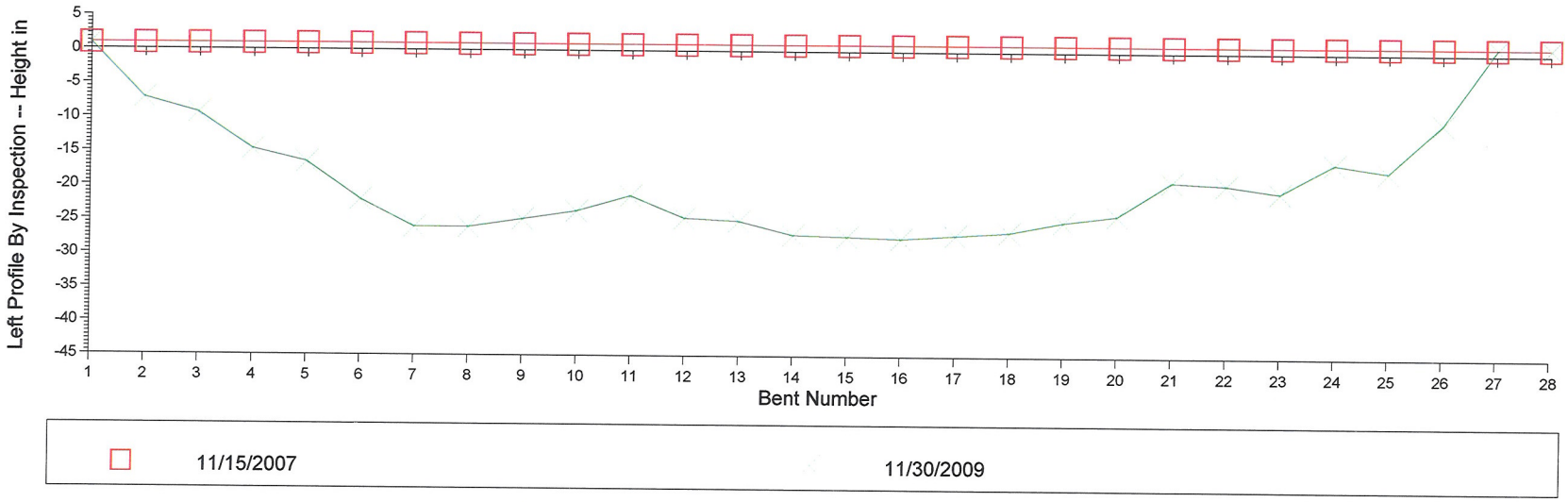
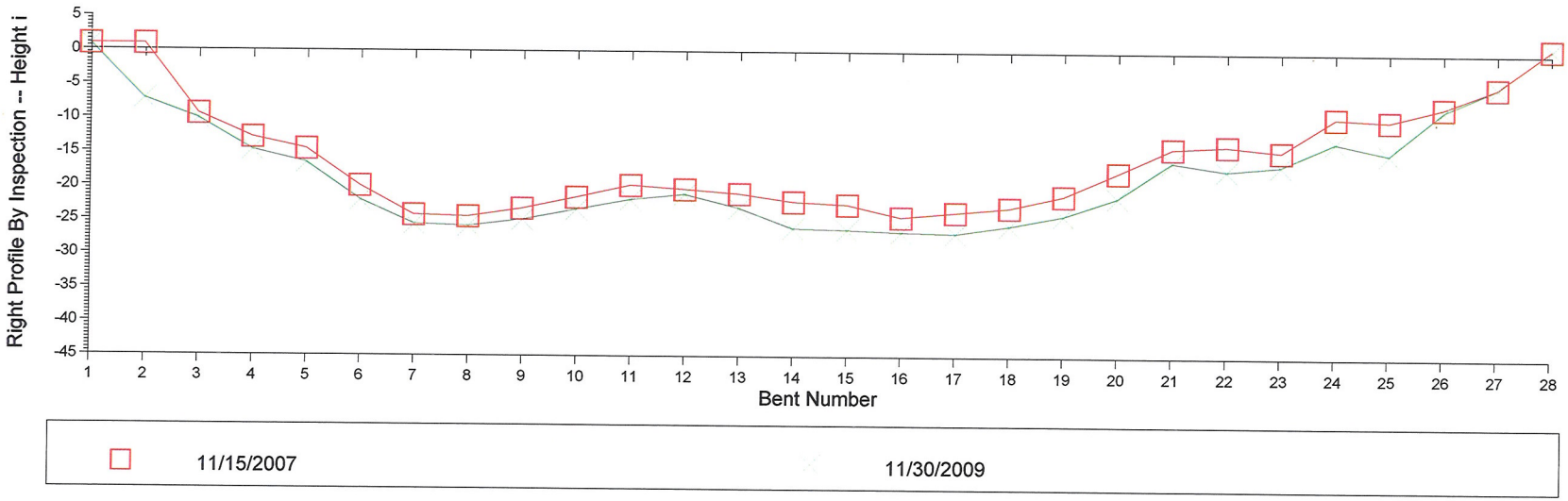
FLORIDA DEPARTMENT OF TRANSPORTATION BRIDGE MANAGEMENT SYSTEM
Bridge Profile Report

REPORT ID: INVT016

Structure #: 124114

DATE PRINTED: 01/07/2010





Profile Data - Numerical Summary

Inspection Date and Key: 11/30/2009 SJCS

(All Heights Are In Feet)

Bent #	Left Height	Right Height
1	-1	-1
2	7.1	7.1
3	9.3	10
4	14.6	14.6
5	16.5	16.5
6	22	22
7	26	25.5
8	26	25.8
9	24.8	24.8
10	23.6	23.3
11	21.3	21.8
12	24.6	21
13	25	23
14	27	26
15	27.2	26.2
16	27.5	26.5
17	27	26.7
18	26.5	25.5
19	25	24
20	24	21.3
21	19	16
22	19.4	17.2
23	20.5	16.5
24	16.2	13
25	17.4	14.7
26	10.2	8.2
27	-1	4.8
28	-1	-1

Air Temp: 1

Profile Notes:

Meaurements referenced from the top of the footers.
Waterline at Footer 3 = 2.8ft.
Note: A meaurement showing a -1 indicates that location was out of the water.

Profile Data - Numerical Summary

Inspection Date and Key: 11/15/2007 NPFY

(All Heights Are In Feet)

Bent #	Left Height	Right Height
1	-1	-1
2	-1	-1
3	-1	9.3
4	-1	12.8
5	-1	14.5
6	-1	19.9
7	-1	24.2
8	-1	24.4
9	-1	23.2
10	-1	21.5
11	-1	19.7
12	-1	20.3
13	-1	20.9
14	-1	22.1
15	-1	22.5
16	-1	24.3
17	-1	23.6
18	-1	22.9
19	-1	21.1
20	-1	17.6
21	-1	14
22	-1	13.6
23	-1	14.4
24	-1	9.4
25	-1	9.8
26	-1	7.8
27	-1	4.8
28	-1	-1

Air Temp:

Profile Notes:

Profile Reference: Top of Footer 3.
Waterline at Footer 3: 2.8FT
NOTE: Left side measurements were not taken due to the ongoing demolition of the replaced structure at the time of this inspection.

BOLT UNDERWATER SERVICES
7946 62ND STREET NORTH
PINELLAS PARK, FL 33781

Routine Underwater Bridge Inspection Report for Kisinger Campo & Associates, Corp.

NBI Structure No. (8): **124114**

Underwater Date (93): 10/05/09

Structure/Roadway Identification:

District (2): 01
County (3): Lee
Feature Intersected (6): San Carlos Bay
Facility Carried (7): CR 867

Underwater Inspection Details:

Special Crew Hours: 12.0
Max. Depth: 25ft.
Type of Dive Insp.: SCUBA
Type of Boat Used: 21ft.
Water Type/Marine Growth: Salt-Tidal / Barnacles - Oysters

Previous Inspection:

Lead Diver:	C.B.I. No.:	Inspection Date:
Hoogland, Keith S.	00341	10/02/07

Inspection Personnel:

Field Personnel:	Title	C.B.I. No.:	Duty:	Signature:
Hays, Stephen F.	C.B.I. Diver-Inspector	00438/Lead	Tend	
Myers, Jared L	Diver-Inspector		Dive	
Harris, Scott R.	Diver-Inspector		Dive	

PILING/COLUMNS
ELEMENT: 207 HLW CORE **360**: ea.

Condition State:	QTY:	Recommended Feasible Action:
CS-1	**359**	**Do Nothing**

Footer 2 and 27 has no visible piling.

Pile 11-6: There is a CMP sleeve around the pile with no fill material, starting 24in. below footer to the G/L. This pile could not be inspected (possible incomplete jacket). *(Previously noted as 10-6)*

CS-2 **1** **Do Nothing**
Pile 6-4: NE edge 28in. below footer, SPL, no exposed steel, 3ft. 7in. x 10in. x 2½in. *INCREASED (Previously noted as 16-1)*

NOTE: Piles 6-1 through 6-8, 6-13 through 6-15, 22-1 through 22-15, 23-1 through 23-3, 23-5 through 23-10, 23-14 and all deficiencies were cleaned.

SUBMERGED FOOTER
ELEMENT: 220 R/CONCRETE **26**: ea.

Condition State:	QTY:	Recommended Feasible Action:
CS-1	**21**	**Do Nothing**
CS-2	**5**	**Do Nothing**

Footers 25, 26 and 27 have a different construction with a concrete formed side. The sides have vertical cracks up to 1/16in. wide to full height with efflorescence.
Footer 5: NE edge 3ft. below top of footer, SPL, no exposed steel, 30in. x 10in. x 2in.
Footer 19: SE edge 27in. below top of footer, SPL, no exposed steel, 25in. x 15in. x 2½in.

CAT: The spalls on Footer 3 and 16 were patched.

NOTE: Footers 3, 4, 5 and all deficiencies were cleaned.

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CHANNEL
ELEMENT: 290 1: ea.

Condition State:	QTY:	Recommended Feasible Action:
CS-1	1	Do Nothing

FENDER SYSTEM
ELEMENT: 387 P/S CONCRETE 384 lf.

Condition State:	QTY:	Recommended Feasible Action:
CS-1	384 lf.	Do Nothing

The lower connecting hardware has light corrosion with no measureable section loss. *NEW*

BULKHEAD
ELEMENT: 393 OTHER: 350 lf.

NOTE: Quantity includes N Bulkhead only.

Condition State:	QTY:	Recommended Feasible Action:
CS-1	350 lf.	Do Nothing

INSPECTION NOTES: Divers inspected three hundred sixty 30in. piling in Bents 3 through 26, Footers, Fender System, N Bulkhead and Channel.
STRUCTURE NOTES: Structure inventoried south to north.

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Description

Structure Unit Identification

Bridge/Unit Key: 124114 1
Structure Name: STRUCTURE C SANIBEL CAUSEWAY
Description: MAIN SPAN
Type: M Main

Roadway Identification:

NBI Structure No (8) 124114
Position/Prefix (5) Route On Structure
Kind Hwy (Rte Prefix) 4 County Hwy
Design Level of Service 1 Mainline
Route Number/Suffix 00867/ 0 N/A (NBI)
Feature Intersect (6) SAN CARLOS BAY
Critical Facility Not Defense-crit
Facility Carried (7) CR-867
Mile Point (11) 0
Latitude (16) 026d27'17" Long (17) 082d02'10"

Roadway Traffic and Accidents

Lanes (28) 2 Medians 0 Speed 35 mph
ADT Class ADT Class 4
Recent ADT (29) 19690 Year (30) 2008
Future ADT (114) 20675 Year (115) 2028
Truck % ADT (109) 7
Detour Length (19) 99 mi
Detour Speed -1 mph
Accident Count -1 Rate -1

Roadway Classification

Nat. Hwy Sys (104) 0 Not on NHS
National base Net (12) Not on Base Network
LRS Inventory Rte (13a) 12 000 000 Sub Rte (13b) 00
Functional Class (26) 16 Urban Minor Arterial
On Federal Aid System Y
Defense Hwy (100) 0 Not a STRAHNET hwy
Direction of Traffic (102) 2 2-way traffic
Emergency ☑

Roadway Clearances

Vertical (10) 99.99 ft Appr. Road (32) 40
Horiz. (47) 40 ft Roadway (51) 40 ft
Truck Network (110) 0 Not part of natl netwo
Toll Facility (20) 2 On toll road
Fed. Lands Hwy (105) 0 N/A (NBI)
School Bus Route ☑
Transit Route ☑

Thomas G. LaCicero
1/8/10

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Structure Identification

Admin Area Lee County
District (2) D1 - Bartow
County (3) (12)Lee
Place Code (4) Sanibel
Location (9) 3RD STRUCT S OF TOLL PLAZ
Border Br St/Reg (98) Not Applicable (P) Share 0 %
Border Struct No (99) _
FIPS State/Region (1) 12 Florida Region 4-Atlanta
NBIS Bridge Len (112) Meets NBI Length
Parallel Structure (101) No || bridge exists
Temp. Structure (103) Not Applicable (P)
Maint. Resp. (21) 2 County Hwy Agency
Owner (22) 2 County Hwy Agency
Historic Signif. (37) 5 Not eligible for NRHP

Structure Type and Material

Curb/Sidewalk (50): Left 0 ft Right 0 ft
Bridge Median (33): 0 No median
Main Span Material (43A): 6 P/S Conc Continuous
Appr Span Material (44A): Not Applicable (P)
Main Span Design (43B): 02 Stringer/Girder
Appr Span Design (44B): Not Applicable (P)

Geometrics

Spans in Main Unit (45) 27
Approach Spans (46) 0
Length of Max Span (48) 144 ft
Structure Length (49) 3866.6 ft
Total Length 3906.6 ft
Deck Area 166651 sqft
Structure Flared (35) 0 No flare

Age and Service

Year Built (27) 2007
Year Reconstructed (106) 0
Type of Service On (42a) 1 Highway
Under (42b) 5 Waterway
Fracture Critical Details Not Applicable

Deck Type and Material

Deck Width (52): 43.1
Skew (34): 0
Deck Type (107): 1 Concrete-Cast-in-Place
Surface (108): 0 None
Membrane: 0 None
Deck Protection: None

Appraisal

Structure Appraisal

Open/Posted/Closed (41) A Open, no restriction
Deck Geometry (68) 5 Above Tolerable
Underclearances (69) N Not applicable (NBI)
Approach Alignment (72) 8-No Speed Red thru Curv
Bridge Railings (36a) 1 Meets Standards
Transitions (36b) 1 Meets Standards
Approach Guardrail (36c) 1 Meets Standards
Approach Guardrail ends (36d) 1 Meets Standards
Scour Critical (113) 8 Stable Above Footing

Navigation Data

Navigation Control (38) Permit Required
Nav Vertical Clr (39) 26 ft
Nav Horizontal Clr (40) 96.2 ft
Min Vert Lift Clr (116) 0 ft
Pier Protection (111) 2 In-Place, Functioning

NBI Condition Rating

Sufficiency Rating 79
Health Index 99.06
Structural Eval (67) 7 Above Min Criteria
Deficiency Not Deficient

Minimum Vertical Clearance

Over Structure (53) 99.99 ft
Under (reference) (54a) N Feature not hwy or RR
Under (54b) 0 ft

Minimum Lateral Underclearance

Reference (55a) N Feature not hwy or RR
Right Side (55b) 0 ft
Left Side (56) 0 ft

Load Rating

Design Load (31) HL 93
Rating Date 4/13/2004 Initials MCM
Posting (70) 5 At/Above Legal Loads

Operating Type (63) 1 LF Load Factor
Operating rating (64) 99.9 tons Alternate -1
Inventory Type (65) 1 LF Load Factor
Inventory Rating (66) 59.2 tons Alternate -1
Alt Meth -1

Schedule

Current Inspection

Inspection Date: 11/30/2009
Inspector: KN538OJ-P - John O'Grady
Bridge Group: BD523
Primary Type: Regular NBI
Review Required: ☑

Next Inspection Date Scheduled

NBI: 11/30/2011
Element: 11/30/2011
Fracture Critical:
Underwater: 11/30/2011
Other/Special:

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Schedule Cont.

Inspection Types Performed NBI ☑ Element ☑ Fracture Critical ☐ Underwater ☑ Other Special ☐

Inspection Intervals	Required (92)	Frequency (92)	Last Date (93)
Fracture Critical	☐	mos	
Underwater	☑	24 mos	10/05/2009
Other Special	☐	mos	
NBI		24 mos (91)	11/30/2009 (90)

Inspection Resources

Crew Hours	40
Flagger Hours	8
Helper Hours	0
Snooper Hours	6
Special Crew Hours	12
Special Equip Hours	0

Custom

General Bridge Information

Parallel Bridge Seq	
Channel Depth	24.701 ft
Radio Frequency	-1
Phone Number	(000) 000-0000
Exception Date	
Exception Type	Unknown
Accepted By Maint	00/00/0000
Warranty Expiration	00/00/0000
Bridge Rail 1	Steel barrier
Bridge Rail 2	Not applicable-No rail
Electrical Devices	Navigation lights only
Culvert Type	Not applicable
Maintenance Yard	0
FIHS ON / OFF	No Routes on FIHS
Previous Structure	124041
2nd Previous Structure	
Replacement Structure	

Bridge Load Rating Information

HS20 Govr. Span Length	144 ft
L-Rating Origination	Design Plans
Load Rating Date	04/13/2004
Method Calculation	Others
Load Dist. Factor	1.047
Impact Factor	19
Design Method	Load Factor
Design Measure	English
Recommend SU Posting	99 tons
Recommend C Posting	99 tons
Recommend T Posting	99 tons
Gov FB Span	0 ft
Gov FB Spacing	0 ft
FB HS20 Rating	0 tons
FB SU4 Rating	0 tons
FB Present	N
FB INV Rating Factor	0
FB OPR Rating Factor	0
FB FL 120	0 tons
Single Unit Truck 2 Axles	91.6 tons
Single Unit Truck 3 Axles	76.6 tons
Single Unit Truck 4 Axles	82.4 tons
Combination Unit Truck 3 Axles	93.5 tons
Combination Unit Truck 4 Axles	84.4 tons
Combination Unit Truck 5 Axles	92.899 tons
Truck Trailer 5 Axles	98.1 tons
Posting Weight	99 tons
Actual SU Posting	99 tons
Actual C Posting	99 tons
Actual T Posting	99 tons
FL 120 Long Gov Span	-1 tons
FL 120 Trans	-1 tons
Single Axle Trans	-1 tons
Tandem Axle Trans	-1 tons
Wing Span	-1 ft
Web to Web Span	-1 ft
HS20 OPR Rating Max Span	98.9 tons
FL120 Long Max Span	-1 tons

Bridge Scour and Storm Information

Pile Driving Record	All pile driving records
Foundation Type	Foundation details
Mode of Flow	Tidal
Rating Scour Eval	Low Risk - High
Highest Scour Eval	No phase completed
Scour Recommended I	No recommendation
Scour Recommended II	No recommendation
Scour Recommended III	No recommendation
Scour Elevation	999 ft
Action Elevation	999 ft
Storm Frequency	999

Condition

NBI Rating

Channel (61)	7 Minor Damage
Deck (58)	8 Very Good
Superstructure (59)	7 Good
Substructure (60)	7 Good
Culvert (62)	N N/A (NBI)
Waterway (71)	8 Equal Desirable
Unrepaired Spalls	-1 sq.ft.
Review Required	☑

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Elements

Inspection Date: 11/30/2009SJCS

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Unit 1	12/4	Bare Concrete Deck	166651	100.	0	.	0	.	0	.	0	.	166651 sf.

Notes Note: Two 4-1/2in. diameter fiberglass conduits and one 3-1/2in. diameter PVC conduit are suspended from hangers anchored to the underside of Bay 1 in all spans. Refer to photo 1. The type of anchorage for the hangers is unknown.

CS1 = There is a light accumulation of dirt and debris in the shoulder areas - NEW.

The undersides of the overhangs have full width x up to 1/64in. wide transverse cracks, some with efflorescence - NEW.

Unit 1	300/4	Strip Seal Exp Joint	431	100.	0	.	0	.	0	.	0	.	431 lf.

Notes Note: Joints are present at Abutments 1 and 28 and at Piers 4, 7, 10, 13, 16, 19, 22 and 25.

CS1 = The joints are filling with dirt and debris, but are functioning as intended at this time - NEW. Refer to photo 2.

Unit 1	334/4	Metal Rail Coated	7734	100.	0	.	0	.	0	.	0	.	7734 lf.

Notes Note: Barriers meet NCHRP TL4 criteria and meet standards for SIA Item #36. standards

CS1 = The bridge rails have minor impact related scrapes at random locations - NEW.

Unit 1	109/4	P/S Conc Open Girder	15464	99.98	0	.	3	.02	0	.	0	.	15467 lf.

Notes CS1 = The beams have multiple diagonal web cracks of various lengths up to 4ft. long x 1/64in. wide near the bearing areas, extending up and away from the supports. Refer to photo 3.

CS3 = The west face of the bottom flange of Beam 6-4 at Pier 7 has a 30in. x 12in. delamination - NEW. Refer to photo 4. REPAIR

Unit 1	310/4	Elastomeric Bearing	216	100.	0	.	0	.	0	.	0	.	216 ea.

Notes

Unit 1	563/4	Acc Ladd & Plat	8	100.	0	.	0	.	0	.	0	.	8 ea.

Notes Note: The quantity includes four fender access ladders and four platforms/walkways.

Unit 1	580/4	Navigational Lights	1	100.	0	.	0	.	0	.	0	.	1 ea.

Notes Note: This element represents six fender lights, two clearance at centerline of channel gauge lights and two centerline of channel swing lights.

Unit 1	205/4	R/Conc Column	52	100.	0	.	0	.	0	.	0	.	52 ea.

Notes CORRECTIVE ACTION TAKEN:
The previously noted lifting eyes have been removed since the previous inspection.

Unit 1	207/4	P/S Conc Holl Pile	359	99.72	1	.	0	.	0	.	0	.	360 ea.

Notes Note: The divers cleaned Piles 6-1 thru 6-8, 6-13 thru 6-15, 22-1 thru 22-15, 23-1 thru 23-3, 23-5 thru 23-10, 23-14 and all deficiencies. The divers noted that no piles are visible under Footers 2 and 27.

The following was noted by the underwater inspectors:
CS1 = Pile 11-6, previously noted as Pile 10-6, has a corrugated metal pipe sleeve around it with no fill material, starting 24in. below the footer and extending to the groundline.

CS2 = The northeast corner of Pile 6-4 has a 3ft. 7in. x 10in. x 2-1/2in. spall with no exposed steel, 28in. below the footer - INCREASE. This was previously noted as Pile 16-1.

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Elements

Inspection Date: 11/30/2009SJCS

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Unit 1	215/4	R/Conc Abutment	70	100.	0	.	0	.	0	.	0	.	70 lf.

Notes

Unit 1	220/4	R/C Sub Pile Cap/Ftg	13	50.	13	50.	0	.	0	.	0	.	26 ea.

Notes Note: The divers cleaned Footers 3, 4, 5 and all deficiencies.

CS2 = The following footers have spalls with no exposed steel up to 24in. x 12in. x 8in.;
Footer 4, northeast corner
Footer 5, northeast corner
Footer 6, southeast and northeast corners
Footer 7, southeast and northeast corners
Footer 8, northeast corner
Footer 9, northeast corner
Footer 14, northeast corner - NEW.
Footer 19, southeast corner
Footer 22, southeast and northeast corners
Footer 23, southeast corner

The following was noted by the underwater inspectors:
The northeast corner of Footer 5 has a 30in. x 10in. x 2in. spall with no exposed steel, 3ft. below the top of the footer.
The southeast corner of Footer 19 has a 25in. x 15in. x 2-1/2in. spall with no exposed steel, 27in. below the top of the footer.
Footers 25, 26 and 27 have a different construction with concrete formed sides. The sides have vertical cracks up to 1/16in. wide to full height with efflorescence.

CORRECTIVE ACTION TAKEN:
The previously noted lifting eyes in-place on the footers have been removed since the previous inspection. Also, the spalls in Footers 3 and 16 have been repaired since the previous inspection.

Unit 1	234/4	R/Conc Cap	1121	100.	0	.	0	.	0	.	0	.	1121 lf.

Notes

Unit 1	387/4	P/S Fender/Dolphin	384	100.	0	.	0	.	0	.	0	.	384 lf.

Notes The following was noted by the underwater inspectors:
CS1 = The lower connecting hardware has light corrosion with no measurable section loss - NEW.

Unit 1	393/4	Blkhd Sewl Any Mater	350	100.	0	.	0	.	0	.	0	.	350 ft

Notes Note: This element represents the north bulkhead constructed with concrete sheet piling and a concrete cap.

Unit 1	396/4	Other Abut Slope Pro	2500	100.	0	.	0	.	0	.	0	.	2500 sf.

Notes Note: This element includes the rock rubble rip rap and concrete block mats.

Unit 1	290/4	Channel	0	.	1	100.	0	.	0	.	0	.	1 ea.

Notes CS2 = Some channel measurements have a 2ft. or greater change since the previous inspection. The reason for the changes may be due to the strong currents altering the channel bottom.

Some channel measurements have a 2ft. or greater change since the previous inspection. Reason for change may be due to the strong current and/or ongoing demolition of the old structures during the previous inspection, altering the channel bottom.

Unit 1	321/4	R/Conc Approach Slab	2	100.	0	.	0	.	0	.	0	.	2 ea.

Notes Note: The approach slabs are not visible due to an overlay of asphalt.

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Elements

Inspection Date: 11/30/2009SJCS

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Unit 1	478/4	MSE Walls	120	100.	0	.	0	.	0	.	0	.	120 lf.

Notes Note: This element quantifies 30lf at each corner.

Total Number of Elements: 18

Inspection Information

Inspection Date: 11.30.2009 **Type:** Regular NBI

Inspector: KN538OJ-P - John O'Grady

Inspection Notes: Sufficiency Rating Calculation Accepted by KNKCARL-P at 2010-01-07 15:13:08

LOAD CAPACITY EVALUATION:
The findings of this inspection reveal no reason to warrant a new analysis; therefore, the current load rating results still govern.

Note: Pontis Element 393 Blkhd Sewl Any Mater was created in this inspection report.

Note: NBI Item #58 Superstructure was changed from an 8 to a 7 due to the diagonal cracks in the webs of the beams. NBI Item #61 Channel was changed form an 8 to a 7 due to the changes of 2ft. or greater in the channel measurements at some locations.

Inspection Date: 11.15.2007 **Type:** Regular NBI

Inspector: KNVOLWW-P - Wade Wolfe

Inspection Notes: Sufficiency Rating Calculation Accepted by knvolsg-P at 2008-05-20 14:40:30
Sufficiency Rating Calculation Accepted by kn110ku-P at 2007-12-26 12:31:59
Sufficiency Rating Calculation Accepted by kn110ku-P at 2007-12-07 15:30:04

NOTE: For this initial inspection, construction of fenders, dolphins, slope protection, bulkheads and navigation lighting was still under construction.
Demolition of replaced structure was ongoing.
Left side channel groundline measurements not taken due to demolition of replaced structure.

LOAD CAPACITY EVALUATION:
The load rating dated 4/13/04 applies to the current condition of this bridge.

Structure Notes

BRIDGE OWNER: LEE COUNTY

TRAFFIC STATEMENT: According to the load rating dated 4/13/04, the structure does not require posting. This structure is not posted.

Structure was inventoried from south to north.

This structure replaced Bridge No. 124041.

Lane shift required for underbridge inspection vehicle.
A power boat was used for groundline measurements and substructure inspection.

Owner provided 2008 ADT.

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EXHIBIT I

BRIDGE INSPECTION REPORT

PREPARED FOR: FLORIDA DEPARTMENT OF TRANSPORTATION

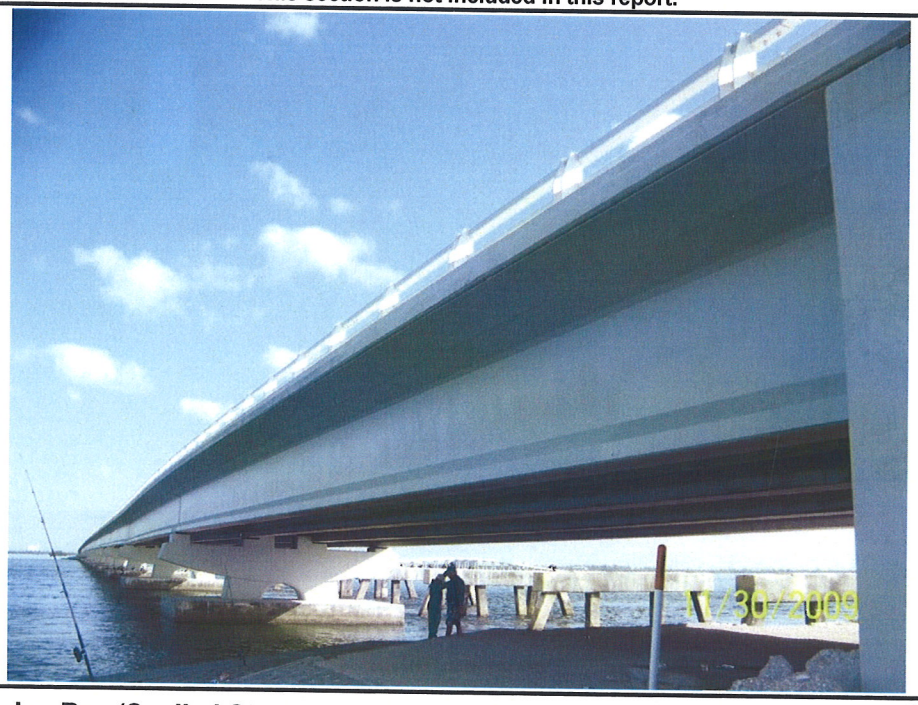
BRIDGE OWNER: LEE COUNTY

INSPECTED BY:

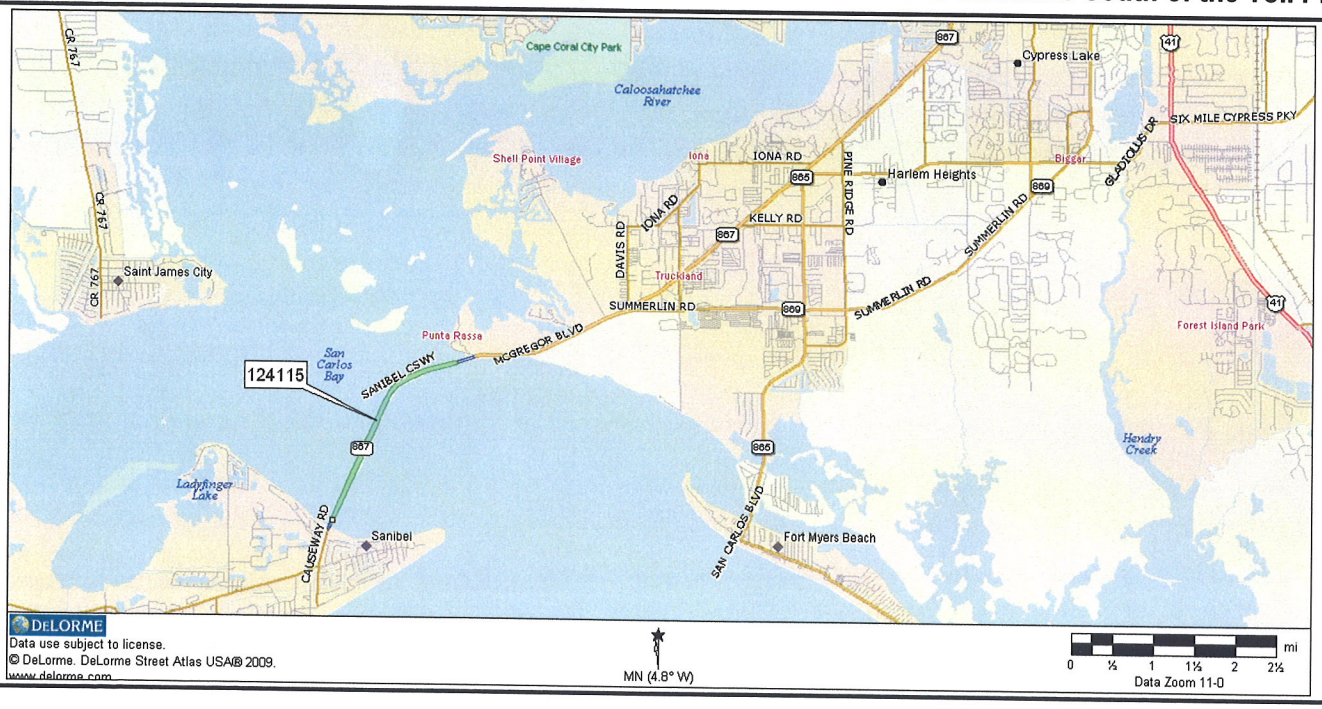
BRIDGE NO. 124115 **CONTENTS OF REPORT** **INSPECTION DATE:** 11/30/2009

- Pontis Report
- CIDR
- Scour Elevation (Profile)
- * Addendum (Element Notes & Photos/Sketches)
- U/W Inspection Report
- * Fracture Critical Data
- * Load Rating Analysis Summary

*This section is not included in this report.



CR-867 over San Carlos Bay (Sanibel Structure B) **Second Structure South of the Toll Plaza**



FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
Inspection Report with PDF attachment(s)

BRIDGE ID: 124115
DISTRICT: 01 Bartow

INSPECTION DATE: 11/30/2009 JXNS

BY:	KCA	STRUCTURE NAME:	STRUCTURE B SANIBEL CAUSEV
OWNER:	2 County Hwy Agency	YEAR BUILT:	2007
MAINTAINED BY:	2 County Hwy Agency	SECTION NO.:	12 000 000
STRUCTURE TYPE:	6 P/S Conc Continuous 02 Stringer/Girder	MP:	0
LOCATION:	2ND STRUC S OF TOLL PLAZA	ROUTE:	00867
SERVICE TYPE ON:	1 Highway	FACILITY CARRIED:	CR-867
SERV TYPE UND:	5 Waterway	FEATURE INTERSECTED:	SAN CARLOS BAY

☐ FUNCTIONALLY OBSOLETE ☐ STRUCTURALLY DEFICIENT

TYPE OF INSPECTION: Regular NBI

DATE FIELD INSPECTION WAS PERFORMED: ABOVE WATER: 11/30/2009 UNDERWATER: 10/06/2009

SUFFICIENCY RATING: 79.0
HEALTH INDEX: 99.31

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FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
Inspection Report with PDF attachment(s)

BRIDGE ID: 124115
DISTRICT: 01 Bartow

INSPECTION DATE: 11/30/2009 JXNS

BY: KCA
OWNER: 2 County Hwy Agency
MAINTAINED BY: 2 County Hwy Agency
STRUCTURE TYPE: 6 P/S Conc Continuous 02 Stringer/Girder
LOCATION: 2ND STRUC S OF TOLL PLAZA
SERVICE TYPE ON: 1 Highway
SERV TYPE UND: 5 Waterway

STRUCTURE NAME: STRUCTURE B SANIBEL CAUSEV
YEAR BUILT: 2007
SECTION NO.: 12 000 000
MP: 0
ROUTE: 00867
FACILITY CARRIED: CR-867
FEATURE INTERSECTED: SAN CARLOS BAY

☐ THIS BRIDGE CONTAINS FRACTURE CRITICAL COMPONENTS
☐ THIS BRIDGE IS SCOUR CRITICAL
☐ THIS REPORT IDENTIFIES DEFICIENCIES WHICH REQUIRE PROMPT CORRECTIVE ACTION
☐ FUNCTIONALLY OBSOLETE ☐ STRUCTURALLY DEFICIENT

TYPE OF INSPECTION: Regular NBI
DATE FIELD INSPECTION WAS PERFORMED: ABOVE WATER: 11/30/2009 UNDERWATER: 10/06/2009

SMART FLAGS:
None

OVERALL NBI RATINGS:
DECK: 8 Very Good
SUPERSTRUCTURE: 7 Good
SUBSTRUCTURE: 8 Very Good
CHANNEL: 7 Minor Damage
CULVERT: N N/A (NBI)
SUFFICIENCY RATING: 79.0
HEALTH INDEX: 99.31
PERFORMANCE RATING: Good

FIELD PERSONNEL / TITLE / NUMBER	INITIALS
O'Grady, John - Bridge Inspector (CBI# 00344) (lead)	
Carreno, Fernando - BI Tech	
Hays, Stephen - Bridge Inspector (CBI#00438)/Lead Diver	
Myers, Jared - Diver/Inspector	
Harris, Scott - Diver/Inspector	

REVIEWING BRIDGE INSPECTION SUPERVISOR:
Crissey, Dave - Bridge Inspector (CBI #00321)

CONFIRMING REGISTERED PROFESSIONAL ENGINEER:
LoCicero, Thomas - PE #31136
Kisinger Campo & Associates
9270 Bay Plaza Blvd., Suite 605
Certificate of Authorization #2317
Tampa, FL 33619

SIGNATURE: Thomas G. LoCicero
DATE: 1/8/10

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All Elements

UNIT: Structure Unit 1 DECKS

ELEMENT/ENV: 12/4 Bare Concrete Deck 80684 sf. ELEM CATEGORY: Decks/Slabs

CONDITION STATE (5)	DESCRIPTION	QUANTITY
1	The surface and underside of the deck have few repaired areas, there are few spalls/delaminations in the deck surface or underside and the only cracking is superficial or surface map cracking. The combined distressed area is 2% or less of the deck area.	80684 sf.

ELEMENT INSPECTION NOTES:

Note: Two 4-1/2in. diameter fiberglass conduits and one 3-1/2in. diameter PVC conduit are suspended from hangers anchored to the underside of Bay 1 in all spans. Refer to photo 1. The type of anchorage for the utility hangers is unknown.

CS1 = There is a light accumulation of dirt and debris in the shoulder areas - NEW.

The undersides of the overhangs have full width x up to 1/64in. wide transverse cracks, some with efflorescence - NEW.

ELEMENT/ENV: 300/4 Strip Seal Exp Joint 216 lf. ELEM CATEGORY: Joints

CONDITION STATE (3)	DESCRIPTION	QUANTITY
1	The element shows minimal deterioration. There is no leakage at any point along the joint. Gland is secure and has no defects. Debris in joint is not causing any problems. The adjacent deck and/or header is sound.	216 lf.

ELEMENT INSPECTION NOTES:

Note: Joints are present at Abutments 1 and 14 and Piers 4, 7 and 10.

CS1 = The joints are filling with dirt and debris, but are functioning as intended at this time - NEW. Refer to photo 2.

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All Elements

UNIT: Structure Unit 1 SUPERSTRUCTURE

ELEMENT/ENV: 334/4 Metal Rail Coated 3744 lf. ELEM CATEGORY: Railing

CONDITION STATE (5)	DESCRIPTION	QUANTITY
1	There is no evidence of active corrosion. Protective coating is sound and functioning as intended to protect the element.	3744 lf.

ELEMENT INSPECTION NOTES:
Note: Barriers meet NCHRP TL4 criteria and meet SIA Item #36 standards.

ELEMENT/ENV: 109/4 P/S Conc Open Girder 7488 lf. ELEM CATEGORY: Superstructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	7488 lf.

ELEMENT INSPECTION NOTES:
CS1 = The beams have multiple diagonal web cracks up to 4ft. long x 1/64in. wide near the bearing areas, extending up and away from the supports.

The following was considered incidental to this element:
The west face of the poured beam end of Beam 3-1 at Pier 3 has a 10in. x 8in. delamination - NEW.

ELEMENT/ENV: 310/4 Elastomeric Bearing 104 ea. ELEM CATEGORY: Bearings

CONDITION STATE (3)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. Shear deformations are correct for existing temperatures.	104 ea.

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All Elements

UNIT: Structure Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 205/4 R/Conc Column 24 ea. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	24 ea.

ELEMENT/ENV: 207/4 P/S Conc Holl Pile 180 ea. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	180 ea.

ELEMENT INSPECTION NOTES:

Note: The divers cleaned Piles 12-1 thru 12-15, 15-1, 15-4, 15-5, 15-8 thru 15-10 and all deficiencies.

ELEMENT/ENV: 215/4 R/Conc Abutment 70 lf. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	70 lf.

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All Elements

UNIT: Structure Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 220/4 R/C Sub Pile Cap/Ftg 12 ea. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	12 ea.

ELEMENT INSPECTION NOTES:

Note: The divers cleaned Footer 8 and all deficiencies.

CORRECTIVE ACTION TAKEN:

The lifting eyes have been removed since the previous inspection.

ELEMENT/ENV: 234/4 R/Conc Cap 518 lf. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	518 lf.

ELEMENT INSPECTION NOTES:

CS1 = Beams 3-1 and 4-1 dip, approximately 3in. at Pier 3, is possibly due to an incorrect pedestal elevation. There are no obvious signs of distress on the surrounding members. This condition was not observed during this inspection.

ELEMENT/ENV: 393/4 Blkhd Sewl Any Mater 480 ft ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	There is little or no deterioration. Surface defects only are in evidence. Random open joints may exist.	480 ft

ELEMENT INSPECTION NOTES:

Note: The element represents the bulkheads constructed with concrete sheet piling and concrete caps.

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All Elements

UNIT: Structure Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 396/4 Other Abut Slope Pro 1800 sf. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	There is little or no deterioration. Surface defects only are in evidence. Random open joints may exist.	1800 sf.

ELEMENT INSPECTION NOTES:

Note: This element represents the concrete block mat slope protection.

ELEMENT/ENV: 321/4 R/Conc Approach Slab 2 ea. ELEM CATEGORY: Other Elements

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The slab has not settled and shows no sign of deterioration other than superficial surface cracks.	2 ea.

ELEMENT INSPECTION NOTES:

Note: The approach slabs are not visible due to an overlay of asphalt.

CS1 = The north approach slab joint header has a 1/32in. wide longitudinal crack in Lane 1.

ELEMENT/ENV: 478/4 MSE Walls 120 lf. ELEM CATEGORY: Other Elements

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	There is little or no deterioration. Surface defects only are in evidence.	120 lf.

ELEMENT INSPECTION NOTES:

Note: The MSE walls were measured back 30ft. at each corner of the structure.

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All Elements

UNIT: Structure Unit 1 MISCELLANEOUS

ELEMENT/ENV: 290/4 Channel **1 ea.** **ELEM CATEGORY:** Channel

CONDITION STATE (4)	DESCRIPTION	QUANTITY
2	Bank protection is in need of minor repairs, bank may be beginning to slump, minor stream bed movement may be evident or debris may be present.	1 ea.

ELEMENT INSPECTION NOTES:

The following was noted by the underwater inspectors:
CS2 = Some piles have scour holes around them up to 18in. deep.
The groundline slopes up to 4ft. to the west side of the piling and 10ft. out from the piling on several bents - NEW.

Some channel measurements have a 2ft. or greater change since the previous inspection. Reason for change may be due to the strong current and/or ongoing demolition of the old structures during the previous inspection, altering the channel bottom.

Structure Notes

BRIDGE OWNER: LEE COUNTY

TRAFFIC RESTRICTIONS: Based on the load rating dated 4/13/04, the structure does not require posting. This structure is not posted.

Structure was inventoried from south to north.

This structure replaced Bridge No. 124042.

Power boat with fathometer used for underbridge inspection and groundline measurements.

Owner provided 2008 ADT.

INSPECTION NOTES: JXNS 11/30/2009

Sufficiency Rating Calculation Accepted by KNKCARL-P at 2010-01-07 15:13:57

LOAD CAPACITY EVALUATION:
The findings of this inspection reveal no reason to warrant a new analysis; therefore, the current load rating results still govern.

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FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
Inspection Report with PDF attachment(s)

BRIDGE ID: 124115
DISTRICT: 01 Bartow

INSPECTION DATE: 11/30/2009 JXNS

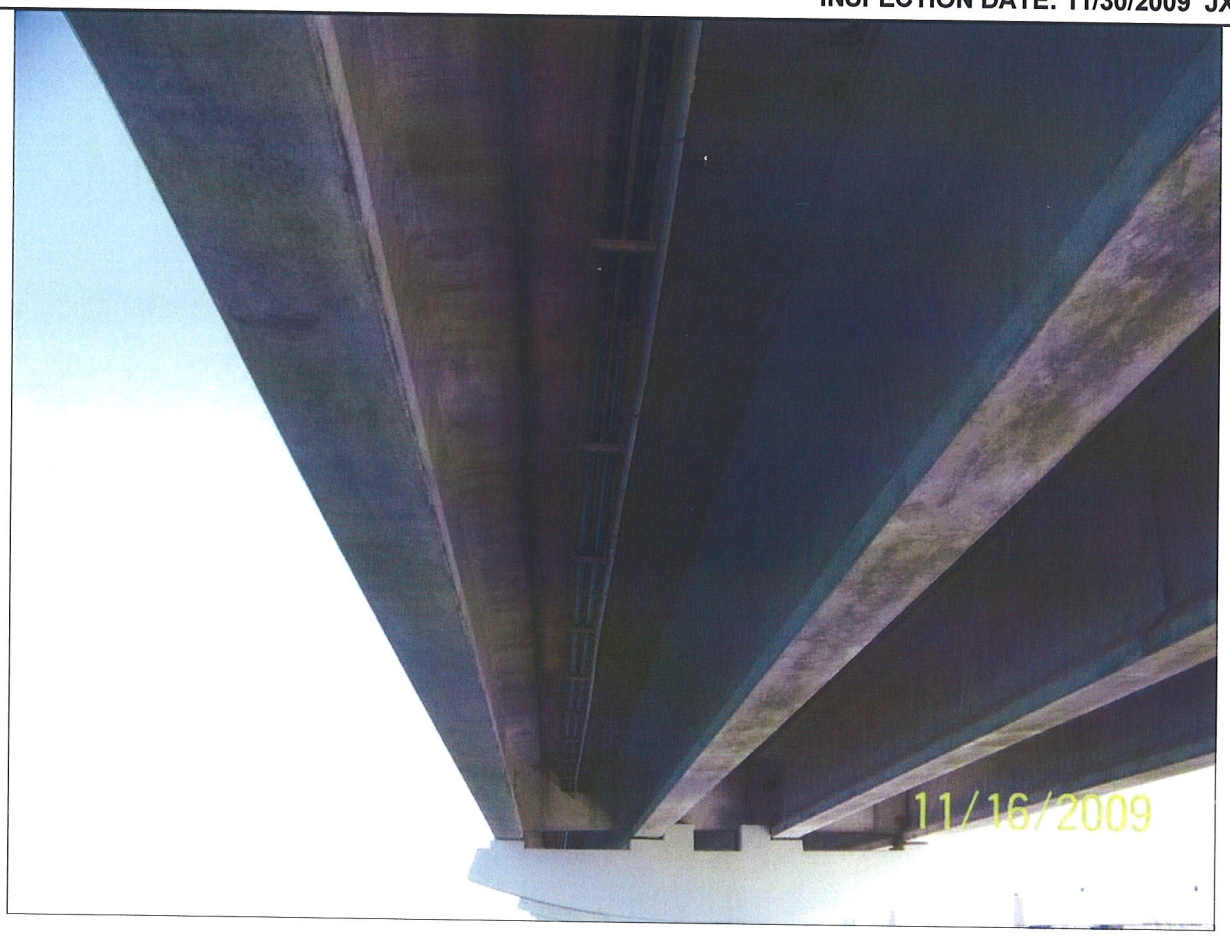

Photo 1 - Element 12 Bare Concrete Deck

Utilities in Bay 1 of all spans

REPAIR RECOMMENDATION:
None

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FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
Inspection Report with PDF attachment(s)

BRIDGE ID: 124115
DISTRICT: 01 Bartow

INSPECTION DATE: 11/30/2009 JXNS

Photo 2 - Element 300 Strip Seal Exp Joint

Typical view of dirt and debris in the joints (joint at Abutment 1 shown)

REPAIR RECOMMENDATION:
None

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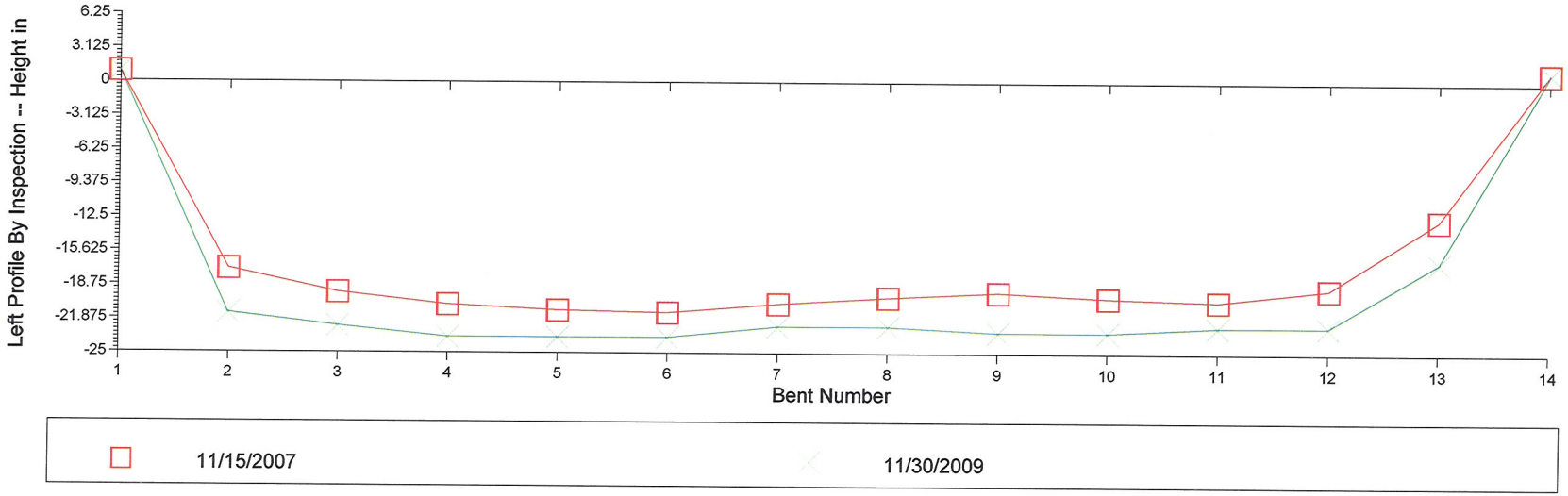
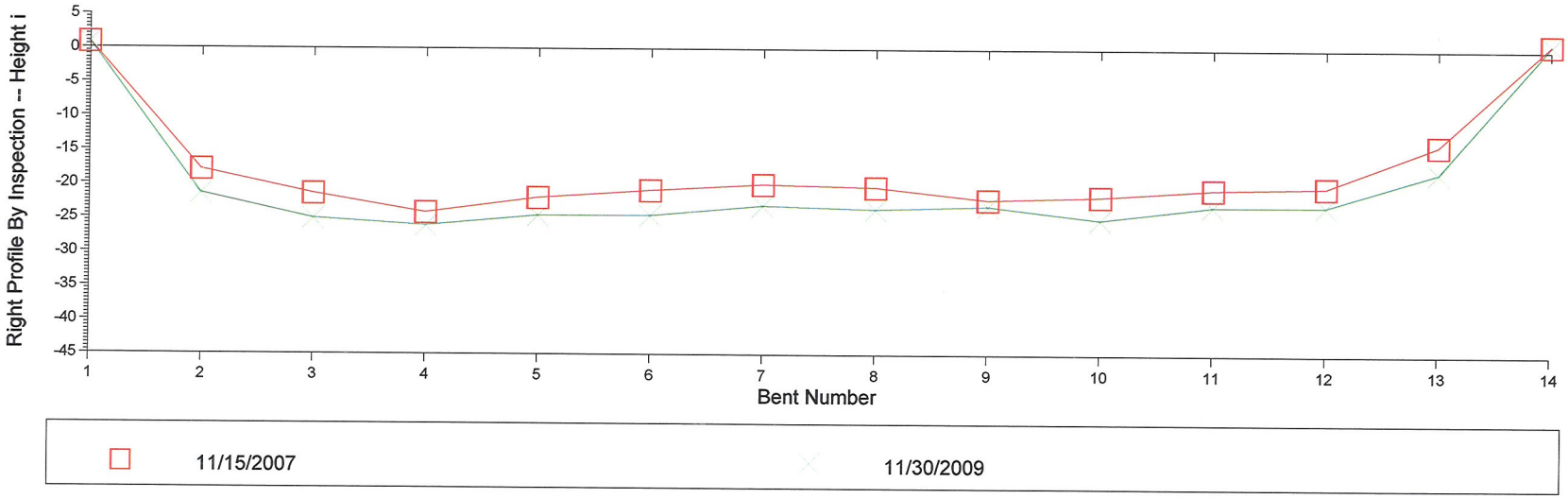
FLORIDA DEPARTMENT OF TRANSPORTATION BRIDGE MANAGEMENT SYSTEM
Bridge Profile Report

REPORT ID: INVT016

Structure #: 124115

DATE PRINTED: 01/07/2010





Profile Data - Numerical Summary

Inspection Date and Key: 11/30/2009 JXNS

(All Heights Are In Feet)

Bent #	Left Height	Right Height
1	-1	-1
2	21.3	21.3
3	22.5	25
4	23.5	26
5	23.5	24.5
6	23.5	24.5
7	22.5	23
8	22.5	23.5
9	23	23
10	23	25
11	22.5	23
12	22.5	23
13	16.5	18
14	-1	-1

Air Temp: 1

Profile Notes:

Measurements referenced from the top of the footers.
Waterline at Footer 2 left and right = 3.5ft.
Note: A value of -1 indicates that this location was out of the water during this inspection.

Inspection Date and Key: 11/15/2007 NRSE

1	-1	-1
2	17.2	17.8
3	19.4	21.3
4	20.5	24.1
5	21	21.9
6	21.2	20.8
7	20.4	19.9
8	19.8	20.3
9	19.3	22.1
10	19.8	21.6
11	20.1	20.5
12	19	20.2

Profile Data - Numerical Summary

Inspection Date and Key: 11/15/2007 NRSE

Bent #	Left Height	Right Height
13	12.6	14
14	-1	-1

(All Heights Are In Feet)

Air Temp:

Profile Notes:

Profile Reference: Top of footer 2
Waterline to top of footer 2: 2.2ft Left and Right

BOLT UNDERWATER SERVICES
7946 62ND STREET NORTH
PINELLAS PARK, FL 33781

Routine Underwater Bridge Inspection Report for Kisinger Campo & Associates, Corp.

NBI Structure No. (8): **124115**

Underwater Date (93): 10/06/09

Structure/Roadway Identification:

District (2): 01
County (3): Lee
Feature Intersected (6): San Carlos Bay
Facility Carried (7): CR 867

Underwater Inspection Details:

Special Crew Hours: 3.0
Max. Depth: 20ft.
Type of Dive Insp.: SCUBA
Type of Boat Used: 21ft.
Water Type/Marine Growth: Salt-Tidal / Barnacles - Oysters

Previous Inspection:

Lead Diver:	C.B.I. No.:	Inspection Date:
Hoogland, Keith S.	00341	10/02/07

Inspection Personnel:

Field Personnel:	Title	C.B.I. No.:	Duty:	Signature:
Hays, Stephen F.	C.B.I. Diver-Inspector	00438/Lead	Tend	SHP
Myers, Jared L	Diver-Inspector		Dive	
Harris, Scott R.	Diver-Inspector		Dive	

PILING/COLUMNS
ELEMENT: 207 HLW CORE — **180**: ea.

Condition State:	QTY:	Recommended Feasible Action:
CS-1	180	Do Nothing

NOTE: Piles 12-1 through 12-15, 15-1, 15-4, 15-5, 15-8 through 15-10 and all deficiencies were cleaned.

SUBMERGED FOOTER
ELEMENT: 220 R/CONCRETE — **12**: ea.

Condition State:	QTY:	Recommended Feasible Action:
CS-1	12	Do Nothing

NOTE: Footer 8 and all deficiencies were cleaned.

CHANNEL
ELEMENT: 290 — **1**: ea.

Condition State:	QTY:	Recommended Feasible Action:
CS-2	1	Do Nothing

The G/L slopes up 4ft. to the west side and 10ft. out from the piling on several bents.
There are local scour holes around several piling up to 18in. deep due to heavy current. *DECREASED*

BULKHEAD
ELEMENT: 393 OTHER — **480 lf.**

Condition State:	QTY:	Recommended Feasible Action:
CS-1	480 lf.	Do Nothing

INSPECTION NOTES: Divers inspected one hundred eighty 30in. piling in Bents 2 through 13, Footers, N and S Bulkhead and Channel.
STRUCTURE NOTES: Structure inventoried south to north.

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Description

Structure Unit Identification

Bridge/Unit Key: 124115 1
Structure Name: STRUCTURE B SANIBEL CAUSEWAY
Description:
Type: M Main

Roadway Identification:

NBI Structure No (8) 124115
Position/Prefix (5) Route On Structure
Kind Hwy (Rte Prefix) 4 County Hwy
Design Level of Service 1 Mainline
Route Number/Suffix 00867/ 0 N/A (NBI)
Feature Intersect (6) SAN CARLOS BAY
Critical Facility Not Defense-crit
Facility Carried (7) CR-867
Mile Point (11) 0
Latitude (16) 026d28'19" Long (17) 082d01'40"

Roadway Traffic and Accidents

Lanes (28) 2 Medians 0 Speed 35 mph
ADT Class ADT Class 4
Recent ADT (29) 19690 Year (30) 2008
Future ADT (114) 20675 Year (115) 2028
Truck % ADT (109) 7
Detour Length (19) 99 mi
Detour Speed 0 mph
Accident Count -1 Rate -1

Roadway Classification

Nat. Hwy Sys (104) 0 Not on NHS
National base Net (12) Not on Base Network
LRS Inventory Rte (13a) 12 000 000 Sub Rte (13b) 00
Functional Class (26) 16 Urban Minor Arterial
On Federal Aid System Y
Defense Hwy (100) 0 Not a STRAHNET hwy
Direction of Traffic (102) 2 2-way traffic
Emergency ☑

Roadway Clearances

Vertical (10) 99.9 ft Appr. Road (32) 40
Horiz. (47) 40 ft Roadway (51) 40 ft
Truck Network (110) 0 Not part of natl netwo
Toll Facility (20) 2 On toll road
Fed. Lands Hwy (105) 0 N/A (NBI)
School Bus Route ☑
Transit Route ☑

Thomas G. LaCicero
1/8/10

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Structure Identification

Admin Area Lee County
District (2) D1 - Bartow
County (3) (12)Lee
Place Code (4) Sanibel
Location (9) 2ND STRUC S OF TOLL PLAZA
Border Br St/Reg (98) Not Applicable (P) Share 0 %
Border Struct No (99)
FIPS State/Region (1) 12 Florida Region 4-Atlanta
NBIS Bridge Len (112) Meets NBI Length
Parallel Structure (101) No || bridge exists
Temp. Structure (103) Not Applicable (P)
Maint. Resp. (21) 2 County Hwy Agency
Owner (22) 2 County Hwy Agency
Historic Signif. (37) 5 Not eligible for NRHP

Geometrics

Spans in Main Unit (45) 13
Approach Spans (46) 0
Length of Max Span (48) 144 ft
Structure Length (49) 1872 ft
Total Length 1912 ft
Deck Area 80684 sqft
Structure Flared (35) 0 No flare

Age and Service

Year Built (27) 2007
Year Reconstructed (106) 0
Type of Service On (42a) 1 Highway
Under (42b) 5 Waterway
Fracture Critical Details Not Applicable

Structure Type and Material

Curb/Sidewalk (50): Left 0 ft Right 0 ft
Bridge Median (33): 0 No median
Main Span Material (43A): 6 P/S Conc Continuous
Appr Span Material (44A): Not Applicable (P)
Main Span Design (43B): 02 Stringer/Girder
Appr Span Design (44B): Not Applicable (P)

Deck Type and Material

Deck Width (52): 43.1
Skew (34): 0
Deck Type (107): 1 Concrete-Cast-in-Place
Surface (108): 0 None
Membrane: 0 None
Deck Protection: None

Appraisal

Structure Appraisal

Open/Posted/Closed (41) A Open, no restriction
Deck Geometry (68) 5 Above Tolerable
Underclearances (69) N Not applicable (NBI)
Approach Alignment (72) 8-No Speed Red thru Curv
Bridge Railings (36a) 1 Meets Standards
Transitions (36b) 1 Meets Standards
Approach Guardrail (36c) 1 Meets Standards
Approach Guardrail ends (36d) 1 Meets Standards
Scour Critical (113) 8 Stable Above Footing

Navigation Data

Navigation Control (38) Permit Required
Nav Vertical Clr (39) 13.5 ft
Nav Horizontal Clr (40) 110 ft
Min Vert Lift Clr (116) 0 ft
Pier Protection (111) 1 Not Required

NBI Condition Rating

Sufficiency Rating 79
Health Index 99.31
Structural Eval (67) 7 Above Min Criteria
Deficiency Not Deficient

Minimum Vertical Clearance

Over Structure (53) 99.99 ft
Under (reference) (54a) N Feature not hwy or RR
Under (54b) 0 ft

Minimum Lateral Underclearance

Reference (55a) N Feature not hwy or RR
Right Side (55b) 0 ft
Left Side (56) 0 ft

Load Rating

Design Load (31) HL 93
Rating Date 4/13/2004 Initials MCM
Posting (70) 5 At/Above Legal Loads

Operating Type (63) 1 LF Load Factor
Operating rating (64) 99.9 tons Alternate -1
Inventory Type (65) 1 LF Load Factor
Inventory Rating (66) 59.2 tons Alternate -1
Alt Meth -1

Schedule

Current Inspection

Inspection Date: 11/30/2009
Inspector: KN538OJ-P - John O'Grady
Bridge Group: BD523
Primary Type: Regular NBI
Review Required: ☑

Next Inspection Date Scheduled

NBI: 11/30/2011
Element: 11/30/2011
Fracture Critical:
Underwater: 11/30/2011
Other/Special:

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Schedule Cont.

Inspection Types Performed NBI ☑ Element ☑ Fracture Critical ☐ Underwater ☑ Other Special ☐

Inspection Intervals	Required (92)	Frequency (92)	Last Date (93)
Fracture Critical	☐	mos	
Underwater	☑	24 mos	10/06/2009
Other Special	☐	mos	
NBI		24 mos (91)	11/30/2009 (90)

Inspection Resources

Crew Hours	10
Flagger Hours	0
Helper Hours	0
Snooper Hours	0
Special Crew Hours	3
Special Equip Hours	0

Custom

General Bridge Information

Parallel Bridge Seq	0
Channel Depth	22.5 ft
Radio Frequency	-1
Phone Number	(000) 000-0000
Exception Date	
Exception Type	Unknown
Accepted By Maint	00/00/0000
Warranty Expiration	00/00/0000
Bridge Rail 1	Steel barrier
Bridge Rail 2	Not applicable-No rail
Electrical Devices	No electric service
Culvert Type	Not applicable
Maintenance Yard	0
FIHS ON / OFF	No Routes on FIHS
Previous Structure	124042
2nd Previous Structure	
Replacement Structure	

Bridge Load Rating Information

HS20 Govr. Span Length	144 ft
L-Rating Origination	Design Plans
Load Rating Date	04/13/2004
Method Calculation	Others
Load Dist. Factor	1.047
Impact Factor	19
Design Method	Load Factor
Design Measure	English
Recommend SU Posting	99 tons
Recommend C Posting	99 tons
Recommend T Posting	99 tons
Gov FB Span	0 ft
Gov FB Spacing	0 ft
FB HS20 Rating	0 tons
FB SU4 Rating	0 tons
FB Present	N
FB INV Rating Factor	0
FB OPR Rating Factor	0
FB FL 120	0 tons
Single Unit Truck 2 Axles	91.6 tons
Single Unit Truck 3 Axles	76.6 tons
Single Unit Truck 4 Axles	82.4 tons
Combination Unit Truck 3 Axles	93.5 tons
Combination Unit Truck 4 Axles	84.4 tons
Combination Unit Truck 5 Axles	92.899 tons
Truck Trailer 5 Axles	98.1 tons
Posting Weight	99 tons
Actual SU Posting	99 tons
Actual C Posting	99 tons
Actual T Posting	99 tons
FL 120 Long Gov Span	-1 tons
FL 120 Trans	-1 tons
Single Axle Trans	-1 tons
Tandem Axle Trans	-1 tons
Wing Span	-1 ft
Web to Web Span	-1 ft
HS20 OPR Rating Max Span	98.9 tons
FL120 Long Max Span	-1 tons

Bridge Scour and Storm Information

Pile Driving Record	All pile driving records
Foundation Type	Foundation details
Mode of Flow	Tidal
Rating Scour Eval	Low Risk - High
Highest Scour Eval	No phase completed
Scour Recommended I	No recommendation
Scour Recommended II	No recommendation
Scour Recommended III	No recommendation
Scour Elevation	999 ft
Action Elevation	999 ft
Storm Frequency	100

Condition

NBI Rating

Channel (61)	7 Minor Damage
Deck (58)	8 Very Good
Superstructure (59)	7 Good
Substructure (60)	8 Very Good
Culvert (62)	N N/A (NBI)
Waterway (71)	8 Equal Desirable
Unrepaired Spalls	-1 sq.ft.
Review Required	☑

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Elements

Inspection Date: 11/30/2009JXNS

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	12/4	Bare Concrete Deck	80684	100.	0	.	0	.	0	.	0	.	80684 sf.

Notes Note: Two 4-1/2in. diameter fiberglass conduits and one 3-1/2in. diameter PVC conduit are suspended from hangers anchored to the underside of Bay 1 in all spans. Refer to photo 1. The type of anchorage for the utility hangers is unknown.

CS1 = There is a light accumulation of dirt and debris in the shoulder areas - NEW.

The undersides of the overhangs have full width x up to 1/64in. wide transverse cracks, some with efflorescence - NEW.

Structur	300/4	Strip Seal Exp Joint	216	100.	0	.	0	.	0	.	0	.	216 lf.

Notes Note: Joints are present at Abutments 1 and 14 and Piers 4, 7 and 10.

CS1 = The joints are filling with dirt and debris, but are functioning as intended at this time - NEW. Refer to photo 2.

Structur	334/4	Metal Rail Coated	3744	100.	0	.	0	.	0	.	0	.	3744 lf.

Notes Note: Barriers meet NCHRP TL4 criteria and meet SIA Item #36 standards.

Structur	109/4	P/S Conc Open Girder	7488	100.	0	.	0	.	0	.	0	.	7488 lf.

Notes CS1 = The beams have multiple diagonal web cracks up to 4ft. long x 1/64in. wide near the bearing areas, extending up and away from the supports.

The following was considered incidental to this element:
The west face of the poured beam end of Beam 3-1 at Pier 3 has a 10in. x 8in. delamination - NEW.

Structur	310/4	Elastomeric Bearing	104	100.	0	.	0	.	0	.	0	.	104 ea.

Notes

Structur	205/4	R/Conc Column	24	100.	0	.	0	.	0	.	0	.	24 ea.

Notes

Structur	207/4	P/S Conc Holl Pile	180	100.	0	.	0	.	0	.	0	.	180 ea.

Notes Note: The divers cleaned Piles 12-1 thru 12-15, 15-1, 15-4, 15-5, 15-8 thru 15-10 and all deficiencies.

Structur	215/4	R/Conc Abutment	70	100.	0	.	0	.	0	.	0	.	70 lf.

Notes

Structur	220/4	R/C Sub Pile Cap/Ftg	12	100.	0	.	0	.	0	.	0	.	12 ea.

Notes Note: The divers cleaned Footer 8 and all deficiencies.

CORRECTIVE ACTION TAKEN:
The lifting eyes have been removed since the previous inspection.

Structur	234/4	R/Conc Cap	518	100.	0	.	0	.	0	.	0	.	518 lf.

Notes CS1 = Beams 3-1 and 4-1 dip, approximately 3in. at Pier 3, is possibly due to an incorrect pedestal elevation. There are no obvious signs of distress on the surrounding members. This condition was not observed during this inspection.

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Elements

Inspection Date: 11/30/2009JXNS

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	393/4	Blkhd Sewl Any Mater	480	100.	0	.	0	.	0	.	0	.	480 ft

Notes Note: The element represents the bulkheads constructed with concrete sheet piling and concrete caps.

Structur	396/4	Other Abut Slope Pro	1800	100.	0	.	0	.	0	.	0	.	1800 sf.

Notes Note: This element represents the concrete block mat slope protection.

Structur	290/4	Channel	0	.	1	100.	0	.	0	.	0	.	1 ea.

Notes The following was noted by the underwater inspectors:
CS2 = Some piles have scour holes around them up to 18in. deep.
The groundline slopes up to 4ft. to the west side of the piling and 10ft. out from the piling on several bents - NEW.

Some channel measurements have a 2ft. or greater change since the previous inspection. Reason for change may be due to the strong current and/or ongoing demolition of the old structures during the previous inspection, altering the channel bottom.

Structur	321/4	R/Conc Approach Slab	2	100.	0	.	0	.	0	.	0	.	2 ea.

Notes Note: The approach slabs are not visible due to an overlay of asphalt.

CS1 = The north approach slab joint header has a 1/32in. wide longitudinal crack in Lane 1.

Structur	478/4	MSE Walls	120	100.	0	.	0	.	0	.	0	.	120 lf.

Notes Note: The MSE walls were measured back 30ft. at each corner of the structure.

Total Number of Elements: 15

Inspection Information

Inspection Date: 11.30.2009 **Type:** Regular NBI
Inspector: KN538OJ-P - John O'Grady

Inspection Notes: Sufficiency Rating Calculation Accepted by KNKCARL-P at 2010-01-07 15:13:57

LOAD CAPACITY EVALUATION:
The findings of this inspection reveal no reason to warrant a new analysis; therefore, the current load rating results still govern.

Inspection Date: 11.15.2007 **Type:** Regular NBI
Inspector: KNVOLWW-P - Wade Wolfe

Inspection Notes: Sufficiency Rating Calculation Accepted by knvolsg-P at 2008-05-20 14:45:32
Sufficiency Rating Calculation Accepted by kn110ku-P at 2008-02-05 11:46:29
Sufficiency Rating Calculation Accepted by KNVOLCW-P at 2007-12-18 09:11:31
Sufficiency Rating Calculation Accepted by KNVOLCW-P at 2007-11-30 11:24:34

LOAD CAPACITY EVALUATION:
The load rating dated 4/13/04 applies to the current condition of this bridge.

Construction of various elements is still in progress. Demolition of replaced structure is in progress.

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Structure Notes

BRIDGE OWNER: LEE COUNTY

TRAFFIC RESTRICTIONS: Based on the load rating dated 4/13/04, the structure does not require posting. This structure is not posted.

Structure was inventoried from south to north.

This structure replaced Bridge No. 124042.

Power boat with fathometer used for underbridge inspection and groundline measurements.

Owner provided 2008 ADT.

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EXHIBIT J

BRIDGE INSPECTION REPORT

PREPARED FOR: FLORIDA DEPARTMENT OF TRANSPORTATION

BRIDGE OWNER: LEE COUNTY

INSPECTED BY:

BRIDGE NO. 124116

CONTENTS OF REPORT

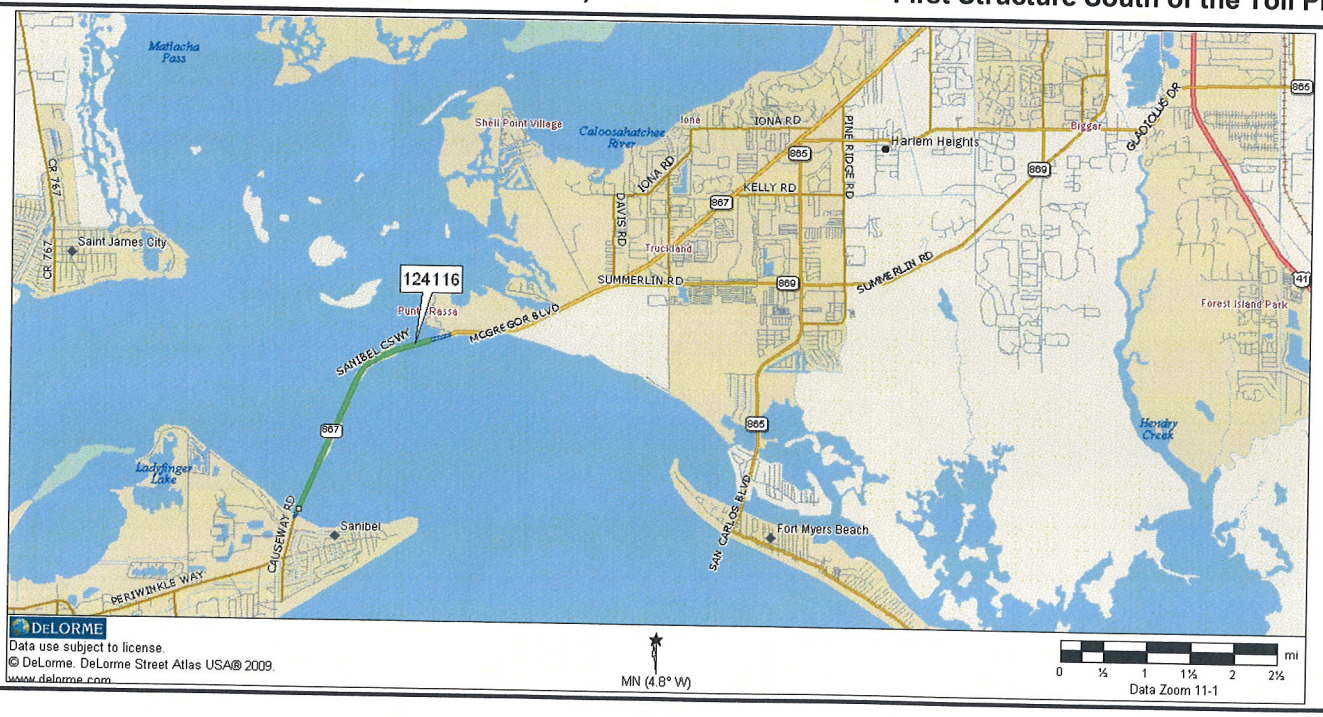
INSPECTION DATE: 11/30/2009

- Pontis Report
- CIDR
- Scour Elevation (Profile)
- * Addendum (Element Notes & Photos/Sketches)
- U/W Inspection Report
- * Fracture Critical Data
- * Load Rating Analysis Summary

*This section is not included in this report.

CR-867 over San Carlos Bay (Sanibel Structure A)

First Structure South of the Toll Plaza



FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
Inspection Report with PDF attachment(s)

BRIDGE ID: 124116
DISTRICT: 01 Bartow

INSPECTION DATE: 11/30/2009 ESCS

BY: KCA
OWNER: 2 County Hwy Agency
MAINTAINED BY: 2 County Hwy Agency
STRUCTURE TYPE: 6 P/S Conc Continuous 02 Stringer/Girder
LOCATION: 1ST STRUC S OF TOLL PLAZA
SERVICE TYPE ON: 1 Highway
SERV TYPE UND: 5 Waterway

STRUCTURE NAME: STRUCTURE A SANIBEL CAUSEV
YEAR BUILT: 2007
SECTION NO.: 12 000 000
MP: 0
ROUTE: 00867
FACILITY CARRIED: CR-867
FEATURE INTERSECTED: SAN CARLOS BAY

☐ FUNCTIONALLY OBSOLETE ☐ STRUCTURALLY DEFICIENT

TYPE OF INSPECTION: Regular NBI
DATE FIELD INSPECTION WAS PERFORMED: ABOVE WATER: 11/30/2009 UNDERWATER: 10/07/2009

SUFFICIENCY RATING: 79.0
HEALTH INDEX: 98.94

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FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
Inspection Report with PDF attachment(s)

BRIDGE ID: 124116
DISTRICT: 01 Bartow

INSPECTION DATE: 11/30/2009 ESCS

BY: KCA
OWNER: 2 County Hwy Agency
MAINTAINED BY: 2 County Hwy Agency
STRUCTURE TYPE: 6 P/S Conc Continuous 02 Stringer/Girder
LOCATION: 1ST STRUC S OF TOLL PLAZA
SERVICE TYPE ON: 1 Highway
SERV TYPE UND: 5 Waterway

STRUCTURE NAME: STRUCTURE A SANIBEL CAUSEV
YEAR BUILT: 2007
SECTION NO.: 12 000 000
MP: 0
ROUTE: 00867
FACILITY CARRIED: CR-867
FEATURE INTERSECTED: SAN CARLOS BAY

☐ THIS BRIDGE CONTAINS FRACTURE CRITICAL COMPONENTS
☐ THIS BRIDGE IS SCOUR CRITICAL
☐ THIS REPORT IDENTIFIES DEFICIENCIES WHICH REQUIRE PROMPT CORRECTIVE ACTION
☐ FUNCTIONALLY OBSOLETE ☐ STRUCTURALLY DEFICIENT

TYPE OF INSPECTION: Regular NBI
DATE FIELD INSPECTION WAS PERFORMED: ABOVE WATER: 11/30/2009 UNDERWATER: 10/07/2009

SMART FLAGS:
None

OVERALL NBI RATINGS:
DECK: 8 Very Good
SUPERSTRUCTURE: 7 Good
SUBSTRUCTURE: 7 Good
CHANNEL: 7 Minor Damage
CULVERT: N N/A (NBI)
SUFFICIENCY RATING: 79.0
HEALTH INDEX: 98.94
PERFORMANCE RATING: Good

FIELD PERSONNEL / TITLE / NUMBER	INITIALS
O'Grady, John - Bridge Inspector (CBI# 00344) (lead)	
Carreno, Fernando - BI Tech	
Hays, Stephen - Bridge Inspector (CBI#00438)/Lead Diver	
Myers, Jared - Diver/Inspector	
Harris, Scott - Diver/Inspector	

REVIEWING BRIDGE INSPECTION SUPERVISOR:
Crissey, Dave - Bridge Inspector (CBI #00321)

CONFIRMING REGISTERED PROFESSIONAL ENGINEER:
LoCicero, Thomas - PE #31136
Kisinger Campo & Associates
9270 Bay Plaza Blvd., Suite 605
Certificate of Authorization #2317
Tampa, FL 33619

SIGNATURE: Thomas G. LoCicero
DATE: 1/8/10

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All Elements

UNIT: Structure Unit 1 DECKS

ELEMENT/ENV: 12/4 Bare Concrete Deck 129408 sf. ELEM CATEGORY: Decks/Slabs

CONDITION STATE (5)	DESCRIPTION	QUANTITY
1	The surface and underside of the deck have few repaired areas, there are few spalls/delaminations in the deck surface or underside and the only cracking is superficial or surface map cracking. The combined distressed area is 2% or less of the deck area.	129408 sf.

ELEMENT INSPECTION NOTES:

Note: Two 4-1/2in. diameter fiberglass conduits are attached to hangers anchored to the underside of Bay 3 in all spans. Refer to photo 1. The type of hanger anchorage is unknown.

CS1 = There is a light accumulation of dirt and debris in the shoulder areas - NEW.

The undersides of the overhangs have full width x up to 1/64in. wide transverse cracks, some with efflorescence - NEW.

ELEMENT/ENV: 300/4 Strip Seal Exp Joint 345 lf. ELEM CATEGORY: Joints

CONDITION STATE (3)	DESCRIPTION	QUANTITY
1	The element shows minimal deterioration. There is no leakage at any point along the joint. Gland is secure and has no defects. Debris in joint is not causing any problems. The adjacent deck and/or header is sound.	345 lf.

ELEMENT INSPECTION NOTES:

Note: Joints are present at Abutments 1 and 22 and Piers 4, 7, 10, 13, 16 and 19.

CS1 = The joints are filling with dirt and debris, but are functioning as intended at this time - NEW. Refer to photo 2.

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All Elements

UNIT: Structure Unit 1 SUPERSTRUCTURE

ELEMENT/ENV: 334/4 Metal Rail Coated 6005 lf. ELEM CATEGORY: Railing

CONDITION STATE (5)	DESCRIPTION	QUANTITY
1	There is no evidence of active corrosion. Protective coating is sound and functioning as intended to protect the element.	6005 lf.

ELEMENT INSPECTION NOTES:

Note: Barriers meet NCHRP TL4 criteria and meet SIA Item #36 standards.

CS1 = There are several tire marks on the barriers.

ELEMENT/ENV: 109/4 P/S Conc Open Girder 12010 lf. ELEM CATEGORY: Superstructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	12006 lf.

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All Elements

UNIT: Structure Unit 1 SUPERSTRUCTURE

ELEMENT/ENV: 109/4 P/S Conc Open Girder 12010 lf. ELEM CATEGORY: Superstructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
2	Minor cracks and spalls may be present and there may be exposed reinforcing with no evidence of corrosion. There is no exposure of the prestress system.	4 lf.

ELEMENT INSPECTION NOTES:

CS1 = The beams have diagonal web cracks up to 4ft. long x typically less than 1/64in. wide at the bearing areas, extending up and away from the supports.

The east face of the bottom flange of Beam 14-4 has a 20in. long x 1/64in. wide vertical/diagonal crack over the bearing at Pier 14 - INCREASE. Beam 16-4 at Pier 16 has similar cracking - NEW.

The left top flange of Beam 17-4 has longitudinal hairline cracking, some with efflorescence, up to 1/64in. wide near Pier 18.

CS2 = There are minor spalls with no exposed steel in the bottom flanges of the following beams:
Beam 15-1, east face 7-1/2ft. from Pier 16, 6in. x 2in. x 1/2in.
Beam 15-3, east face at 25-1/2ft. from Pier 16, 4in. x 4in. x 1in.
Beam 15-4, west face 60ft. from Pier 15, 16in. x 4in. x 1in.

CORRECTIVE ACTION TAKEN:
The previously noted spalls and delaminations in the beam ends/closure pours at Pier 11 have been repaired since the previous inspection.

ELEMENT/ENV: 397/4 Drain. Syst Metal 20 ea. ELEM CATEGORY: Superstructure

CONDITION STATE (5)	DESCRIPTION	QUANTITY
1	There is no evidence of active corrosion and the paint system is sound and functioning as intended to protect the metal surface. Drainage system is functioning as intended.	20 ea.

ELEMENT INSPECTION NOTES:

CS1 = Most scupper down spouts are not properly shimmed or anchored to the beams. Refer to photo 3. REPAIR

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All Elements

UNIT: Structure Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 310/4 Elastomeric Bearing 168 ea. ELEM CATEGORY: Bearings

CONDITION STATE (3)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. Shear deformations are correct for existing temperatures.	168 ea.

ELEMENT/ENV: 563/4 Acc Ladd & Plat 16 ea. ELEM CATEGORY: Movable

CONDITION STATE (5)	DESCRIPTION	QUANTITY
1	There is no evidence of active corrosion, and the paint system is sound and functioning as intended to protect the metal surface.	16 ea.

ELEMENT INSPECTION NOTES:

Note: The quantity includes eight ladders and eight platforms including the two fender access walkways.

ELEMENT/ENV: 580/4 Navigational Lights 1 ea. ELEM CATEGORY: Movable

CONDITION STATE (3)	DESCRIPTION	QUANTITY
1	Lights are operational, lenses are clean and not broken, there is no evidence of corrosion.	1 ea.

ELEMENT INSPECTION NOTES:

Note: The element includes six fender lights, two clearance at centerline of channel gauge lights and two swing lights at centerline of channel.

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All Elements

UNIT: Structure Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 205/4 R/Conc Column 40 ea. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	40 ea.

ELEMENT/ENV: 207/4 P/S Conc Holl Pile 224 ea. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	221 ea.
2	Minor cracks, spalls and scaling may be present and there may be exposed reinforcing with no evidence of corrosion. There is no exposure of the prestress system.	3 ea.

ELEMENT INSPECTION NOTES:

Note: The divers cleaned Piles 4-1, 17-1 through 17-21, 14-13 through 14-16 and all deficiencies.

The following was noted by the underwater inspectors;
CS2 = The northeast corner of Pile 4-1 has a 16in. x 6in. x 2in. spall with no exposed steel, 5ft. below the footer - NEW.
The northwest corner of Pile 11-17 has a 5ft. 6in. x 10in. x 2in. spall with no exposed steel, just below the footer - NEW.
The northeast corner of Pile 17-10 has a 13ft. x 12in. x 3in. spall with no exposed steel, 24in. below the footer.

CORRECTIVE ACTION TAKEN:
Piles 11-8 and 11-15 have been jacketed since the previous inspection.

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All Elements

UNIT: Structure Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 215/4 R/Conc Abutment 70 lf. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	70 lf.

ELEMENT/ENV: 220/4 R/C Sub Pile Cap/Ftg 20 ea. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	13 ea.
2	Minor cracks, spalls and scaling may be present but there is no exposed reinforcing or surface evidence of rebar corrosion.	4 ea.

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All Elements

UNIT: Structure Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 220/4 R/C Sub Pile Cap/Ftg 20 ea. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
3	Some delaminations, moderate cracks, spalls and/or scaling may be present and some reinforcing may be exposed. Corrosion of rebar may be present but loss of section is incidental and does not significantly affect the strength and/or serviceability of either the element or the bridge.	3 ea.

ELEMENT INSPECTION NOTES:

Note: The divers cleaned Footers 12 and 13 and all deficiencies.

CS1 = The following was noted by the underwater inspectors:
There are several edge scrapes up to 5ft. x 6in. x 3/4in. - NEW.
The footers have concrete formed sides that have vertical cracks with no corrosion bleedout up to full height x 1/16in. wide. Several cracks have efflorescence - NEW.

CS2 = The top northwest corner of Footer 4 has a 24in. x 12in. x 2in. spall with no exposed steel - NEW.

The following was noted by the underwater inspectors:
The southwest corner of Footer 12 has an 8in. x 6in. x 2-1/2in. spall with no exposed steel, 20in. below the top of the footer - NEW.
The southeast corner of Footer 13 has a 12in. x 6in. x 1in. spall with no exposed steel, 15in. below the top of the footer - NEW.
The northeast and southeast corners of Footer 17 have spalls with no exposed steel up to 12in. x 12in. x 2in., 20in. below the top of the footer.

CS3 = The top east edge of Footer 9 has a 30in. x 9in. delamination - NEW. Refer to photo 4.
The top northwest corner of Footer 10 has a 24in. x 8in. x 1in. spalled and delaminated area with no exposed steel - NEW.
The top northwest corner of Footer 16 has a 15in. x 6in. x 1/2in. spalled and delaminated patch with no exposed steel - NEW.
REPAIR ALL

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All Elements

UNIT: Structure Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 234/4 R/Conc Cap 862 lf. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	862 lf.

ELEMENT INSPECTION NOTES:

CORRECTIVE ACTION TAKEN:
The fractured shear blocks in Span 10 at Pier 10 have been repaired since the previous inspection.

ELEMENT/ENV: 387/4 P/S Fender/Dolphin 588 lf. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	588 lf.

ELEMENT INSPECTION NOTES:

Note: The quantity includes the three rectangular dolphins at the southeast corner of the fender and the three rectangular dolphins at the northwest corner of the fender.

ELEMENT/ENV: 396/4 Other Abut Slope Pro 2500 sf. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	There is little or no deterioration. Surface defects only are in evidence. Random open joints may exist.	2500 sf.

ELEMENT INSPECTION NOTES:

Note: This element includes rock rubble rip rap and concrete block mats.

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All Elements

UNIT: Structure Unit 1 MISCELLANEOUS

ELEMENT/ENV: 321/4 R/Conc Approach Slab 2 ea. **ELEM CATEGORY:** Other Elements

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The slab has not settled and shows no sign of deterioration other than superficial surface cracks.	2 ea.

ELEMENT INSPECTION NOTES:

Note: The approach slabs are not visible due to an overlay of asphalt.

ELEMENT/ENV: 478/4 MSE Walls 120 lf. **ELEM CATEGORY:** Other Elements

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	There is little or no deterioration. Surface defects only are in evidence.	120 lf.

ELEMENT INSPECTION NOTES:

Note: The MSE walls were measured back 30ft. at each corner of the structure.

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All Elements

UNIT: Structure Unit 1 MISCELLANEOUS

ELEMENT/ENV: 290/4 Channel **1 ea.** **ELEM CATEGORY:** Channel

CONDITION STATE (4)	DESCRIPTION	QUANTITY
2	Bank protection is in need of minor repairs, bank may be beginning to slump, minor stream bed movement may be evident or debris may be present.	1 ea.

ELEMENT INSPECTION NOTES:

Note: The bulkheads were evaluated under this element as channel bank protection.

CS2 = The north bulkhead cap, at the northeast corner of the structure, is intermittently spalled and delaminated with corrosion bleedout, up to 10ft. long 18in. wide x 3in. deep - NEW. Refer to photo 5. REPAIR

Some channel measurements have a 2ft. or greater change since the previous inspection. Reason for change may be due to the strong current and/or ongoing demolition of the old structures during the previous inspection, altering the channel bottom.

The following was noted by the underwater inspectors:
There is scattered timber debris from the previous fender system along the new fender system - NEW.
At Bents 14 through 17, the groundline slopes upward up to 4ft. going away from the piling, on one or more sides - NEW. Several piling have minimal marine growth on the lower 4in. to 6in. - NEW.

Structure Notes

BRIDGE OWNER: LEE COUNTY

TRAFFIC RESTRICTION: Based on the load rating analysis dated 8/1/07, the structure does not require posting. This structure is not posted.

Structure was inventoried from south to north on a west to east leg of a south to north roadway. Direction of stationing is used to describe deficiency locations (left is west).

This structure replaces bascule Bridge No. 124043.

Lane shift required for underbridge inspection vehicle. Power boat used for groundline measurements and substructure inspection.

Owner provided 2008 ADT.

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FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
Inspection Report with PDF attachment(s)

INSPECTION NOTES: ESCS 11/30/2009

Sufficiency Rating Calculation Accepted by KNKCARL-P at 2010-01-07 15:14:37

LOAD CAPACITY EVALUATION:
The findings of this inspection reveal no reason to warrant a new analysis; therefore, the current load rating results still govern.

Note: NBI Item #59 Superstructure was raised from a 6 to a 7 due to repairs made.
NBI Item #60 Substructure was raised from a 5 to a 7 due to repairs made.
NBI Item #61 Channel was lowered from an 8 to a 7 due to changes of 2ft. or greater in some of the groundline measurements.

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FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
Inspection Report with PDF attachment(s)

BRIDGE ID: 124116
DISTRICT: 01 Bartow

INSPECTION DATE: 11/30/2009 ESCS

Photo 1 - Element 12 Bare Concrete Deck

Utilities suspended from hangers anchored to the underside of Bay 3 in all spans

REPAIR RECOMMENDATION:
None

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FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
Inspection Report with PDF attachment(s)

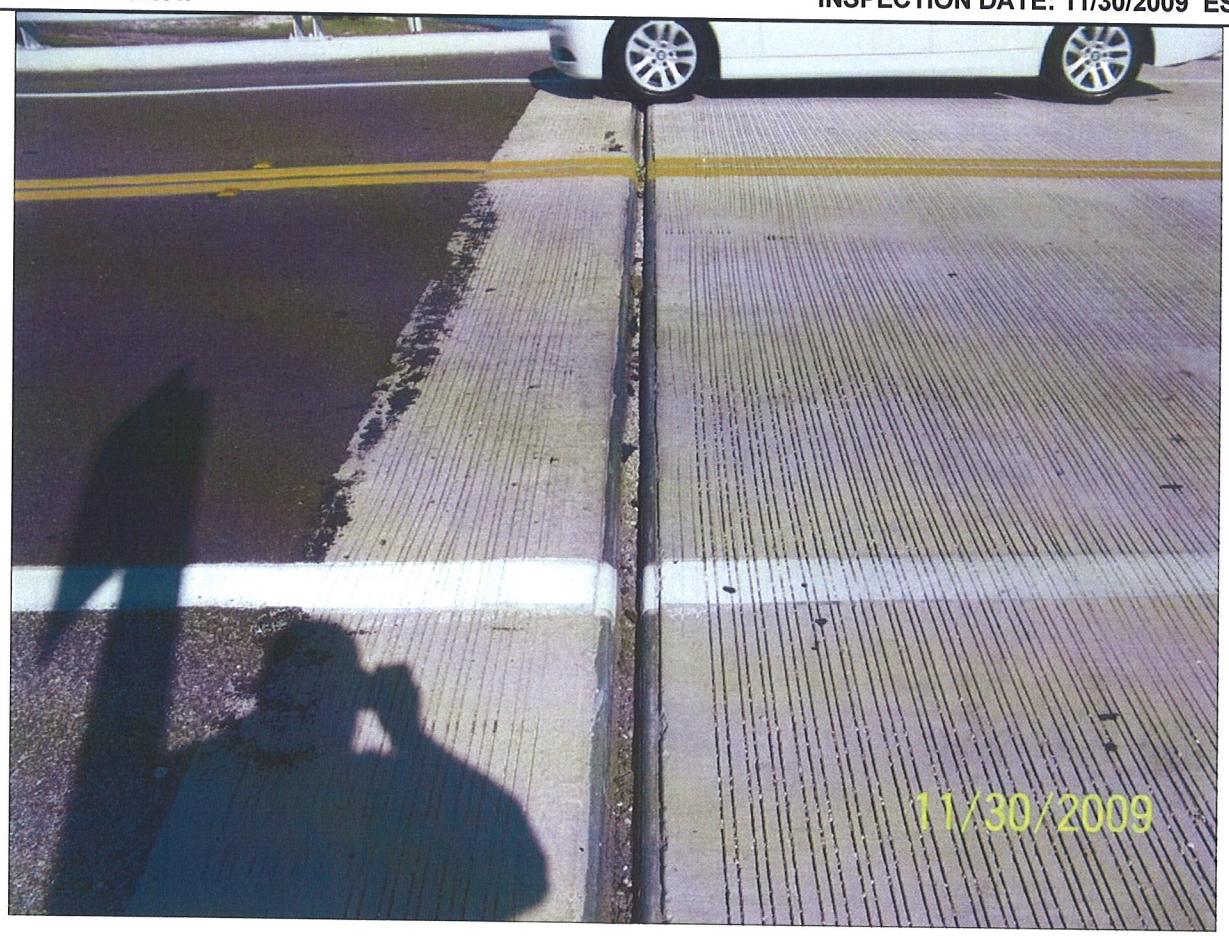

Photo 2 - Element 300 Strip Seal Exp Joint

Typical view of dirt and debris in the joints (Abutment 1 joint shown)

REPAIR RECOMMENDATION:
None

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Photo 3 - Element 397 Drain Syst Metal

Typical view of improperly shimmed drainage down spout and down spout improperly attached to the beam

REPAIR RECOMMENDATION:
Properly shim and attach the drainage system down spouts to the beams.

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Photo 4 - Element 220 R/C Sub Pile Cap/Ftg

Delamination along the top east edge of Footer 9

REPAIR RECOMMENDATION:
Repair the spalled and/or delaminated areas in the top east edge of Footer 9, the top northwest corner of Footer 10 and the top northwest corner of Footer 16.

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FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
Inspection Report with PDF attachment(s)

BRIDGE ID: 124116
DISTRICT: 01 Bartow

INSPECTION DATE: 11/30/2009 ESCS

Photo 5 - Element 290 Channel

Typical spalled and delaminated areas with corrosion bleedout in the bulkhead cap at the northeast corner of the structure

REPAIR RECOMMENDATION:
Repair the spalled and delaminated areas in the bulkhead cap at the northeast corner of the structure.

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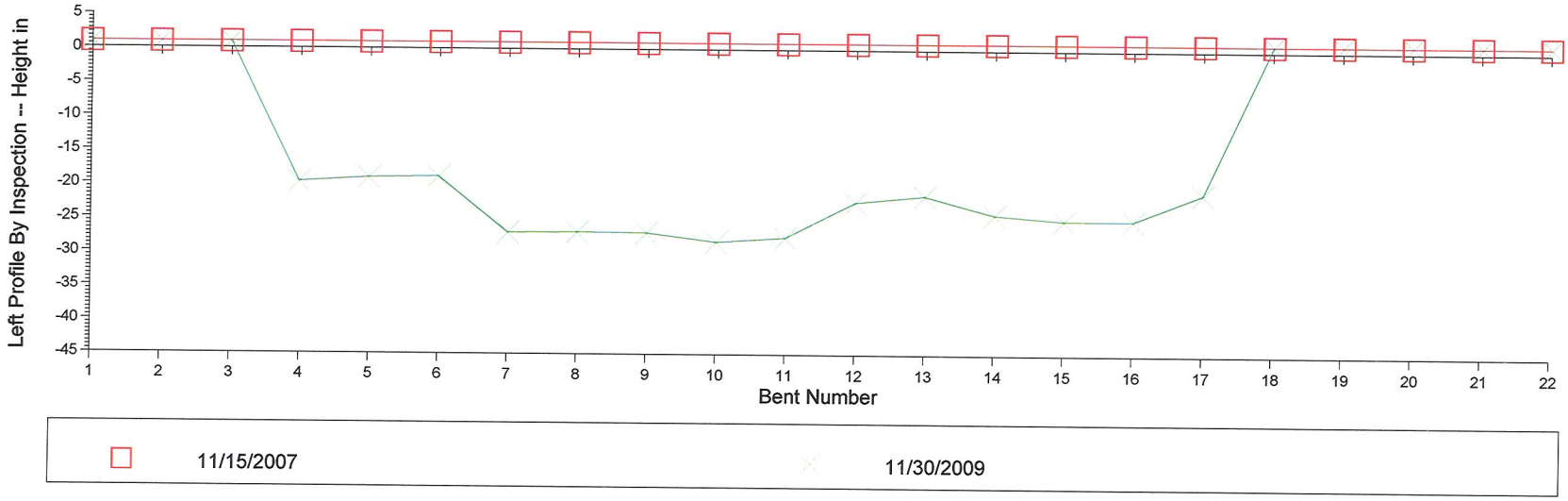
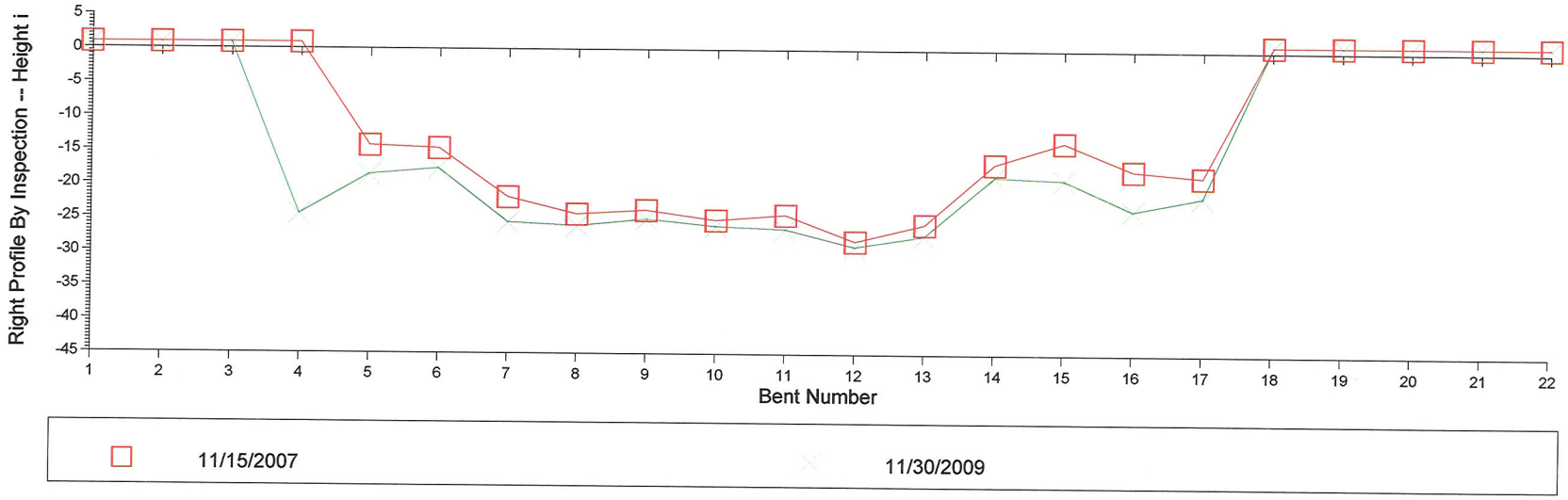
FLORIDA DEPARTMENT OF TRANSPORTATION BRIDGE MANAGEMENT SYSTEM
Bridge Profile Report

REPORT ID: INVT016

Structure #: 124116

DATE PRINTED: 01/07/2010





Profile Data - Numerical Summary

Inspection Date and Key: 11/30/2009 ESCS

(All Heights Are In Feet)

Bent #	Left Height	Right Height
1	-1	-1
2	-1	-1
3	-1	-1
4	19.6	24.4
5	19	18.5
6	18.8	17.6
7	27	25.5
8	26.9	26
9	27	25
10	28.3	26
11	27.6	26.4
12	22.4	29
13	21.4	27.4
14	24.2	18.6
15	25	19
16	25	23.5
17	21	21.5
18	-1	-1
19	-1	-1
20	-1	-1
21	-1	-1
22	-1	-1

Air Temp: 1

Profile Notes:

Measurements referenced from the top of the footers.
Waterline = 2.5ft.
Note: A value of -1 indicates that location was out of the water during this inspection.

Inspection Date and Key: 11/15/2007 GPFO

1	-1	-1
2	-1	-1
3	-1	-1
4	-1	-1

Profile Data - Numerical Summary

Inspection Date and Key: 11/15/2007 GPFO

(All Heights Are In Feet)

Bent #	Left Height	Right Height
5	-1	14.2
6	-1	14.6
7	-1	21.8
8	-1	24.3
9	-1	23.7
10	-1	25.1
11	-1	24.3
12	-1	28.2
13	-1	25.7
14	-1	16.7
15	-1	13.5
16	-1	17.6
17	-1	18.5
18	-1	-1
19	-1	-1
20	-1	-1
21	-1	-1
22	-1	-1

Air Temp:

Profile Notes:

Measurements referenced to top of pier 4 footer.
Waterline: 3.0ft

No left side measurements taken due to ongoing demolition.
Bents 1 - 4 and 18 - 22 are on dryland.

BOLT UNDERWATER SERVICES
7946 62ND STREET NORTH
PINELLAS PARK, FL 33781

Routine Underwater Bridge Inspection Report for Kisinger Campo & Associates, Corp.

NBI Structure No. (8): **124116**

Underwater Date (93): 10/07/09

Structure/Roadway Identification:

District (2): 01
County (3): Lee
Feature Intersected (6): San Carlos Bay
Facility Carried (7): CR 867

Underwater Inspection Details:

Special Crew Hours: 18.0
Max. Depth: 22ft.
Type of Dive Insp.: SCUBA
Type of Boat Used: 21ft.
Water Type/Marine Growth: Salt-Tidal / Barnacles - Oysters

Previous Inspection:

Lead Diver:	C.B.I. No.:	Inspection Date:
Hoogland, Keith S.	00341	10/02/07

Inspection Personnel:

Field Personnel:	Title	C.B.I. No.:	Duty:	Signature:
Hays, Stephen F.	C.B.I. Diver-Inspector	00438/Lead	Dive	
Myers, Jared L	Diver-Inspector		Dive	
Harris, Scott R.	Diver-Inspector		Tend	

PILING/COLUMNS
ELEMENT: 207 HLW CORE **291**: ea.

Condition State:	QTY:	Recommended Feasible Action:
CS-1	**288**	**Do Nothing**
CS-2	**3**	**Do Nothing**

Pile 4-1: NE edge 5ft. below footer, SPL, no exposed steel, 16in. x 6in. x 2in. *NEW*
Pile 11-17: NW edge below footer, SPL, no exposed steel, 5ft. 6in. x 10in. x 2in. *NEW*
Pile 17-10: NE edge 24in. below footer, intermittent SPL, no exposed steel, 13ft. x 12in. x 3in.

CAT: Piles 11-8 and 11-15 have jackets installed.

NOTE: Piles 4-1, 17-1 though 17-21, 14-13 through 14-16 and all deficiencies were cleaned.

SUBMERGED FOOTER
ELEMENT: 220 R/CONCRETE **14**: ea.

Condition State:	QTY:	Recommended Feasible Action:
CS-1	**11**	**Do Nothing**

There are several edge scrapes up to 6in. x 5ft. x ¾in.
The footers have concrete formed sides that have vertical cracks with no CBO up to 1/16in. wide x full height. Several cracks have efflorescence.

CS-2	**3**	**Do Nothing**

Footer 12: SW edge 20in. below top of footer, SPL, no exposed steel, 6in. x 8in. x 2½in. *NEW*
Footer 13: SE edge 15in. below top of footer, SPL, no exposed steel, 12in. x 6in. x 1in. *NEW*
Footer 17: NE and SE edges 20in. below top of footer, 2 SPL's, no exposed steel, 12in. x 12in. x 2in.

NOTE: Footers 12 and 13 and all deficiencies were cleaned.

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CHANNEL
ELEMENT: 290 **1**: ea.

NOTE: The bulkheads were evaluated under this element as channel bank protection.

Condition State:	QTY:	Recommended Feasible Action:
CS-2	1	Do Nothing

There is scattered timber debris from the previous fender system along the new fender system.
On Bents 14 through 17, the G/L slopes upward going away from the piling up to 4ft. high on one or more sides. Several piling had minimal M/G on the bottom 4in. to 6in.

FENDER SYSTEM
ELEMENT: 387 P/S CONCRETE **256 lf.**

NOTE: Quantity includes dolphins. The lower wales are composite.

Condition State:	QTY:	Recommended Feasible Action:
CS-1	256 lf.	Do Nothing

INSPECTION NOTES: Divers inspected two hundred ninety-one 30in. piling in Bents 4 through 17, eighteen 30in. concrete piling in Bent 4, Jackets, Footings, Fender System and Channel.
STRUCTURE NOTES: Structure inventoried south to north

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Description

Structure Unit Identification

Bridge/Unit Key: 124116 1
Structure Name: STRUCTURE A SANIBEL CAUSEWAY
Description:
Type: M Main

Roadway Identification:

NBI Structure No (8) 124116
Position/Prefix (5) Route On Structure
Kind Hwy (Rte Prefix) 4 County Hwy
Design Level of Service 1 Mainline
Route Number/Suffix 00867/ 0 N/A (NBI)
Feature Intersect (6) SAN CARLOS BAY
Critical Facility Not Defense-crit
Facility Carried (7) CR-867
Mile Point (11) 0
Latitude (16) 026d28'56" Long (17) 082d01'03"

Roadway Traffic and Accidents

Lanes (28) 2 Medians 0 Speed 35 mph
ADT Class ADT Class 4
Recent ADT (29) 19690 Year (30) 2008
Future ADT (114) 20675 Year (115) 2028
Truck % ADT (109) 7
Detour Length (19) 99 mi
Detour Speed -1 mph
Accident Count -1 Rate -1

Roadway Classification

Nat. Hwy Sys (104) 0 Not on NHS
National base Net (12) Not on Base Network
LRS Inventory Rte (13a) 12 000 000 Sub Rte (13b) 00
Functional Class (26) 16 Urban Minor Arterial
On Federal Aid System Y
Defense Hwy (100) 0 Not a STRAHNET hwy
Direction of Traffic (102) 2 2-way traffic
Emergency ☑

Roadway Clearances

Vertical (10) 99.99 ft Appr. Road (32) 40
Horiz. (47) 40 ft Roadway (51) 40 ft
Truck Network (110) 0 Not part of natl netwo
Toll Facility (20) 2 On toll road
Fed. Lands Hwy (105) 0 N/A (NBI)
School Bus Route ☑
Transit Route ☑

Thomas G. Falcione
1/8/10

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Structure Identification

Admin Area Lee County
District (2) D1 - Bartow
County (3) (12)Lee
Place Code (4) Sanibel
Location (9) 1ST STRUC S OF TOLL PLAZA
Border Br St/Reg (98) Not Applicable (P) Share 0 %
Border Struct No (99)
FIPS State/Region (1) 12 Florida Region 4-Atlanta
NBIS Bridge Len (112) Meets NBI Length
Parallel Structure (101) No || bridge exists
Temp. Structure (103) Not Applicable (P)
Maint. Resp. (21) 2 County Hwy Agency
Owner (22) 2 County Hwy Agency
Historic Signif. (37) 5 Not eligible for NRHP

Geometrics

Spans in Main Unit (45) 21
Approach Spans (46) 0
Length of Max Span (48) 144.2 ft
Structure Length (49) 3002.5 ft
Total Length 3042.5 ft
Deck Area 129408 sqft
Structure Flared (35) 0 No flare

Age and Service

Year Built (27) 2007
Year Reconstructed (106) 0
Type of Service On (42a) 1 Highway
Under (42b) 5 Waterway
Fracture Critical Details Not Applicable

Structure Type and Material

Curb/Sidewalk (50): Left 0 ft Right 0 ft
Bridge Median (33): 0 No median
Main Span Material (43A): 6 P/S Conc Continuous
Appr Span Material (44A): Not Applicable (P)
Main Span Design (43B): 02 Stringer/Girder
Appr Span Design (44B): Not Applicable (P)

Deck Type and Material

Deck Width (52): 43.1
Skew (34): 0
Deck Type (107): 1 Concrete-Cast-in-Place
Surface (108): 0 None
Membrane: 0 None
Deck Protection: None

Appraisal

Structure Appraisal

Open/Posted/Closed (41) A Open, no restriction
Deck Geometry (68) 5 Above Tolerable
Underclearances (69) N Not applicable (NBI)
Approach Alignment (72) 9-No Speed Red No Curve
Bridge Railings (36a) 1 Meets Standards
Transitions (36b) 1 Meets Standards
Approach Guardrail (36c) 1 Meets Standards
Approach Guardrail ends (36d) 1 Meets Standards
Scour Critical (113) 8 Stable Above Footing

Navigation Data

Navigation Control (38) Permit Required
Nav Vertical Clr (39) 70 ft
Nav Horizontal Clr (40) 111.2 ft
Min Vert Lift Clr (116) 0 ft
Pier Protection (111) 2 In-Place, Functioning

NBI Condition Rating

Sufficiency Rating 79
Health Index 98.94
Structural Eval (67) 7 Above Min Criteria
Deficiency Not Deficient

Minimum Vertical Clearance

Over Structure (53) 99.99 ft
Under (reference) (54a) N Feature not hwy or RR
Under (54b) 0 ft

Minimum Lateral Underclearance

Reference (55a) N Feature not hwy or RR
Right Side (55b) 0 ft
Left Side (56) 0 ft

Load Rating

Design Load (31) HL 93
Rating Date 8/1/2007 Initials RS
Posting (70) 5 At/Above Legal Loads

Operating Type (63) 3 LRFR Load & Res. Fact
Operating rating (64) 60.9 tons Alternate -1
Inventory Type (65) 3 LRFR Load & Res. Fact
Inventory Rating (66) 47.7 tons Alternate -1
Alt Meth -1

Schedule

Current Inspection

Inspection Date: 11/30/2009
Inspector: KN538OJ-P - John O'Grady
Bridge Group: BD523
Primary Type: Regular NBI
Review Required: ☑

Next Inspection Date Scheduled

NBI: 11/30/2011
Element: 11/30/2011
Fracture Critical:
Underwater: 11/30/2011
Other/Special:

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Schedule Cont.

Inspection Types Performed NBI ☑ Element ☑ Fracture Critical ☐ Underwater ☑ Other Special ☐

Inspection Intervals	Required (92)	Frequency (92)	Last Date (93)
Fracture Critical	☐	mos	
Underwater	☑	24 mos	10/07/2009
Other Special	☐	mos	
NBI		24 mos (91)	11/30/2009 (90)

Inspection Resources

Crew Hours	20
Flagger Hours	8
Helper Hours	0
Snooper Hours	6
Special Crew Hours	18
Special Equip Hours	0

Custom

General Bridge Information

Parallel Bridge Seq	0000
Channel Depth	26.499 ft
Radio Frequency	-1
Phone Number	(000) 000-0000
Exception Date	
Exception Type	Unknown
Accepted By Maint	00/00/0000
Warranty Expiration	00/00/0000
Bridge Rail 1	Steel barrier
Bridge Rail 2	Not applicable-No rail
Electrical Devices	Navigation lights only
Culvert Type	Not applicable
Maintenance Yard	0
FIHS ON / OFF	No Routes on FIHS
Previous Structure	124043
2nd Previous Structure	
Replacement Structure	

Bridge Load Rating Information

HS20 Govr. Span Length	144 ft
L-Rating Origination	Design Plans
Load Rating Date	08/01/2007
Method Calculation	AASHTO formula
Load Dist. Factor	0.982
Impact Factor	1
Design Method	LRFD (Load & Res Factor)
Design Measure	English
Recommend SU Posting	99 tons
Recommend C Posting	99 tons
Recommend T Posting	99 tons
Gov FB Span	0 ft
Gov FB Spacing	0 ft
FB HS20 Rating	0 tons
FB SU4 Rating	0 tons
FB Present	N
FB INV Rating Factor	0
FB OPR Rating Factor	0
FB FL 120	0 tons
Single Unit Truck 2 Axles	-1 tons
Single Unit Truck 3 Axles	-1 tons
Single Unit Truck 4 Axles	-1 tons
Combination Unit Truck 3 Axles	-1 tons
Combination Unit Truck 4 Axles	-1 tons
Combination Unit Truck 5 Axles	-1 tons
Truck Trailer 5 Axles	-1 tons
Posting Weight	99 tons
Actual SU Posting	99 tons
Actual C Posting	99 tons
Actual T Posting	99 tons
FL 120 Long Gov Span	110 tons
FL 120 Trans	-1 tons
Single Axle Trans	-1 tons
Tandem Axle Trans	-1 tons
Wing Span	-1 ft
Web to Web Span	-1 ft
HS20 OPR Rating Max Span	-1 tons
FL120 Long Max Span	110 tons

Bridge Scour and Storm Information

Pile Driving Record	All pile driving records
Foundation Type	Foundation details
Mode of Flow	Tidal
Rating Scour Eval	Low Risk - High
Highest Scour Eval	No phase completed
Scour Recommended I	No recommendation
Scour Recommended II	No recommendation
Scour Recommended III	No recommendation
Scour Elevation	999 ft
Action Elevation	999 ft
Storm Frequency	100

Condition

NBI Rating

Channel (61)	7 Minor Damage
Deck (58)	8 Very Good
Superstructure (59)	7 Good
Substructure (60)	7 Good
Culvert (62)	N N/A (NBI)
Waterway (71)	8 Equal Desirable
Unrepaired Spalls	-1 sq.ft.
Review Required	☑

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Elements

Inspection Date: 11/30/2009 ESCS

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	12/4	Bare Concrete Deck	129408	100.	0	.	0	.	0	.	0	.	129408 sf.

Notes Note: Two 4-1/2in. diameter fiberglass conduits are attached to hangers anchored to the underside of Bay 3 in all spans. Refer to photo 1. The type of hanger anchorage is unknown.

CS1 = There is a light accumulation of dirt and debris in the shoulder areas - NEW.

The undersides of the overhangs have full width x up to 1/64in. wide transverse cracks, some with efflorescence - NEW.

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	300/4	Strip Seal Exp Joint	345	100.	0	.	0	.	0	.	0	.	345 lf.

Notes Note: Joints are present at Abutments 1 and 22 and Piers 4, 7, 10, 13, 16 and 19.

CS1 = The joints are filling with dirt and debris, but are functioning as intended at this time - NEW. Refer to photo 2.

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	334/4	Metal Rail Coated	6005	100.	0	.	0	.	0	.	0	.	6005 lf.

Notes Note: Barriers meet NCHRP TL4 criteria and meet SIA Item #36 standards.

CS1 = There are several tire marks on the barriers.

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	109/4	P/S Conc Open Girder	12006	99.97	4	.03	0	.	0	.	0	.	12010 lf.

Notes CS1 = The beams have diagonal web cracks up to 4ft. long x typically less than 1/64in. wide at the bearing areas, extending up and away from the supports.

The east face of the bottom flange of Beam 14-4 has a 20in. long x 1/64in. wide vertical/diagonal crack over the bearing at Pier 14 - INCREASE. Beam 16-4 at Pier 16 has similar cracking - NEW.

The left top flange of Beam 17-4 has longitudinal hairline cracking, some with efflorescence, up to 1/64in. wide near Pier 18.

CS2 = There are minor spalls with no exposed steel in the bottom flanges of the following beams:
Beam 15-1, east face 7-1/2ft. from Pier 16, 6in. x 2in. x 1/2in.
Beam 15-3, east face at 25-1/2ft. from Pier 16, 4in. x 4in. x 1in.
Beam 15-4, west face 60ft. from Pier 15, 16in. x 4in. x 1in.

CORRECTIVE ACTION TAKEN:
The previously noted spalls and delaminations in the beam ends/closure pours at Pier 11 have been repaired since the previous inspection.

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	397/4	Drain. Syst Metal	20	100.	0	.	0	.	0	.	0	.	20 ea.

Notes CS1 = Most scupper down spouts are not properly shimmed or anchored to the beams. Refer to photo 3. REPAIR

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	310/4	Elastomeric Bearing	168	100.	0	.	0	.	0	.	0	.	168 ea.

Notes

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	563/4	Acc Ladd & Plat	16	100.	0	.	0	.	0	.	0	.	16 ea.

Notes Note: The quantity includes eight ladders and eight platforms including the two fender access walkways.

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	580/4	Navigational Lights	1	100.	0	.	0	.	0	.	0	.	1 ea.

Notes Note: The element includes six fender lights, two clearance at centerline of channel gauge lights and two swing lights at centerline of channel.

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Elements

Inspection Date: 11/30/2009 ESCS

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	205/4	R/Conc Column	40	100.	0	.	0	.	0	.	0	.	40 ea.

Notes

Structur	207/4	P/S Conc Holl Pile	221	98.66	3	1.34	0	.	0	.	0	.	224 ea.

Notes Note: The divers cleaned Piles 4-1, 17-1 through 17-21, 14-13 through 14-16 and all deficiencies.

The following was noted by the underwater inspectors;
CS2 = The northeast corner of Pile 4-1 has a 16in. x 6in. x 2in. spall with no exposed steel, 5ft. below the footer - NEW.
The northwest corner of Pile 11-17 has a 5ft. 6in. x 10in. x 2in. spall with no exposed steel, just below the footer - NEW.
The northeast corner of Pile 17-10 has a 13ft. x 12in. x 3in. spall with no exposed steel, 24in. below the footer.

CORRECTIVE ACTION TAKEN:
Piles 11-8 and 11-15 have been jacketed since the previous inspection.

Structur	215/4	R/Conc Abutment	70	100.	0	.	0	.	0	.	0	.	70 lf.

Notes

Structur	220/4	R/C Sub Pile Cap/Ftg	13	65.	4	20.	3	15.	0	.	0	.	20 ea.

Notes Note: The divers cleaned Footers 12 and 13 and all deficiencies.

CS1 = The following was noted by the underwater inspectors:
There are several edge scrapes up to 5ft. x 6in. x 3/4in. - NEW.
The footers have concrete formed sides that have vertical cracks with no corrosion bleedout up to full height x 1/16in. wide. Several cracks have efflorescence - NEW.

CS2 = The top northwest corner of Footer 4 has a 24in. x 12in. x 2in. spall with no exposed steel - NEW.

The following was noted by the underwater inspectors:
The southwest corner of Footer 12 has an 8in. x 6in. x 2-1/2in. spall with no exposed steel, 20in. below the top of the footer - NEW.
The southeast corner of Footer 13 has a 12in. x 6in. x 1in. spall with no exposed steel, 15in. below the top of the footer - NEW.
The northeast and southeast corners of Footer 17 have spalls with no exposed steel up to 12in. x 12in. x 2in., 20in. below the top of the footer.

CS3 = The top east edge of Footer 9 has a 30in. x 9in. delamination - NEW. Refer to photo 4.
The top northwest corner of Footer 10 has a 24in. x 8in. x 1in. spalled and delaminated area with no exposed steel - NEW.
The top northwest corner of Footer 16 has a 15in. x 6in. x 1/2in. spalled and delaminated patch with no exposed steel - NEW.
REPAIR ALL

Structur	234/4	R/Conc Cap	862	100.	0	.	0	.	0	.	0	.	862 lf.

Notes CORRECTIVE ACTION TAKEN:
The fractured shear blocks in Span 10 at Pier 10 have been repaired since the previous inspection.

Structur	387/4	P/S Fender/Dolphin	588	100.	0	.	0	.	0	.	0	.	588 lf.

Notes Note: The quantity includes the three rectangular dolphins at the southeast corner of the fender and the three rectangular dolphins at the northwest corner of the fender.

Structur	396/4	Other Abut Slope Pro	2500	100.	0	.	0	.	0	.	0	.	2500 sf.

Notes Note: This element includes rock rubble rip rap and concrete block mats.

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Elements

Inspection Date: 11/30/2009 ESCS

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	290/4	Channel	0	.	1	100.	0	.	0	.	0	.	1 ea.

Notes Note: The bulkheads were evaluated under this element as channel bank protection.

CS2 = The north bulkhead cap, at the northeast corner of the structure, is intermittently spalled and delaminated with corrosion bleedout, up to 10ft. long 18in. wide x 3in. deep - NEW. Refer to photo 5. REPAIR

Some channel measurements have a 2ft. or greater change since the previous inspection. Reason for change may be due to the strong current and/or ongoing demolition of the old structures during the previous inspection, altering the channel bottom.

The following was noted by the underwater inspectors:
There is scattered timber debris from the previous fender system along the new fender system - NEW.
At Bents 14 through 17, the groundline slopes upward up to 4ft. going away from the piling, on one or more sides - NEW. Several piling have minimal marine growth on the lower 4in. to 6in. - NEW.

Structur	321/4	R/Conc Approach Slab	2	100.	0	.	0	.	0	.	0	.	2 ea.

Notes Note: The approach slabs are not visible due to an overlay of asphalt.

Structur	478/4	MSE Walls	120	100.	0	.	0	.	0	.	0	.	120 lf.

Notes Note: The MSE walls were measured back 30ft. at each corner of the structure.

Total Number of Elements: 18

Inspection Information

Inspection Date: 11.30.2009 **Type:** Regular NBI
Inspector: KN538OJ-P - John O'Grady

Inspection Notes: Sufficiency Rating Calculation Accepted by KNKCARL-P at 2010-01-07 15:14:37

LOAD CAPACITY EVALUATION:
The findings of this inspection reveal no reason to warrant a new analysis; therefore, the current load rating results still govern.

Note: NBI Item #59 Superstructure was raised from a 6 to a 7 due to repairs made.
NBI Item #60 Substructure was raised from a 5 to a 7 due to repairs made.
NBI Item #61 Channel was lowered from an 8 to a 7 due to changes of 2ft. or greater in some of the groundline measurements.

Inspection Date: 11.15.2007 **Type:** Regular NBI
Inspector: KNVOLWW-P - Wade Wolfe

Inspection Notes: Sufficiency Rating Calculation Accepted by knvolsg-P at 2008-05-20 14:47:08
Sufficiency Rating Calculation Accepted by KNVOLCW-P at 2007-12-13 11:47:06
Sufficiency Rating Calculation Accepted by KNVOLCW-P at 2007-12-04 11:53:05

LOAD CAPACITY EVALUATION:
The load rating dated 8/1/07 applies to the current condition of this bridge.

Construction of fenders, dolphins, slope protection and navigation lighting still in progress. Demolition of replaced structure ongoing. Left side groundline measurements not taken due to demolition.

Structure sustained damage due to demolition of replaced structure. Refer to Elements 109 P/S Conc Open Girder, 207 P/S Conc Holl Pile and 234 R/Conc Cap.

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Structure Notes

BRIDGE OWNER: LEE COUNTY

TRAFFIC RESTRICTION: Based on the load rating analysis dated 8/1/07, the structure does not require posting. This structure is not posted.

Structure was inventoried from south to north on a west to east leg of a south to north roadway. Direction of stationing is used to describe deficiency locations (left is west).

This structure replaces bascule Bridge No. 124043.

Lane shift required for underbridge inspection vehicle. Power boat used for groundline measurements and substructure inspection.

Owner provided 2008 ADT.

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EXHIBIT K

BRIDGE INSPECTION REPORT

PREPARED FOR: FLORIDA DEPARTMENT OF TRANSPORTATION

BRIDGE OWNER: LEE COUNTY

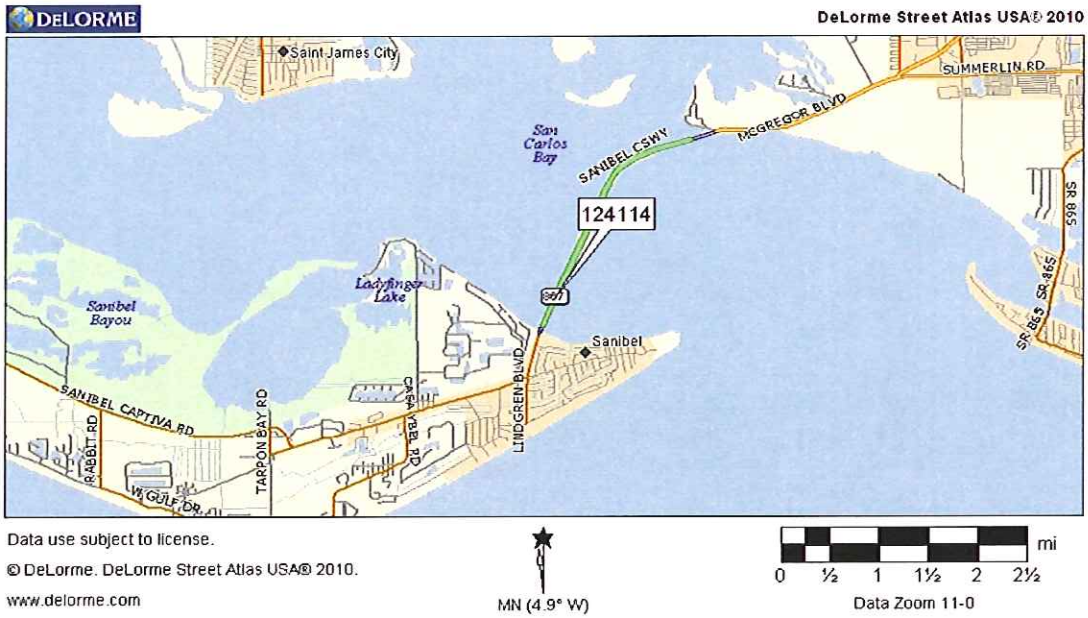
INSPECTED BY: VOLKERT

BRIDGE NO. 124114 **CONTENTS OF REPORT** **INSPECTION DATE:** 11/17/2011

- Pontis Report
- CIDR
- Scour Elevation (Profile)
- * Addendum (Element Notes & Photos/Sketches)
- U/W Inspection Report
- * Fracture Critical Data
- * Load Rating Analysis Summary

*This section is not included in this report.

STRUCTURE C SANIBEL CAUSEWAY OVER SAN CARLOS BAY **3RD STRUCTURE SOUTH OF TOLL PLAZA**



FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
Inspection/CID Report with PDF attachment(s)

BRIDGE ID: 124114
DISTRICT: 01 Bartow

INSPECTION DATE: 11/17/2011 PROM

BY:	VOLKERT, INC.	STRUCTURE NAME:	STRUCTURE C SANIBEL CAUSEV
OWNER:	2 County Hwy Agency	YEAR BUILT:	2007
MAINTAINED BY:	2 County Hwy Agency	SECTION NO.:	12 000 000
STRUCTURE TYPE:	6 P/S Conc Continuous - 02 Stringer/Girder	MP:	0
LOCATION:	3RD STRUCT S OF TOLL PLAZ	ROUTE:	00867
SERVICE TYPE ON:	1 Highway	FACILITY CARRIED:	CR-867
SERV TYPE UND:	5 Waterway	FEATURE INTERSECTED:	SAN CARLOS BAY

☐ FUNCTIONALLY OBSOLETE ☐ STRUCTURALLY DEFICIENT

TYPE OF INSPECTION: Regular NBI

DATE FIELD INSPECTION WAS PERFORMED: ABOVE WATER: 11/17/2011 UNDERWATER: 10/25/2011

SUFFICIENCY RATING: 79.0
HEALTH INDEX: 99.25

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FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
Inspection/CID Report with PDF attachment(s)

BY: VOLKERT, INC.
OWNER: 2 County Hwy Agency
MAINTAINED BY: 2 County Hwy Agency
STRUCTURE TYPE: 6 P/S Conc Continuous - 02 Stringer/Girder
LOCATION: 3RD STRUCT S OF TOLL PLAZ
SERVICE TYPE ON: 1 Highway
SERV TYPE UND: 5 Waterway

STRUCTURE NAME: STRUCTURE C SANIBEL CAUSEWAY
YEAR BUILT: 2007
SECTION NO.: 12 000 000
MP: 0
ROUTE: 00867
FACILITY CARRIED: CR-867
FEATURE INTERSECTED: SAN CARLOS BAY

- [ ] THIS BRIDGE CONTAINS FRACTURE CRITICAL COMPONENTS
- [ ] THIS BRIDGE IS SCOUR CRITICAL
- [ ] THIS REPORT IDENTIFIES DEFICIENCIES WHICH REQUIRE PROMPT CORRECTIVE ACTION
- [ ] FUNCTIONALLY OBSOLETE
- [ ] STRUCTURALLY DEFICIENT

TYPE OF INSPECTION: Regular NBI
DATE FIELD INSPECTION WAS PERFORMED: ABOVE WATER: 11/17/2011 UNDERWATER: 10/25/2011

SMART FLAGS:
None

OVERALL NBI RATINGS:
DECK: 7 Good
SUPERSTRUCTURE: 7 Good
SUBSTRUCTURE: 7 Good
PERF. RATING: Good
CHANNEL: 7 Minor Damage
CULVERT: N N/A (NBI)
SUFF. RATING: 79.0
HEALTH INDEX: 99.25

FIELD PERSONNEL / TITLE / NUMBER	INITIALS
Bibelhauser, Anthony - Bridge Inspector (CBI #00359) (lead)	AB
Eorgan, Steve - Bridge Inspector (CBI#00362)	
Hoogland, Keith - Bridge Inspector/Diver (CBI#00341) (lead)	
Young, Ryan C. - Diver/Inspector	
Tumaniszwili, Alex T. - Diver/Inspector	

REVIEWING BRIDGE INSPECTION SUPERVISOR:
Rucks, Edward - CBI (#00273) ER

CONFIRMING REGISTERED PROFESSIONAL ENGINEER:
Teal, Daniel - PROJECT MANAGER (PE # 42097)
VOLKERT, INC.
3409 W. LEMON STREET STE 1
CERTIFICATE OF AUTHORIZATION NO 4641
TAMPA, FL 33609

DANIEL BOWERS TEAL LICENSE No. 42097 STATE OF FLORIDA PROFESSIONAL ENGINEER
JAN 05 2012

SIGNATURE:
DATE:

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All Elements

UNIT: Unit 1 DECKS

ELEMENT/ENV: 12/4 Bare Concrete Deck 166651 sf. ELEM CATEGORY: Decks/Slabs

CONDITION STATE (5)	DESCRIPTION	QUANTITY
1	The surface and underside of the deck have few repaired areas, there are few spalls/delaminations in the deck surface or underside and the only cracking is superficial or surface map cracking. The combined distressed area is 2% or less of the deck area.	166651 sf.

ELEMENT INSPECTION NOTES:

Note: Two 4-1/2in. diameter fiberglass conduits and one 3-1/2in. diameter PVC conduit are suspended from hangers anchored to the underside of Bay 1 in all spans. The type of anchorage for the hangers is unknown.

There is a navigational swing light attached to the left and right fascia of span 11 by three undetermined type of anchors. Refer to Photo 1.

CS1: There is a light accumulation of dirt and debris in the shoulder areas.

The deck top has minor transverse and diagonal cracks up to 1/64in wide in numerous span and transverse cracks up to 1/32in wide over some bents with no expansion joint - NEW.

The undersides of the overhangs have full width x up to 1/64in. wide transverse cracks, some with efflorescence.

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All Elements

UNIT: Unit 1 DECKS

ELEMENT/ENV: 300/4 Strip Seal Exp Joint 431 lf. ELEM CATEGORY: Joints

CONDITION STATE (3)	DESCRIPTION	QUANTITY
1	The element shows minimal deterioration. There is no leakage at any point along the joint. Gland is secure and has no defects. Debris in joint is not causing any problems. The adjacent deck and/or header is sound.	429 lf.
2	Signs of seepage along the joint may be present. The gland may be punctured, ripped or partially pulled out of the extrusion. Significant debris is in all or part of the joint. Minor spalls in the deck and/or header may be present adjacent to the joint.	2 lf.

ELEMENT INSPECTION NOTES:

Note: Joints are at Abutments 1 and 28 and at Piers 4, 7, 10, 13, 16, 19, 22 and 25.

CS1: The joints are filling with dirt and debris, but are functioning as intended at this time.

CS2: There is a 16in long area where the gland has pulled out of its slot in the left shoulder over Pier 10 - NEW. Refer to Photo 2.

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All Elements

UNIT: Unit 1 DECKS

ELEMENT/ENV: 334/4 Metal Rail Coated 7734 lf. ELEM CATEGORY: Railing

CONDITION STATE (5)	DESCRIPTION	QUANTITY
1	There is no evidence of active corrosion. Protective coating is sound and functioning as intended to protect the element.	7674 lf.
2	There is little or no active corrosion. Surface corrosion has formed or is forming. Protective coating may have minor areas of deterioration.	60 lf.

ELEMENT INSPECTION NOTES:

CS2: The bridge rails have minor impact related scrapes with no surface corrosion at several locations.

Several of the rail to post fasteners on both bridge rails have minor surface corrosion - NEW. Refer to Photo 3. REPAIR

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All Elements

UNIT: Unit 1 SUPERSTRUCTURE

ELEMENT/ENV: 109/4 P/S Conc Open Girder 15467 lf. ELEM CATEGORY: Superstructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	15404 lf.
2	Minor cracks and spalls may be present and there may be exposed reinforcing with no evidence of corrosion. There is no exposure of the prestress system.	60 lf.

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All Elements

UNIT: Unit 1 SUPERSTRUCTURE

ELEMENT/ENV: 109/4 P/S Conc Open Girder 15467 lf. ELEM CATEGORY: Superstructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
3	Some delaminations and/or spalls may be present. There may be minor exposure but no deterioration of the prestress system. Corrosion of non-prestressed reinforcement may be present but loss of section is incidental and does not significantly affect the strength and/or serviceability of either the element or the bridge.	3lf.

ELEMENT INSPECTION NOTES:

CS1: The beams have multiple hairline diagonal cracks in the lower flange and webs up to 10ft. predominately in the exterior beams near the bearing areas, extending up and away from the supports - INCREASED.

These cracks vary in length, number of cracks and exact location and are predominately in the exterior beams. The cracks on Beam 8-4 were marked with a red paint stick to track the general trend in crack lengths. Refer to Photo 4.

The outside faces of the exterior beams have numerous hairline horizontal cracks up to 30in long throughout the length - NEW. Refer to Photo 5.

CS2: The exterior face of Beam 11-1 at the top flange to web chamfer has a 1/32in wide horizontal crack starting at Pier 11 extending to mid-span - NEW. Refer to Photos 6 and 7. REPAIR

CS3: The west face of the bottom flange of Beam 6-4 at Pier 7 has a 30in. x 12in. delamination. Refer to Photo 8. REPAIR

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All Elements

UNIT: Unit 1 SUPERSTRUCTURE

ELEMENT/ENV: 310/4 Elastomeric Bearing 216 ea. ELEM CATEGORY: Bearings

CONDITION STATE (3)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. Shear deformations are correct for existing temperatures.	216 ea.

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All Elements

UNIT: Unit 1 SUPERSTRUCTURE

ELEMENT/ENV: 563/4 Acc Ladd & Plat 8 ea. ELEM CATEGORY: Movable

CONDITION STATE (5)	DESCRIPTION	QUANTITY
1	There is no evidence of active corrosion, and the paint system is sound and functioning as intended to protect the metal surface.	8 ea.

ELEMENT INSPECTION NOTES:

Note: The quantity includes four fender access ladders and four platforms/walkways.

ELEMENT/ENV: 580/4 Navigational Lights 1 ea. ELEM CATEGORY: Movable

CONDITION STATE (3)	DESCRIPTION	QUANTITY
1	Lights are operational, lenses are clean and not broken, there is no evidence of corrosion.	1 ea.

ELEMENT INSPECTION NOTES:

Note: This element represents six fender lights, two clearance at centerline of channel gauge lights and two centerline of channel swing lights.

CS1: The conduit at the southwest navigational light on the south fender is separated - NEW. Refer to Photo 9. REPAIR

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All Elements

UNIT: Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 205/4 R/Conc Column 52 ea. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	52 ea.

ELEMENT/ENV: 207/4 P/S Conc Holl Pile 360 ea. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	359 ea.
2	Minor cracks, spalls and scaling may be present and there may be exposed reinforcing with no evidence of corrosion. There is no exposure of the prestress system.	1 ea.

ELEMENT INSPECTION NOTES:

The following was noted by the underwater inspectors:
CS1: Pile 11-6 has a corrugated metal pipe sleeve around it with no fill material, starting 24in. below the footer and extending to the groundline. This pile could not be inspected (possible incomplete jacket).

CS2: The northeast corner of Pile 6-4 has a 3ft. 7in. x 10in. x 2-1/2in. spall with no exposed steel, 28in. below the footer.

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All Elements

UNIT: Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 215/4 R/Conc Abutment 70 lf. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	70 lf.

ELEMENT INSPECTION NOTES:

CS1: The outside faces of Abutment 1 cheek walls have vertical/diagonal crack up to 1/64in wide - NEW.

ELEMENT/ENV: 220/4 R/C Sub Pile Cap/Ftg 26 ea. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	18 ea.

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All Elements

UNIT: Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 220/4 R/C Sub Pile Cap/Ftg 26 ea. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
2	Minor cracks, spalls and scaling may be present but there is no exposed reinforcing or surface evidence of rebar corrosion.	8 ea.

ELEMENT INSPECTION NOTES:

CS2: The following footers have spalls with no exposed steel up to 24in. x 12in. x 8in.;
Footer 2, top face adjacent to west side of column 2-2 - NEW.
Footer 5, northeast corner
Footer 6, southeast and northeast corners
Footer 7, southeast and northeast corners
Footer 14, northeast corner
Footer 19, southeast corner

The following was noted by the underwater inspectors:
The northeast corner of Footer 5 has a 30in. x 10in. x 2in. spall with no exposed steel, 3ft. below the top of the footer.
The southeast corner of Footer 19 has a 25in. x 15in. x 2-1/2in. spall with no exposed steel, 27in. below the top of the footer.
Footers 25, 26 and 27 have a different construction with concrete formed sides. The sides have vertical cracks up to 1/16in. wide to full height with efflorescence.

CORRECTIVE ACTION TAKEN:
The spalls on Footings 4, 8, 9, 22 and 23 have been repaired.

ELEMENT/ENV: 234/4 R/Conc Cap 1121 lf. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	1121 lf.

ELEMENT INSPECTION NOTES:

CS1: There is non-offensive graffiti on the south and north faces of Pier cap 2 - NEW. Refer to Photo 10. REPAIR

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All Elements

UNIT: Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 387/4 P/S Fender/Dolphin 384 lf. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	384 lf.

ELEMENT INSPECTION NOTES:

The following was noted by the underwater inspectors:
CS1: The lower connecting hardware has light corrosion with no measurable section loss.

ELEMENT/ENV: 393/4 Blkhd Sewl Any Mater 350 ft ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	There is little or no deterioration. Surface defects only are in evidence. Random open joints may exist.	350 ft

ELEMENT INSPECTION NOTES:

Note: This element represents the north bulkhead constructed with concrete sheet piling and a concrete cap.

ELEMENT/ENV: 396/4 Other Abut Slope Pro 2500 sf. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	There is little or no deterioration. Surface defects only are in evidence. Random open joints may exist.	2500 sf.

ELEMENT INSPECTION NOTES:

Note: This element includes the rock rubble rip rap and concrete block mats.

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All Elements

UNIT: Unit 1 CHANNEL

ELEMENT/ENV: 290/4 Channel **1 ea.** **ELEM CATEGORY:** Channel

CONDITION STATE (4)	DESCRIPTION	QUANTITY
2	Bank protection is in need of minor repairs, bank may be beginning to slump, minor stream bed movement may be evident or debris may be present.	1 ea.

ELEMENT INSPECTION NOTES:

CS2: Some channel measurements have a 2ft. or greater change since the previous inspection. The reason for the changes may be due to the strong currents altering the channel bottom.

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All Elements

UNIT: Unit 1 MISCELLANEOUS

ELEMENT/ENV: 321/4 R/Conc Approach Slab 2 ea. **ELEM CATEGORY:** Other Elements

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The slab has not settled and shows no sign of deterioration other than superficial surface cracks.	2 ea.

ELEMENT INSPECTION NOTES:
Note: The approach slabs are not visible due to an overlay of asphalt.

ELEMENT/ENV: 478/4 MSE Walls 120 lf. **ELEM CATEGORY:** Other Elements

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	There is little or no deterioration. Surface defects only are in evidence.	120 lf.

ELEMENT INSPECTION NOTES:
Note: This element quantifies 30lf at each corner.

Structure Notes

BRIDGE OWNER: LEE COUNTY

TRAFFIC STATEMENT: According to the load rating dated 4/21/04, the structure does not require posting. This structure is not posted.

Structure was inventoried from south to north.

This structure replaced Bridge No. 124041.

Access to the underside of the bridge requires a 60ft. lift boat or an under bridge vehicle with a lane shift traffic control setup.

A power boat was used for groundline measurements and substructure inspection.

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INSPECTION NOTES: PROM 11/17/2011

Sufficiency Rating Calculation Accepted by KNVOLFA-P at 2011-12-06 10:15:43

LOAD CAPACITY EVALUATION:
The findings of this inspection reveal no reason to warrant a new analysis; therefore, the current load rating dated 4/21/04 results still govern.

A 60ft. lift boat was used for this inspection.

The NBI rating for SIA Item 58, Deck, has been lowered from 8 to 7 due to numerous diagonal and transverse cracks in the deck top.

NON-STRUCTURAL ITEMS:

APPROACH ROADWAY:
The south approach roadway in the northbound lane has settled up to 1/2in at the approach slab transition - NEW.

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PHOTO 1: 12 BARE CONCRETE DECK

Navigational swing light attached to deck fascia of Span 11.

REPAIR RECOMMENDATION:
None

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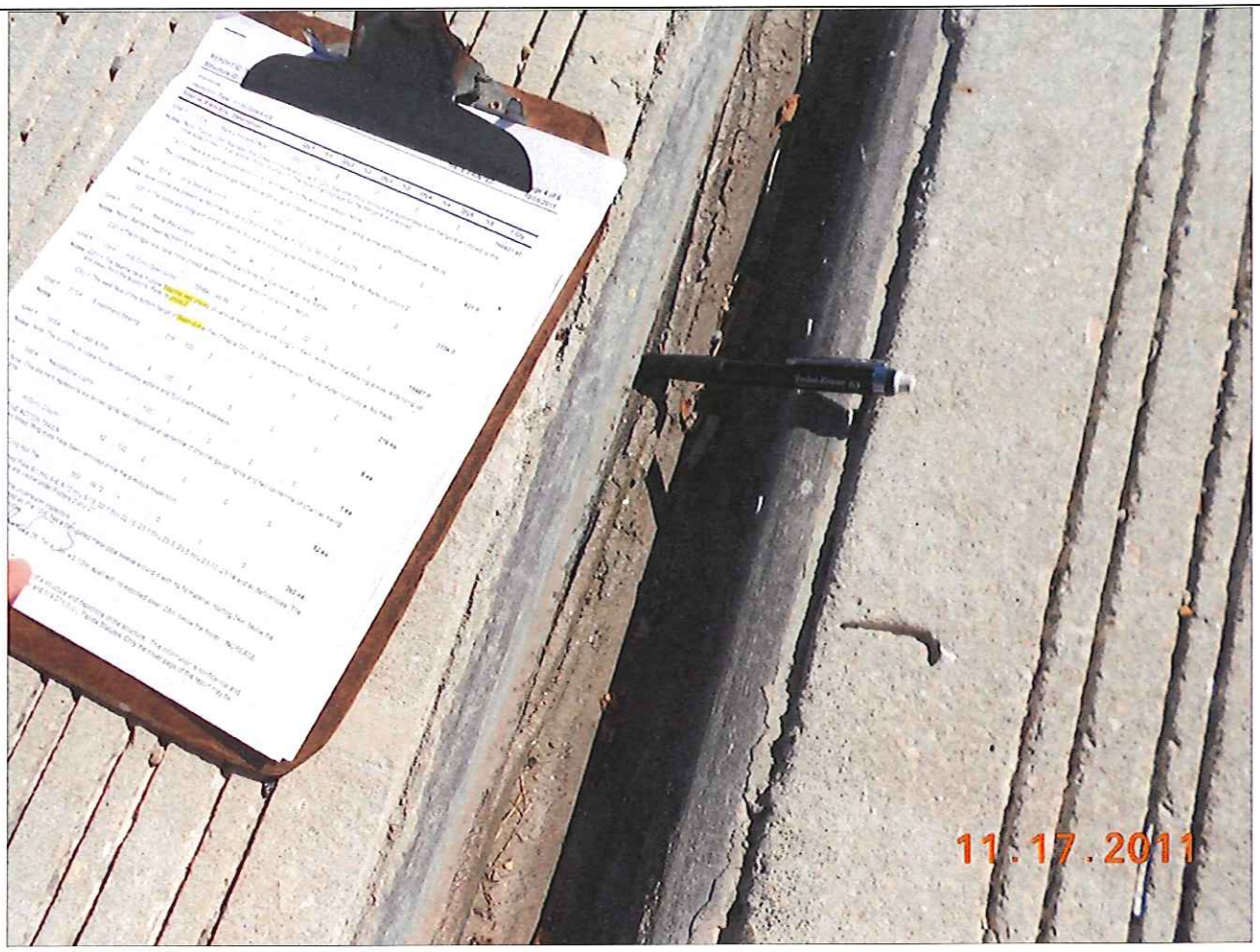

PHOTO 2: 300 STRIP SEAL EXP JOINT

Strip seal pulled out of slot on joint over Pier 10, in left shoulder.

REPAIR RECOMMENDATION:
None

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PHOTO 3: 334 METAL RAIL COATED

Minor surface corrosion on bridge rail to post fasteners.

REPAIR RECOMMENDATION:
Clean corrosion and spot paint on bridge rail to post hardware on exterior face of both bridge rails.

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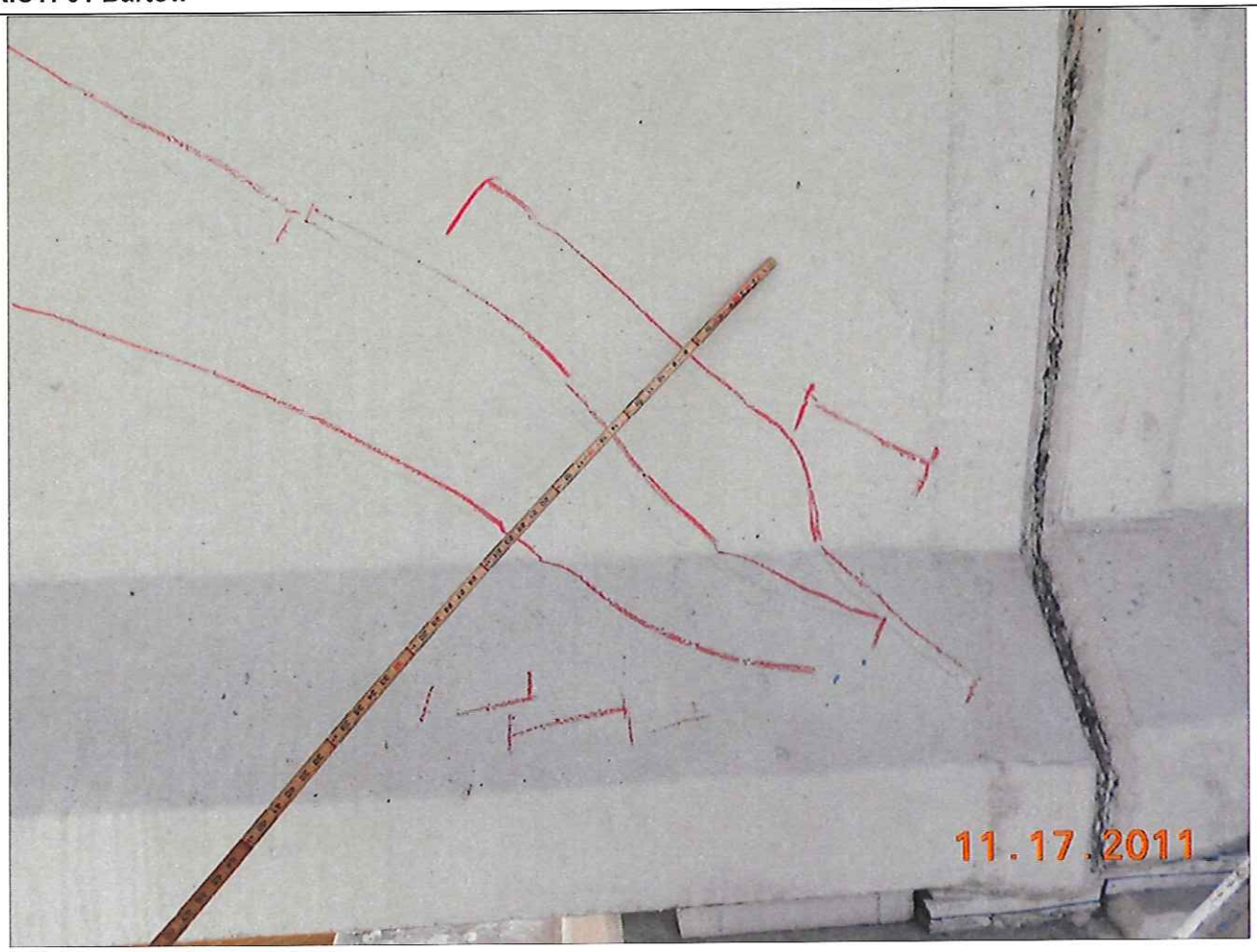

PHOTO 4: 109 P/S CONC OPEN GIRDER

Typical diagonal cracks in bottom flange and web of the exterior beams (Beam 8-4 marked in red shown).

REPAIR RECOMMENDATION:
None

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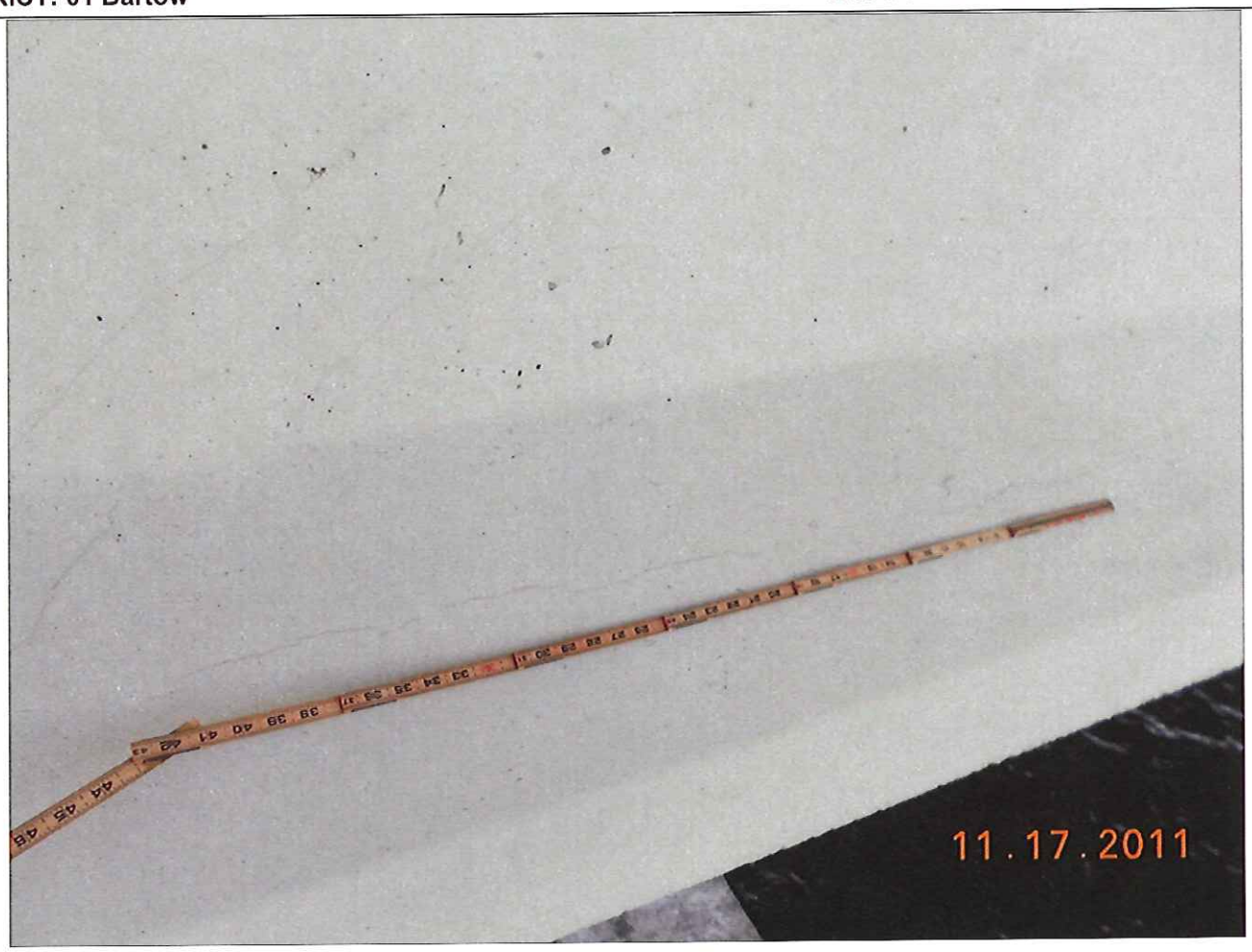

PHOTO 5: 109 P/S CONC OPEN GIRDER

Typical horizontal cracks in bottom flange of the exterior beams.

REPAIR RECOMMENDATION:
None

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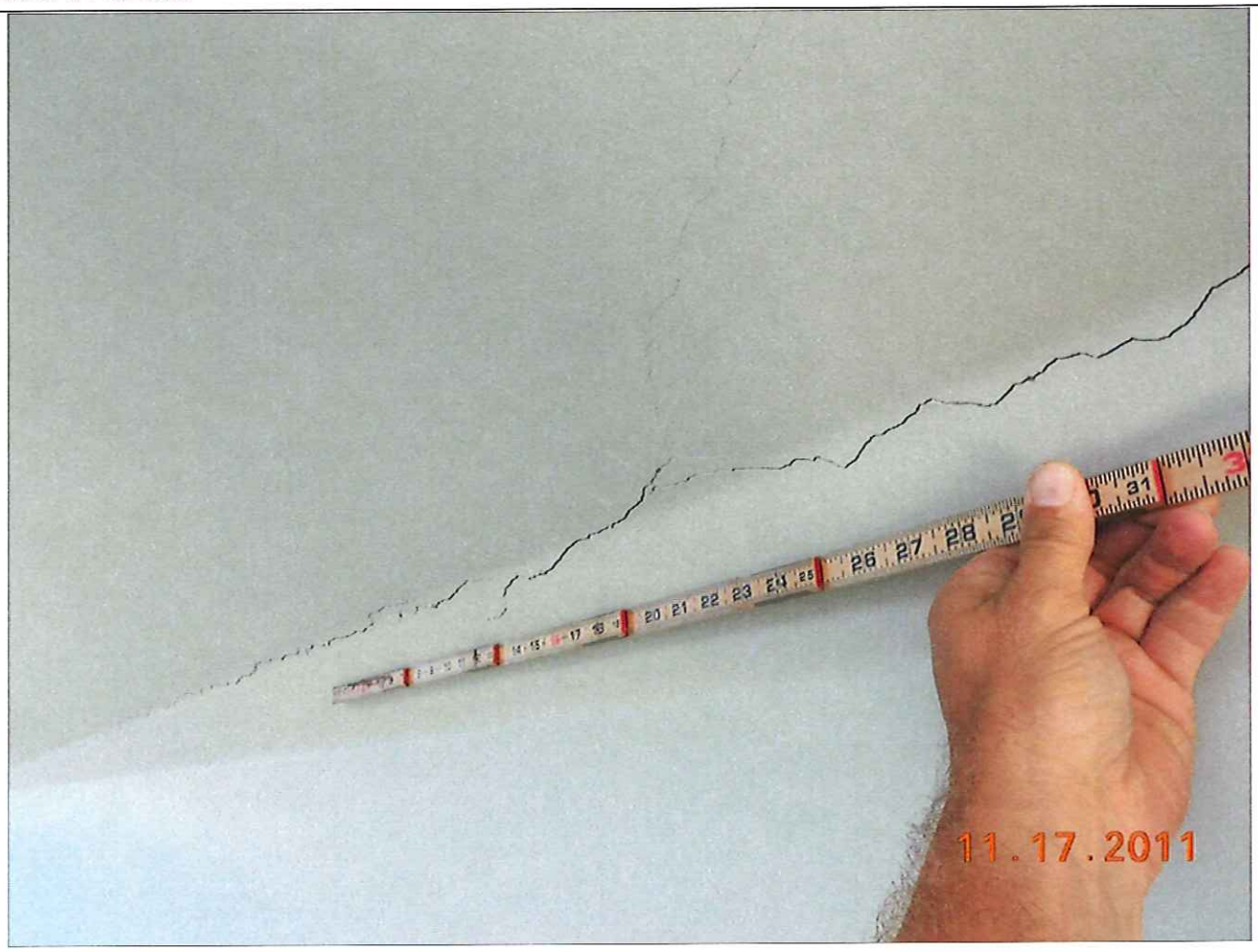

PHOTO 6: 109 P/S CONC OPEN GIRDER

Horizontal crack in exterior face of Beam 11-1 at top flange to web transition.

REPAIR RECOMMENDATION:
Inject horizontal crack in exterior face of Beam 11-1 at top flange to web transition to protect reinforcement.

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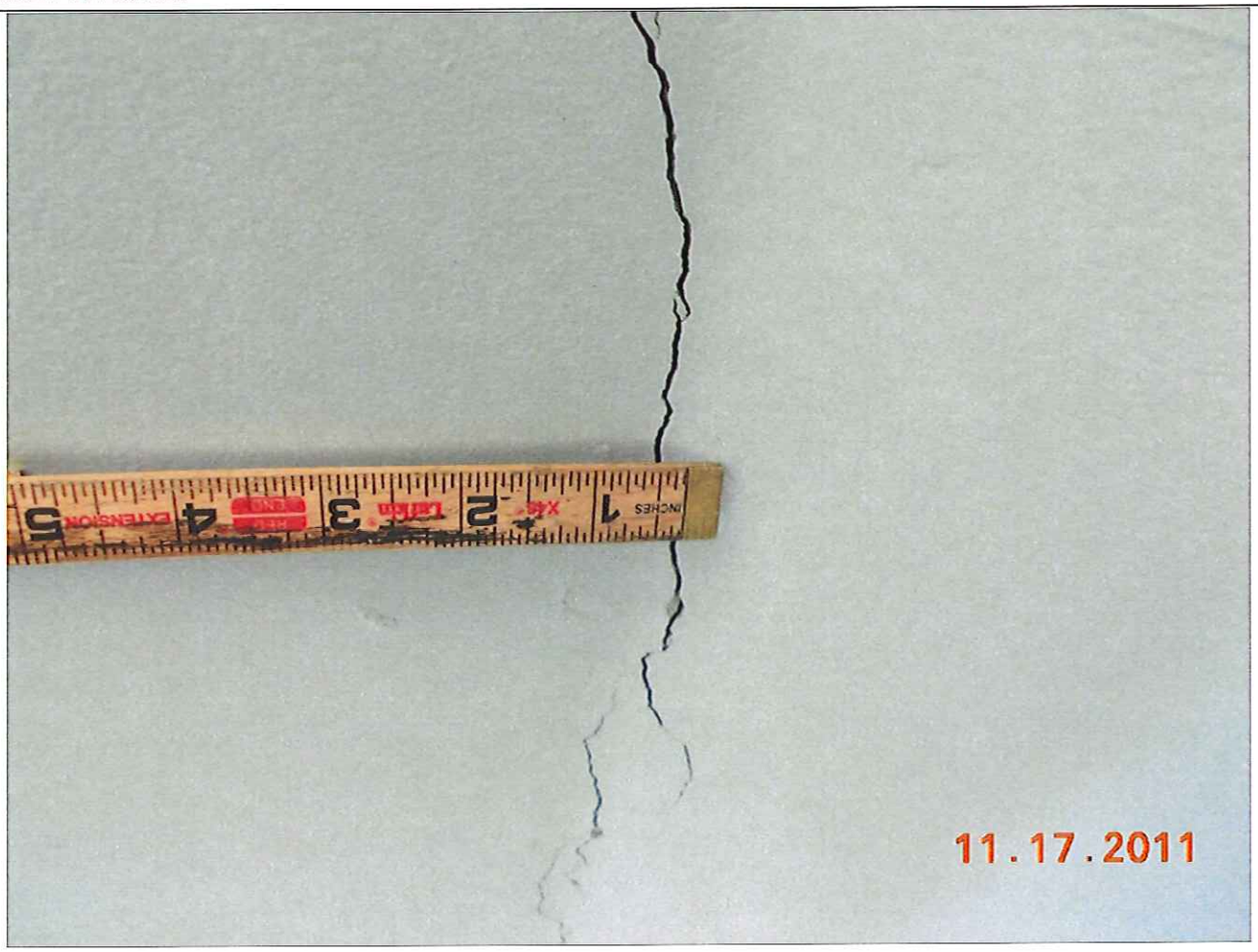

PHOTO 7: 109 P/S CONC OPEN GIRDER

Close up of crack in top flange/web of Beam 11-1.

REPAIR RECOMMENDATION:
Refer to Photo 6.

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PHOTO 8: 109 P/S CONC OPEN GIRDER

Delamination in the west face of the bottom flange of Beam 6-4 at Pier 7.

REPAIR RECOMMENDATION:
Remove delaminated concrete and patch bottom west flange of Beam 6-4 over Pier 7.

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PHOTO 9: 580 NAVIGATIONAL LIGHTS

Separated conduit on south fender at southwest navigational light.

REPAIR RECOMMENDATION:
Repair separated conduit on south fender for southwest navigational light.

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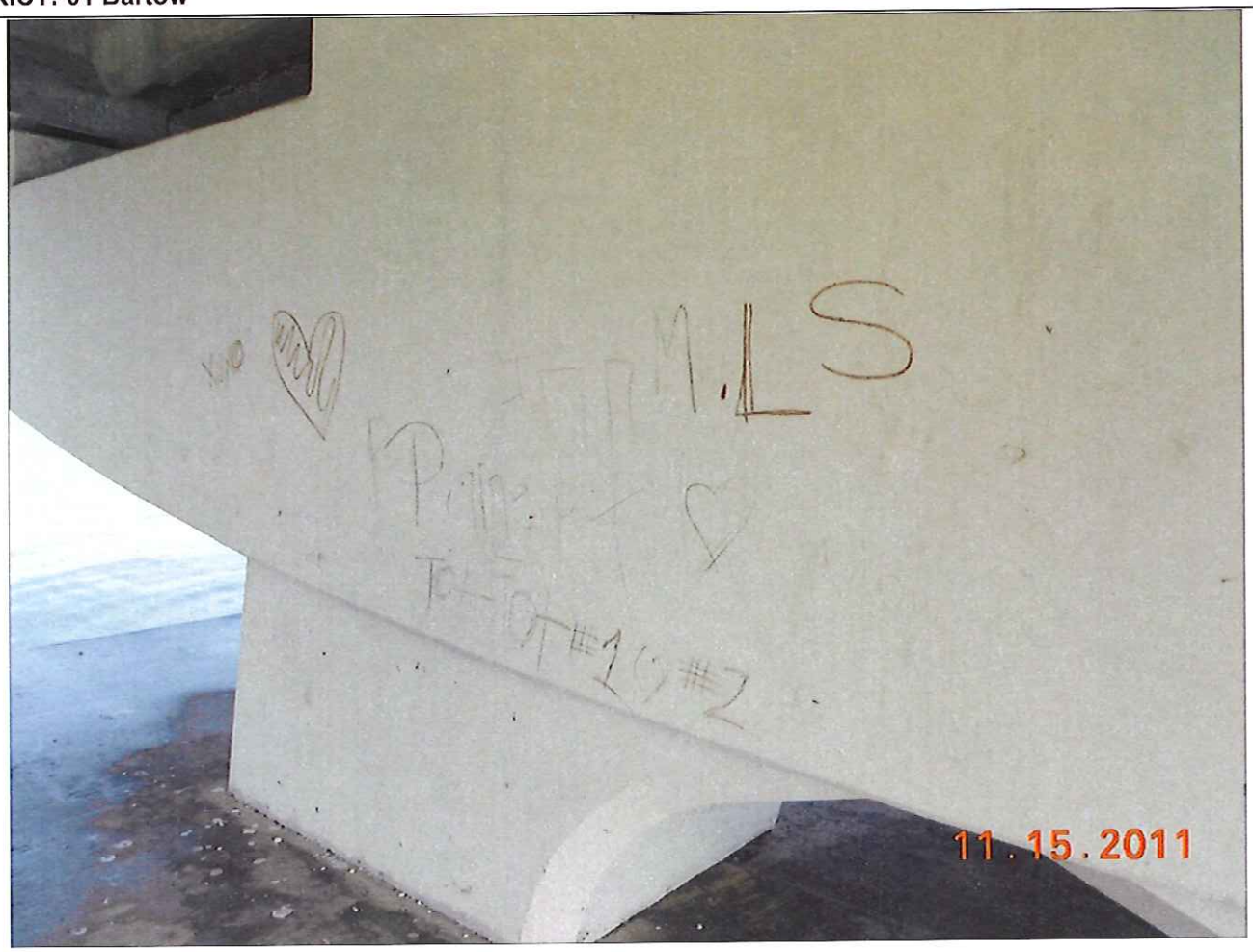

PHOTO 10: 234 R/CONC CAP

Graffiti on Pier Cap 2.

REPAIR RECOMMENDATION:
Remove/paint over graffiti on south and north faces of Pier Cap 2.

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Description

Structure Unit Identification

Bridge/Unit Key: 124114 1
Structure Name: STRUCTURE C SANIBEL CAUSEWAY
Description: MAIN SPAN
Type: M Main

Roadway Identification:

NBI Structure No (8) 124114
Position/Prefix (5) Route On Structure
Kind Hwy (Rte Prefix) 4 County Hwy
Design Level of Service 1 Mainline
Route Number/Suffix 00867/ 0 N/A (NBI)
Feature Intersect (6) SAN CARLOS BAY
Critical Facility Not Defense-crit
Facility Carried (7) CR-867
Mile Point (11) 0
Latitude (16) 026d27'17" Long (17) 082d02'10"

Roadway Traffic and Accidents

Lanes (28) 2 Medians 0 Speed 35 mph
ADT Class ADT Class 4
Recent ADT (29) 19690 Year (30) 2011
Future ADT (114) 20675 Year (115) 2031
Truck % ADT (109) 7
Detour Length (19) 99 mi
Detour Speed -1 mph
Accident Count -1 Rate -1

Roadway Classification

Nat. Hwy Sys (104) 0 Not on NHS
National base Net (12) Not on Base Network
LRS Inventory Rte (13a) 12 000 000 Sub Rte (13b) 00
Functional Class (26) 16 Urban Minor Arterial
On Federal Aid System Y
Defense Hwy (100) 0 Not a STRAHNET hwy
Direction of Traffic (102) 2 2-way traffic
Emergency ☒

Roadway Clearances

Vertical (10) 99.99 ft Appr. Road (32) 40
Horiz. (47) 40 ft Roadway (51) 40 ft
Truck Network (110) 0 Not part of natl netwo
Toll Facility (20) 2 On toll road
Fed. Lands Hwy (105) 0 N/A (NBI)
School Bus Route ☒
Transit Route ☒

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Structure Identification

Admin Area Lee County
District (2) D1 - Bartow
County (3) (12)Lee
Place Code (4) Sanibel
Location (9) 3RD STRUCT S OF TOLL PLAZ
Border Br St/Reg (98) Not Applicable (P) Share 0 %
Border Struct No (99) _
FIPS State/Region (1) 12 Florida Region 4-Atlanta
NBIS Bridge Len (112) Meets NBI Length
Parallel Structure (101) No || bridge exists
Temp. Structure (103) Not Applicable (P)
Maint. Resp. (21) 2 County Hwy Agency
Owner (22) 2 County Hwy Agency
Historic Signif. (37) 5 Not eligible for NRHP

Geometrics

Spans in Main Unit (45) 27
Approach Spans (46) 0
Length of Max Span (48) 144 ft
Structure Length (49) 3866.6 ft
Total Length 3906.6 ft
Deck Area 166651 sqft
Structure Flared (35) 0 No flare

Age and Service

Year Built (27) 2007
Year Reconstructed (106) 0
Type of Service On (42a) 1 Highway
Under (42b) 5 Waterway
Fracture Critical Details Not Applicable

Structure Type and Material

Curb/Sidewalk (50): Left 0 ft Right 0 ft
Bridge Median (33): 0 No median
Main Span Material (43A): 6 P/S Conc Continuous
Appr Span Material (44A): Not Applicable (P)
Main Span Design (43B): 02 Stringer/Girder
Appr Span Design (44B): Not Applicable (P)

Deck Type and Material

Deck Width (52): 43.1
Skew (34): 0
Deck Type (107): 1 Concrete-Cast-in-Place
Surface (108): 0 None
Membrane: 0 None
Deck Protection: None

Appraisal

Structure Appraisal

Open/Posted/Closed (41) A Open, no restriction
Deck Geometry (68) 5 Above Tolerable
Underclearances (69) N Not applicable (NBI)
Approach Alignment (72) 8-No Speed Red thru Curv
Bridge Railings (36a) 1 Meets Standards
Transitions (36b) 1 Meets Standards
Approach Guardrail (36c) 1 Meets Standards
Approach Guardrail ends (36d) 1 Meets Standards
Scour Critical (113) 8 Stable Above Footing

Navigation Data

Navigation Control (38) Permit Required
Nav Vertical Clr (39) 26 ft
Nav Horizontal Clr (40) 96.2 ft
Min Vert Lift Clr (116) 0 ft
Pier Protection (111) 2 In-Place, Functioning

NBI Condition Rating

Sufficiency Rating 79
Health Index 99.25
Structural Eval (67) 7 Above Min Criteria
Deficiency Not Deficient

Minimum Vertical Clearance

Over Structure (53) 99.99 ft
Under (reference) (54a) N Feature not hwy or RR
Under (54b) 0 ft

Minimum Lateral Underclearance

Reference (55a) N Feature not hwy or RR
Right Side (55b) 0 ft
Left Side (56) 0 ft

Load Rating

Design Load (31) HL 93
Rating Date 4/21/2004 Initials MCM
Posting (70) 5 At/Above Legal Loads

Operating Type (63) 1 LF Load Factor
Operating rating (64) 99.9 tons Alternate -1
Inventory Type (65) 1 LF Load Factor
Inventory Rating (66) 59.2 tons Alternate -1
Alt Meth -1

Schedule

Current Inspection

Inspection Date: 11/17/2011
Inspector: KN738AB-P - Anthony Bibelhauser
Bridge Group: BD523
Primary Type: Regular NBI
Review Required: ☒

Next Inspection Date Scheduled

NBI: 11/17/2013
Element: 11/17/2013
Fracture Critical:
Underwater: 11/17/2013
Other/Special:

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Schedule Cont.

Inspection Types Performed NBI ☒ Element ☒ Fracture Critical ☐ Underwater ☒ Other Special ☐

Inspection Intervals	Required (92)	Frequency (92)	Last Date (93)
Fracture Critical	☐	mos	
Underwater	☒	24 mos	10/25/2011
Other Special	☐	mos	
NBI		24 mos (91)	11/17/2011 (90)

Inspection Resources

Crew Hours	40
Flagger Hours	8
Helper Hours	0
Snooper Hours	6
Special Crew Hours	12
Special Equip Hours	0

Custom

General Bridge Information

Parallel Bridge Seq	
Channel Depth	24.701 ft
Radio Frequency	-1
Phone Number	(000) 000-0000
Exception Date	
Exception Type	Unknown
Accepted By Maint	00/00/0000
Warranty Expiration	00/00/0000
Bridge Rail 1	Steel barrier
Bridge Rail 2	Not applicable-No rail
Electrical Devices	Navigation lights only
Culvert Type	Not applicable
Maintenance Yard	0
FIHS ON / OFF	No Routes on FIHS
Previous Structure	124041
2nd Previous Structure	
Replacement Structure	

Bridge Load Rating Information

HS20 Govr. Span Length	144 ft
L-Rating Origination	Design Plans
Load Rating Date	04/21/2004
Method Calculation	Others
Load Dist. Factor	1.047
Impact Factor	19
Design Method	Load Factor
Design Measure	English
Recommend SU Posting	99 tons
Recommend C Posting	99 tons
Recommend ST Posting	99 tons
Gov FB Span	0 ft
Gov FB Spacing	0 ft
FB HS20 Rating	0 tons
FB SU4 Rating	0 tons
FB Present	N
FB INV Rating Factor	0
FB OPR Rating Factor	0
FB FL 120	0 tons
Single Unit Truck 2 Axles	91.6 tons
Single Unit Truck 3 Axles	76.6 tons
Single Unit Truck 4 Axles	82.4 tons
Combination Unit Truck 3 Axles	93.5 tons
Combination Unit Truck 4 Axles	84.4 tons
Combination Unit Truck 5 Axles	92.899 tons
Truck Trailer 5 Axles	98.1 tons
Posting Weight	99 tons
Actual SU Posting	99 tons
Actual C Posting	99 tons
Actual ST Posting	99 tons
FL 120 Long Gov Span	-1 tons
FL 120 Trans	-1 tons
Single Axle Trans	-1 tons
Tandem Axle Trans	-1 tons
Wing Span	-1 ft
Web to Web Span	-1 ft
HS20 OPR Rating Max Span	98.9 tons
FL120 Long Max Span	-1 tons

Bridge Scour and Storm Information

Pile Driving Record	All pile driving records
Foundation Type	Foundation details
Mode of Flow	Tidal
Rating Scour Eval	Low Risk - High
Highest Scour Eval	No phase completed
Scour Recommended I	No recommendation
Scour Recommended II	No recommendation
Scour Recommended III	No recommendation
Scour Elevation	999 ft
Action Elevation	999 ft
Storm Frequency	999

Condition

NBI Rating

Channel (61)	7 Minor Damage
Deck (58)	7 Good
Superstructure (59)	7 Good
Substructure (60)	7 Good
Culvert (62)	N N/A (NBI)
Waterway (71)	8 Equal Desirable
Unrepaired Spalls	-1 sq.ft.
Review Required	☒

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Elements

Inspection Date: 11/17/2011PROM

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Unit 1	12/4	Bare Concrete Deck	166651	100.	0	.	0	.	0	.	0	.	166651 sf.

Notes Note: Two 4-1/2in. diameter fiberglass conduits and one 3-1/2in. diameter PVC conduit are suspended from hangers anchored to the underside of Bay 1 in all spans. The type of anchorage for the hangers is unknown.

There is a navigational swing light attached to the left and right fascia of span 11 by three undetermined type of anchors. Refer to Photo 1.

CS1: There is a light accumulation of dirt and debris in the shoulder areas.

The deck top has minor transverse and diagonal cracks up to 1/64in wide in numerous span and transverse cracks up to 1/32in wide over some bents with no expansion joint - NEW.

The undersides of the overhangs have full width x up to 1/64in. wide transverse cracks, some with efflorescence.

Unit 1	300/4	Strip Seal Exp Joint	429	99.54	2	.46	0	.	0	.	0	.	431 lf.

Notes Note: Joints are at Abutments 1 and 28 and at Piers 4, 7, 10, 13, 16, 19, 22 and 25.

CS1: The joints are filling with dirt and debris, but are functioning as intended at this time.

CS2: There is a 16in long area where the gland has pulled out of its slot in the left shoulder over Pier 10 - NEW. Refer to Photo 2.

Unit 1	334/4	Metal Rail Coated	7674	99.22	60	.78	0	.	0	.	0	.	7734 lf.

Notes CS2: The bridge rails have minor impact related scrapes with no surface corrosion at several locations.

Several of the rail to post fasteners on both bridge rails have minor surface corrosion - NEW. Refer to Photo 3. REPAIR

Unit 1	109/4	P/S Conc Open Girder	15404	99.61	60	.39	3	.	0	.	0	.	15467 lf.

Notes CS1: The beams have multiple hairline diagonal cracks in the lower flange and webs up to 10ft. predominately in the exterior beams near the bearing areas, extending up and away from the supports - INCREASED.

These cracks vary in length, number of cracks and exact location and are predominately in the exterior beams. The cracks on Beam 8-4 were marked with a red paint stick to track the general trend in crack lengths. Refer to Photo 4.

The outside faces of the exterior beams have numerous hairline horizontal cracks up to 30in long throughout the length - NEW. Refer to Photo 5.

CS2: The exterior face of Beam 11-1 at the top flange to web chamfer has a 1/32in wide horizontal crack starting at Pier 11 extending to mid-span - NEW. Refer to Photos 6 and 7. REPAIR

CS3: The west face of the bottom flange of Beam 6-4 at Pier 7 has a 30in. x 12in. delamination. Refer to Photo 8. REPAIR

Unit 1	310/4	Elastomeric Bearing	216	100.	0	.	0	.	0	.	0	.	216 ea.

Notes

Unit 1	563/4	Acc Ladd & Plat	8	100.	0	.	0	.	0	.	0	.	8 ea.

Notes Note: The quantity includes four fender access ladders and four platforms/walkways.

Unit 1	580/4	Navigational Lights	1	100.	0	.	0	.	0	.	0	.	1 ea.

Notes Note: This element represents six fender lights, two clearance at centerline of channel gauge lights and two centerline of channel swing lights.

CS1: The conduit at the southwest navigational light on the south fender is separated - NEW. Refer to Photo 9. REPAIR

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Elements

Inspection Date: 11/17/2011PROM

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Unit 1	205/4	R/Conc Column	52	100.	0	.	0	.	0	.	0	.	52 ea.

Notes

Unit 1	207/4	P/S Conc Holl Pile	359	99.72	1	.	0	.	0	.	0	.	360 ea.

Notes The following was noted by the underwater inspectors:
CS1: Pile 11-6 has a corrugated metal pipe sleeve around it with no fill material, starting 24in. below the footer and extending to the groundline. This pile could not be inspected (possible incomplete jacket).

CS2: The northeast corner of Pile 6-4 has a 3ft. 7in. x 10in. x 2-1/2in. spall with no exposed steel, 28in. below the footer.

Unit 1	215/4	R/Conc Abutment	70	100.	0	.	0	.	0	.	0	.	70 lf.

Notes CS1: The outside faces of Abutment 1 cheek walls have vertical/diagonal crack up to 1/64in wide - NEW.

Unit 1	220/4	R/C Sub Pile Cap/Ftg	18	69.23	8	30.77	0	.	0	.	0	.	26 ea.

Notes CS2: The following footers have spalls with no exposed steel up to 24in. x 12in. x 8in.;
Footer 2, top face adjacent to west side of column 2-2 - NEW.
Footer 5, northeast corner
Footer 6, southeast and northeast corners
Footer 7, southeast and northeast corners
Footer 14, northeast corner
Footer 19, southeast corner

The following was noted by the underwater inspectors:
The northeast corner of Footer 5 has a 30in. x 10in. x 2in. spall with no exposed steel, 3ft. below the top of the footer.
The southeast corner of Footer 19 has a 25in. x 15in. x 2-1/2in. spall with no exposed steel, 27in. below the top of the footer.
Footers 25, 26 and 27 have a different construction with concrete formed sides. The sides have vertical cracks up to 1/16in. wide to full height with efflorescence.

CORRECTIVE ACTION TAKEN:
The spalls on Footings 4, 8, 9, 22 and 23 have been repaired.

Unit 1	234/4	R/Conc Cap	1121	100.	0	.	0	.	0	.	0	.	1121 lf.

Notes CS1: There is non-offensive graffiti on the south and north faces of Pier cap 2 - NEW. Refer to Photo 10. REPAIR

Unit 1	387/4	P/S Fender/Dolphin	384	100.	0	.	0	.	0	.	0	.	384 lf.

Notes The following was noted by the underwater inspectors:
CS1: The lower connecting hardware has light corrosion with no measurable section loss.

Unit 1	393/4	Blkhd Sewl Any Mater	350	100.	0	.	0	.	0	.	0	.	350 ft

Notes Note: This element represents the north bulkhead constructed with concrete sheet piling and a concrete cap.

Unit 1	396/4	Other Abut Slope Pro	2500	100.	0	.	0	.	0	.	0	.	2500 sf.

Notes Note: This element includes the rock rubble rip rap and concrete block mats.

Unit 1	290/4	Channel	0	.	1	100.	0	.	0	.	0	.	1 ea.

Notes CS2: Some channel measurements have a 2ft. or greater change since the previous inspection. The reason for the changes may be due to the strong currents altering the channel bottom.

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Elements

Inspection Date: 11/17/2011PROM

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Unit 1	321/4	R/Conc Approach Slab	2	100.	0	.	0	.	0	.	0	.	2 ea.

Notes Note: The approach slabs are not visible due to an overlay of asphalt.

Unit 1	478/4	MSE Walls	120	100.	0	.	0	.	0	.	0	.	120 lf.

Notes Note: This element quantifies 30lf at each corner.

Total Number of Elements: 18

Inspection Information

Inspection Date: 11.17.2011 **Type:** Regular NBI

Inspector: KN738AB-P - Anthony Bibelhauser

Inspection Notes: Sufficiency Rating Calculation Accepted by KNVOLFA-P at 2011-12-06 10:15:43

LOAD CAPACITY EVALUATION:
The findings of this inspection reveal no reason to warrant a new analysis; therefore, the current load rating dated 4/21/04 results still govern.

A 60ft. lift boat was used for this inspection.

The NBI rating for SIA Item 58, Deck, has been lowered from 8 to 7 due to numerous diagonal and transverse cracks in the deck top.

NON-STRUCTURAL ITEMS:

APPROACH ROADWAY:
The south approach roadway in the northbound lane has settled up to 1/2in at the approach slab transition - NEW.

Structure Notes

BRIDGE OWNER: LEE COUNTY

TRAFFIC STATEMENT: According to the load rating dated 4/21/04, the structure does not require posting. This structure is not posted.

Structure was inventoried from south to north.

This structure replaced Bridge No. 124041.

Access to the underside of the bridge requires a 60ft. lift boat or an under bridge vehicle with a lane shift traffic control setup.

A power boat was used for groundline measurements and substructure inspection.

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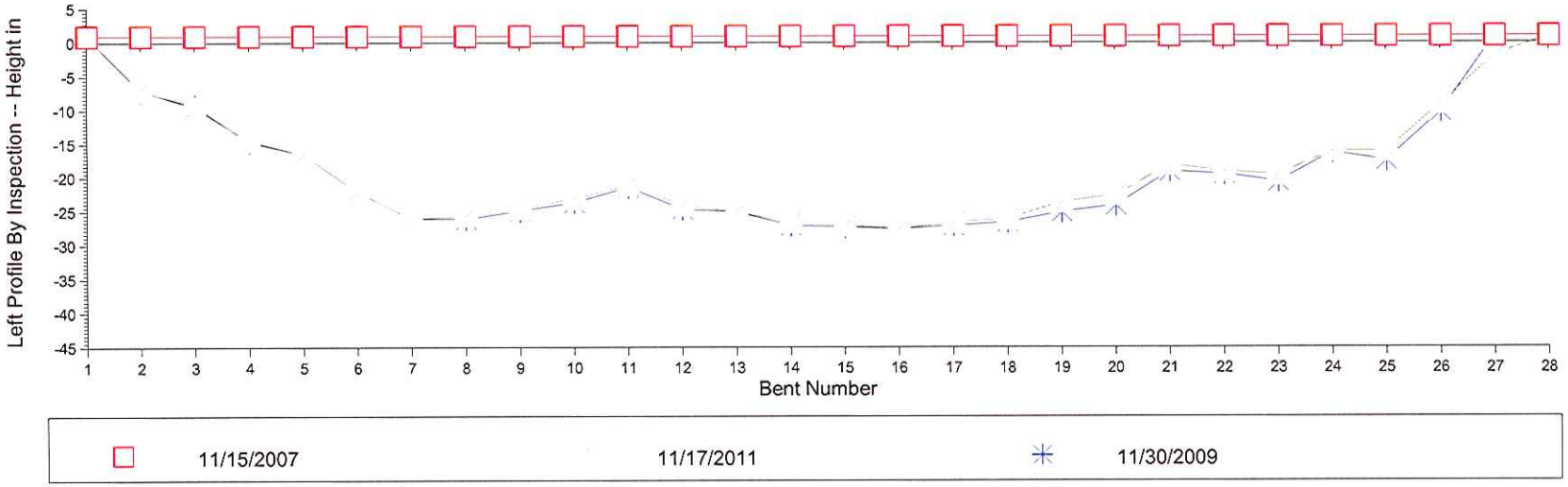
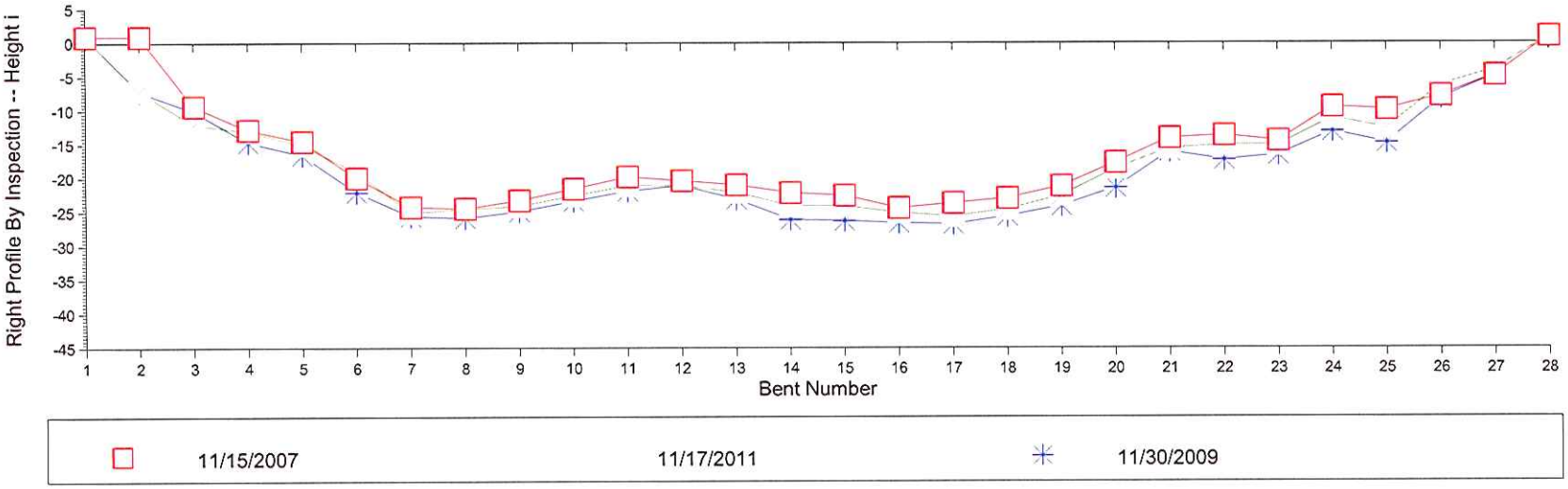
FLORIDA DEPARTMENT OF TRANSPORTATION BRIDGE MANAGEMENT SYSTEM
Bridge Profile Report

REPORT ID: INVT016

Structure #: 124114

DATE PRINTED: 12/28/2011





Profile Data - Numerical Summary

Inspection Date and Key: 11/17/2011 PROM

(All Heights Are In Feet)

Bent #	Left Height	Right Height
1	-1	-1
2	7	7
3	9.5	12
4	14.5	13
5	16.5	15
6	22	19
7	26	25
8	25.5	24.5
9	24.5	24
10	23	22.5
11	21	21
12	24	21
13	25	22
14	26.5	24
15	27	24
16	27.5	25
17	26.5	25.5
18	26	24.5
19	23.5	22.5
20	22.5	18.5
21	18	15.5
22	19	15
23	19.5	15
24	16	11
25	16	12.5
26	9	6.2
27	1.9	3.9

Profile Data - Numerical Summary

Inspection Date and Key: 11/17/2011 PROM

(All Heights Are In Feet)

Bent #	Left Height	Right Height
28	-1	-1

Air Temp:

Profile Notes:

Measurements referenced from the tip of the footing.
Waterline at Footing 3: 4ft.
Note: a measurement showing a -1 indicates that location was out of the water.

Inspection Date and Key: 11/30/2009 SJCS

1	-1	-1
2	7.1	7.1
3	9.3	10
4	14.6	14.6
5	16.5	16.5
6	22	22
7	26	25.5
8	26	25.8
9	24.8	24.8
10	23.6	23.3
11	21.3	21.8
12	24.6	21
13	25	23
14	27	26
15	27.2	26.2
16	27.5	26.5
17	27	26.7
18	26.5	25.5
19	25	24
20	24	21.3
21	19	16
22	19.4	17.2
23	20.5	16.5
24	16.2	13
25	17.4	14.7

Profile Data - Numerical Summary

Inspection Date and Key: 11/30/2009 SJCS

Bent #	Left Height	Right Height
26	10.2	8.2
27	-1	4.8
28	-1	-1

(All Heights Are In Feet)

Air Temp: 1

Profile Notes:

Meaurements referenced from the top of the footers.
Waterline at Footer 3 = 2.8ft.
Note: A meaurement showing a -1 indicates that location was out of the water.

Inspection Date and Key: 11/15/2007 NPFY

1	-1	-1
2	-1	-1
3	-1	9.3
4	-1	12.8
5	-1	14.5
6	-1	19.9
7	-1	24.2
8	-1	24.4
9	-1	23.2
10	-1	21.5
11	-1	19.7
12	-1	20.3
13	-1	20.9
14	-1	22.1
15	-1	22.5
16	-1	24.3
17	-1	23.6
18	-1	22.9
19	-1	21.1
20	-1	17.6
21	-1	14
22	-1	13.6
23	-1	14.4

Profile Data - Numerical Summary

Inspection Date and Key: 11/15/2007 NPFY

(All Heights Are In Feet)

Bent #	Left Height	Right Height
24	-1	9.4
25	-1	9.8
26	-1	7.8
27	-1	4.8
28	-1	-1

Air Temp:

Profile Notes:

Profile Reference: Top of Footer 3.
Waterline at Footer 3: 2.8FT
NOTE: Left side measurements were not taken due to the ongoing demolition of the replaced structure at the time of this inspection.

BOLT Underwater Services, Inc
7950 62ND STREET NORTH, PINELLAS PARK, FL 33781

Routine Underwater Bridge Inspection Report for VOLKERT & ASSOCIATES, INC.

NBI Structure No. (8): **124114 (Structure C / Sanibel)**

Underwater Date (93): 10/25/11

Structure/Roadway Identification:

District (2): 01
County (3): Lee
Feature Intersected (6): San Carlos Bay
Facility Carried (7): CR 867

Underwater Inspection Details:

Special Crew Hours: 12.0
Max. Depth: 25ft.
Type of Dive Insp.: SCUBA
Type of Boat Used: 21ft.
Water Type/Marine Growth: Salt-Tidal / Barnacles - Oysters

Previous Inspection:

Lead Diver:	C.B.I. No.:	Inspection Date:
Hays, Stephen F.	00438	10/05/2009

Inspection Personnel:

Field Personnel:	Title	C.B.I. No.:	Duty:	Signature:
Hoogland, Keith S.	C.B.I. Diver-Inspector	00341/Lead	Dive	KLH
Young, Ryan C.	Diver-Inspector		Dive	
Tumaniszwili, Alex T.	Diver-Inspector		Tend	

PILING/COLUMNS
ELEMENT: 207 HLW CORE 360: ea.

Condition State:	QTY:	Recommended Feasible Action:
CS-1	359	**Do Nothing**

Footer 2 has no visible piling.

Pile 11-6: There is a CMP sleeve around the pile with no fill material, starting 24in. below footer to the groundline. This pile could not be inspected (possible incomplete jacket).

CS-2	1	**Do Nothing**

Pile 6-4: Northeast edge 28in. below footer, spall, no exposed steel, 3ft. 7in. H x 10in. W x 2½in. D.

NOTE: Piles 3-1 through 3-15, 5-1, 5-2, 5-11 through 5-13, 11-1, 11-2, 11-13 through 11-15, 23-6 through 23-10, 23-15, 26-1, 26-2, 26-11 through 26-14 and all deficiencies were cleaned.

SUBMERGED FOOTER
ELEMENT: 220 R/CONCRETE 25ea.

NOTE: Footer 27 was dry at the time of inspection.

Condition State:	QTY:	Recommended Feasible Action:
CS-1	23	**Do Nothing**

Footers 25 and 26 have a different construction with a concrete formed side. The sides have vertical cracks up to 1/16in. wide to full height some with efflorescence and no corrosion bleedout.

CS-2	2	**Do Nothing**

Footer 5: Northeast corner 3ft. below top of footer, spall, no exposed steel, 30in. H x 10in. W x 2in. D.
Footer 19: Southeast corner 27in. below top of footer, spall, no exposed steel, 25in. H x 15in. W x 2½in. D.

NOTE: Footers 6 through 8 and all deficiencies were cleaned.

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CHANNEL
ELEMENT: 290 1: ea.

Condition State:	QTY:	Recommended Feasible Action:
CS-1	1	Do Nothing

FENDER SYSTEM
ELEMENT: 387 P/S CONCRETE 384 lf.

NOTE: Bottom wale is composite material.

Condition State:	QTY:	Recommended Feasible Action:
CS-1	384	Do Nothing

The lower connecting hardware has light corrosion with no measureable section loss.

INSPECTION NOTES: Divers inspected three hundred sixty 30in. piling in Bents 3 through 26, Footers 2 through 26, Fender System and Channel.
STRUCTURE NOTES: Structure inventoried south to north.

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EXHIBIT L

BRIDGE INSPECTION REPORT

PREPARED FOR: FLORIDA DEPARTMENT OF TRANSPORTATION

BRIDGE OWNER: LEE COUNTY

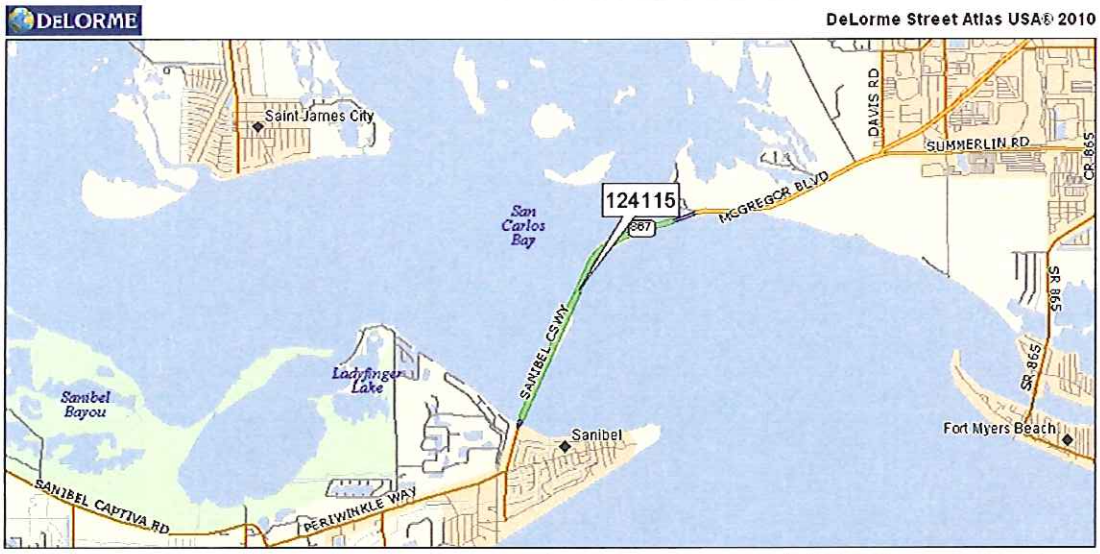
INSPECTED BY: VOLKERT

BRIDGE NO. 124115 | **CONTENTS OF REPORT** | **INSPECTION DATE:** 11/16/2011

- Pontis Report
- CIDR
- Scour Elevation (Profile)
- * Addendum (Element Notes & Photos/Sketches)
- U/W Inspection Report
- * Fracture Critical Data
- * Load Rating Analysis Summary

*This section is not included in this report.

STRUCTURE B SANIBEL CAUSEWAY OVER SAN CARLOS BAY | **2ND STRUCTURE SOUTH OF TOLL PLAZA**



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www.delorme.com

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Data Zoom 11-0

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
Inspection/CID Report with PDF attachment(s)

BY:	VOLKERT, INC.	STRUCTURE NAME:	STRUCTURE B SANIBEL CAUSEV
OWNER:	2 County Hwy Agency	YEAR BUILT:	2007
MAINTAINED BY:	2 County Hwy Agency	SECTION NO.:	12 000 000
STRUCTURE TYPE:	6 P/S Conc Continuous - 02 Stringer/Girder	MP:	0
LOCATION:	2ND STRUC S OF TOLL PLAZA	ROUTE:	00867
SERVICE TYPE ON:	1 Highway	FACILITY CARRIED:	CR-867
SERV TYPE UND:	5 Waterway	FEATURE INTERSECTED:	SAN CARLOS BAY

☐ FUNCTIONALLY OBSOLETE ☐ STRUCTURALLY DEFICIENT

TYPE OF INSPECTION: Regular NBI

DATE FIELD INSPECTION WAS PERFORMED: ABOVE WATER: 11/16/2011 UNDERWATER: 10/26/2011

SUFFICIENCY RATING: 79.0
HEALTH INDEX: 99.30

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FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
Inspection/CID Report with PDF attachment(s)

BRIDGE ID: 124115
DISTRICT: 01 Bartow

INSPECTION DATE: 11/16/2011 ZOMJ

BY: VOLKERT, INC.
OWNER: 2 County Hwy Agency
MAINTAINED BY: 2 County Hwy Agency
STRUCTURE TYPE: 6 P/S Conc Continuous - 02 Stringer/Girder
LOCATION: 2ND STRUC S OF TOLL PLAZA
SERVICE TYPE ON: 1 Highway
SERV TYPE UND: 5 Waterway

STRUCTURE NAME: STRUCTURE B SANIBEL CAUSEWAY
YEAR BUILT: 2007
SECTION NO.: 12 000 000
MP: 0
ROUTE: 00867
FACILITY CARRIED: CR-867
FEATURE INTERSECTED: SAN CARLOS BAY

☐ THIS BRIDGE CONTAINS FRACTURE CRITICAL COMPONENTS
☐ THIS BRIDGE IS SCOUR CRITICAL
☐ THIS REPORT IDENTIFIES DEFICIENCIES WHICH REQUIRE PROMPT CORRECTIVE ACTION
☐ FUNCTIONALLY OBSOLETE ☐ STRUCTURALLY DEFICIENT

TYPE OF INSPECTION: Regular NBI
DATE FIELD INSPECTION WAS PERFORMED: ABOVE WATER: 11/16/2011 UNDERWATER: 10/26/2011

SMART FLAGS:
None

OVERALL NBI RATINGS:
DECK: 7 Good
SUPERSTRUCTURE: 7 Good
SUBSTRUCTURE: 8 Very Good
PERF. RATING: Good
CHANNEL: 7 Minor Damage
CULVERT: N N/A (NBI)
SUFF. RATING: 79.0
HEALTH INDEX: 99.30

FIELD PERSONNEL / TITLE / NUMBER	INITIALS
Bibelhauser, Anthony - Bridge Inspector (CBI #00359) (lead)	AB
Eorgan, Steve - Bridge Inspector (CBI#00362)	
Hoogland, Keith - Bridge Inspector/Diver (CBI#00341) (lead)	
Tumaniszwili, Alex P. - Diver/Inspector	
Young, Ryan C. - Diver/Inspector	

REVIEWING BRIDGE INSPECTION SUPERVISOR:
Rucks, Edward - CBI (#00273) ER

CONFIRMING REGISTERED PROFESSIONAL ENGINEER:
Teal, Daniel - PROJECT MANAGER (PE # 42097)
VOLKERT, INC.
3409 W. LEMON STREET STE 1
CERTIFICATE OF AUTHORIZATION NO 4641
TAMPA, FL 33609

DANIEL BOWERS TEAL LICENSE No. 42097 STATE OF FLORIDA PROFESSIONAL ENGINEER
JAN 05 2012

SIGNATURE:
DATE:

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All Elements

UNIT: Structure Unit 1 DECKS

ELEMENT/ENV: 12/4 Bare Concrete Deck 80684 sf. ELEM CATEGORY: Decks/Slabs

CONDITION STATE (5)	DESCRIPTION	QUANTITY
1	The surface and underside of the deck have few repaired areas, there are few spalls/delaminations in the deck surface or underside and the only cracking is superficial or surface map cracking. The combined distressed area is 2% or less of the deck area.	80684 sf.

ELEMENT INSPECTION NOTES:

Note: Two 4-1/2in. diameter fiberglass conduits and one 3-1/2in. diameter PVC conduit are suspended from hangers anchored to the underside of Bay 1 in all spans. The type of anchorage for the utility hangers is unknown.

CS1: There is a light accumulation of dirt and debris in the shoulder areas.

The deck top has transverse and diagonal cracks up to 1/64in wide throughout and isolated areas of map cracking less than 1/64in wide - NEW.

The undersides of the overhangs have full width x up to 1/64in. wide transverse cracks, some with efflorescence.

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All Elements

UNIT: Structure Unit 1 DECKS

ELEMENT/ENV: 300/4 Strip Seal Exp Joint 216 lf. ELEM CATEGORY: Joints

CONDITION STATE (3)	DESCRIPTION	QUANTITY
1	The element shows minimal deterioration. There is no leakage at any point along the joint. Gland is secure and has no defects. Debris in joint is not causing any problems. The adjacent deck and/or header is sound.	216 lf.

ELEMENT INSPECTION NOTES:

Note: Joints are at Abutments 1 and 14 and Piers 4, 7 and 10.

CS1: The joints are filling with dirt and debris, but are functioning as intended at this time.

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All Elements

UNIT: Structure Unit 1 DECKS

ELEMENT/ENV: 334/4 Metal Rail Coated 3744 lf. ELEM CATEGORY: Railing

CONDITION STATE (5)	DESCRIPTION	QUANTITY
1	There is no evidence of active corrosion. Protective coating is sound and functioning as intended to protect the element.	3684 lf.
2	There is little or no active corrosion. Surface corrosion has formed or is forming. Protective coating may have minor areas of deterioration.	60 lf.

ELEMENT INSPECTION NOTES:

Note: Barriers meet NCHRP TL4 criteria and meet SIA Item #36 standards.

CS2: The rail to post attachment hardware has light surface corrosion on approximately half of the posts - NEW. Refer to Photo 1. REPAIR

Post 1-5 right is missing both lower rail to post attachment nuts and the top two nuts are loose - NEW. Refer to Photo 2. REPAIR

Post 11-8 right is missing one of the lower rail to post attachment nuts - NEW. REPAIR

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All Elements

UNIT: Structure Unit 1 SUPERSTRUCTURE

ELEMENT/ENV: 109/4 P/S Conc Open Girder 7488 lf. ELEM CATEGORY: Superstructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	7488 lf.

ELEMENT INSPECTION NOTES:

CS1: The beams have multiple hairline diagonal cracks in the lower flange and web up to 8ft. long near the bearing areas, extending up and away from the supports - INCREASED. These cracks vary in length number of cracks and exact location and are predominately in the exterior beams. The cracks on Beam 12-1 were marked with a red paint stick to track the general trend in crack lengths. Refer to Photo 3.

The bottom flanges of the exterior beams typically have short hairline horizontal cracks up to 2ft long throughout the length - NEW.

Several of the poured beam end diaphragms have delaminations up to 10in x 8in - INCREASED.

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All Elements

UNIT: Structure Unit 1 SUPERSTRUCTURE

ELEMENT/ENV: 310/4 Elastomeric Bearing 104 ea. ELEM CATEGORY: Bearings

CONDITION STATE (3)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. Shear deformations are correct for existing temperatures.	104 ea.

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All Elements

UNIT: Structure Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 205/4 R/Conc Column 24 ea. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	24 ea.

ELEMENT/ENV: 207/4 P/S Conc Holl Pile 180 ea. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	180 ea.

ELEMENT/ENV: 215/4 R/Conc Abutment 70 lf. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	70 lf.

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All Elements

UNIT: Structure Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 220/4 R/C Sub Pile Cap/Ftg 12 ea. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	12 ea.

ELEMENT/ENV: 234/4 R/Conc Cap 518 lf. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	518 lf.

ELEMENT/ENV: 393/4 Blkhd Sewl Any Mater 480 ft ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	There is little or no deterioration. Surface defects only are in evidence. Random open joints may exist.	480 ft

ELEMENT INSPECTION NOTES:

Note: The element represents the bulkheads constructed with concrete sheet piling and concrete caps.

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All Elements

UNIT: Structure Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 396/4 Other Abut Slope Pro 1800 sf. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	There is little or no deterioration. Surface defects only are in evidence. Random open joints may exist.	1760 sf.
2	There may be minor deterioration, random open joints, cracking and weathering. Mortar in joints may show minor deterioration.	40 sf.

ELEMENT INSPECTION NOTES:

Note: This element represents the concrete block mat slope protection.

CS2: The south slope protection is intermittently undermined up to 18in wide x 10in deep along the bulkhead cap - NEW. Refer to Photo 4. REPAIR

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All Elements

UNIT: Structure Unit 1 CHANNEL

ELEMENT/ENV: 290/4 Channel **1 ea.** **ELEM CATEGORY:** Channel

CONDITION STATE (4)	DESCRIPTION	QUANTITY
2	Bank protection is in need of minor repairs, bank may be beginning to slump, minor stream bed movement may be evident or debris may be present.	1 ea.

ELEMENT INSPECTION NOTES:

The following was noted by the underwater inspectors:
CS2: Some piles have scour holes around them up to 18in. deep.
The groundline slopes up to 4ft. to the west side of the piling and 10ft. out from the piling on several bents.

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All Elements

UNIT: Structure Unit 1 MISCELLANEOUS

ELEMENT/ENV: 321/4 R/Conc Approach Slab 2 ea. **ELEM CATEGORY:** Other Elements

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The slab has not settled and shows no sign of deterioration other than superficial surface cracks.	2 ea.

ELEMENT INSPECTION NOTES:

Note: The approach slabs are not visible due to an overlay of asphalt.

CS1: The north and south approach slab joint headers have up to a 1/32in. wide longitudinal crack.

ELEMENT/ENV: 478/4 MSE Walls 120 lf. **ELEM CATEGORY:** Other Elements

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	There is little or no deterioration. Surface defects only are in evidence.	120 lf.

ELEMENT INSPECTION NOTES:

Note: The MSE walls were measured back 30ft. at each corner of the structure.

Structure Notes

BRIDGE OWNER: LEE COUNTY

TRAFFIC RESTRICTIONS: Based on the load rating dated 4/21/04, the structure does not require posting. This structure is not posted.

Structure was inventoried from south to north.

This structure replaced Bridge No. 124042.

Power boat with fathometer used for underbridge inspection and groundline measurements.

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INSPECTION NOTES: ZOMJ 11/16/2011

Sufficiency Rating Calculation Accepted by kn110ku-P at 2011-12-13 11:14:44
Sufficiency Rating Calculation Accepted by KNVOLFA-P at 2011-12-06 11:15:13

LOAD CAPACITY EVALUATION:
The findings of this inspection reveal no reason to warrant a new analysis; therefore, the current load rating dated 4/21/04 results still govern.

The NBI Rating for SIA Item 58, Deck, was lowered from 8 to 7 due to the cracking on the deck top.

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PHOTO 1: 334 METAL RAIL COATED

Light surface corrosion on bridge rail to post hardware.

REPAIR RECOMMENDATION:
Spot paint bridge rail to post hardware throughout both bridge rails.

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PHOTO 2: 334 METAL RAIL COATED

Missing bridge rail to post attachment nuts.

REPAIR RECOMMENDATION:
Replace missing rail to post attachment nuts on bridge rail posts 1-5 and 11-8 right and tighten loose nuts on post 1-5.

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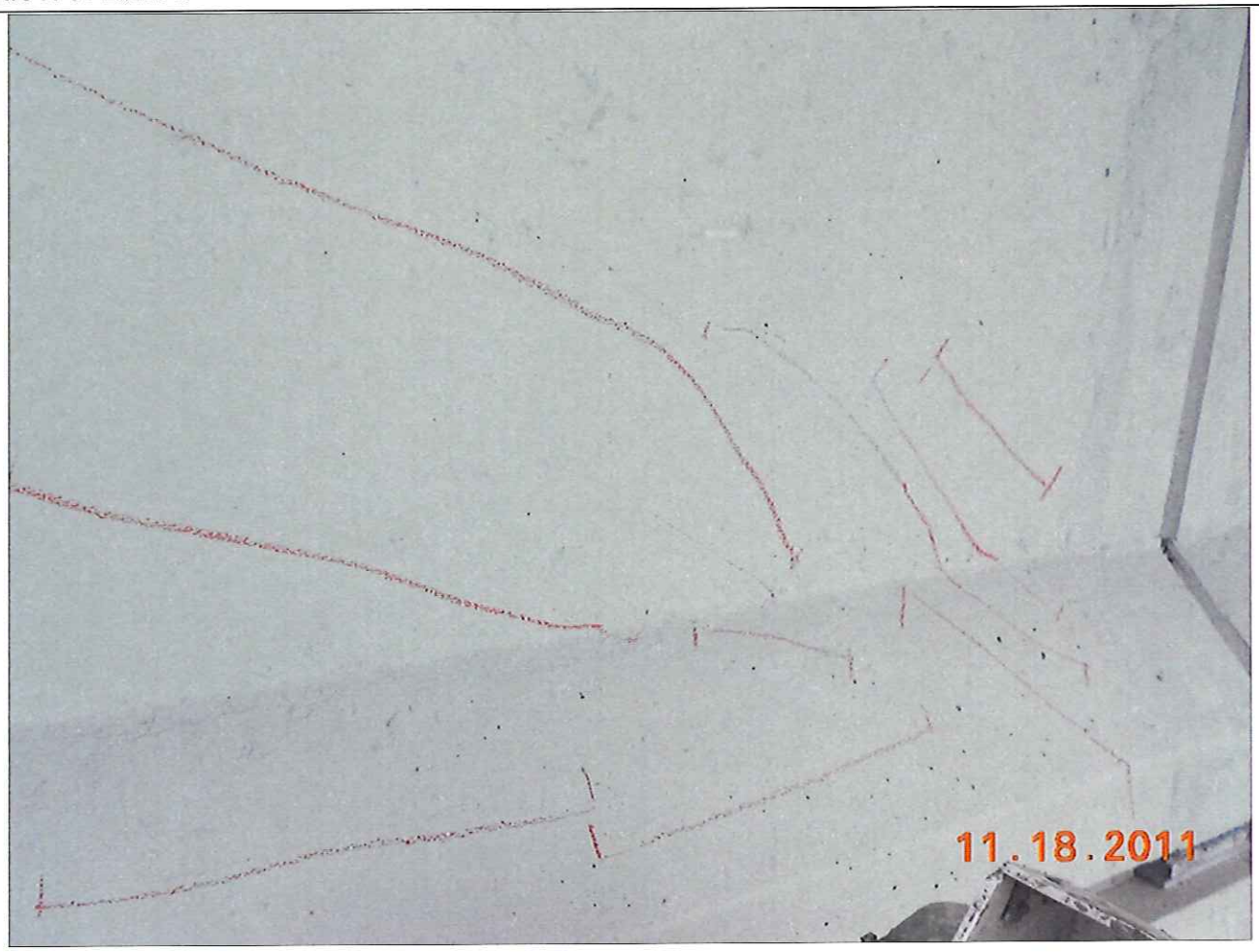

PHOTO 3: 109 P/S CONC OPEN GIRDER

Typical diagonal cracks in the exterior beams (Beam 2-1 marked in red shown).

REPAIR RECOMMENDATION:
None

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PHOTO 4: 396 OTHER ABUT SLOPE PRO

Undermined block mail slope protection along the south bulkhead cap.

REPAIR RECOMMENDATION:
Fill in undermining under south slope protection along the south bulkhead cap.

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Description

Structure Unit Identification

Bridge/Unit Key: 124115 1
Structure Name: STRUCTURE B SANIBEL CAUSEWAY
Description:
Type: M Main

Roadway Identification:

NBI Structure No (8) 124115
Position/Prefix (5) Route On Structure
Kind Hwy (Rte Prefix) 4 County Hwy
Design Level of Service 1 Mainline
Route Number/Suffix 00867/ 0 N/A (NBI)
Feature Intersect (6) SAN CARLOS BAY
Critical Facility Not Defense-crit
Facility Carried (7) CR-867
Mile Point (11) 0
Latitude (16) 026d28'19" Long (17) 082d01'40"

Roadway Traffic and Accidents

Lanes (28) 2 Medians 0 Speed 35 mph
ADT Class ADT Class 4
Recent ADT (29) 19690 Year (30) 2011
Future ADT (114) 20675 Year (115) 2031
Truck % ADT (109) 7
Detour Length (19) 99 mi
Detour Speed 0 mph
Accident Count -1 Rate -1

Roadway Classification

Nat. Hwy Sys (104) 0 Not on NHS
National base Net (12) Not on Base Network
LRS Inventory Rte (13a) 12 000 000 Sub Rte (13b) 00
Functional Class (26) 16 Urban Minor Arterial
On Federal Aid System Y
Defense Hwy (100) 0 Not a STRAHNET hwy
Direction of Traffic (102) 2 2-way traffic
Emergency ☒

Roadway Clearances

Vertical (10) 99.9 ft Appr. Road (32) 40
Horiz. (47) 40 ft Roadway (51) 40 ft
Truck Network (110) 0 Not part of natl netwo
Toll Facility (20) 2 On toll road
Fed. Lands Hwy (105) 0 N/A (NBI)
School Bus Route ☒
Transit Route ☒

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Structure Identification

Admin Area Lee County
District (2) D1 - Bartow
County (3) (12)Lee
Place Code (4) Sanibel
Location (9) 2ND STRUC S OF TOLL PLAZA
Border Br St/Reg (98) Not Applicable (P) Share 0 %
Border Struct No (99)
FIPS State/Region (1) 12 Florida Region 4-Atlanta
NBIS Bridge Len (112) Meets NBI Length
Parallel Structure (101) No || bridge exists
Temp. Structure (103) Not Applicable (P)
Maint. Resp. (21) 2 County Hwy Agency
Owner (22) 2 County Hwy Agency
Historic Signif. (37) 5 Not eligible for NRHP

Geometrics

Spans in Main Unit (45) 13
Approach Spans (46) 0
Length of Max Span (48) 144 ft
Structure Length (49) 1872 ft
Total Length 1912 ft
Deck Area 80684 sqft
Structure Flared (35) 0 No flare

Age and Service

Year Built (27) 2007
Year Reconstructed (106) 0
Type of Service On (42a) 1 Highway
Under (42b) 5 Waterway
Fracture Critical Details Not Applicable

Structure Type and Material

Curb/Sidewalk (50): Left 0 ft Right 0 ft
Bridge Median (33): 0 No median
Main Span Material (43A): 6 P/S Conc Continuous
Appr Span Material (44A): Not Applicable (P)
Main Span Design (43B): 02 Stringer/Girder
Appr Span Design (44B): Not Applicable (P)

Deck Type and Material

Deck Width (52): 43.1
Skew (34): 0
Deck Type (107): 1 Concrete-Cast-in-Place
Surface (108): 0 None
Membrane: 0 None
Deck Protection: None

Appraisal

Structure Appraisal

Open/Posted/Closed (41) A Open, no restriction
Deck Geometry (68) 5 Above Tolerable
Underclearances (69) N Not applicable (NBI)
Approach Alignment (72) 8-No Speed Red thru Curv
Bridge Railings (36a) 1 Meets Standards
Transitions (36b) 1 Meets Standards
Approach Guardrail (36c) 1 Meets Standards
Approach Guardrail ends (36d) 1 Meets Standards
Scour Critical (113) 8 Stable Above Footing

Navigation Data

Navigation Control (38) Permit Required
Nav Vertical Clr (39) 13.5 ft
Nav Horizontal Clr (40) 110 ft
Min Vert Lift Clr (116) 0 ft
Pier Protection (111) 1 Not Required

NBI Condition Rating

Sufficiency Rating 79
Health Index 99.3
Structural Eval (67) 7 Above Min Criteria
Deficiency Not Deficient

Minimum Vertical Clearance

Over Structure (53) 99.99 ft
Under (reference) (54a) N Feature not hwy or RR
Under (54b) 0 ft

Minimum Lateral Underclearance

Reference (55a) N Feature not hwy or RR
Right Side (55b) 0 ft
Left Side (56) 0 ft

Load Rating

Design Load (31) HL 93
Rating Date 4/21/2004 Initials MCM
Posting (70) 5 At/Above Legal Loads

Operating Type (63) 1 LF Load Factor
Operating rating (64) 99.9 tons Alternate -1
Inventory Type (65) 1 LF Load Factor
Inventory Rating (66) 59.2 tons Alternate -1
Alt Meth -1

Schedule

Current Inspection

Inspection Date: 11/16/2011
Inspector: KN738AB-P - Anthony Bibelhauser
Bridge Group: BD523
Primary Type: Regular NBI
Review Required: ☒

Next Inspection Date Scheduled

NBI: 11/16/2013
Element: 11/16/2013
Fracture Critical:
Underwater: 11/16/2013
Other/Special:

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Schedule Cont.

Inspection Types Performed NBI ☒ Element ☒ Fracture Critical ☐ Underwater ☒ Other Special ☐

Inspection Intervals	Required (92)	Frequency (92)	Last Date (93)
Fracture Critical	☐	mos	
Underwater	☒	24 mos	10/26/2011
Other Special	☐	mos	
NBI		24 mos (91)	11/16/2011 (90)

Inspection Resources	
Crew Hours	10
Flagger Hours	0
Helper Hours	0
Snooper Hours	0
Special Crew Hours	3
Special Equip Hours	0

Custom

General Bridge Information

Parallel Bridge Seq	-1
Channel Depth	22.5 ft
Radio Frequency	-1
Phone Number	(000) 000-0000
Exception Date	
Exception Type	Unknown
Accepted By Maint	00/00/0000
Warranty Expiration	00/00/0000
Bridge Rail 1	Steel barrier
Bridge Rail 2	Not applicable-No rail
Electrical Devices	No electric service
Culvert Type	Not applicable
Maintenance Yard	0
FIHS ON / OFF	No Routes on FIHS
Previous Structure	124042
2nd Previous Structure	
Replacement Structure	

Bridge Load Rating Information

HS20 Govr. Span Length	144 ft
L-Rating Origination	Design Plans
Load Rating Date	04/21/2004
Method Calculation	Others
Load Dist. Factor	1.047
Impact Factor	19
Design Method	Load Factor
Design Measure	English
Recommend SU Posting	99 tons
Recommend C Posting	99 tons
Recommend ST Posting	99 tons
Gov FB Span	0 ft
Gov FB Spacing	0 ft
FB HS20 Rating	0 tons
FB SU4 Rating	0 tons
FB Present	N
FB INV Rating Factor	0
FB OPR Rating Factor	0
FB FL 120	0 tons
Single Unit Truck 2 Axles	91.6 tons
Single Unit Truck 3 Axles	76.6 tons
Single Unit Truck 4 Axles	82.4 tons
Combination Unit Truck 3 Axles	93.5 tons
Combination Unit Truck 4 Axles	84.4 tons
Combination Unit Truck 5 Axles	92.899 tons
Truck Trailer 5 Axles	98.1 tons
Posting Weight	99 tons
Actual SU Posting	99 tons
Actual C Posting	99 tons
Actual ST Posting	99 tons
FL 120 Long Gov Span	-1 tons
FL 120 Trans	-1 tons
Single Axle Trans	-1 tons
Tandem Axle Trans	-1 tons
Wing Span	-1 ft
Web to Web Span	-1 ft
HS20 OPR Rating Max Span	98.9 tons
FL120 Long Max Span	-1 tons

Bridge Scour and Storm Information

Pile Driving Record	All pile driving records
Foundation Type	Foundation details
Mode of Flow	Tidal
Rating Scour Eval	Low Risk - High
Highest Scour Eval	No phase completed
Scour Recommended I	No recommendation
Scour Recommended II	No recommendation
Scour Recommended III	No recommendation
Scour Elevation	999 ft
Action Elevation	999 ft
Storm Frequency	100

Condition

NBI Rating

Channel (61)	7 Minor Damage
Deck (58)	7 Good
Superstructure (59)	7 Good
Substructure (60)	8 Very Good
Culvert (62)	N N/A (NBI)
Waterway (71)	8 Equal Desirable
Unrepaired Spalls	-1 sq.ft.
Review Required	☒

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Elements

Inspection Date: 11/16/2011ZOMJ

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	12/4	Bare Concrete Deck	80684	100.	0	.	0	.	0	.	0	.	80684 sf.

Notes Note: Two 4-1/2in. diameter fiberglass conduits and one 3-1/2in. diameter PVC conduit are suspended from hangers anchored to the underside of Bay 1 in all spans. The type of anchorage for the utility hangers is unknown.

CS1: There is a light accumulation of dirt and debris in the shoulder areas.

The deck top has transverse and diagonal cracks up to 1/64in wide throughout and isolated areas of map cracking less than 1/64in wide - NEW.

The undersides of the overhangs have full width x up to 1/64in. wide transverse cracks, some with efflorescence.

Structur	300/4	Strip Seal Exp Joint	216	100.	0	.	0	.	0	.	0	.	216 lf.

Notes Note: Joints are at Abutments 1 and 14 and Piers 4, 7 and 10.

CS1: The joints are filling with dirt and debris, but are functioning as intended at this time.

Structur	334/4	Metal Rail Coated	3684	98.4	60	1.6	0	.	0	.	0	.	3744 lf.

Notes Note: Barriers meet NCHRP TL4 criteria and meet SIA Item #36 standards.

CS2: The rail to post attachment hardware has light surface corrosion on approximately half of the posts - NEW. Refer to Photo 1. REPAIR

Post 1-5 right is missing both lower rail to post attachment nuts and the top two nuts are loose - NEW. Refer to Photo 2. REPAIR

Post 11-8 right is missing one of the lower rail to post attachment nuts - NEW. REPAIR

Structur	109/4	P/S Conc Open Girder	7488	100.	0	.	0	.	0	.	0	.	7488 lf.

Notes CS1: The beams have multiple hairline diagonal cracks in the lower flange and web up to 8ft. long near the bearing areas, extending up and away from the supports - INCREASED. These cracks vary in length number of cracks and exact location and are predominately in the exterior beams. The cracks on Beam 12-1 were marked with a red paint stick to track the general trend in crack lengths. Refer to Photo 3.

The bottom flanges of the exterior beams typically have short hairline horizontal cracks up to 2ft long throughout the length - NEW.

Several of the poured beam end diaphragms have delaminations up to 10in x 8in - INCREASED.

Structur	310/4	Elastomeric Bearing	104	100.	0	.	0	.	0	.	0	.	104 ea.

Notes

Structur	205/4	R/Conc Column	24	100.	0	.	0	.	0	.	0	.	24 ea.

Notes

Structur	207/4	P/S Conc Holl Pile	180	100.	0	.	0	.	0	.	0	.	180 ea.

Notes

Structur	215/4	R/Conc Abutment	70	100.	0	.	0	.	0	.	0	.	70 lf.

Notes

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Elements

Inspection Date: 11/16/2011ZOMJ

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	220/4	R/C Sub Pile Cap/Ftg	12	100.	0	.	0	.	0	.	0	.	12 ea.
Notes													
Structur	234/4	R/Conc Cap	518	100.	0	.	0	.	0	.	0	.	518 lf.
Notes													
Structur	393/4	Blkhd Sewl Any Mater	480	100.	0	.	0	.	0	.	0	.	480 ft
Notes	Note: The element represents the bulkheads constructed with concrete sheet piling and concrete caps.												
Structur	396/4	Other Abut Slope Pro	1760	97.78	40	2.22	0	.	0	.	0	.	1800 sf.
Notes	Note: This element represents the concrete block mat slope protection. CS2: The south slope protection is intermittently undermined up to 18in wide x 10in deep along the bulkhead cap - NEW. Refer to Photo 4. REPAIR												
Structur	290/4	Channel	0	.	1	100.	0	.	0	.	0	.	1 ea.
Notes	The following was noted by the underwater inspectors: CS2: Some piles have scour holes around them up to 18in. deep. The groundline slopes up to 4ft. to the west side of the piling and 10ft. out from the piling on several bents.												
Structur	321/4	R/Conc Approach Slab	2	100.	0	.	0	.	0	.	0	.	2 ea.
Notes	Note: The approach slabs are not visible due to an overlay of asphalt. CS1: The north and south approach slab joint headers have up to a 1/32in. wide longitudinal crack.												
Structur	478/4	MSE Walls	120	100.	0	.	0	.	0	.	0	.	120 lf.
Notes	Note: The MSE walls were measured back 30ft. at each corner of the structure.												

Total Number of Elements: 15

Inspection Information

Inspection Date: 11.16.2011 **Type:** Regular NBI

Inspector: KN738AB-P - Anthony Bibelhauser

Inspection Notes: Sufficiency Rating Calculation Accepted by kn110ku-P at 2011-12-13 11:14:44
Sufficiency Rating Calculation Accepted by KNVOLFA-P at 2011-12-06 11:15:13

LOAD CAPACITY EVALUATION:
The findings of this inspection reveal no reason to warrant a new analysis; therefore, the current load rating dated 4/21/04 results still govern.

The NBI Rating for SIA Item 58, Deck, was lowered from 8 to 7 due to the cracking on the deck top.

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Structure Notes

BRIDGE OWNER: LEE COUNTY

TRAFFIC RESTRICTIONS: Based on the load rating dated 4/21/04, the structure does not require posting. This structure is not posted.

Structure was inventoried from south to north.

This structure replaced Bridge No. 124042.

Power boat with fathometer used for underbridge inspection and groundline measurements.

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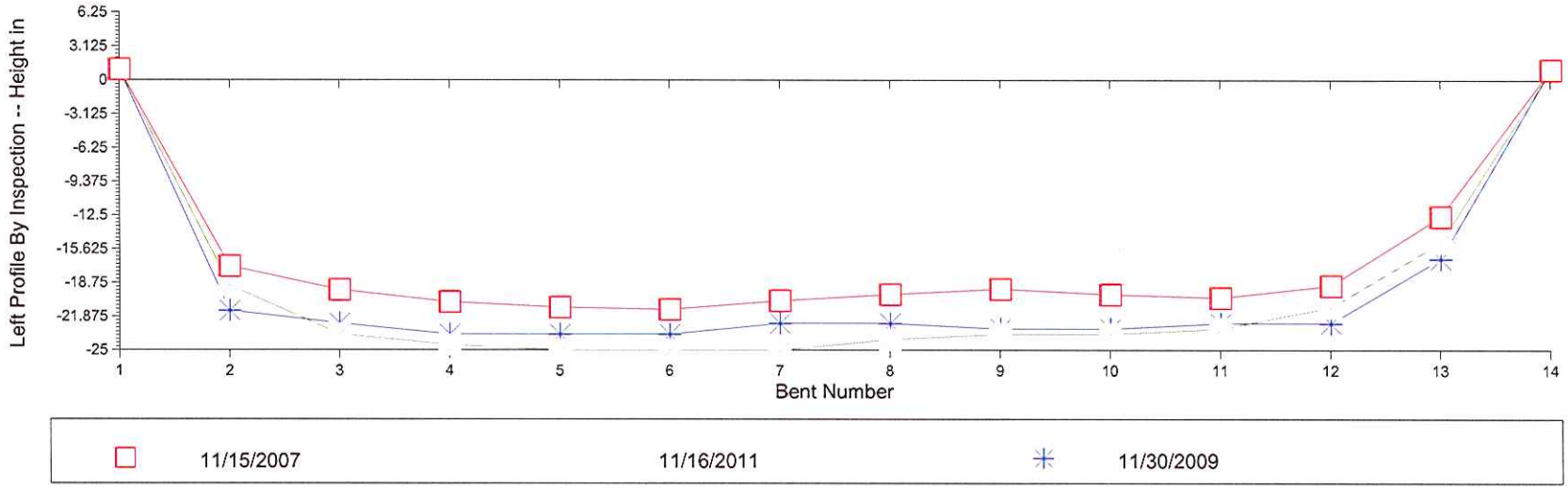
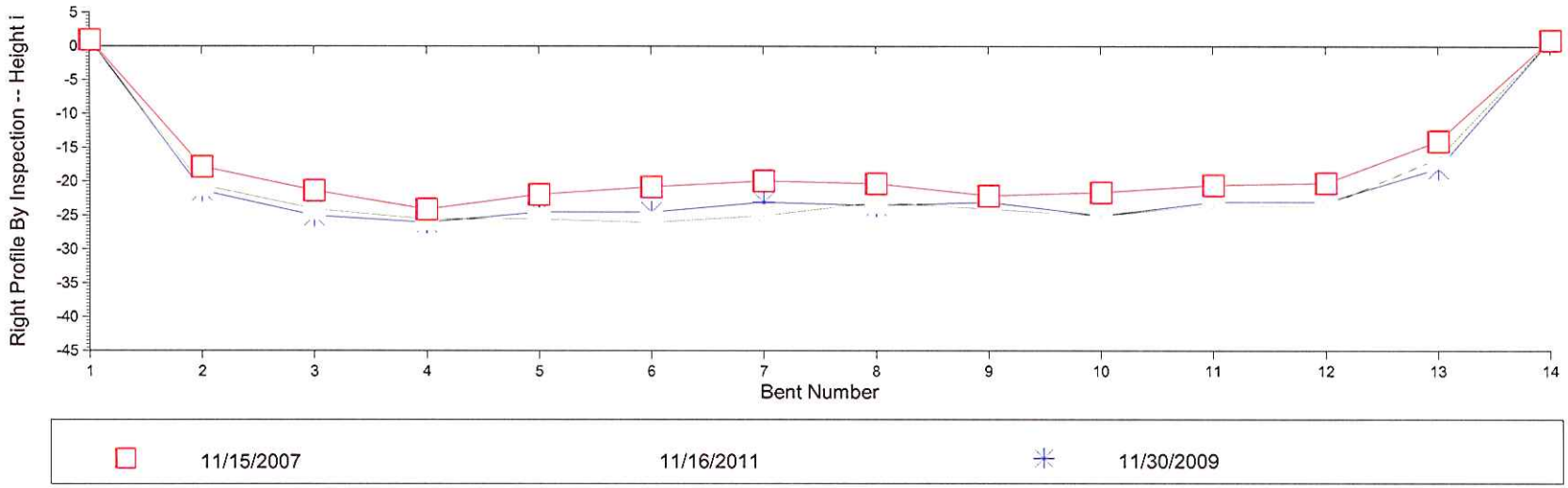
FLORIDA DEPARTMENT OF TRANSPORTATION BRIDGE MANAGEMENT SYSTEM
Bridge Profile Report

REPORT ID: INVT016

Structure #: 124115

DATE PRINTED: 12/28/2011





Profile Data - Numerical Summary

Inspection Date and Key: 11/16/2011 ZOMJ

(All Heights Are In Feet)

Bent #	Left Height	Right Height
1	-1	-1
2	19	20.5
3	23.5	24
4	24.5	25.5
5	25	25.5
6	25	26
7	25	25
8	24	23
9	23.5	24
10	23.5	25
11	23	23.5
12	21	23.5
13	15	16.5
14	-1	-1

Air Temp:

Profile Notes:

Measurements referenced from the top of the footers.
Waterline at footer 2 left and right = 3ft.
Note: A value of -1 indicates that this location is out of the water.

Inspection Date and Key: 11/30/2009 JXNS

1	-1	-1
2	21.3	21.3
3	22.5	25
4	23.5	26
5	23.5	24.5
6	23.5	24.5
7	22.5	23
8	22.5	23.5
9	23	23
10	23	25
11	22.5	23
12	22.5	23

Profile Data - Numerical Summary

Inspection Date and Key: 11/30/2009 JXNS

(All Heights Are In Feet)

Bent #	Left Height	Right Height
13	16.5	18
14	-1	-1

Air Temp: 1

Profile Notes:

Measurements referenced from the top of the footers.
Waterline at Footer 2 left and right = 3.5ft.
Note: A value of -1 indicates that this location was out of the water during this inspection.

Inspection Date and Key: 11/15/2007 NRSE

1	-1	-1
2	17.2	17.8
3	19.4	21.3
4	20.5	24.1
5	21	21.9
6	21.2	20.8
7	20.4	19.9
8	19.8	20.3
9	19.3	22.1
10	19.8	21.6
11	20.1	20.5
12	19	20.2
13	12.6	14
14	-1	-1

Air Temp:

Profile Notes:

Profile Reference: Top of footer 2
Waterline to top of footer 2: 2.2ft Left and Right

Underwater Services, Inc
7930 62ND STREET NORTH, PINELLAS PARK, FL 33781

Routine Underwater Bridge Inspection Report for VOLKERT, INC.

NBI Structure No. (8): **124115 (Structure B / Sanibel)**

Underwater Date (93): 10/26/11

Structure/Roadway Identification:

District (2):	01
County (3):	Lee
Feature Intersected (6):	San Carlos Bay
Facility Carried (7):	CR 867

Underwater Inspection Details:

Special Crew Hours:	3.0
Max. Depth:	20ft.
Type of Dive Insp.:	SCUBA
Type of Boat Used:	21ft.
Water Type/Marine Growth:	Salt-Tidal / Barnacles - Oysters

Previous Inspection:

Lead Diver:	C.B.I. No.:	Inspection Date:
Hays, Stephen F.	00438	10/06/2009

Inspection Personnel:

Field Personnel:	Title	C.B.I. No.:	Duty:	Signature:
Hoogland, Keith S.	C.B.I. Diver-Inspector	00341/Lead	Dive	KSH
Tumaniszwili, Alex P.	Diver-Inspector		Dive	
Young, Ryan C.	Diver-Inspector		Tend	

PILING/COLUMNS
ELEMENT: 207 HLW CORE — **180**: ea.

Condition State:	QTY:	Recommended Feasible Action:
CS-1	**180**	**Do Nothing**

NOTE: Piles 2-1, 2-6, 2-11, 4-1, 4-6, 4-11, 6-1, 6-6, 6-11, 8-6, 8-11, 8-12, 9-6, 9-11, 9-12, 13-6, 13-11, 13-12, and all deficiencies were cleaned.

SUBMERGED FOOTER
ELEMENT: 220 R/CONCRETE — **12**: ea.

Condition State:	QTY:	Recommended Feasible Action:
CS-1	**12**	**Do Nothing**

NOTE: Footer 2 and all deficiencies were cleaned.

CHANNEL
ELEMENT: 290 — **1**: ea.

Condition State:	QTY:	Recommended Feasible Action:
CS-2	**1**	**Do Nothing**

The groundline slopes up 4ft. to the west side and 10ft. out from the piling on several bents.
There are local scour holes around several piling up to 18in. deep due to heavy current.

BULKHEAD
ELEMENT: 393 OTHER — **480 lf.**

Condition State:	QTY:	Recommended Feasible Action:
CS-1	**480**	**Do Nothing**

INSPECTION NOTES: Divers inspected one hundred eighty 30in. piling in Bents 2 through 13, Footers, North/South Bulkhead and Channel.
STRUCTURE NOTES: Structure inventoried south to north.

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EXHIBIT M

BRIDGE INSPECTION REPORT

PREPARED FOR: FLORIDA DEPARTMENT OF TRANSPORTATION

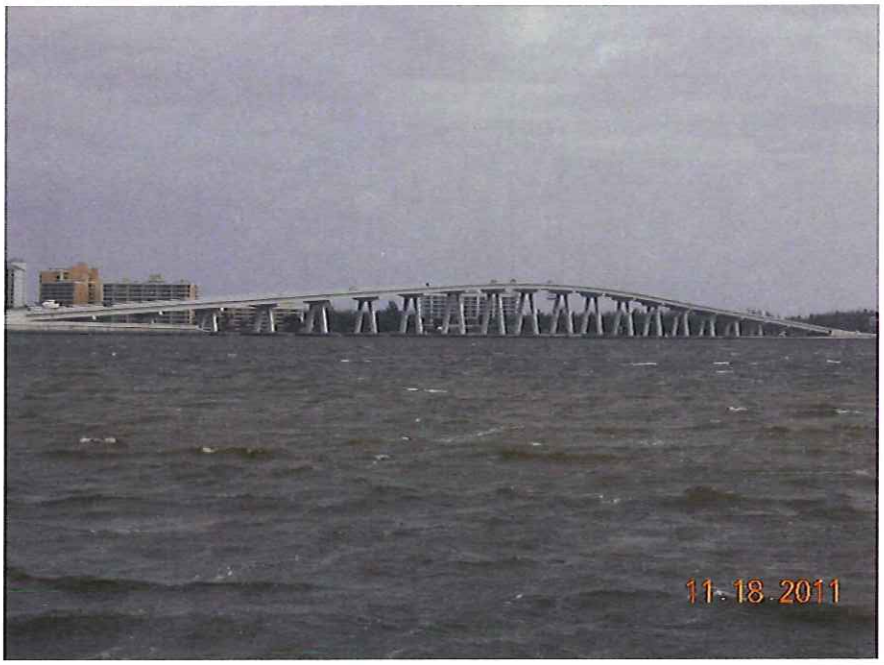
BRIDGE OWNER: LEE COUNTY

INSPECTED BY: VOLKERT

BRIDGE NO. 124116 **CONTENTS OF REPORT** **INSPECTION DATE:** 11/18/2011

- Pontis Report
- CIDR
- Scour Elevation (Profile)
- * Addendum (Element Notes & Photos/Sketches)
- U/W Inspection Report
- * Fracture Critical Data
- * Load Rating Analysis Summary

*This section is not included in this report.



STRUCTURE A SANIBEL CAUSEWAY OVER SAN CARLOS BAY **1ST STRUCTURE SOUTH OF TOLL PLAZA**

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www.delorme.com

MN (4.9° W)

0 600 1200 1800 2400 3000 3600 ft

Data Zoom 13-0

FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
Inspection/CID Report with PDF attachment(s)

BY:	VOLKERT, INC.	STRUCTURE NAME:	STRUCTURE A SANIBEL CAUSEV
OWNER:	2 County Hwy Agency	YEAR BUILT:	2007
MAINTAINED BY:	2 County Hwy Agency	SECTION NO.:	12 000 000
STRUCTURE TYPE:	6 P/S Conc Continuous - 02 Stringer/Girder	MP:	0
LOCATION:	1ST STRUC S OF TOLL PLAZA	ROUTE:	00867
SERVICE TYPE ON:	1 Highway	FACILITY CARRIED:	CR-867
SERV TYPE UND:	5 Waterway	FEATURE INTERSECTED:	SAN CARLOS BAY

☐ FUNCTIONALLY OBSOLETE ☐ STRUCTURALLY DEFICIENT

TYPE OF INSPECTION: Regular NBI

DATE FIELD INSPECTION WAS PERFORMED: ABOVE WATER: 11/18/2011 UNDERWATER: 10/24/2011

SUFFICIENCY RATING: 79.0
HEALTH INDEX: 98.94

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FLORIDA DEPARTMENT OF TRANSPORTATION
BRIDGE MANAGEMENT SYSTEM
Inspection/CID Report with PDF attachment(s)

BRIDGE ID: 124116 | **PAGE: 2 OF 32**
DISTRICT: 01 Bartow | **INSPECTION DATE: 11/18/2011 WNFP**

BY: VOLKERT, INC.
OWNER: 2 County Hwy Agency
MAINTAINED BY: 2 County Hwy Agency
STRUCTURE TYPE: 6 P/S Conc Continuous - 02 Stringer/Girder
LOCATION: 1ST STRUC S OF TOLL PLAZA
SERVICE TYPE ON: 1 Highway
SERV TYPE UND: 5 Waterway

STRUCTURE NAME: STRUCTURE A SANIBEL CAUSEWAY
YEAR BUILT: 2007
SECTION NO.: 12 000 000
MP: 0
ROUTE: 00867
FACILITY CARRIED: CR-867
FEATURE INTERSECTED: SAN CARLOS BAY

- [ ] THIS BRIDGE CONTAINS FRACTURE CRITICAL COMPONENTS
- [ ] THIS BRIDGE IS SCOUR CRITICAL
- [ ] THIS REPORT IDENTIFIES DEFICIENCIES WHICH REQUIRE PROMPT CORRECTIVE ACTION
- [ ] FUNCTIONALLY OBSOLETE
- [ ] STRUCTURALLY DEFICIENT

TYPE OF INSPECTION: Regular NBI
DATE FIELD INSPECTION WAS PERFORMED: ABOVE WATER: 11/18/2011 UNDERWATER: 10/24/2011

SMART FLAGS:
None

OVERALL NBI RATINGS:

DECK: 8 Very Good
SUPERSTRUCTURE: 7 Good
SUBSTRUCTURE: 7 Good
PERF. RATING: Good

CHANNEL: 7 Minor Damage
CULVERT: N N/A (NBI)
SUFF. RATING: 79.0
HEALTH INDEX: 98.94

FIELD PERSONNEL / TITLE / NUMBER	INITIALS
Eorgan, Steve - Bridge Inspector (CBI#00362) (lead)	CE
Bibelhauser, Anthony - Bridge Inspector (CBI #00359)	
Hoogland, Keith - Bridge Inspector/Diver (CBI#00341) (lead)	
Tumaniszwili, Alex P. - Diver/Inspector	
Young, Ryan C. - Diver/Inspector	

REVIEWING BRIDGE INSPECTION SUPERVISOR:
Rucks, Edward - CBI (#00273) — ER

CONFIRMING REGISTERED PROFESSIONAL ENGINEER:
Teal, Daniel - PROJECT MANAGER (PE # 42097)
VOLKERT, INC.
3409 W. LEMON STREET STE 1
CERTIFICATE OF AUTHORIZATION NO 4641
TAMPA, FL 33609

DANIEL BOWERS TEAL
LICENSE
No. 42097
JAN 05 2012
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

SIGNATURE:
DATE:

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All Elements

UNIT: Structure Unit 1 DECKS

ELEMENT/ENV: 12/4 Bare Concrete Deck 129408 sf. ELEM CATEGORY: Decks/Slabs

CONDITION STATE (5)	DESCRIPTION	QUANTITY
1	The surface and underside of the deck have few repaired areas, there are few spalls/delaminations in the deck surface or underside and the only cracking is superficial or surface map cracking. The combined distressed area is 2% or less of the deck area.	129408 sf.

ELEMENT INSPECTION NOTES:

Note: Two 4-1/2in. diameter fiberglass conduits are attached to hangers anchored to the underside of Bay 3 in all spans. The type of hanger anchorage is unknown.

CS1: There is a light accumulation of debris in the shoulder areas.

The undersides of the overhangs have full width x up to 1/64in. wide transverse cracks, some with efflorescence.

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All Elements

UNIT: Structure Unit 1 DECKS

ELEMENT/ENV: 300/4 Strip Seal Exp Joint 345 lf. ELEM CATEGORY: Joints

CONDITION STATE (3)	DESCRIPTION	QUANTITY
1	The element shows minimal deterioration. There is no leakage at any point along the joint. Gland is secure and has no defects. Debris in joint is not causing any problems. The adjacent deck and/or header is sound.	345 lf.

ELEMENT INSPECTION NOTES:

Note: Joints are present at Abutments 1 and 22 and Piers 4, 7, 10, 13, 16 and 19.

CS1: The joints have light dirt and debris in the shoulder areas and are functioning as intended - DECREASED.

CORRECTIVE ACTION TAKEN:
Most of the dirt and debris within the joints has been removed.

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All Elements

UNIT: Structure Unit 1 DECKS

ELEMENT/ENV: 334/4 Metal Rail Coated 6005 lf. ELEM CATEGORY: Railing

CONDITION STATE (5)	DESCRIPTION	QUANTITY
1	There is no evidence of active corrosion. Protective coating is sound and functioning as intended to protect the element.	5999 lf.
2	There is little or no active corrosion. Surface corrosion has formed or is forming. Protective coating may have minor areas of deterioration.	6 lf.

ELEMENT INSPECTION NOTES:

Note: Barriers meet NCHRP TL4 criteria and meet SIA Item #36 standards.

CS1: There are several tire marks on the barriers.

CS2: There are several areas of impact scrapes to the left bridge rail up to 8ft long at the following locations - NEW. Refer to Photo 1. REPAIR ALL

Span 4, near Pier 5
Span 5, at 1/2 and 3/4 points
Span 6, at 1/4, 1/2 and 3/4 points
Span 12, near Pier 12
Span 13, at 1/4 point
Span 14, near Pier 15
Span 16, near at Pier 17
Span 18, at 1/2 point

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All Elements

UNIT: Structure Unit 1 SUPERSTRUCTURE

ELEMENT/ENV: 109/4 P/S Conc Open Girder 12010 lf. ELEM CATEGORY: Superstructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	12006 lf.
2	Minor cracks and spalls may be present and there may be exposed reinforcing with no evidence of corrosion. There is no exposure of the prestress system.	4 lf.

ELEMENT INSPECTION NOTES:

CS1: The beams have diagonal web cracks up to 4ft. long x typically less than 1/64in. wide at the bearing areas, extending up and away from the supports.

The east face of the bottom flange of Beam 14-4 has a 20in. long x 1/64in. wide vertical/diagonal crack over the bearing at Pier 14. Beam 16-4 at Pier 16 has similar cracking - INCREASE.

The left top flange of Beam 17-4 has longitudinal hairline cracking, some with efflorescence, up to 1/64in. wide near Pier 18.

CS2: There are minor spalls with no exposed steel in the bottom flanges of the following beams:
Beam 15-1, east face 7-1/2ft. from Pier 16, 6in. x 2in. x 1/2in.
Beam 15-3, east face at 25-1/2ft. from Pier 16, 4in. x 4in. x 1in.
Beam 15-4, west face 60ft. from Pier 15, 16in. x 4in. x 1in.

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All Elements

UNIT: Structure Unit 1 SUPERSTRUCTURE

ELEMENT/ENV: 397/4 Drain. Syst Metal 20 ea. ELEM CATEGORY: Superstructure

CONDITION STATE (5)	DESCRIPTION	QUANTITY
1	There is no evidence of active corrosion and the paint system is sound and functioning as intended to protect the metal surface. Drainage system is functioning as intended.	19 ea.
2	There is little or no active corrosion. Surface corrosion rust has formed or is forming. The paint system may be chalking, peeling, curling or showing other early evidence of paint system distress but there is no exposure of metal. Drainage system is functioning as intended, there may be evidence of minor restrictions of flow.	1 ea.

ELEMENT INSPECTION NOTES:

CS2: The anchor hardware for the scupper down pipe attached to the inside face of Beam 8-1 at the 2/3 point is loose - NEW. Refer to Photo 2. REPAIR

CORRECTIVE ACTION TAKEN:
The scupper down pipes have been properly shimmed.

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All Elements

UNIT: Structure Unit 1 SUPERSTRUCTURE

ELEMENT/ENV: 310/4 Elastomeric Bearing 168 ea. ELEM CATEGORY: Bearings

CONDITION STATE (3)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. Shear deformations are correct for existing temperatures.	168 ea.

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All Elements

UNIT: Structure Unit 1 SUPERSTRUCTURE

ELEMENT/ENV: 563/4 Acc Ladd & Plat 16 ea. ELEM CATEGORY: Movable

CONDITION STATE (5)	DESCRIPTION	QUANTITY
1	There is no evidence of active corrosion, and the paint system is sound and functioning as intended to protect the metal surface.	16 ea.

ELEMENT INSPECTION NOTES:

Note: The quantity includes eight ladders and eight platforms including the two fender access walkways.

ELEMENT/ENV: 580/4 Navigational Lights 1 ea. ELEM CATEGORY: Movable

CONDITION STATE (3)	DESCRIPTION	QUANTITY
2	There is some evidence of corrosion, lights may be burned out, lens may be broken.	1 ea.

ELEMENT INSPECTION NOTES:

Note: The element includes six fender lights, two clearance at centerline of channel gauge lights and two swing lights at centerline of channel attached to the deck fascias with unknown anchors. Refer to Photo 3.

CS2: The hinges for top access cover on the southeast and northwest fender lights are broken - NEW. Refer to Photo 4. REPAIR

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All Elements

UNIT: Structure Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 205/4 R/Conc Column 40 ea. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	40 ea.

ELEMENT/ENV: 207/4 P/S Conc Holl Pile 224 ea. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	220 ea.
2	Minor cracks, spalls and scaling may be present and there may be exposed reinforcing with no evidence of corrosion. There is no exposure of the prestress system.	4 ea.

ELEMENT INSPECTION NOTES:

Note: Quantity field verified by underwater inspectors.

The following was noted by the underwater inspectors;
CS2: The northesast corner of Pile 10-13 has a 7ft6in x 18in x 2in spall with no exposed steel 11ft below the footing.
The northeast corner of Pile 4-1 has a 16in. x 6in. x 2in. spall with no exposed steel, 5ft. below the footing.
The northwest corner of Pile 11-17 has a 5ft. 6in. x 10in. x 2in. spall with no exposed steel, just below the footing.
The northeast corner of Pile 17-10 has a 13ft. x 12in. x 3in. spall with no exposed steel, 24in. below the footing.

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All Elements

UNIT: Structure Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 215/4 R/Conc Abutment 70 lf. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	70 lf.

ELEMENT INSPECTION NOTES:

CS1: There is minor horizontal cracking to the top outside faces of both cheek walls at the cold joint of Abutment 1 - NEW.

ELEMENT/ENV: 220/4 R/C Sub Pile Cap/Ftg 17 ea. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	8 ea.

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All Elements

UNIT: Structure Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 220/4 R/C Sub Pile Cap/Ftg 17 ea. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
2	Minor cracks, spalls and scaling may be present but there is no exposed reinforcing or surface evidence of rebar corrosion.	9 ea.

ELEMENT INSPECTION NOTES:

NOTE: Quantity change due to footings 19, 20 and 21 no longer being exposed.

CS1: The following was noted by the underwater inspection:
There are several corner scrapes up to 6in H x 5ft W x 3/4in D.
The footing have concrete formed sides that have vertical cracks with no corrosion bleedout up to 1/16in wide x full height. Several cracks have efflorescence.

CS2: The top northwest corner of footing 4 has a 24in x 12in x 2in spall with no exposed steel.

The top east corner of footing 9 near center point has a 30in x 9in x 2in spall with no exposed steel (Previously noted as a delamination).

The top northeast corner of footing 10 has a spall with no exposed steel 24in x 8in x 1in previously noted as a spall/delamination on the northwest corner of footing 10.

The top northeast corner of footing 16 has a spall with no exposed steel 15in x 12in x 1in. Previously noted as a spall/delamination on the northwest corner.

The following was noted by the underwater inspection:
Footing 5, southeast corner 18in below top of footing - spall with no exposed steel, 9in H x 9in W x 2in D - NEW.
Footing 8, southeast corner 10in below top of footing - spall with no exposed steel, 12in H x 6in W x 2in D - NEW.
Footing 10, northeast corner at top of footing - intermittent spall with no exposed steel, 28in H x 9in W x 2in D - NEW.
Footing 12, southwest corner 20in below top of footing, spall with no exposed steel, 6in x H 8in W x 2-1/2in D.
Footing 13, southeast corner 15in below top of footing, spall with no exposed steel, 12in H x 6in W x 1in D.
Footing 17, northeast and southeast corners 20in below top footing, spall with no exposed steel, 12in H x 12in W x 2in D.

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All Elements

UNIT: Structure Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 234/4 R/Conc Cap 862 lf. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	862 lf.

ELEMENT/ENV: 298/4 Pile Jacket Bare 2 ea. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	There is little or no deterioration. Surface defects only are in evidence.	2 ea.

ELEMENT INSPECTION NOTES:

NOTE: This element is for the Pile Jackets installed on Piling 11-8 and 11-15.

ELEMENT/ENV: 387/4 P/S Fender/Dolphin 588 lf. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The element shows little or no deterioration. There may be discoloration, efflorescence, and/or superficial cracking but without affect on strength and/or serviceability.	588 lf.

ELEMENT INSPECTION NOTES:

Note: The quantity includes the three rectangular dolphins at the southeast corner of the fender and the three rectangular dolphins at the northwest corner of the fender.

CS3: The south fender starting at the 1st single plumb pile (12th cluster) from the west for the next 13 piles (55ft long), the steel driving tips are exposed up to 30in to 3ft height - NEW. Refer to Photo 5 and Diagram 1. REPAIR

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All Elements

UNIT: Structure Unit 1 SUBSTRUCTURE

ELEMENT/ENV: 396/4 Other Abut Slope Pro 2500 sf. ELEM CATEGORY: Substructure

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	There is little or no deterioration. Surface defects only are in evidence. Random open joints may exist.	2404 sf.
2	There may be minor deterioration, random open joints, cracking and weathering. Mortar in joints may show minor deterioration.	12 sf.
3	Moderate to major deterioration and cracking. Major deterioration of joints. Minor settlement may be present.	84 sf.

ELEMENT INSPECTION NOTES:

Note: This element includes rock rubble rip rap and concrete block mats.

CS1: The rock inside the concrete block mats has settled up to 6in in several location - NEW.

CS2: There are 6 displaced concrete rip rap bags on the south slope protection under the structure.

CS3: The rock inside the concrete block mat on the north slope protection 8ft adjacent to the seawall cap has settled up to 16in and has undermined the slope in a 4ft x 3ft area - NEW. Refer to Photo 6. REPAIR

There is a 20ft x 4ft x 1ft of settlement to the concrete block mat on the southwest corner of footing 18 - NEW. Refer to Photo 7. REPAIR

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All Elements

UNIT: Structure Unit 1 CHANNEL

ELEMENT/ENV: 290/4 Channel **1 ea.** **ELEM CATEGORY:** Channel

CONDITION STATE (4)	DESCRIPTION	QUANTITY
2	Bank protection is in need of minor repairs, bank may be beginning to slump, minor stream bed movement may be evident or debris may be present.	1 ea.

ELEMENT INSPECTION NOTES:

Note: The bulkheads were evaluated under this element as channel bank protection.

CS2: Some channel measurements have a 3ft. or greater change since the previous inspection. Reason for change may be due to the strong current altering the channel bottom.

The following was noted by the underwater inspectors:
There is scattered timber debris from the previous fender system along the new fender system.
At Bents 4 through 17, the groundline slopes upward up to 4ft. going away from the piling, on one or more sides. Several piling have minimal marine growth on the lower 4in. to 6in. - INCREASE.

CORRECTIVE ACTION TAKEN:
The north channel bulkhead cap has been repaired.

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All Elements

UNIT: Structure Unit 1 MISCELLANEOUS

ELEMENT/ENV: 321/4 R/Conc Approach Slab 2 ea. **ELEM CATEGORY:** Other Elements

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	The slab has not settled and shows no sign of deterioration other than superficial surface cracks.	2 ea.

ELEMENT INSPECTION NOTES:
Note: The approach slabs are not visible due to an overlay of asphalt.

ELEMENT/ENV: 478/4 MSE Walls 120 lf. **ELEM CATEGORY:** Other Elements

CONDITION STATE (4)	DESCRIPTION	QUANTITY
1	There is little or no deterioration. Surface defects only are in evidence.	120 lf.

ELEMENT INSPECTION NOTES:
Note: The MSE walls were measured back 30ft. at each corner of the structure.

Structure Notes

BRIDGE OWNER: LEE COUNTY

TRAFFIC RESTRICTION: Based on the load rating analysis dated 8/8/07, the structure does not require posting. This structure is not posted.

Structure was inventoried from south to north on a west to east leg of a south to north roadway. Direction of stationing is used to describe deficiency locations (left is west).

This structure replaces bascule Bridge No. 124043.

Access to the bridge underside requires a boat with a 60ft. lift or an under bridge inspection vehicle with a lane shift traffic control setup.

Power boat used for groundline measurements and substructure inspection.

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INSPECTION NOTES: WNFP 11/18/2011

Sufficiency Rating Calculation Accepted by KNVOLFA-P at 2011-12-06 13:52:56

LOAD CAPACITY EVALUATION:
The findings of this inspection reveal no reason to warrant a new analysis; therefore, the current load rating dated 8/8/07 results still govern.

Note: Element 298, Pile Jacket Bare, has been added to this report.

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PHOTO 1: 334 METAL RAIL COATED

Impact scrapes on bridge railing Span 4 left near Pier 5.

REPAIR RECOMMENDATION:
Repair impact scrapes to left bridge railing up to 8ft long in Spans 4, 5, 6, 12, 13, 14, 16 and 18.

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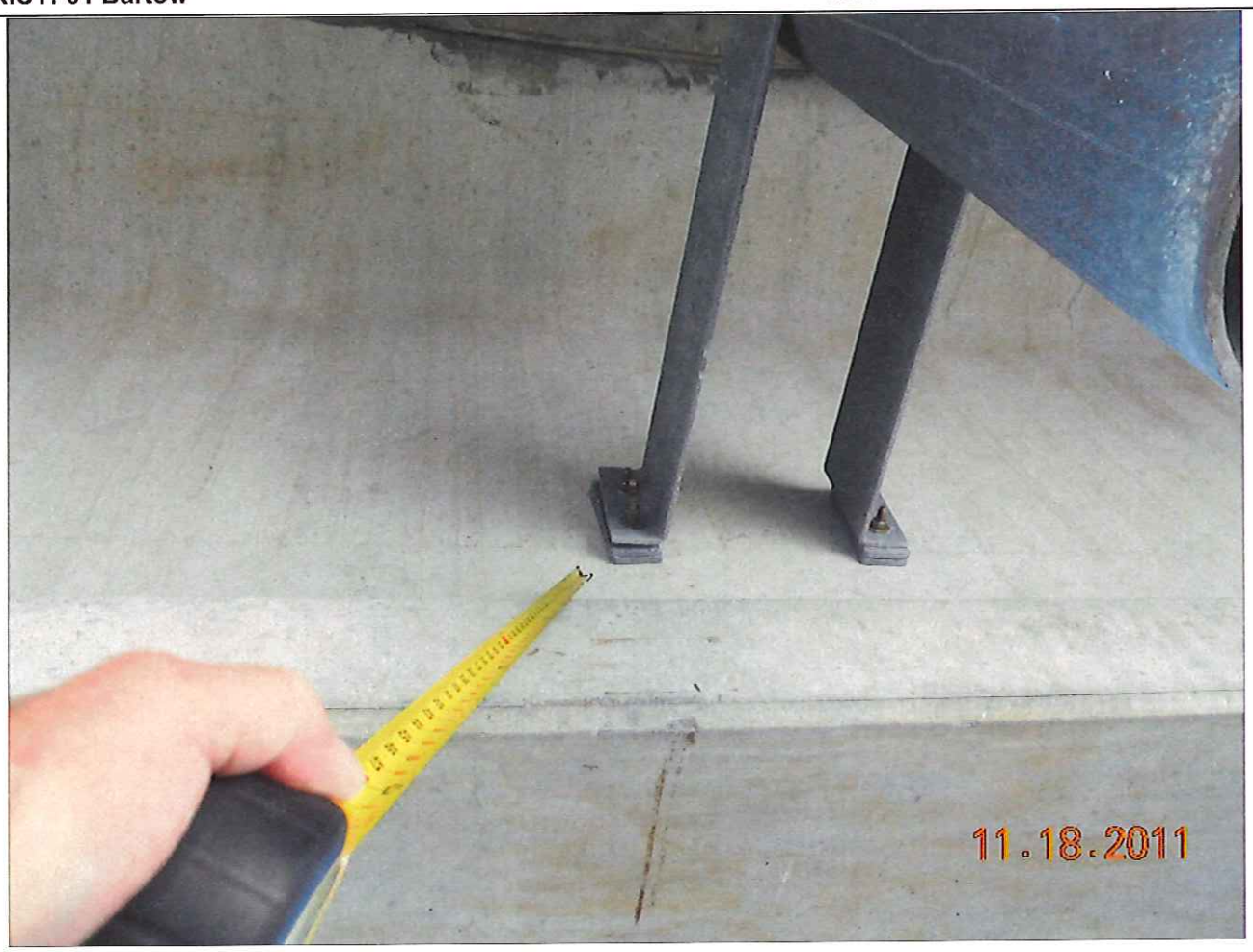

PHOTO 2: 397 DRAIN SYST METAL

Loose anchor hardware for scupper down pipe attached to inside face of Beam 8-1.

REPAIR RECOMMENDATION:
Repair loose anchor hardware for scupper down pipe attached to Beam 8-1 at the 2/3 point.

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PHOTO 3: 580 NAVIGATIONAL LIGHTS

Center span navigational swing lights attached to bridge fascias.

REPAIR RECOMMENDATION:
None

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PHOTO 4: 580 NAVIGATIONAL LIGHTS

Broken access cover plate hinge for the northwest fender light.

REPAIR RECOMMENDATION:
Repair 2 broken access cover plate hinges for the southeast and northwest fender lights.

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PHOTO 5: 387 P/S FENDER/DOLPHIN

Area of exposed driving tips on the southwest fender top side (from 12th cluster from west to 25th cluster).

REPAIR RECOMMENDATION:
Install 55lf of scour protection for south fender piling starting at 12th cluster from west for next 13 pilings.

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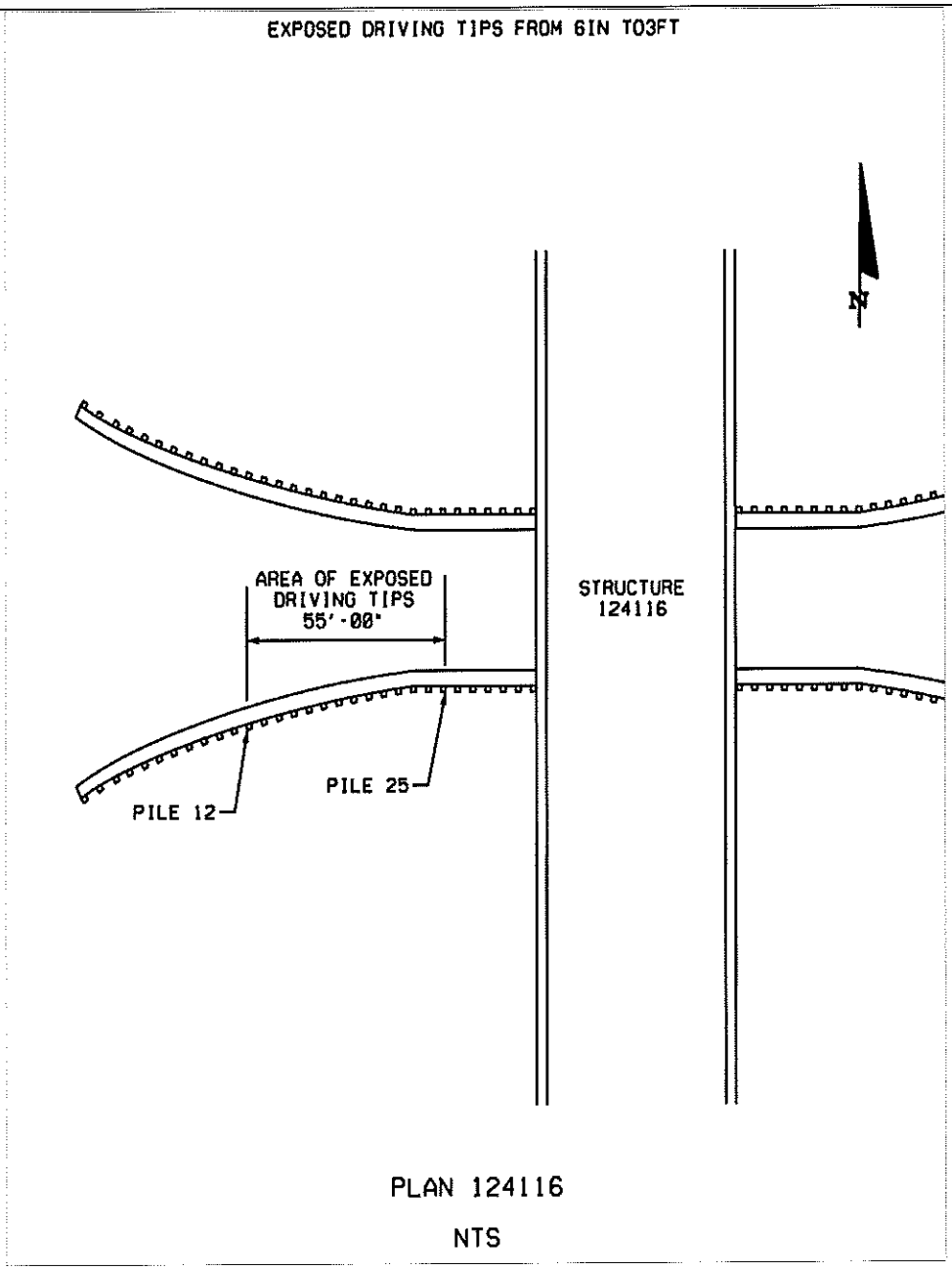

DIAGRAM 1: 387 P/S FENDER/DOLPHIN

Piles with exposed driving tips.

REPAIR RECOMMENDATION:
Refer to Photo 5.

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PHOTO 6: 396 OTHER ABUT SLOPE PRO

Settled rock fill with undermining to the concrete block mat 8ft south of the southeast corner of Pier 18.

REPAIR RECOMMENDATION:
Fill and stabilize loss fill and undermining to the concrete block mats 8ft south of the southeast corner of Pier 18.

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PHOTO 7: 396 OTHER ABUT SLOPE PRO

Settled slope and erosion of the concrete block mat on the southwest corner at footing 18.

REPAIR RECOMMENDATION:
Fill and stabilize 20ft x 4ft area of settlement and erosion to the slope on the southwest corner at footing 18.

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Description

Structure Unit Identification

Bridge/Unit Key: 124116 1
Structure Name: STRUCTURE A SANIBEL CAUSEWAY
Description:
Type: M Main

Roadway Identification:

NBI Structure No (8) 124116
Position/Prefix (5) Route On Structure
Kind Hwy (Rte Prefix) 4 County Hwy
Design Level of Service 1 Mainline
Route Number/Suffix 00867/ 0 N/A (NBI)
Feature Intersect (6) SAN CARLOS BAY
Critical Facility Not Defense-crit
Facility Carried (7) CR-867
Mile Point (11) 0
Latitude (16) 026d28'56" Long (17) 082d01'03"

Roadway Traffic and Accidents

Lanes (28) 2 Medians 0 Speed 35 mph
ADT Class ADT Class 4
Recent ADT (29) 19690 Year (30) 2011
Future ADT (114) 20675 Year (115) 2031
Truck % ADT (109) 7
Detour Length (19) 99 mi
Detour Speed -1 mph
Accident Count -1 Rate -1

Roadway Classification

Nat. Hwy Sys (104) 0 Not on NHS
National base Net (12) Not on Base Network
LRS Inventory Rte (13a) 12 000 000 Sub Rte (13b) 00
Functional Class (26) 16 Urban Minor Arterial
On Federal Aid System Y
Defense Hwy (100) 0 Not a STRAHNET hwy
Direction of Traffic (102) 2 2-way traffic
Emergency ☒

Roadway Clearances

Vertical (10) 99.99 ft Appr. Road (32) 40
Horiz. (47) 40 ft Roadway (51) 40 ft
Truck Network (110) 0 Not part of natl netwo
Toll Facility (20) 2 On toll road
Fed. Lands Hwy (105) 0 N/A (NBI)
School Bus Route ☒
Transit Route ☒

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Structure Identification

Admin Area Lee County
District (2) D1 - Bartow
County (3) (12)Lee
Place Code (4) Sanibel
Location (9) 1ST STRUC S OF TOLL PLAZA
Border Br St/Reg (98) Not Applicable (P) Share 0 %
Border Struct No (99)
FIPS State/Region (1) 12 Florida Region 4-Atlanta
NBIS Bridge Len (112) Meets NBI Length
Parallel Structure (101) No || bridge exists
Temp. Structure (103) Not Applicable (P)
Maint. Resp. (21) 2 County Hwy Agency
Owner (22) 2 County Hwy Agency
Historic Signif. (37) 5 Not eligible for NRHP

Geometrics

Spans in Main Unit (45) 21
Approach Spans (46) 0
Length of Max Span (48) 144.2 ft
Structure Length (49) 3002.5 ft
Total Length 3042.5 ft
Deck Area 129408 sqft
Structure Flared (35) 0 No flare

Age and Service

Year Built (27) 2007
Year Reconstructed (106) 0
Type of Service On (42a) 1 Highway
Under (42b) 5 Waterway
Fracture Critical Details Not Applicable

Structure Type and Material

Curb/Sidewalk (50): Left 0 ft Right 0 ft
Bridge Median (33): 0 No median
Main Span Material (43A): 6 P/S Conc Continuous
Appr Span Material (44A): Not Applicable (P)
Main Span Design (43B): 02 Stringer/Girder
Appr Span Design (44B): Not Applicable (P)

Deck Type and Material

Deck Width (52): 43.1
Skew (34): 0
Deck Type (107): 1 Concrete-Cast-in-Place
Surface (108): 0 None
Membrane: 0 None
Deck Protection: None

Appraisal

Structure Appraisal

Open/Posted/Closed (41) A Open, no restriction
Deck Geometry (68) 5 Above Tolerable
Underclearances (69) N Not applicable (NBI)
Approach Alignment (72) 9-No Speed Red No Curve
Bridge Railings (36a) 1 Meets Standards
Transitions (36b) 1 Meets Standards
Approach Guardrail (36c) 1 Meets Standards
Approach Guardrail ends (36d) 1 Meets Standards
Scour Critical (113) 8 Stable Above Footing

Navigation Data

Navigation Control (38) Permit Required
Nav Vertical Clr (39) 70 ft
Nav Horizontal Clr (40) 111.2 ft
Min Vert Lift Clr (116) 0 ft
Pier Protection (111) 2 In-Place, Functioning

NBI Condition Rating

Sufficiency Rating 79
Health Index 98.94
Structural Eval (67) 7 Above Min Criteria
Deficiency Not Deficient

Minimum Vertical Clearance

Over Structure (53) 99.99 ft
Under (reference) (54a) N Feature not hwy or RR
Under (54b) 0 ft

Minimum Lateral Underclearance

Reference (55a) N Feature not hwy or RR
Right Side (55b) 0 ft
Left Side (56) 0 ft

Load Rating

Design Load (31) HL 93
Rating Date 8/8/2007 Initials RS
Posting (70) 5 At/Above Legal Loads

Operating Type (63) 3 LRFR Load & Res. Fact
Operating rating (64) 60.9 tons Alternate -1
Inventory Type (65) 3 LRFR Load & Res. Fact
Inventory Rating (66) 47.7 tons Alternate -1
Alt Meth -1

Schedule

Current Inspection

Inspection Date: 11/18/2011
Inspector: KNVOLSE-P - Steve Eorgan
Bridge Group: BD523
Primary Type: Regular NBI
Review Required: ☒

Next Inspection Date Scheduled

NBI: 11/18/2013
Element: 11/18/2013
Fracture Critical:
Underwater: 11/18/2013
Other/Special:

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Schedule Cont.

Inspection Types Performed NBI ☒ Element ☒ Fracture Critical ☐ Underwater ☒ Other Special ☐

Inspection Intervals	Required (92)	Frequency (92)	Last Date (93)
Fracture Critical	☐	mos	
Underwater	☒	24 mos	10/24/2011
Other Special	☐	mos	
NBI		24 mos (91)	11/18/2011 (90)

Inspection Resources

Crew Hours	20
Flagger Hours	8
Helper Hours	0
Snooper Hours	6
Special Crew Hours	18
Special Equip Hours	0

Custom

General Bridge Information

Parallel Bridge Seq	0000
Channel Depth	26.499 ft
Radio Frequency	-1
Phone Number	(000) 000-0000
Exception Date	
Exception Type	Unknown
Accepted By Maint	00/00/0000
Warranty Expiration	00/00/0000
Bridge Rail 1	Steel barrier
Bridge Rail 2	Not applicable-No rail
Electrical Devices	Navigation lights only
Culvert Type	Not applicable
Maintenance Yard	0
FIHS ON / OFF	No Routes on FIHS
Previous Structure	124043
2nd Previous Structure	
Replacement Structure	

Bridge Load Rating Information

HS20 Govr. Span Length	144 ft
L-Rating Origination	Design Plans
Load Rating Date	08/08/2007
Method Calculation	AASHTO formula
Load Dist. Factor	0.982
Impact Factor	1
Design Method	LRFD (Load & Res Factor)
Design Measure	English
Recommend SU Posting	99 tons
Recommend C Posting	99 tons
Recommend ST Posting	99 tons
Gov FB Span	0 ft
Gov FB Spacing	0 ft
FB HS20 Rating	0 tons
FB SU4 Rating	0 tons
FB Present	N
FB INV Rating Factor	0
FB OPR Rating Factor	0
FB FL 120	0 tons
Single Unit Truck 2 Axles	-1 tons
Single Unit Truck 3 Axles	-1 tons
Single Unit Truck 4 Axles	-1 tons
Combination Unit Truck 3 Axles	-1 tons
Combination Unit Truck 4 Axles	-1 tons
Combination Unit Truck 5 Axles	-1 tons
Truck Trailer 5 Axles	-1 tons
Posting Weight	99 tons
Actual SU Posting	99 tons
Actual C Posting	99 tons
Actual ST Posting	99 tons
FL 120 Long Gov Span	110 tons
FL 120 Trans	-1 tons
Single Axle Trans	-1 tons
Tandem Axle Trans	-1 tons
Wing Span	-1 ft
Web to Web Span	-1 ft
HS20 OPR Rating Max Span	-1 tons
FL120 Long Max Span	110 tons

Bridge Scour and Storm Information

Pile Driving Record	All pile driving records
Foundation Type	Foundation details
Mode of Flow	Tidal
Rating Scour Eval	Low Risk - High
Highest Scour Eval	No phase completed
Scour Recommended I	No recommendation
Scour Recommended II	No recommendation
Scour Recommended III	No recommendation
Scour Elevation	999 ft
Action Elevation	999 ft
Storm Frequency	100

Condition

NBI Rating

Channel (61)	7 Minor Damage
Deck (58)	8 Very Good
Superstructure (59)	7 Good
Substructure (60)	7 Good
Culvert (62)	N N/A (NBI)
Waterway (71)	8 Equal Desirable
Unrepaired Spalls	-1 sq.ft.
Review Required	☒

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Elements

Inspection Date: 11/18/2011WNFP

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	12/4	Bare Concrete Deck	129408	100.	0	.	0	.	0	.	0	.	129408 sf.

Notes Note: Two 4-1/2in. diameter fiberglass conduits are attached to hangers anchored to the underside of Bay 3 in all spans. The type of hanger anchorage is unknown.

CS1: There is a light accumulation of debris in the shoulder areas.

The undersides of the overhangs have full width x up to 1/64in. wide transverse cracks, some with efflorescence.

Structur	300/4	Strip Seal Exp Joint	345	100.	0	.	0	.	0	.	0	.	345 lf.

Notes Note: Joints are present at Abutments 1 and 22 and Piers 4, 7, 10, 13, 16 and 19.

CS1: The joints have light dirt and debris in the shoulder areas and are functioning as intended - DECREASED.

CORRECTIVE ACTION TAKEN:
Most of the dirt and debris within the joints has been removed.

Structur	334/4	Metal Rail Coated	5999	99.9	6	.1	0	.	0	.	0	.	6005 lf.

Notes Note: Barriers meet NCHRP TL4 criteria and meet SIA Item #36 standards.

CS1: There are several tire marks on the barriers.

CS2: There are several areas of impact scrapes to the left bridge rail up to 8ft long at the following locations - NEW. Refer to Photo 1. REPAIR ALL

Span 4, near Pier 5
Span 5, at 1/2 and 3/4 points
Span 6, at 1/4, 1/2 and 3/4 points
Span 12, near Pier 12
Span 13, at 1/4 point
Span 14, near Pier 15
Span 16, near at Pier 17
Span 18, at 1/2 point

Structur	109/4	P/S Conc Open Girder	12006	99.97	4	.	0	.	0	.	0	.	12010 lf.

Notes CS1: The beams have diagonal web cracks up to 4ft. long x typically less than 1/64in. wide at the bearing areas, extending up and away from the supports.

The east face of the bottom flange of Beam 14-4 has a 20in. long x 1/64in. wide vertical/diagonal crack over the bearing at Pier 14. Beam 16-4 at Pier 16 has similar cracking - INCREASE.

The left top flange of Beam 17-4 has longitudinal hairline cracking, some with efflorescence, up to 1/64in. wide near Pier 18.

CS2: There are minor spalls with no exposed steel in the bottom flanges of the following beams:
Beam 15-1, east face 7-1/2ft. from Pier 16, 6in. x 2in. x 1/2in.
Beam 15-3, east face at 25-1/2ft. from Pier 16, 4in. x 4in. x 1in.
Beam 15-4, west face 60ft. from Pier 15, 16in. x 4in. x 1in.

Structur	397/4	Drain. Syst Metal	19	95.	1	5.	0	.	0	.	0	.	20 ea.

Notes CS2: The anchor hardware for the scupper down pipe attached to the inside face of Beam 8-1 at the 2/3 point is loose - NEW. Refer to Photo 2. REPAIR

CORRECTIVE ACTION TAKEN:
The scupper down pipes have been properly shimmed.

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Elements

Inspection Date: 11/18/2011WNFP

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	310/4	Elastomeric Bearing	168	100.	0	.	0	.	0	.	0	.	168 ea.

Notes

Structur	563/4	Acc Ladd & Plat	16	100.	0	.	0	.	0	.	0	.	16 ea.

Notes Note: The quantity includes eight ladders and eight platforms including the two fender access walkways.

Structur	580/4	Navigational Lights	0	.	1	100.	0	.	0	.	0	.	1 ea.

Notes Note: The element includes six fender lights, two clearance at centerline of channel gauge lights and two swing lights at centerline of channel attached to the deck fascias with unknown anchors. Refer to Photo 3.

CS2: The hinges for top access cover on the southeast and northwest fender lights are broken - NEW. Refer to Photo 4. REPAIR

Structur	205/4	R/Conc Column	40	100.	0	.	0	.	0	.	0	.	40 ea.

Notes

Structur	207/4	P/S Conc Holl Pile	220	98.21	4	1.79	0	.	0	.	0	.	224 ea.

Notes Note: Quantity field verified by underwater inspectors.

The following was noted by the underwater inspectors;
CS2: The northesast corner of Pile 10-13 has a 7ft6in x 18in x 2in spall with no exposed steel 11ft below the footing.
The northeast corner of Pile 4-1 has a 16in. x 6in. x 2in. spall with no exposed steel, 5ft. below the footing.
The northwest corner of Pile 11-17 has a 5ft. 6in. x 10in. x 2in. spall with no exposed steel, just below the footing.
The northeast corner of Pile 17-10 has a 13ft. x 12in. x 3in. spall with no exposed steel, 24in. below the footing.

Structur	215/4	R/Conc Abutment	70	100.	0	.	0	.	0	.	0	.	70 lf.

Notes CS1: There is minor horizontal cracking to the top outside faces of both cheek walls at the cold joint of Abutment 1 - NEW.

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Elements

Inspection Date: 11/18/2011WNFP

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	220/4	R/C Sub Pile Cap/Ftg	8	47.06	9	52.94	0	.	0	.	0	.	17 ea.

Notes NOTE: Quantity change due to footings 19, 20 and 21 no longer being exposed.

CS1: The following was noted by the underwater inspection:
There are several corner scrapes up to 6in H x 5ft W x 3/4in D.
The footing have concrete formed sides that have vertical cracks with no corrosion bleedout up to 1/16in wide x full height. Several cracks have efflorescence.

CS2: The top northwest corner of footing 4 has a 24in x 12in x 2in spall with no exposed steel.

The top east corner of footing 9 near center point has a 30in x 9in x 2in spall with no exposed steel (Previously noted as a delamination).

The top northeast corner of footing 10 has a spall with no exposed steel 24in x 8in x 1in previously noted as a spall/delamination on the northwest corner of footing 10.

The top northeast corner of footing 16 has a spall with no exposed steel 15in x 12in x 1in. Previously noted as a spall/delamination on the northwest corner.

The following was noted by the underwater inspection:
Footing 5, southeast corner 18in below top of footing - spall with no exposed steel, 9in H x 9in W x 2in D - NEW.
Footing 8, southeast corner 10in below top of footing - spall with no exposed steel, 12in H x 6in W x 2in D - NEW.
Footing 10, northeast corner at top of footing - intermittent spall with no exposed steel, 28in H x 9in W x 2in D - NEW.
Footing 12, southwest corner 20in below top of footing, spall with no exposed steel, 6in x H 8in W x 2-1/2in D.
Footing 13, southeast corner 15in below top of footing, spall with no exposed steel, 12in H x 6in W x 1in D.
Footing 17, northeast and southeast corners 20in below top footing, spall with no exposed steel, 12in H x 12in W x 2in D.

Structur	234/4	R/Conc Cap	862	100.	0	.	0	.	0	.	0	.	862 lf.

Notes

Structur	298/4	Pile Jacket Bare	2	100.	0	.	0	.	0	.	0	.	2 ea.

Notes NOTE: This element is for the Pile Jackets installed on Piling 11-8 and 11-15.

Structur	387/4	P/S Fender/Dolphin	588	100.	0	.	0	.	0	.	0	.	588 lf.

Notes Note: The quantity includes the three rectangular dolphins at the southeast corner of the fender and the three rectangular dolphins at the northwest corner of the fender.

CS3: The south fender starting at the 1st single plumb pile (12th cluster) from the west for the next 13 piles (55ft long), the steel driving tips are exposed up to 30in to 3ft height - NEW. Refer to Photo 5 and Diagram 1. REPAIR

Structur	396/4	Other Abut Slope Pro	2404	96.16	12	.48	84	3.36	0	.	0	.	2500 sf.

Notes Note: This element includes rock rubble rip rap and concrete block mats.

CS1: The rock inside the concrete block mats has settled up to 6in in several location - NEW.

CS2: There are 6 displaced concrete rip rap bags on the south slope protection under the structure.

CS3: The rock inside the concrete block mat on the north slope protection 8ft adjacent to the seawall cap has settled up to 16in and has undermined the slope in a 4ft x 3ft area - NEW. Refer to Photo 6. REPAIR

There is a 20ft x 4ft x 1ft of settlement to the concrete block mat on the southwest corner of footing 18 - NEW. Refer to Photo 7. REPAIR

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Elements

Inspection Date: 11/18/2011WNFP

Span Id	Elem/Env	Description	Qty1	%1	Qty2	%2	Qty3	%3	Qty4	%4	Qty5	%5	T Qty
Structur	290/4	Channel	0	.	1	100.	0	.	0	.	0	.	1 ea.

Notes Note: The bulkheads were evaluated under this element as channel bank protection.

CS2: Some channel measurements have a 3ft. or greater change since the previous inspection. Reason for change may be due to the strong current altering the channel bottom.

The following was noted by the underwater inspectors:
There is scattered timber debris from the previous fender system along the new fender system.
At Bents 4 through 17, the groundline slopes upward up to 4ft. going away from the piling, on one or more sides. Several piling have minimal marine growth on the lower 4in. to 6in. - INCREASE.

CORRECTIVE ACTION TAKEN:
The north channel bulkhead cap has been repaired.

Structur	321/4	R/Conc Approach Slab	2	100.	0	.	0	.	0	.	0	.	2 ea.

Notes Note: The approach slabs are not visible due to an overlay of asphalt.

Structur	478/4	MSE Walls	120	100.	0	.	0	.	0	.	0	.	120 lf.

Notes Note: The MSE walls were measured back 30ft. at each corner of the structure.

Total Number of Elements: 19

Inspection Information

Inspection Date: 11.18.2011 **Type:** Regular NBI

Inspector: KNVOLSE-P - Steve Eorgan

Inspection Notes: Sufficiency Rating Calculation Accepted by KNVOLFA-P at 2011-12-06 13:52:56

LOAD CAPACITY EVALUATION:
The findings of this inspection reveal no reason to warrant a new analysis; therefore, the current load rating dated 8/8/07 results still govern.

Note: Element 298, Pile Jacket Bare, has been added to this report.

Structure Notes

BRIDGE OWNER: LEE COUNTY

TRAFFIC RESTRICTION: Based on the load rating analysis dated 8/8/07, the structure does not require posting. This structure is not posted.

Structure was inventoried from south to north on a west to east leg of a south to north roadway. Direction of stationing is used to describe deficiency locations (left is west).

This structure replaces bascule Bridge No. 124043.

Access to the bridge underside requires a boat with a 60ft. lift or an under bridge inspection vehicle with a lane shift traffic control setup.

Power boat used for groundline measurements and substructure inspection.

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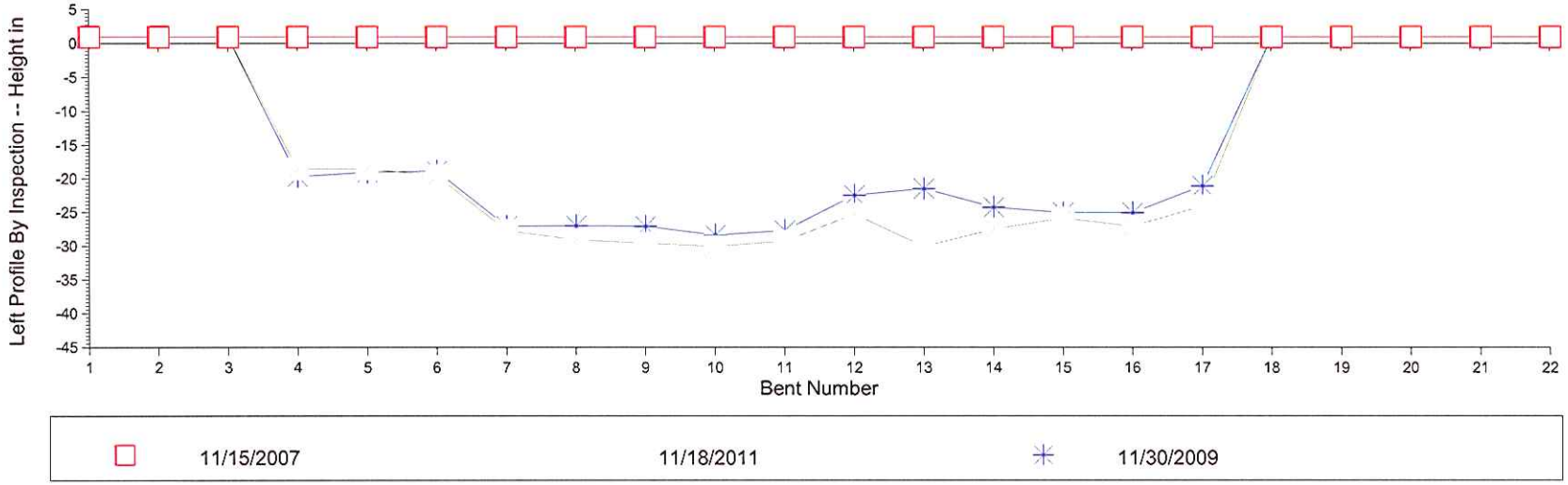
FLORIDA DEPARTMENT OF TRANSPORTATION BRIDGE MANAGEMENT SYSTEM

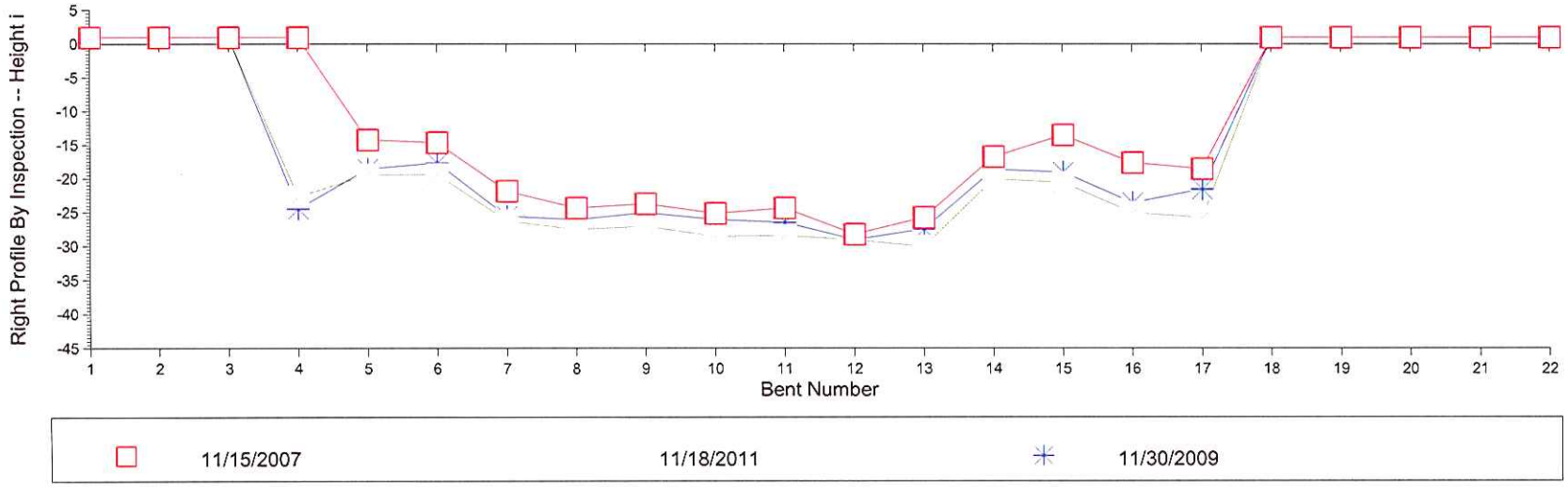
Bridge Profile Report

REPORT ID: INVT016

Structure #: 124116

DATE PRINTED: 12/28/2011





Profile Data - Numerical Summary

Inspection Date and Key: 11/18/2011 WNFP

(All Heights Are In Feet)

Bent #	Left Height	Right Height
1	-1	-1
2	-1	-1
3	-1	-1
4	18.5	22.6
5	18.5	19.4
6	19.5	19.3
7	27.6	26.2
8	29	27.5
9	29.5	27
10	30	28.5
11	29.2	28.4
12	25.2	29
13	30	30
14	27.4	20
15	25.8	20.5
16	27	25
17	24	25.7
18	-1	-1
19	-1	-1
20	-1	-1
21	-1	-1
22	-1	-1

Air Temp:

Profile Notes:

Measurements referenced from the top of the footing.
Waterline at top of footing 4 = 4ft.
Note: Bents 1 to 3 and 18 to 22 are on dry land.

Inspection Date and Key: 11/30/2009 ESCS

1	-1	-1
2	-1	-1
3	-1	-1
4	19.6	24.4

Profile Data - Numerical Summary

Inspection Date and Key: 11/30/2009 ESCS

(All Heights Are In Feet)

Bent #	Left Height	Right Height
5	19	18.5
6	18.8	17.6
7	27	25.5
8	26.9	26
9	27	25
10	28.3	26
11	27.6	26.4
12	22.4	29
13	21.4	27.4
14	24.2	18.6
15	25	19
16	25	23.5
17	21	21.5
18	-1	-1
19	-1	-1
20	-1	-1
21	-1	-1
22	-1	-1

Air Temp: 1

Profile Notes:

Measurements referenced from the top of the footers.
Waterline = 2.5ft.
Note: A value of -1 indicates that location was out of the water during this inspection.

Inspection Date and Key: 11/15/2007 GPFO

1	-1	-1
2	-1	-1
3	-1	-1
4	-1	-1
5	-1	14.2
6	-1	14.6
7	-1	21.8
8	-1	24.3

Profile Data - Numerical Summary

Inspection Date and Key: 11/15/2007 GPFO

(All Heights Are In Feet)

Bent #	Left Height	Right Height
9	-1	23.7
10	-1	25.1
11	-1	24.3
12	-1	28.2
13	-1	25.7
14	-1	16.7
15	-1	13.5
16	-1	17.6
17	-1	18.5
18	-1	-1
19	-1	-1
20	-1	-1
21	-1	-1
22	-1	-1

Air Temp:

Profile Notes:

Measurements referenced to top of pier 4 footer.
Waterline: 3.0ft

No left side measurements taken due to ongoing demolition.
Bents 1 - 4 and 18 - 22 are on dryland.

BOLT Underwater Services, Inc
7930 62ND STREET NORTH, PINELLAS PARK, FL 33781

Routine Underwater Bridge Inspection Report for VOLKERT, INC.

NBI Structure No. (8): **124116 (Structure A / Sanibel)**

Underwater Date (93): 10/24/11

Structure/Roadway Identification:

District (2): 01
County (3): Lee
Feature Intersected (6): San Carlos Bay
Facility Carried (7): CR 867

Underwater Inspection Details:

Special Crew Hours: 18.0
Max. Depth: 28ft.
Type of Dive Insp.: SCUBA
Type of Boat Used: 21ft.
Water Type/Marine Growth: Salt-Tidal / Barnacles - Oysters

Previous Inspection:

Lead Diver:	C.B.I. No.:	Inspection Date:
Hays, Stephen F.	00438	10/07/2009

Inspection Personnel:

Field Personnel:	Title	C.B.I. No.:	Duty:	Signature:
Hoogland, Keith S.	C.B.I. Diver-Inspector	00341/Lead	Dive	KLN
Tumaniszwili, Alex P.	Diver-Inspector		Dive	
Young, Ryan C.	Diver-Inspector		Tend	

PILING/COLUMNS
ELEMENT: 207 HLW CORE 291: ea.

NOTE: Pile quantity was incorrect on the previous topside report, quantity was field verified.

Condition State:	QTY:	Recommended Feasible Action:
CS-1	287	Do Nothing
CS-2	4	Do Nothing

Pile 4-1: Northeast corner 5ft. below footing, spall, no exposed steel, 16in. H x 6in. W x 2in. D.
Pile 10-13: Northeast corner 11ft. below footing, intermittent spall, no exposed steel, 7ft. 6in. H x 18in. W x 2in. D – *NEW.*
Pile 11-17: Northwest corner below footing, spall, no exposed steel, 5ft. 6in. H x 10in. W x 2in. D.
Pile 17-10: Northwest corner 24in. below footing, intermittent spall, no exposed steel, 13ft. H x 12in. W x 3in. D (entire pile length).

NOTE: Piles 6-1, 6-8, 6-15, 7-1, 7-2, 7-15, 11-7, 11-14, 11-20, 11-21, 13-7, 13-21, 14-5, 14-6, 14-7, 14-10, 14-11, 14-12, 14-17 through 21, 15-3, 15-4, 15-8 through 15-11 and all deficiencies were cleaned.

SUBMERGED FOOTING
ELEMENT: 220 R/CONCRETE 14: ea.

Condition State:	QTY:	Recommended Feasible Action:
CS-1	8	Do Nothing

There are several corner scrapes up to 6in. H x 5ft. W x ¾in. D.
The footing have concrete formed sides that have vertical cracks with no corrosion bleedout up to 1/16in. wide x full height. Several cracks have efflorescence.

CS-2 6 Do Nothing

Footing	Location	Type	Comment	Size
5	Southeast corner 18in. below top of footing	Spall	No exposed steel	9in. H x 9in. W x 2in. D - *NEW*
8	Southeast corner 10in. below top of footing	Spall	No exposed steel	12in. H x 6in. W x 2in. D - *NEW*
10	Northeast corner at top of footing	Intermittent Spall	No exposed steel	28in. H x 9in. W x 2in. D - *NEW*
12	Southwest corner 20in. below top of footing	Spall	No exposed steel	6in. H x 8in. W x 2½in. D.
13	Southeast corner 15in. below top of footing	Spall	No exposed steel	12in. H x 6in. W x 1in. D.
17	Northeast and southeast corners 20in. below top of footing	Spall	No exposed steel	12in. H x 12in. W x 2in. D

NOTE: Footing 4 and 6 and all deficiencies were cleaned.

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CHANNEL
ELEMENT: 290 1: ea.

NOTE: The bulkheads were evaluated under this element as channel bank protection.

Condition State:	QTY:	Recommended Feasible Action:
CS-2	**1**	**Do Nothing**

There is scattered timber debris from the previous fender system along the new fender system.

On Bents 4 through 17, the groundline slopes upward going away from the piling up to 4ft. high on one or more sides. Several piling had minimal marine growth on the bottom 4in. to 6in. – *INCREASE.*

North Seawall: 1st panel west of the angle break on the west joint, 7ft. below the cap, spall with no steel, 6ft. H x 8in. W x 4in. D (extends to the groundline) – *NEW.*

JACKETS
ELEMENT: 298 PILE JACKET BARE 2: ea.

NOTE: Piles 11-8 and 11-15 have Jackets from the footing to the groundline approximately 5ft. in diameter due to damage during old bridge removal.

Condition State:	QTY:	Recommended Feasible Action:
CS-1	**2**	**Do Nothing**

FENDER SYSTEM
ELEMENT: 387 P/S CONCRETE **588 lf.**

NOTE: Quantity includes three rectangular dolphins at the southeast corner of the fender and three rectangular dolphins at the northwest corner of the fender. The lower wales are composite.

Condition State:	QTY:	Recommended Feasible Action:
CS-1	**533**	**Do Nothing**
CS-3	**55**	**REPAIR**

The south fender starting at the 1st single plumb pile (12th cluster) from the west, for the next 13 piles (55ft. long), the steel driving tips are exposed up to 30in. to 3ft. high – *NEW.*

INSPECTION NOTES: Divers inspected two hundred ninety-one 30in. piling in Bents 5 through 17, eighteen 30in. concrete piling in Bent 4, Jackets, Footing, Fender System and Channel.
STRUCTURE NOTES: Structure inventoried south to north

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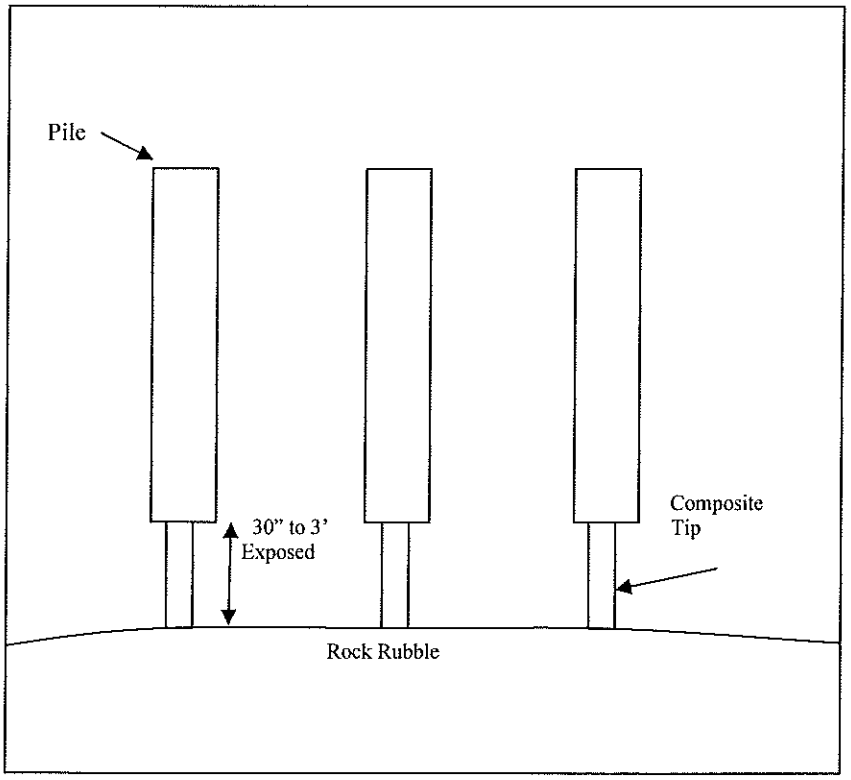
Fender Pile Sketch



Not to Scale

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EXHIBIT N

CDM Smith

1301 Gervais Street, Suite 1600
Columbia, South Carolina 29201
tel: 803 758-4500
fax: 803 758-4561

June 29, 2012

Mr. Ehab Guirguis, P.E.
Senior Engineer, Transportation Dept., Lee County FL
5560 Zip Drive
Fort Myers, FL 33905

Project: Lee County – Department of Transportation
Project Nos. 5807 and 5814
County Road No. 869
Sanibel Causeway Improvements

Subject: Bridge Nos. 124114, 124115, and 124116
Sanibel Causeway Beam Cracking Report

Dear Mr. Guirguis:

Your office has engaged the structural design services of CDM Smith to evaluate small-to-hairline cracks near beam ends of project referenced above, using information currently available from the county, and my own on-site review of the beam cracks on April 24, 2012. The purpose of this evaluation is to give an expert opinion on the cause of the cracks; the public safety impact due to the cracks; and the possible effect on the continued maintenance program to the bridge due to the cracks. We agreed that this first stage effort to perform those tasks would be to

(1) Evaluate the original design for the beams against required AASHTO Specification, standard practice of this type beam's design, and any supplemental Florida DOT design requirements that should have been utilized

(2) Review the construction records for deviations to the design intent

(3) Offer a judgment on the apparent cause of the cracks, if the study reveals it

This initial study has been completed and this letter will report on the above tasks. Subsequent to your review of this report, and anticipated further dialog on the bridge safety implications, we will recommend remediation or maintenance procedures, if needed, that will assure the bridge life is safely reached.

Sanibel Causeway Bridges, Description and Design Data

The structures are located on County Road 867 near Sanibel Island over San Carlos Bay. They are also known as the Sanibel Causeway Boulevard bridges, and form the sole vehicular access to Sanibel Island. These bridges are owned by Lee County, and operate under a tolling system. All three bridge structures utilize precast, prestressed Florida Bulb-T 78 beams with a cast-in-place reinforced concrete deck. The substructures consist of reinforced concrete piers supported by spread footings with prestressed concrete piles.

All bridge record plans indicate a design period of 2003 to 2004, with revisions thru 2006. Public information gives the construction dates from August, 2004 to mid 2007, with the official traffic opening in September 2007. They were constructed during one contract and by one prime contractor.

Bridge record plans also state that the Design Specification was the AASHTO LRFD, Bridge Design Specifications, 2nd Ed., 1998 w/ Interims thru 2003. Also referenced and implicitly assumed is that the bridges' design was under the guidelines of the Florida DOT Structures Design Guidelines for LRFD, Jan 1, 2003. The plans were prepared under the Florida DOT Detailing Manual, Jan 1, 1999. State DOT's often have supplemental design criteria, or waive or modify the AASHTO Specification criteria, for bridges in their own state through their Structure Guidelines. It is common practice for design consultants to also use those DOT Guidelines for any bridge designed in that state, whether state-owned or not, for consistency to practice. It will be pointed out herein whether such differences existed at the time of these bridge designs

It is noted that two different design firms of record produced the plans for the three bridges; the higher northern Bridge (124116) over the prime navigational channel was designed by Hardesty and Hanover, while the somewhat lower southern Bridges (124115, 124114) were designed by URS. However, relative to the issues addressed by this report, all beam details utilized similar or identical reinforcing and prestressing patterns, and were drawn upon the same Florida DOT standard beam details. One notable design difference between the two firms design approach is that Hardesty and Hanover utilized "full" beam continuity, with 3-span "fully-continuous" span units and fully-competent concrete diaphragms at interior span joints to achieve that beam continuity for superimposed loads. URS utilized discontinuous beams but what is referred to as "slab continuity", that is, only the deck is continuous. While this difference in continuity does play a role in the bridges behavior, and could have influenced beam end cracking or at least inferred a variation of cracking between the two design approaches, such difference has not been noted in earlier inspections; the same or similar beam cracking has been observed in all beams. This observation is significant, as it makes less likely the influences of temperature or concrete shrinkage are primary contributing factors.

Bridge No. 124114 (Bridge C in record plans) has an overall bridge length of 3864'-0" consisting of 27 total spans of three span continuous deck units. All spans are 144'-0" except for the span over the Navigation Channel, which notably is the shortest at 120'-0". All beams for the 144'-0" spans have the same prestressing pattern, while the four beams in the 120'-0" have the same type, but fewer, strands. All beams have similar reinforcing steel, with the only variation coming some distance away from the beam ends.

Bridge No. 124115 (Bridge B in record plans) has an overall bridge length of 1872'-0" consisting of 13 total spans of three or four span continuous deck units. All spans are 144'-0". All beams have the same prestressing pattern and similar reinforcing steel.

Bridge No. 124116 (Bridge A in record plans) has an overall bridge length of 2996'-2½" consisting of 21 total spans of three span continuous units. Four units have 144'-0 spans, two units have two 144-0" spans and a 144'-1¼" span, and the Center Unit has two 130'-0 spans and a 144'-0" span. All beams in the Center Unit have the same prestressing pattern, while the other six units have the same type, but more, strands. All beams have similar reinforcing steel, with the only variation coming some distance away from the beam ends.

The contract plans state that the beams in all three bridge use Class VI concrete (f'c = 8.5 ksi). The plans show the same concrete stress limits for tension and compression at different construction stages for all bridges. All of the bridges have the same design loadings, except for ship vessel impact in which Bridge No. 124116 has an a higher vessel impact loading.

Because the focus of this report is on the concern over the many cracks in the prestressed beam ends, the remainder of this report will only contain information directly or indirectly related to the beam cracks.

Observed In situ Beam Cracks

The cracks in the beams that are the subject of study, as noted in the inspection reports and observed by our brief inspection, are only near beam ends. This is the typical location where, if any, cracks tend to appear in prestressed beams. During our brief inspection, we observed minor cracks that would fall into 3 categories:

- Very minor, almost imperceptible, random cracking of the bottom flange of the beams.
- Very minor horizontal cracking of the beam web at or near mid depth. This was only observed in one location but is not unusual in highly-prestressed beams of this depth.
- Minor but perceptible diagonal cracking that tends to begin at the span end at the bearing area and proceed up the web diagonally away from the bearing support. This is typical of a

"shear crack" and of the same orientation. It is this cracking, which is observed in a significant number of these bridges beams, that is the focus of this study.

Most of the cracks in this area are noted to be superficial. The diagonal cracks are up to 4 feet long and those observed were 1/64 inch wide maximum. In at least one location observed, the diagonal crack extended to the top flange. The inspection report for Bridge No. 124116 also refers to two particular cracks where one has increased in size over time (Beam 14-4 at Pier 14) while the other is a newly developed crack (Beam 16-4 at Pier 16). Also noted in the report for Bridge No. 124116 is a longitudinal hairline crack in the top flange of Beam 17-4 near Pier 18. Also mentioned in the inspection reports are some minor areas of delamination and spalling at the beam ends.

Beam End-Zone Cracking

As with all concrete elements, concrete beams crack when tensile stresses exceed the tensile strength of the concrete. The length, width, and depth of the crack depend on the magnitude and distribution of the tensile stresses and the amount and location of reinforcement within the area of the crack. Single span, reinforced concrete beams subject to normal vertical loads typically see their largest tensile stresses in the bottom of the bottom flange near midspan and in the webs near supports. Continuous span, reinforced concrete beams also develop tension in the top flange over continuous supports. The presence of cracks alone is not a sign of misbehavior or a problem. Properly reinforced concrete members are designed so that the tension forces transfer to the reinforcing steel as the concrete cracks, and properly distributed reinforcing steel keeps the cracks small and evenly distributed. It is a given that in large non-prestressed concrete beams certain cracking is predicable and acceptable, and controlled by the reinforcing steel present.

Prestressing a reinforced concrete beam changes the cracking behavior due to the superposition of the internal prestressing stresses. In typical prestressed highway bridge beams these internal forces act in opposition to the bending stresses from external loading to aid their "flexural" strength. As the prestressing forces are somewhat constant along the beam, the stresses from external forces vary. Therefore, prestress strands are either draped or selectively debonded near the ends, so that the prestressing that is intended to strengthen the beam does not itself produce harmful internal stresses at some points.

As modern prestressed beam design has advanced with higher concrete strengths, stronger prestressing strands, and optimized beam shapes, longer spans are reached with today's prestressed beams. As the technology advances, though, modern prestressed beams have become more-complex in their behavior as they are subjected to much higher internal and external loads than historically the case. It is especially true that in the end zones of large, longer span beams, that stress fields caused by high stressing can become problematical. In a relatively small end zone of the beam, we have the introduction of large prestressing forces, strand slippage as the strands transfer their forces to the concrete, the beam bearing forces, the forces resisting sliding of the

bridge (bearing shear), and the debonding (sheathing) of some strands to eliminate their effect. Modern bridge codes and state DOT's are constantly changing the design parameters today to effectively understand and control prestress beam end-zone design.

Several U.S. states, particularly Florida among them, have been the cradle for advancement of prestressing technology in the U.S. The economic factors of rapid transportation growth, and limited steel supply, have enabled more advancement in concrete design theory and sophistication of use than in other states. Simply put, the Florida Department of Transportation (FDOT) is a leader in the advancement of prestressed beam technology, and is often more aggressive than other agencies. The beams in these bridges are the culmination of decades of design evolution, but at the same time are at the leading edge of the use of prestressing to enable beams to go longer (thus more economically) than in the past.

Crack Investigation

Of the three types of end-zone cracks described earlier, only the diagonal cracking at the beam ends are reason for concern at the Sanibel Island site. The other crack types appear to be within the range of what might normally be expected for beams correctly designed to the AASHTO LRFD Specification. The AASHTO design recognizes the potential for these cracks and provides the appropriate reinforcement and/or maintains the appropriate stress level to control them.

The cracks that are present that are the most unpredictable, and the cause of this study, are the diagonal cracks near the supports. Typical depth beams, of modest spans and traditional prestressing are not known to develop cracking of this nature to quite the extent we see in the subject bridges. It should be noted that all of the cracks have very small widths which indicate the reinforcing steel in the vicinity of the cracks is likely to be performing adequately. However, we performed an analysis to confirm there is not a design flaw.

Design Check

This crack investigation is principally to determine if there is a design flaw, and therefore a possible safety issue with the prestressed beams. In the investigation, we have used only the codes, guidelines and practices which were present during the original design. In the following discussion, we evaluated the reinforcing steel used in the beam ends, and the prestressing applied, in view of the operable codes and the FDOT Structures Design Guidelines (SDG) of that time.

The concrete allowable stress limits in the contract plans match those used by the FDOT at the time of design, as expressed by its Structures Design Guide (SDG) and memo's to designers. FDOT added a requirement that the maximum compressive concrete strength at release must not be greater than 6,000 psi via its Temporary Design Bulletin C04-01 dated February 3, 2004. Bridge No. 124116 used a stated value of 6,800 psi, but it is not clear if C04-01 pre-dated the design. Assuming it did not, the 6800 psi value is not a code or policy violation, but it does indicate the designer's

intent to use more force at release than subsequently allowed. Still, this was an isolated incidence and most of the beams were designed clearly within the AASHTO and prescribed FDOT limits of the design period.

More significantly, another FDOT revisionary change in the same referenced memorandum is to limit the maximum bonded prestress force for our particular beam type. This limit was set at 1,430 kips. We note that the 144'-0" spans of all three bridges have a bonded prestress force of nearly 2,100 kips, or nearly 50% greater than the memorandum allows. Note that these memoranda occurred during the time of design, and it is unclear whether they could have been incorporated. But the result of this limit would be to effectively preclude the use of the prestressing force that was used, and so the beams pre-memo are acceptable but post-memo are unacceptable. Only the 120'-0" of Bridge No. 124114 comes close to remaining below the limit at about 1,450 kips. FDOT specifically states, in the memo (attached for reference): "The use of higher strength concrete, higher release strengths and 0.6 inch diameter strands in recent years, to accommodate longer spans and wider beam spacings, has resulted in much higher bursting forces in the ends of prestressed beams. This has aggravated the minor cracking traditionally observed in the ends of these beams. Additional reinforcing was added to the ends of prestressed beams in the June 30, 2000 release of the Standard Drawings to satisfy the Bursting Resistance in LRFD and utilize the full strand pattern available in most of these beams. Undesirable cracking in the ends of AASHTO and Florida Bulb-Tee beams has been reported for beam designs near the upper limits of the LRFD (2001) Bursting Resistance requirements." Based on this comparison, the designers did not violate limits set by FDOT or AASHTO at time of project letting. However, these same beams would not have satisfied the changes set forth by Temporary Design Bulletin C04-01. Stated more forcefully, these beams exceed allowable limits of prestressing that are in today's SDG.

In addition to determining the "code and SDG compliance" discussed above, we also performed an independent analysis of the state of stress in the beam end. We used "industry standard" procedures and mainstream software commonly used by designers. A beam analysis was performed using LEAP CONSPAN. CONSPAN is published by Bentley, a major design software supplier, and is industry-accepted prestressed beam design and analysis software. We were not able to locate a 2005 version, so a newer version of the software was used than would not have been available at the time of the design. While the analysis of concrete has not changed much over the years, software developers continue to refine the methods used to balance speed of analysis with accuracy of results. This means that an analysis run using the current version may not yield exactly the same results as previous version, but the results should be close. Given the specific bridge parameters and stress limits, CONSPAN calculates and compares concrete stresses at various stages during life of the prestressed concrete beams. Based on the analysis, the <u>only concrete stress limit violated</u> is compression in the bottom flange at release. The stress limit by AASHTO (and SDG) is 0.60*f'ci = 4.08 ksi, while the maximum compressive stress in this Sanibel bridge beam is 4.22 ksi. This is an overstress of about 3%. For the stress check at release of strands, which is a temporary

condition, this would be an acceptable overstress according to industry practices. Also, the amount of shear reinforcement is adequate per AASHTO and FDOT.

Another change made set forth by Temporary Design Bulletin C04-01 was to set a reduced limit on the stress in the vertical reinforcement near the beam ends due to the bursting force created by the anchorage of the prestressing strands. Per the memorandum, "Cracking in the ends of AASHTO and Florida Bulb-Tee beams has been observed with vertical bursting reinforcing designed to 20 ksi stress, based on 4% of the bonded prestressing force and distributed over a distance of h/5, in accordance with the LRFD (2001) Section 5.10.10.1." The change in LRFD 2002 was the distribution length increased to h/4. This allowed for an additional 12% of bonded strands based on FDOT's prestressed beam standard details. FDOT reduced the 20 ksi limit to 13 ksi. Prior to the memorandum, the maximum prestressing force allowed was 2,860 kips. The beams meet this requirement with only 2,100 kips. The memorandum set the maximum prestressing force at 1,730 kips. Based on the stress limit changes in the memorandum and the details in the plans, the maximum prestressing force allowed is 1,860 kips, still less than the 2,100 kips required and used in prestressing these beams. Even though the plans exceed what is allowed in the (later) memorandum, it is not a direct indication that this is the cause of the cracking, but the FDOT restrictions on the prestressing force, and the language used in the memo, suggests beam end cracking is a potential at the higher prestressing forces used in the Sanibel bridge beams.

The higher prestressing forces used in these beams may have initiated a problem that does not generally need to be considered in prestressed beams unless they are post-tensioned. (In post-tensioning, a very large force is entered into a concrete section in a very small area; in pretensioned beams it is normally applied by strand transfer, and thus a more gradual transfer of forces into a beam). Therefore, the last item investigated is the change in compressive stress distribution through the cross-section of the beam over the last few feet of the beam. At the very end of the beam, the compressive stress in the beam from the strands is very concentrated near the bottom of the beam. At a distance from the beam end approximately equal to the depth, the distribution of the compressive stress is more uniform across the section. The spreading of the compressive forces causes tensile stresses to form within the same area that are somewhat vertically inclined. The stresses can contribute to the type of cracking observed. The stress distribution in this area can only be estimated from a complex analysis (specifically a Finite Element Modeling analysis), which is beyond the scope of this investigation. While this phenomenon may be a contributing factor to the cracks, neither the AASHTO Specification nor FDOT SDG specifically require a check for this stress pattern. Beams with typical and normal prestressing levels have historically not exhibited problems from this effect. It could be that beams with higher prestress levels are more adversely affected by this lateral tension.

Conclusion

Reinforced concrete beam design, with and without prestressing, is understood very well. However, the introduction of the compression due to the prestressing greatly impacts the stress fields near supports. Over years of aggressive design practices that are intended to achieve maximum beam economy, larger amounts of prestressing forces have been used, possibly leading to the onset of cracking in the ends of prestressed beams. Due to this complexity of end-of-beam behavior, FDOT and AASHTO address the stresses near the beam ends by requiring large amounts of reinforcing near the supports based on empirical formulas. These formulas are satisfactory most of the time, but as prestressing become more aggressive, they may have to be adjusted, as they may not accurately capture all the forces within this end area of the beam. During the time of the design of the Sanibel beams, Florida (and others) noted that high levels of prestressing bought about early cracking near beam ends. In simple terms the design technology was pushed too far. FDOT later released Design Memo's restricting the high prestressing (Attachment 2). Those type adjustments were occurring in real time during the design of the Sanibel Causeway bridges, and the designers likely could not have captured the changes in design in sufficient time to change the design. However, it should also be noted that the bridges gained from the larger prestress being used, in that the beams were able to achieve longer spans, inferring that the constructed bridges were as economical as possible under the design guidelines of that period. A few observations to note:

- All beam stresses, prestressing forces, in the beams ends do meet the allowable set forth by the AASHTO and SDG "at the time" of the design. The slight compressive overstress mentioned above is well within normal acceptance.

- Shortly after, or during, the beam design, FDOT greatly reduced the amount of prestress force that could be used in these beams. Their discussion of that change includes the observation of cracking caused by too much prestressing.

- Our own independent "code checks" indicate that the beams were code and practice compliant at the time of design.

- We feel that the large prestressing forces that were used to make these "longer beams", that was later limited by SDG, has contributed to the end-zone cracking, but in a way that is not clearly explainable. Code checks infer acceptable reinforcing is used.

- If the above infers that the AASHTO and SDG are occasionally experimental, the safety of the structure and its users are not risk. In the instance of these beam web cracks, while the designers followed both FDOT and AASHTO code requirements at the time of design, we feel this is one of the instances where the code did not completely capture the reality of the large internal stresses. These stress may have tipped the boundary of crack initiation, (i.e. allowing cracks to occur/appear), but those cracks alone do not put public safety at risk.

- A more detailed, advance analysis could be done (example an FEM model) to determine the precise diagonal tension (shear) and judge whether the cracks now evident are predictable. However, there is no indication that further explanation would lead to additional concerns, as the beam is reinforced consistently with current AASHTO Code provisions.

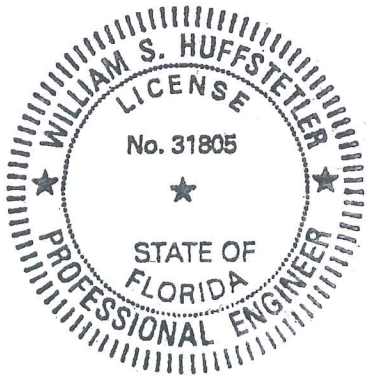
Recommendations

Due to the AASHTO code not completely capturing the results of the large end-zone internal stresses, which by policy are not acceptable in Florida today, we recommend the county set up a crack monitoring program. At some point the cracks should stabilize, but it is not predictable if we have reached that juncture. A monitoring program will give an accurate analysis of how the cracks are behaving. If the cracks are stable and not growing, the stresses in the structure have stabilized. Stable cracks will confirm that the bridge is safe and should require little-to-no maintenance for many years. If the cracks are growing, it does not mean the bridge is not safe. It only means the stresses are still undergoing distribution trying to find internal stability. If the measurement of crack growth suggests the cracks are not stable, and have not yet approached a decline in growth, then a retrofit could be recommended to force the stability of the internal stresses and not allow more redistribution. Although this is not anticipated, funds spent on crack growth measurement do allow more comfort in knowing that the rate of growth is either stable, declining, or problematical.

Crack monitoring can be done by several methods and deserves discussion on the means and methods used. We recommend a direct discussion with you and your staff. After the crack monitoring, depending on the measurements and predictions of rate of growth, we may recommend applying a concrete sealant to all beam ends past the extent of the cracks in each beam.

We also recommend repairing spalls and delaminations mentioned in the inspection reports at earliest convenience.

Sincerely,



William S. Huffstetler, P.E.
Vice President
CDM Smith Inc.

cc: Randy P Cerchie, Lee County
David Taylor, P.E., CDM Smith
Amy Davies, CDM Smith

Attachment No. 1

Additional Insight and Commentary on Prestressed Beam Behavior for Lee County reviewers

Prestressed concrete beams reduce the tensile stresses in the bottom flange via prestressing strands. Prestressing strands are tensioned prior to casting the concrete beam which causes elongation of the strands. After the concrete reaches a predetermined compressive strength, the strands are cut. With the tension removed from the ends of the strands, they want to shorten back to their original length. With the strands bonding with the concrete of the beams, the concrete resists this shortening which causes a compression in the concrete around the strands. The outcome is the concrete is in compression while the prestressing strands remain in tension, but less tension than before the strands were cut. There are many variables that go into calculating how much of the tension transfers from the strands to the concrete in the prestressed beam. There are even more variables that go into calculating the behavior of the beam with respect to time. Adding prestressed strands to bottom of a reinforced concrete beam is done to reduce tensile stresses in the bottom flange of concrete beams. In reinforced concrete beams, longitudinal reinforcing steel is used to resist tensile stresses in the bottom flange.

Continuous span, reinforced concrete bridges reduce the tensile stress in the concrete over supports by adding adequate reinforcing steel in the deck over the supports. Typically enough longitudinal reinforcing steel is added to prevent the top flange of the concrete beams to develop any significant tensile stresses.

Tensile stresses in the concrete also build up in webs near supports. As the vertical loads on the beam have to be transferred to the supports, shear in the beam increases near supports. Shear is resisted primarily by the web in beams. If cracks do form in the web, it is generally near the supports where the shear is highest. Tensile stress due to internal shear forces near beam ends is inclined, with respect to bottom of the beam, causing the cracks to form on a diagonal. Vertical steel (we typically call shear reinforced, or stirrups) is used to resist these internal tensile stresses.

Cracks in beams can also be caused by expansion and contraction, shrinkage, and creep. Concrete expands and contracts with changes in temperature. If the concrete has resistance to expansion or contraction, tension cracks can occur. Concrete shrinks in all direction naturally during the curing process. Again, if the concrete has resistance to this shrinkage, tension cracks can occur. This resistance can be in the longitudinal direction or internally. And internal restraint can occur when the surface of the concrete cures while the internal concrete has not. While the internal concrete cures and continues to shrink, the external concrete resists the internal shrinkage causing cracks to occur in the surface. This concept has brought about special requirements for Mass Concrete, cold construction, and hot construction methods. Concrete creeps due to permanent compressive loads. Prestressed concrete beams have a permanent compressive loading due to the prestressing causing the beams to shorten over time. Any resistance to this shortening can cause tension cracks.

All of these cracks and can be controlled and/or eliminated with good design practices, rebar placement, material selection, and construction practices. But moderate, well-dispersed and small (hairline) cracking is not necessarily cause for alarm.

Attachment No. 2

FDOT's Temporary Design Bulletin C04-01, February, 2004
FDOT Structures Design Guidelines (LRFD) Topic 625-020-154-b

Florida Department of Transportation

JEB BUSH
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

JOSÉ ABREU
SECRETARY

February 3, 2004

M E M O R A N D U M

TO: District Structures Design Engineers:
(Gerard Moliere, Rod Nelson, Keith Shores, John Danielsen, Neil Kenis, Kim Saing, Jose Rodriguez, and Agnes Spielmann)

FROM: William N. Nickas, P.E., State Structures Design Engineer

COPIES: Assistant Secretary, Ken Morefield,
State Highway Engineer, Freddie Simmons,
Director Office of Design, Bob Greer,
District Directors of Production:
(Mike Williams, Dave Byrd, Gene Martin, Gerry O'Reilly, Noranne Downs, Javier Rodriguez, Donald Skelton, Nancy Clements)

SUBJECT: **Temporary Design Bulletin C04-01**
FDOT Structures Design Guidelines (LRFD) Topic 625-020-154-b
Section 4.3.1.C Prestressed Beams – Concrete Release Strength
Section 4.3.1.E Prestressed Beams – Maximum Bonded Prestress Force

REQUIREMENTS:

Add the following sentence to Section 4.3.1.C of the Structures Design Guidelines:

"The maximum compressive concrete strength at release must not be greater than 6000 psi for the design of prestressed beams."

Add the following sub-section "E" to Section 4.3.1 of the Structures Design Guidelines:

The maximum prestressing force from fully bonded strands at the ends of prestressed beams must be limited to the values shown on the Standard Drawings. No losses shall be applied to the calculated prestressing force. The minimum length of debonding from the ends of the beams is half the depth of the beam. The reinforcing in the ends of the beams shown in the Standard Drawings must not be modified without the approval of the State Structures Design Engineer.

For the current Standard Drawings with the following "Issue Dates", the maximum prestressing force from fully bonded strands at the ends of the beams must be limited to the values in the following table:

Beam Type	Standard Drawing (Issue Date)		Max. Bonded Prestress Force
AASHTO Type II	Index No. 120	(2-14-01)	650 kips
AASHTO Type III	Index No. 130	(2-14-01)	995 kips
AASHTO Type IV	Index No. 140	(2-14-01)	1270 kips
AASHTO Type V	Index No. 150	(7-31-03)	1635 kips
AASHTO Type VI	Index No. 160	(7-31-03)	1800 kips
Florida Bulb-T 72	Index No. 172	(7-31-03)	1300 kips
Florida Bulb-T 78	Index No. 178	(6-30-00)	1430 kips
Florida U 48	Index No. 248	(2-14-01)	2790 kips
Florida U 54	Index No. 254	(2-14-01)	2790 kips
Florida U 63	Index No. 263	(2-14-01)	3070 kips
Florida U 72	Index No. 272	(2-14-01)	3070 kips
Inverted-T	Index No. 320	(10-01-01)	310 kips

COMMENTARY:

Cracking in the ends of AASHTO and Florida Bulb-Tee beams has been observed with vertical bursting reinforcing designed to 20 ksi stress, based on 4% of the bonded prestressing force and distributed over a distance of h/5, in accordance with the **LRFD** (2001) Section 5.10.10.1. To minimize these cracks and accommodate the longer distribution length (h/4) adopted by **LRFD** in 2002, the maximum prestressing force in the ends of these beams has been limited. Additionally the maximum design concrete strength at release has been limited to 6000 psi to control the amount of prestress in the ends of these beams. The maximum prestressing force is based on 13 ksi bursting steel stress for AASHTO and Florida Bulb-Tee beams. This is approximately equivalent to a 20% decrease in allowable stress from the **LRFD** (2001) requirements. Florida-U beams and Inverted-T beams have not shown similar problems, so the maximum prestress force is based on 18 ksi and 20 ksi bursting steel stress respectively, which provides equivalent resistance to the previous **LRFD** (2001) requirements.

BACKGROUND:

The use of higher strength concrete, higher release strengths and 0.6” diameter strands in recent years, to accommodate longer spans and wider beam spacings, has resulted in much higher bursting forces in the ends of prestressed beams. This has aggravated the minor cracking traditionally observed in the ends of these beams. Additional reinforcing was added to the ends of the prestressed beams in the June 30, 2000 release of the Standard Drawings to satisfy the Bursting Resistance requirements in **LRFD** and utilize the full strand pattern available in most of these beams. Undesirable cracking in the ends of AASHTO and Florida Bulb-Tee beams has been reported for beam designs near the upper limits of the **LRFD** (2001) Bursting Resistance requirements. Additionally the 2002 Interim Revision to LRFD Section 5.10.10.1, which increased the bursting distribution length from h/5 to h/4, has effectively increased the allowable bursting forces by approximately 25%, necessitating reduction in the allowable bursting stress or

a limit on the maximum prestressing force in the ends of prestressed beams in Florida to control cracking.

FOLLOW-UP:

The standard reinforcing patterns in the February 2004 Structures Standard Drawings, Index Series 100, 200 & 300 will be modified to accommodate most beam designs when up to a maximum of 25% of the strands are debonded at the ends of the beams.

FDOT recognizes that for some beams the full strand pattern will not be completely utilized with the current limits on the pretressing force from fully bonded strands, however due to constructability considerations and to meet commitments to the Prestressed Concrete Industry in Florida, the reinforcing in the ends of prestressed beams should not be changed.

IMPLEMENTATION:

Effective immediately all projects under design using AASHTO Type II , III, IV, V & VI beams and Florida Bulb-Tees should comply with these new requirements for both LFD and LRFD designs. Florida-U Beams and Inverted-T Beams will not require any design changes if designed in accordance with Section 5.10.10.1 of the AASHTO LRFD Bridge Design Specifications prior to the 2002 Interim Revision.

All projects let after June 2004 shall use the revised February 2004 Standard Drawings. These Standard Drawings will have minor changes to the reinforcing in the ends of the AASHTO & Florida Bulb-Tee beams and list the Maximum Bonded Prestressing Force on the “Typical Beam Details and Notes” Index Nos. 110, 210 & 310. The shear stirrups in AASHTO Type V & VI and Florida Bulb-Tee beams will also be changed from #4 Bars 4K, to #5 Bars 5K.

For projects let in or before April 2004, any changes to the plans to meet these new requirements need only be made at the discretion of the District Structures Design Engineer after notification by the Project Manager, taking into consideration the amount of overstress at the ends of the beams and any adverse impact to the production schedule.

No changes to the Specification Package or Quantities will be required as a result of these changes.

WNN/sjn

Attachment No. 3

Typical 144’-0” Sanibel Causeway Bridge beam stress checks

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

PROJECT DATA

```
Project            : Sanibel Causeway Imrovements Bridge Cracks check
Designer           : AEC
Date               : Jun/4/2012
Checked By         :
Date Checked       :
User job number    :
State              :                                State Job #:
State Specification: Florida
Comments           : Design check using single 144' span.
Design Mode        : AASHTO LRFD-US Units  [4th Edition, including 2009 Interims]
Design as:         : Simple span
Flared Girder:     : No
File Name          : P:\FL\Sanibel.Br.Cracks\Data\AEC\Conspan\Bridge A\144ft span (1 span).csl
```

GEOMETRY DATA

BRIDGE LAYOUT

```
Overall width     , ft  =       43.083
Left curb         , ft  =        1.542
Right curb        , ft  =        1.542
curb-to-curb width, ft  =       40.000
Number of spans         =            1
Number of lanes         =            3
Lane width        , ft  =       12.000
Eff Deck thick    , in  =        8.000
Sacrificial thick , in  =        0.500
Haunch thickness  , in  =        2.500
Haunch width      , in  =       60.000
Bridge c/s,MI(Ixx), in4 =   7625428.50
```

SPAN DATA

```
Precast length    , ft =    143.146
Bearing-to-bearing, ft =    142.146
Release span      , ft =    143.146
```

BEAM DATA

No	ID	Loc-prev ft	Area in2	MI(Ixx) in4	Height in	Yb in	B-topg in	B-Trib ft
1	Old FIB-78	4.729	1084.0	914998.0	78.00	39.78	60.00	10.333
2	Old FIB-78	11.208	1084.0	914998.0	78.00	39.78	60.00	11.208
3	Old FIB-78	11.208	1084.0	914998.0	78.00	39.78	60.00	11.208
4	Old FIB-78	11.208	1084.0	914998.0	78.00	39.78	60.00	10.333

MATERIAL DATA – Project Level

As defined in Material Tab. For beam level properties look at Beam Specific output.

CONCRETE PROPERTIES

	Precast	C.I.P.
f'c ,ksi =	8.500	5.500
Wc ,pcf =	150.000	150.000
Ec ,ksi =	5030.400	4046.450

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

```
K1         =      0.900      0.900
f'ci,ksi   =      6.800
Eci ,ksi   =   4499.330
K1         =      0.900
```

STRAND AND REBAR PROPERTIES

PRESTRESSED STEEL:

6/10-270K-LL, Low relaxation strands

```
     Straight Pattern
     Strand Diameter       =        0.600 in
     Tensile Strength(fpu) =      270.0 ksi
     Strand Area           =        0.217 in2
```

Use transformed strand and rebar: Strand Only

REINFORCING STEEL: Tension/Shear steel: fy = 60.0 ksi Es = 29000 ksi fs = 24.0 ksi

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

LOADS DATA:

LOADS GENERATED USING PERMANENT LOAD WIZARD: YES

Left Barrier Weight, klf	0.203
Right Barrier Weight, klf	0.203
Left Curb Weight, klf	0.200
Right Curb Weight, klf	0.000
Left Sidewalk, klf	0.000
Right Sidewalk, klf	0.000
Future Wearing Surface, ksf	0.015
Sacrificial Wearing Surface, in	0.500
Stay in Place Deck Forms, klf	0.000

LOADS ON PRECAST

UNITS: (Point: kips, Location: ft, Line: klf, Trapez: klf)

Span	Beam	DC/DW	Type	Mag.1	Loc.1	Mag.2	Loc.2	Description
1	1	DC	Line	0.065	0.00	0.065	142.15	Sacrificial Wearing Surface
1	2	DC	Line	0.070	0.00	0.070	142.15	Sacrificial Wearing Surface
1	3	DC	Line	0.070	0.00	0.070	142.15	Sacrificial Wearing Surface
1	4	DC	Line	0.065	0.00	0.065	142.15	Sacrificial Wearing Surface

DIAPHRAGM LOADS

UNITS: (Load: kips, Location: ft)

LOADS ON COMPOSITE

UNITS: (Point: kips, Location: ft, Line: klf, Trapez: klf)
(Area: ksf, Width: ft)

Span	DC/DW	Type	Mag.1	Loc.1/Width	Mag.2	Loc.2	Description
1	DC	Line	0.200	0.00	0.200	142.15	Left Curb Weight
1	DC	Line	0.203	0.00	0.203	142.15	Left Barrier Weight
1	DC	Line	0.203	0.00	0.203	142.15	Right Barrier Weight
1	DW	Area	0.015	40.00	-	-	Future Wearing Surface

LIVE LOADS

Live load deflection: not included.
ID: Design Lane (Type: Design Lane)
ID: Design Tandem (Type: Design Tandem)
ID: Design Truck (Type: Design Truck)

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

ANALYSIS DATA:

ANALYSIS PARAMETERS DATA

Truck impact: 1.330
Lane impact: 1.000
Strength II impact: 1.330
Fatigue impact: 1.150

DISTRIBUTION FACTORS (Art. 4.6.2.2):

Is Span Post-tensioned: NO
Include Rigid Cross Section Assumption (Art. 4.6.2.2.2d): YES
ADTT (Average Daily Truck Traffic) : 10000
Percent of the specified force effect : 1.00

NOTE: Beam specific dead and live load DFs are printed in beam level reports.

LOAD FACTORS: (Table 3.4.1-1 & 3.4.1-2)

	Live	DC(max)	DC(min)	DW(max)	DW(min)
Service I:	1.00	1.00	-	1.00	-
Service III:	0.80	1.00	-	1.00	-
Strength I:	1.75	1.25	0.90	1.50	0.65
Fatigue I:	1.50	-	-	-	-

Ductility Factor: 1.00
Redundancy Factor: 1.00
Importance Factor: 1.00

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

PROJECT PARAMETERS DATA:

MULTIPLIERS:

```
  Trans len mult: Bonded   = 1.00
                  Debonded = 1.00
  Dev len mult:   Bonded   = 1.60
                  Debonded = 2.00
```

Camber & Deflection Multiplier (PCI ref.)

	Erection	Final
Prestress:	1.80	2.20
Self. Wt:	1.85	2.40
Deck + Haunch:		2.30
Diaphragm:		3.00
DL-Prec.:		3.00
DL-Comp.:		3.00

MOMENT AND SHEAR PROVISIONS:

```
  Ultimate Moment Capacity, Mr-prvd computed:                AASHTO equations
  Horizontal Shear, Beam and Slab effects in Vu:             INCLUDED
  Negative Moment Design, Non-composite Moment effects in Mu: INCLUDED
```

STRESS LIMITS (Art. 5.9.4):

STRESS LIMITS AT RELEASE BEFORE LOSSES (Using Advanced Settings):

	PRECAST
Strength	6.80 ksi
Elasticity	4499.3 ksi
Max comp	4.08 ksi
Outer 15.00 %	
Max tens	-0.25 ksi
Max tens, w/reinf	-0.99 ksi
Center 70.00 %	
Max tens	-0.25 ksi
Max tens, w/reinf	-0.49 ksi

STRESS LIMITS AT FINAL AFTER LOSSES:

	PRECAST	DECK
Strength	8.50 ksi	5.50 ksi
Elasticity	5030.40 ksi	4046.45 ksi

STRESS LIMITS AT FINAL 1 (P/S + DL + LL):

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

	PRECAST	DECK
Max comp	5.10 ksi	3.30 ksi

STRESS LIMITS AT FINAL 2 (P/S + DL):

	PRECAST	DECK
Max comp	3.83 ksi	2.47 ksi

FATIGUE I STRESS LIMITS AT FINAL 3 (50% P/S + 50% DL + F_LL):

	PRECAST	DECK
Max comp	3.40 ksi	- ksi

SERVICE III (Tension):

	PRECAST	DECK
Max tens	-0.55 ksi	-0.45 ksi

RESISTANCE FACTORS (Art. 5.5.4.2):

Flexure Reinforced	
Compression controlled sections	0.75
Tension controlled sections	0.90
Flexure Prestressed	
Compression controlled sections	0.75
Tension controlled sections	1.00
Shear	0.90

PRESTRESS LOSSES:

Time Dependent Losses, Approximate Method (Art.5.9.5.3)
Days to release = 0.75
Rel. Humid.(RH) = 75.0 %

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

Span: 1, Beam: 1

PRECAST DATA:

Section Id: Old FIB-78
Type : I-Girder
Flng width: Top = 60.000 in Bot = 28.000 in
thick: Top = 3.000 in Bot = 8.000 in
Stems : No = 1
Top = 7.000 in
Bot = 7.000 in

Shear width = 7.000 in
Max. thick = 10.000 in
Fillet width = 3.000 in

GENERAL BRIDGE DATA:

Bridge Width = 43.08 ft
Curb-to-curb = 40.00 ft
Beam Spac. Lt./Rt. = 4.73/ 11.21 ft
Lane width = 12.00 ft
Number of lanes = 3
Interior/Exterior = Exterior
Start Skew Angle = 0.00 degrees
End Skew Angle = 0.00 degrees

TOPPING DATA:

Deck Thickness = 8.000 in
Haunch:
Thickness = 2.500 in
Width = 60.000 in
Effective width = 124.000 in (Art. 4.6.2.6.1)

GENERAL LOAD DATA:

Dead loads on precast:

UNITS: (Point: kips, Location: ft, Line: klf, Trapez: klf)

DC/DW	Type	Mag.1	Loc.1	Mag.2	Loc.2
DC	Line	0.065	0.00	0.065	142.15

Dead loads on composite: See Project info for composite loads

GENERAL SPAN DATA:

Overall length = 143.146 ft
Release length = 143.146 ft
Design length = 142.146 ft

Kern points:

Upper = 61.00 in
Lower = 17.69 in

DISTRIBUTION FACTORS (Art. 4.6.2.2):

Include Rigid Cross Section Assumption (Art. 4.6.2.2.2d): YES
Live Moment (2+ lanes loaded) : 0.982 (Calculated) (#)
Live Moment (1 lane loaded) : 1.006 (Calculated) (#)
Live Shear (2+ lanes loaded) : 0.982 (Calculated) (#)
Live Shear (1 lane loaded) : 1.006 (Calculated) (#)
(#) Lever rule (C4.6.2.2.1)

Dead Loads and Pedestrian Load distributed equally to all beams (Art. 4.6.2.2.1)

Pedestrian : 0.250 (Calculated)

Comp. DC : 0.250 (Calculated)
Comp. DW : 0.250 (Calculated)

RESISTANCE FACTORS (Art. 5.5.4.2):

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

Flexure Reinforced:
Compression controlled sections : 0.75
Tension controlled sections : 0.90
Flexure Prestressed:
Compression controlled sections : 0.75
Tension controlled sections : 1.00
Shear : 0.90

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

Span: 1, Beam: 1

SECTION PROPERTIES:

		PRECAST	COMPOSITE
Area	=	1084.0 in2	2002.6 in2#
Total Height	=	78.00 in	88.50 in
Mom. of Inertia (Ixx)	=	914998 in4	1886197 in4#
Ht. of c.g.	=	39.78 in	59.98 in#
Density	=	150.00 pcf	150.00 pcf
Self-weight	=	1129.2 plf	2318.7 plf
Mom. of Inertia (Iyy)	=	96597.1 in4	
Poisson's Ratio	=	0.2	

(#) Of Total Section using Ect/Ec = 0.8044

Use transformed strand and rebar: Strand Only

TRANSFORMED SECTION PROPERTIES:

Location, ft	Bearing 0.00	Trans 2.50	H/2 3.69	0.10L 13.81	0.20L 28.13	0.30L 42.44	0.40L 56.76	Midspan 71.07
Precast: (At Release, using Ec = 4499.3 ksi)								
Area , in2	1093.3	1139.6	1139.6	1144.2	1151.1	1153.5	1155.8	1155.8
Yb , in	39.52	38.31	38.31	38.19	37.99	37.92	37.85	37.85
MI(Ixx) , in4	923370	963191	963191	967416	974626	977372	980113	980113
Composite: (At Final, using Ec = 5030.4 ksi)								
Area , in2	2010.7	2051.2	2051.2	2055.3	2061.3	2063.4	2065.4	2065.4
Yb , in	59.77	58.78	58.78	58.68	58.53	58.47	58.42	58.42
MI(Ixx) , in4	1906683	2006686	2006686	2017100	2034045	2040210	2046367	2046367

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

Span: 1, Beam: 1

STRESS LIMITS (Art. 5.9.4):

	PRECAST	DECK
STRESS LIMITS AT RELEASE BEFORE LOSSES (Using Advanced Settings):		
Strength =	6.80 ksi	
Elasticity =	4499.3 ksi	
Max comp =	4.08 ksi	
Outer 15.00 %:		
Max tens =	-0.25 ksi	
Max tens,w/reinf =	-0.99 ksi	
Center 70.00 %:		
Max tens =	-0.25 ksi	
Max tens,w/reinf =	-0.49 ksi	
STRESS LIMITS AT FINAL AFTER LOSSES:		
Strength =	8.50 ksi	5.50 ksi
Elasticity =	5030.40 ksi	4046.45 ksi
STRESS LIMITS AT FINAL 1 (P/S + DL + LL):		
Max comp =	5.10 ksi	3.30 ksi
STRESS LIMITS AT FINAL 2 (P/S + DL):		
Max comp =	3.83 ksi	2.47 ksi
FATIGUE I STRESS LIMITS AT FINAL 3 (50% P/S + 50% DL + F_LL):		
Max comp =	3.40 ksi	2.20 ksi
SERVICE III (Tension):		
Max tens =	-0.55 ksi	-0.45 ksi

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

Span: 1, Beam: 1

PRESTRESSED STEEL: 62 strands, 6/10-270K-LL, Low relaxation strands
Straight Pattern
END PATTERN (Ycg = 8.68 in):

11 @ 3.000 in	11 @ 5.000 in	11 @ 7.000 in	9 @ 9.000 in
7 @ 11.000 in	5 @ 13.000 in	3 @ 15.000 in	1 @ 17.000 in
1 @ 19.000 in	1 @ 21.000 in	1 @ 23.000 in	1 @ 25.000 in

Strand Diameter	= 0.600 in	Tensile Strength(fpu)	= 270.0 ksi
Strand Area	= 0.217 in2	Initial Prestress	= 0.75 fpu = 202.5 ksi
Total Strand Area	= 13.454 in2	Initial Pull	= 2724.4 kips
Trans. Len,bonded	= 3.000 ft	Dev. Len, bonded	= 11.549 ft
Trans. Len,debonded	= 3.000 ft	Dev. Len, debonded	= 14.436 ft
Holddown Force	= 0.000 kips	Beam Shrtng (PL/AE)	= 0.913 in

REINFORCING STEEL: Tension steel: fy = 60.0 ksi Es = 29000 ksi fs = 24.0 ksi
Stirrups:

# legs	Size	fy (ksi)	Area (in2)	Spacing (in)	Start (ft)	End (ft)
2	US#5[M16]	60.00	0.62	3.00	0.0000	1.5000
1	US#5[M16]	60.00	0.31	3.00	1.5000	6.2500
1	US#5[M16]	60.00	0.31	4.00	6.2500	18.2500
1	US#5[M16]	60.00	0.31	12.00	18.2500	42.2500
1	US#5[M16]	60.00	0.31	15.00	42.2500	100.8960
1	US#5[M16]	60.00	0.31	12.00	100.8960	124.8960
1	US#5[M16]	60.00	0.31	4.00	124.8960	136.8960
1	US#5[M16]	60.00	0.31	3.00	136.8960	141.6460
2	US#5[M16]	60.00	0.62	3.00	141.6460	143.1460

Midspan: Str. area = 13.4540 in2 Ycg = 8.68 in
P_init = 2724.4 kips Ecc = 31.10 in
Days to release = 0.75 Rel. Humid.(RH) = 75.0 % Es = 28500.0 ksi Eci = 4499 ksi

AASHTO LOSSES
Elastic Shortening ** 20.44 ksi (Eq 5.9.5.2.3a-1), (fcgp= 3.226 ksi)

Elastic Gains	Gains	Adjustment
due to Precast Loads	-6.41 ksi	0.00 ksi
due to Composite Loads	-1.26 ksi	0.00 ksi
due to Live Loads	-6.18 ksi	0.00 ksi

Time Dependent Losses (Approximate Method (Art.5.9.5.3))

	Initial	Final
Steel relaxation	0.00 ksi	2.40 ksi (Eq 5.9.5.3-1)
Concrete shrinkage	0.00 ksi	7.31 ksi (Eq 5.9.5.3-1)
Concrete creep	0.00 ksi	15.31 ksi (Eq 5.9.5.3-1)
Sub-total	20.44 ksi (10.09 %)	11.17 ksi (5.51 %)
Total Prestress Losses		31.60 ksi (15.61 %)

Prestressing Stress Limit Check (Table 5.9.3.1)
initial fpi = 202.5 ksi < 0.75 fpu, OK
initial fpe = 170.9 ksi < 0.80 fpy, OK

** Since the transformed section properties option has been selected, even though ES losses have been calculated explicitly here, they are not included as a part of stress calculations. Please see theory section for complete explanation.

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

SHIELDING AND REDUCED INITIAL PULLS:

Group	Strands	Heights End	Heights Mid	Shielding End	Shielding Mid	Initial Pull Frac	Initial Pull Pull/Str
19	2	9.000 in	9.000 in	5.00 ft	0.00 ft	75.0 %	43.9
24	2	7.000 in	7.000 in	10.00 ft	0.00 ft	75.0 %	43.9
25	2	7.000 in	7.000 in	15.00 ft	0.00 ft	75.0 %	43.9
30	2	5.000 in	5.000 in	20.00 ft	0.00 ft	75.0 %	43.9
31	2	5.000 in	5.000 in	25.00 ft	0.00 ft	75.0 %	43.9
35	2	3.000 in	3.000 in	30.00 ft	0.00 ft	75.0 %	43.9
36	2	3.000 in	3.000 in	45.00 ft	0.00 ft	75.0 %	43.9

Check for Art. 5.11.4.3 (debond termination distances): OK

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

SHEAR AND MOMENT ENVELOPE : Span : 1, Beam : 1, SERVICE I
Shears: kips, Moments: kft

		Bearing	Trans	H/2	0.10L	0.20L	0.30L	0.40L	Midspan
Location,	ft	0.00	2.50	3.69	13.81	28.13	42.44	56.76	71.07
Self wt. :	M	0.0	197.1	288.3	1000.9	1810.7	2389.2	2736.2	2851.9
(Max)	V	80.3	77.4	76.1	64.7	48.5	32.3	16.2	0.0
DL-Prec. :	M	0.0	11.3	16.5	57.2	103.6	136.6	156.5	163.1
DC(Max)	V	4.6	4.4	4.4	3.7	2.8	1.8	0.9	0.0
DL-Prec. :	M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DW(Max)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deck + :	M	0.0	207.7	303.7	1054.5	1907.6	2517.0	2882.6	3004.5
Haunch (Max)	V	84.5	81.6	80.2	68.1	51.1	34.1	17.0	0.0
Diaphragm :	M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(Max)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DL-Comp :	M	-0.0	26.4	38.7	134.3	242.9	320.6	367.1	382.6
DC(Max)	V	10.8	10.4	10.2	8.7	6.5	4.3	2.2	0.0
DL-Comp :	M	-0.0	26.2	38.3	133.0	240.5	317.4	363.5	378.9
DW(Max)	V	10.7	10.3	10.1	8.6	6.4	4.3	2.1	0.0
LL + I :	M+	-0.0	332.3	485.9	1681.0	3022.2	3955.8	4513.4	4674.7
	V	135.8	132.4	130.8	117.2	98.4	79.5	10.5	34.3
LL + I :	M-	-0.0	-0.0	-0.0	0.0	0.0	0.0	0.0	0.0
	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LL + I :	Vmx	135.8	132.4	130.9	117.4	100.0	83.5	67.9	53.3
	M	-0.0	328.0	478.5	1622.3	2813.6	3545.2	3856.5	3786.7
Total :	M+	0.0	801.0	1171.2	4060.9	7327.6	9636.5	11019.3	11455.7
	V	326.6	316.5	311.7	271.0	213.7	156.4	48.9	34.3
Total :	M-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total :	Vmx	326.6	316.6	311.8	271.2	215.3	160.4	106.4	53.3
	M	0.0	796.7	1163.9	4002.2	7119.0	9225.9	10362.4	10567.7

		0.60L	0.70L	0.80L	0.90L	H/2	Trans	Bearing
Location,	ft	85.39	99.70	114.02	128.33	138.46	139.65	142.15
Self wt. :	M	2736.2	2389.2	1810.7	1000.9	288.3	197.1	0.0
(Max)	V	16.2	32.3	48.5	64.7	76.1	77.4	80.3
DL-Prec. :	M	156.5	136.6	103.6	57.2	16.5	11.3	0.0
DC(Max)	V	0.9	1.8	2.8	3.7	4.4	4.4	4.6
DL-Prec. :	M	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DW(Max)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deck + :	M	2882.6	2517.0	1907.6	1054.5	303.7	207.7	0.0
Haunch (Max)	V	17.0	34.1	51.1	68.1	80.2	81.6	84.5
Diaphragm :	M	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(Max)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DL-Comp :	M	367.1	320.6	242.9	134.3	38.7	26.4	0.0
DC(Max)	V	2.2	4.3	6.5	8.7	10.2	10.4	10.8
DL-Comp :	M	363.5	317.4	240.5	133.0	38.3	26.2	0.0
DW(Max)	V	2.1	4.3	6.4	8.6	10.1	10.3	10.7
LL + I :	M+	4513.4	3955.8	3022.2	1681.0	485.9	332.3	-0.0
	V	10.5	79.5	98.4	117.2	130.8	132.4	135.8
LL + I :	M-	0.0	0.0	0.0	0.0	-0.0	-0.0	-0.0
	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LL + I :	Vmx	67.9	83.5	100.0	117.4	130.9	132.4	135.8
	M	3856.5	3545.2	2813.6	1622.3	478.5	328.0	0.0
Total :	M+	11019.3	9636.5	7327.6	4060.9	1171.2	801.0	0.0
	V	48.9	156.4	213.7	271.0	311.7	316.5	326.6
Total :	M-	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total :	Vmx	106.4	160.4	215.3	271.2	311.8	316.6	326.6
	M	10362.4	9225.9	7119.0	4002.2	1163.9	796.7	0.0

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

REACTIONS (kips), SERVICE I

Load Type	Left Support	Right Support
Self Wt.	80.3	80.3
Deck+Haunch	84.5	84.5
Diaphragm	0.0	0.0
DL-Prec.(DC)	4.6	4.6
DL-Prec.(DW)	0.0	0.0
DL-Comp.(DC)	43.1	43.1
DL-Comp.(DW)	42.6	42.6
Live	112.8	112.8
Pedestrian	0.0	0.0

Upward reactions are positive.
Live Load reactions are per lane with no distribution factor and no impact.
Non-composite load types are per beam.
Composite and Pedestrian load types are per total bridge width.

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

SHEAR AND MOMENT ENVELOPE : Span : 1, Beam : 1, SERVICE III
Shears: kips, Moments: kft

		Bearing	Trans	H/2	0.10L	0.20L	0.30L	0.40L	Midspan
Location,	ft	0.00	2.50	3.69	13.81	28.13	42.44	56.76	71.07
Self wt. :	M	0.0	197.1	288.3	1000.9	1810.7	2389.2	2736.2	2851.9
(Max)	V	80.3	77.4	76.1	64.7	48.5	32.3	16.2	0.0
DL-Prec. :	M	0.0	11.3	16.5	57.2	103.6	136.6	156.5	163.1
DC(Max)	V	4.6	4.4	4.4	3.7	2.8	1.8	0.9	0.0
DL-Prec. :	M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DW(Max)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deck + :	M	0.0	207.7	303.7	1054.5	1907.6	2517.0	2882.6	3004.5
Haunch (Max)	V	84.5	81.6	80.2	68.1	51.1	34.1	17.0	0.0
Diaphragm :	M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(Max)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DL-Comp :	M	-0.0	26.4	38.7	134.3	242.9	320.6	367.1	382.6
DC(Max)	V	10.8	10.4	10.2	8.7	6.5	4.3	2.2	0.0
DL-Comp :	M	-0.0	26.2	38.3	133.0	240.5	317.4	363.5	378.9
DW(Max)	V	10.7	10.3	10.1	8.6	6.4	4.3	2.1	0.0
LL + I :	M+	-0.0	265.9	388.7	1344.8	2417.8	3164.6	3610.7	3739.7
	V	108.6	105.9	104.7	93.8	78.7	63.6	8.4	27.4
LL + I :	M-	-0.0	-0.0	-0.0	0.0	0.0	0.0	0.0	0.0
	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LL + I :	Vmx	108.6	106.0	104.7	93.9	80.0	66.8	54.4	42.6
	M	-0.0	262.4	382.8	1297.9	2250.9	2836.2	3085.2	3029.4
Total :	M+	0.0	734.5	1074.1	3724.7	6723.2	8845.4	10116.7	10520.8
	V	299.4	290.0	285.6	247.5	194.0	140.5	46.8	27.4
Total :	M-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total :	Vmx	299.4	290.1	285.6	247.7	195.3	143.7	92.8	42.6
	M	0.0	731.1	1068.2	3677.8	6556.3	8516.9	9591.1	9810.4

		0.60L	0.70L	0.80L	0.90L	H/2	Trans	Bearing
Location,	ft	85.39	99.70	114.02	128.33	138.46	139.65	142.15
Self wt. :	M	2736.2	2389.2	1810.7	1000.9	288.3	197.1	0.0
(Max)	V	16.2	32.3	48.5	64.7	76.1	77.4	80.3
DL-Prec. :	M	156.5	136.6	103.6	57.2	16.5	11.3	0.0
DC(Max)	V	0.9	1.8	2.8	3.7	4.4	4.4	4.6
DL-Prec. :	M	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DW(Max)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deck + :	M	2882.6	2517.0	1907.6	1054.5	303.7	207.7	0.0
Haunch (Max)	V	17.0	34.1	51.1	68.1	80.2	81.6	84.5
Diaphragm :	M	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(Max)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DL-Comp :	M	367.1	320.6	242.9	134.3	38.7	26.4	0.0
DC(Max)	V	2.2	4.3	6.5	8.7	10.2	10.4	10.8
DL-Comp :	M	363.5	317.4	240.5	133.0	38.3	26.2	0.0
DW(Max)	V	2.1	4.3	6.4	8.6	10.1	10.3	10.7
LL + I :	M+	3610.7	3164.6	2417.8	1344.8	388.7	265.9	-0.0
	V	8.4	63.6	78.7	93.8	104.7	105.9	108.6
LL + I :	M-	0.0	0.0	0.0	0.0	-0.0	-0.0	-0.0
	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LL + I :	Vmx	54.4	66.8	80.0	93.9	104.7	106.0	108.6
	M	3085.2	2836.2	2250.9	1297.9	382.8	262.4	0.0
Total :	M+	10116.7	8845.4	6723.2	3724.7	1074.1	734.5	0.0
	V	46.8	140.5	194.0	247.5	285.6	290.0	299.4
Total :	M-	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total :	Vmx	92.8	143.7	195.3	247.7	285.6	290.1	299.4
	M	9591.1	8516.9	6556.3	3677.8	1068.2	731.1	0.0

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

SHEAR AND MOMENT ENVELOPE : Span : 1, Beam : 1, STRENGTH I
Shears: kips, Moments: kft

		Bearing	Trans	H/2	0.10L	0.20L	0.30L	0.40L	Midspan
Location,	ft	0.00	2.50	3.69	13.81	28.13	42.44	56.76	71.07
Self wt.	: M	0.0	246.4	360.3	1251.1	2263.4	2986.5	3420.3	3564.9
(Max)	V	100.3	96.8	95.1	80.8	60.6	40.4	20.2	0.0
Self wt.	: M	0.0	177.4	259.4	900.8	1629.7	2150.3	2462.6	2566.7
(Min)	V	72.2	69.7	68.5	58.2	43.6	29.1	14.5	0.0
DL-Prec.	: M	0.0	14.1	20.6	71.6	129.5	170.8	195.6	203.9
DC(Max)	V	5.7	5.5	5.4	4.6	3.5	2.3	1.2	0.0
DL-Prec.	: M	0.0	10.1	14.8	51.5	93.2	123.0	140.9	146.8
DC(Min)	V	4.1	4.0	3.9	3.3	2.5	1.7	0.8	0.0
DL-Prec.	: M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DW(Max)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DL-Prec.	: M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DW(Min)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deck +	: M	0.0	259.6	379.6	1318.1	2384.5	3146.3	3603.3	3755.6
Haunch (Max)	V	105.7	102.0	100.2	85.1	63.9	42.6	21.3	0.0
Deck +	: M	0.0	186.9	273.3	949.0	1716.9	2265.3	2594.4	2704.1
Haunch (Min)	V	76.1	73.4	72.1	61.3	46.0	30.7	15.3	0.0
Diaphragm	: M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(Max)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Diaphragm	: M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(Min)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DL-Comp	: M	-0.0	33.1	48.3	167.9	303.7	400.7	458.9	478.3
DC(Max)	V	13.5	13.0	12.8	10.8	8.1	5.4	2.7	0.0
DL-Comp	: M	-0.0	23.8	34.8	120.9	218.7	288.5	330.4	344.4
DC(Min)	V	9.7	9.3	9.2	7.8	5.9	3.9	2.0	0.0
DL-Comp	: M	-0.0	39.3	57.4	199.4	360.8	476.1	545.2	568.3
DW(Max)	V	16.0	15.4	15.2	12.9	9.7	6.4	3.2	0.0
DL-Comp	: M	-0.0	17.0	24.9	86.4	156.4	206.3	236.3	246.3
DW(Min)	V	6.9	6.7	6.6	5.6	4.2	2.8	1.4	0.0
LL + I	: M+	-0.0	581.6	850.2	2941.7	5288.9	6922.6	7898.4	8180.6
	V	237.6	231.7	228.9	205.2	172.2	139.2	18.3	60.0
LL + I	: M-	-0.0	-0.0	-0.0	0.0	0.0	0.0	0.0	0.0
	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LL + I	: Vmx	237.6	231.8	229.0	205.5	175.0	146.2	118.9	93.2
	M	-0.0	574.0	837.3	2839.1	4923.8	6204.1	6748.8	6626.7
Total	: M+	0.0	1174.0	1716.6	5949.8	10730.8	14102.9	16121.7	16751.7
	V	478.8	464.4	457.6	399.5	317.9	236.3	66.9	60.0
Total	: M-	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	V	406.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	: Vmx	478.8	464.5	457.7	399.8	320.8	243.3	167.5	93.2
	M	0.0	1166.4	1703.6	5847.2	10365.6	13384.4	14972.2	15197.7

		0.60L	0.70L	0.80L	0.90L	H/2	Trans	Bearing
Location,	ft	85.39	99.70	114.02	128.33	138.46	139.65	142.15
Self wt.	: M	3420.3	2986.5	2263.4	1251.2	360.3	246.4	0.0
(Max)	V	20.2	40.4	60.6	80.8	95.1	96.8	100.3
Self wt.	: M	2462.6	2150.3	1629.7	900.8	259.4	177.4	0.0
(Min)	V	14.5	29.1	43.6	58.2	68.5	69.7	72.2
DL-Prec.	: M	195.6	170.8	129.5	71.6	20.6	14.1	0.0
DC(Max)	V	1.2	2.3	3.5	4.6	5.4	5.5	5.7
DL-Prec.	: M	140.9	123.0	93.2	51.5	14.8	10.1	0.0
DC(Min)	V	0.8	1.7	2.5	3.3	3.9	4.0	4.1
DL-Prec.	: M	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DW(Max)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DL-Prec.	: M	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DW(Min)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deck +	: M	3603.3	3146.3	2384.5	1318.1	379.6	259.6	0.0
Haunch (Max)	V	21.3	42.6	63.9	85.1	100.2	102.0	105.7

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

Deck +	: M	2594.4	2265.3	1716.9	949.0	273.3	186.9	0.0
Haunch (Min)	V	15.3	30.7	46.0	61.3	72.1	73.4	76.1
Diaphragm	: M	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(Max)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Diaphragm	: M	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(Min)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DL-Comp	: M	458.9	400.7	303.7	167.9	48.3	33.1	0.0
DC(Max)	V	2.7	5.4	8.1	10.8	12.8	13.0	13.5
DL-Comp	: M	330.4	288.5	218.7	120.9	34.8	23.8	0.0
DC(Min)	V	2.0	3.9	5.9	7.8	9.2	9.3	9.7
DL-Comp	: M	545.2	476.1	360.8	199.4	57.4	39.3	0.0
DW(Max)	V	3.2	6.4	9.7	12.9	15.2	15.4	16.0
DL-Comp	: M	236.3	206.3	156.4	86.4	24.9	17.0	0.0
DW(Min)	V	1.4	2.8	4.2	5.6	6.6	6.7	6.9
LL + I	: M+	7898.4	6922.6	5288.9	2941.7	850.2	581.6	-0.0
	V	18.3	139.2	172.2	205.2	228.9	231.7	237.6
LL + I	: M-	0.0	0.0	0.0	0.0	-0.0	-0.0	-0.0
	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LL + I	: Vmx	118.9	146.2	175.0	205.5	229.0	231.8	237.6
	M	6748.8	6204.1	4923.8	2839.1	837.3	574.0	0.0
Total	: M+	16121.7	14102.9	10730.8	5949.8	1716.6	1174.0	0.0
	V	66.9	236.3	317.9	399.5	457.6	464.4	478.8
Total	: M-	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	: Vmx	167.5	243.3	320.8	399.8	457.7	464.5	478.8
	M	14972.2	13384.4	10365.6	5847.2	1703.6	1166.4	0.0

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

REACTIONS (kips), STRENGTH I

Load Type	Left Support	Right Support
Self Wt.	100.3	100.3
Deck+Haunch	105.7	105.7
Diaphragm	0.0	0.0
DL-Prec.(DC)	5.7	5.7
DL-Prec.(DW)	0.0	0.0
DL-Comp.(DC)	53.8	53.8
DL-Comp.(DW)	64.0	64.0
Live	197.3	197.3
Pedestrian	0.0	0.0

Upward reactions are positive.
Live Load reactions are per lane with no distribution factor and no impact.
Non-composite load types are per beam.
Composite and Pedestrian load types are per total bridge width.

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

SHEAR AND MOMENT ENVELOPE : Span : 1, Beam : 1, FATIGUE I
Shears: kips, Moments: kft

		Bearing	Trans	H/2	0.10L	0.20L	0.30L	0.40L	Midspan
Location,	ft	0.00	2.50	3.69	13.81	28.13	42.44	56.76	71.07
Self wt.	: M	0.0	197.1	288.3	1000.9	1810.7	2389.2	2736.2	2851.9
(Max)	V	80.3	77.4	76.1	64.7	48.5	32.3	16.2	0.0
Self wt.	: M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(Min)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DL-Prec.	: M	0.0	11.3	16.5	57.2	103.6	136.6	156.5	163.1
DC(Max)	V	4.6	4.4	4.4	3.7	2.8	1.8	0.9	0.0
DL-Prec.	: M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DC(Min)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DL-Prec.	: M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DW(Max)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DL-Prec.	: M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DW(Min)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deck +	: M	0.0	207.7	303.7	1054.5	1907.6	2517.0	2882.6	3004.5
Haunch (Max)	V	84.5	81.6	80.2	68.1	51.1	34.1	17.0	0.0
Deck +	: M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Haunch (Min)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Diaphragm	: M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(Max)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Diaphragm	: M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(Min)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DL-Comp	: M	-0.0	26.4	38.7	134.3	242.9	320.6	367.1	382.6
DC(Max)	V	10.8	10.4	10.2	8.7	6.5	4.3	2.2	0.0
DL-Comp	: M	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DC(Min)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DL-Comp	: M	-0.0	26.2	38.3	133.0	240.5	317.4	363.5	378.9
DW(Max)	V	10.7	10.3	10.1	8.6	6.4	4.3	2.1	0.0
DL-Comp	: M	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DW(Min)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LL + I	: M+	0.0	221.5	323.5	1110.1	1967.5	2571.1	2896.4	2924.8
	V	90.8	88.9	88.0	80.4	69.9	6.6	3.8	31.9
LL + I	: M-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LL + I	: Vmx	90.8	88.9	88.0	80.4	69.9	59.5	49.1	38.7
	M	0.0	221.5	323.5	1110.1	1967.5	2526.8	2788.1	2751.3
Total	: M+	0.0	690.1	1008.9	3490.0	6272.9	8251.8	9402.3	9705.9
	V	281.6	273.0	268.9	234.1	185.2	83.4	42.3	31.9
Total	: M-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	: Vmx	281.6	273.0	268.9	234.1	185.2	136.4	87.6	38.7
	M	0.0	690.1	1008.9	3490.0	6272.9	8207.6	9294.1	9532.3

		0.60L	0.70L	0.80L	0.90L	H/2	Trans	Bearing
Location,	ft	85.39	99.70	114.02	128.33	138.46	139.65	142.15
Self wt.	: M	2736.2	2389.2	1810.7	1000.9	288.3	197.1	0.0
(Max)	V	16.2	32.3	48.5	64.7	76.1	77.4	80.3
Self wt.	: M	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(Min)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DL-Prec.	: M	156.5	136.6	103.6	57.2	16.5	11.3	0.0
DC(Max)	V	0.9	1.8	2.8	3.7	4.4	4.4	4.6
DL-Prec.	: M	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DC(Min)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DL-Prec.	: M	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DW(Max)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DL-Prec.	: M	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DW(Min)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deck +	: M	2882.6	2517.0	1907.6	1054.5	303.7	207.7	0.0
Haunch (Max)	V	17.0	34.1	51.1	68.1	80.2	81.6	84.5

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

Deck +	: M	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Haunch (Min)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Diaphragm	: M	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(Max)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Diaphragm	: M	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(Min)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DL-Comp	: M	367.1	320.6	242.9	134.3	38.7	26.4	0.0
DC(Max)	V	2.2	4.3	6.5	8.7	10.2	10.4	10.8
DL-Comp	: M	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DC(Min)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DL-Comp	: M	363.5	317.4	240.5	133.0	38.3	26.2	0.0
DW(Max)	V	2.1	4.3	6.4	8.6	10.1	10.3	10.7
DL-Comp	: M	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DW(Min)	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LL + I	: M+	2896.4	2571.1	1967.5	1110.1	323.5	221.5	0.0
	V	3.8	6.6	69.9	80.4	88.0	88.9	90.8
LL + I	: M-	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LL + I	: Vmx	49.1	59.5	69.9	80.4	88.0	88.9	90.8
	M	2788.1	2526.8	1967.5	1110.1	323.5	221.5	0.0
Total	: M+	9402.3	8251.8	6272.9	3490.0	1008.9	690.1	0.0
	V	42.3	83.4	185.2	234.1	268.9	273.0	281.6
Total	: M-	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	V	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	: Vmx	87.6	136.4	185.2	234.1	268.9	273.0	281.6
	M	9294.1	8207.6	6272.9	3490.0	1008.9	690.1	0.0

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

Span : 1, Beam : 1, SERVICE I

RELEASE STRESSES, (ksi) (LOSS = 0.00 %)

	Trans	0.10L /0.90L	0.20L /0.80L	0.30L /0.70L	0.40L /0.60L	Midspan
Location, ft	3.00	14.31	28.63	42.94	57.26	71.57
Beam-Self						
Precast-top	0.117	0.514	0.912	1.196	1.365	1.422
Bottom	-0.113	-0.493	-0.866	-1.131	-1.287	-1.340
Prestress						
Precast-top	-0.646	-0.704	-0.812	-0.855	-0.899	-0.899
Bottom	4.261	4.588	5.087	5.257	5.426	5.426
Total						
Precast-top	-0.528	-0.190	0.100	0.340	0.466	0.523
Bottom	4.147*	4.095*	4.221*	4.126*	4.140*	4.086*

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

SERVICE I

POSITIVE ENVELOPE STRESSES, (ksi) (LOSS = 12.35 %)

	Bearing	Trans	H/2	0.10L /0.90L	0.20L /0.80L	0.30L /0.70L	0.40L /0.60L	Midspan
Location, ft	0.00	2.50	3.69	13.81	28.13	42.44	56.76	71.07
Prestress								
Precast-top	-0.103	-0.566	-0.566	-0.617	-0.712	-0.750	-0.788	-0.788
Bottom	0.677	3.734	3.734	4.021	4.459	4.608	4.756	4.756
Self wt.								
Precast-top	0.000	0.097	0.143	0.494	0.892	1.176	1.345	1.402
Bottom	-0.000	-0.094	-0.138	-0.474	-0.847	-1.112	-1.268	-1.322
DL-Prec (DC)								
Precast-top	0.000	0.006	0.008	0.028	0.051	0.067	0.077	0.080
Bottom	-0.000	-0.005	-0.008	-0.027	-0.048	-0.064	-0.073	-0.076
DL-Prec (DW)								
Precast-top	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
Bottom	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
Diaphragm								
Precast-top	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
Bottom	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
Deck + Haunch								
Precast-top	0.000	0.103	0.150	0.521	0.940	1.239	1.417	1.477
Bottom	-0.000	-0.099	-0.145	-0.499	-0.892	-1.172	-1.336	-1.392
DL-Comp (DC)								
Topping-top	0.000	0.004	0.006	0.019	0.035	0.046	0.052	0.054
Precast-top	0.000	0.003	0.004	0.015	0.028	0.037	0.042	0.044
Bottom	-0.000	-0.009	-0.014	-0.047	-0.084	-0.110	-0.126	-0.131
DL-Comp (DW)								
Topping-top	0.000	0.004	0.005	0.019	0.034	0.045	0.052	0.054
Precast-top	0.000	0.003	0.004	0.015	0.028	0.036	0.042	0.044
Bottom	-0.000	-0.009	-0.013	-0.046	-0.083	-0.109	-0.125	-0.130
LL+I(+)								
Topping-top	-0.000	0.048	0.069	0.240	0.430	0.562	0.640	0.663
Precast-top	-0.000	0.038	0.056	0.193	0.347	0.454	0.518	0.537
Bottom	0.000	-0.117	-0.171	-0.587	-1.044	-1.360	-1.546	-1.601
Final 1 (P/S + DL + LL)								
Topping-top	0.000	0.055	0.080	0.278	0.499	0.653	0.744	0.771
Precast-top	-0.103	-0.316	-0.200	0.650	1.574	2.260	2.654	2.796
Bottom	0.677	3.400	3.246	2.340	1.461	0.680	0.283	0.104
Final 2 (P/S + DL)								
Topping-top	0.000	0.008	0.011	0.038	0.069	0.091	0.104	0.108
Precast-top	-0.103	-0.354	-0.256	0.457	1.227	1.805	2.135	2.259
Bottom	0.677	3.517	3.417	2.927	2.504	2.041	1.829	1.706

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

Span : 1, Beam : 1, SERVICE III

RELEASE STRESSES, (ksi) (LOSS = 0.00 %)

	Trans	0.10L /0.90L	0.20L /0.80L	0.30L /0.70L	0.40L /0.60L	Midspan
Location, ft	3.00	14.31	28.63	42.94	57.26	71.57
Beam-Self						
Precast-top	0.117	0.514	0.912	1.196	1.365	1.422
Bottom	-0.113	-0.493	-0.866	-1.131	-1.287	-1.340
Prestress						
Precast-top	-0.646	-0.704	-0.812	-0.855	-0.899	-0.899
Bottom	4.261	4.588	5.087	5.257	5.426	5.426
Total						
Precast-top	-0.528	-0.190	0.100	0.340	0.466	0.523
Bottom	4.147	4.095	4.221	4.126	4.140	4.086
As_top (in2)	3.676	0.000	0.000	0.000	0.000	0.000

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

SERVICE III

POSITIVE ENVELOPE STRESSES, (ksi) (LOSS = 12.35 %)

	Bearing	Trans	H/2	0.10L /0.90L	0.20L /0.80L	0.30L /0.70L	0.40L /0.60L	Midspan
Location, ft	0.00	2.50	3.69	13.81	28.13	42.44	56.76	71.07
Prestress								
Precast-top	-0.103	-0.566	-0.566	-0.617	-0.712	-0.750	-0.788	-0.788
Bottom	0.677	3.734	3.734	4.021	4.459	4.608	4.756	4.756
Self wt.								
Precast-top	0.000	0.097	0.143	0.494	0.892	1.176	1.345	1.402
Bottom	-0.000	-0.094	-0.138	-0.474	-0.847	-1.112	-1.268	-1.322
DL-Prec (DC)								
Precast-top	0.000	0.006	0.008	0.028	0.051	0.067	0.077	0.080
Bottom	-0.000	-0.005	-0.008	-0.027	-0.048	-0.064	-0.073	-0.076
DL-Prec (DW)								
Precast-top	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
Bottom	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
Diaphragm								
Precast-top	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
Bottom	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
Deck + Haunch								
Precast-top	0.000	0.103	0.150	0.521	0.940	1.239	1.417	1.477
Bottom	-0.000	-0.099	-0.145	-0.499	-0.892	-1.172	-1.336	-1.392
DL-Comp (DC)								
Topping-top	-0.000	0.004	0.006	0.019	0.035	0.046	0.052	0.054
Precast-top	-0.000	0.003	0.004	0.015	0.028	0.037	0.042	0.044
Bottom	0.000	-0.009	-0.014	-0.047	-0.084	-0.110	-0.126	-0.131
DL-Comp (DW)								
Topping-top	-0.000	0.004	0.005	0.019	0.034	0.045	0.052	0.054
Precast-top	-0.000	0.003	0.004	0.015	0.028	0.036	0.042	0.044
Bottom	0.000	-0.009	-0.013	-0.046	-0.083	-0.109	-0.125	-0.130
LL+I(+)								
Topping-top	-0.000	0.038	0.056	0.192	0.344	0.450	0.512	0.531
Precast-top	-0.000	0.031	0.045	0.155	0.278	0.363	0.415	0.429
Bottom	0.000	-0.093	-0.137	-0.469	-0.835	-1.088	-1.237	-1.281
Final 1 (P/S + DL + LL)								
Topping-top	-0.000	0.046	0.067	0.230	0.413	0.540	0.616	0.639
Precast-top	-0.103	-0.324	-0.212	0.611	1.505	2.169	2.550	2.688
Bottom	0.677	3.424	3.280	2.458	1.669	0.953	0.593	0.425

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

Span : 1, Beam : 1, FATIGUE I
POSITIVE ENVELOPE STRESSES, (ksi)

	Bearing	Trans	H/2	0.10L /0.90L	0.20L /0.80L	0.30L /0.70L	0.40L /0.60L	Midspan
Location, ft	0.00	2.50	3.69	13.81	28.13	42.44	56.76	71.07
F_LL+I(+)								
Topping-top	-0.000	0.032	0.046	0.158	0.280	0.365	0.411	0.415
Precast-top	-0.000	0.025	0.037	0.128	0.226	0.295	0.333	0.336
Bottom	-0.000	-0.078	-0.114	-0.388	-0.679	-0.884	-0.992	-1.002
Final 3 (50% P/S + 50% DL + F_LL)								
Topping-top	-0.000	0.035	0.052	0.177	0.314	0.411	0.463	0.469
Precast-top	-0.051	-0.152	-0.091	0.356	0.839	1.198	1.400	1.465
Bottom	0.338	1.681	1.595	1.076	0.573	0.136	-0.077	-0.149

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

VERTICAL SHEAR (Art. 5.8) - Span : 1, Beam : 1, STRENGTH I
Using General Beta Theta Equation procedure - Art.5.8.3.4.2

Location (ft)	Vu (kips)	bv (in)	de (in)	Aps (in2)	Vp (kips)	eps_x	Theta	Vs-reqd (kips)	Av/s (in2/ft)	Av-prvd (in2/ft)	Al_reqd (in2)
	Mcor (kft)	a (in)	dv (in)	fpo (ksi)	vu/fc	Vc-com (kips)	Beta	Max.spc. (in)	min.Av/s (in2/ft)	pVn/Vu	Aps* (in2)
Bearing : 0.50											
	478.8	7.0	78.9	1.069	0.0	6.00e-3	50.0	487.7	1.478	2.480	0.00
	0.0	0.5	78.6	31.5	0.114	44.3	0.87	24.00	0.129	1.621	1.173
Transfer: 3.00											
	464.5	7.0	78.9	10.416	0.0	-0.34e-3	27.8	193.5	0.264	1.240	0.00
	1166.4	3.2	77.3	189.0	0.112	322.5	6.47	24.00	0.129	2.228	7.040
Critical: 6.92											
	442.1	7.0	78.9	10.850	0.0	-0.38e-3	27.7	156.3	0.213	0.930	0.00
	2820.3	3.9	77.0	189.0	0.107	335.0	6.74	24.00	0.129	2.073	8.945
0.1L : 14.31											
	399.8	7.0	79.0	11.284	0.0	-0.27e-3	28.1	147.8	0.206	0.930	0.00
	5847.2	5.0	76.5	189.0	0.098	296.4	6.01	24.00	0.129	2.170	10.706
0.2L : 28.63											
	320.8	7.0	79.4	12.586	0.0	-0.14e-3	28.5	91.1	0.129	0.310	0.00
	10365.6	5.6	76.6	189.0	0.078	265.3	5.37	24.00	0.129	1.358	11.925
0.3L : 42.94											
	243.3	7.0	79.6	13.020	0.0	-0.04e-3	28.9	25.6	0.129	0.248	0.00
	13384.4	5.9	76.7	189.0	0.059	244.7	4.95	24.00	0.129	1.543	12.963
0.4L : 57.26											
	167.5	7.0	79.8	13.454	0.0	-0.01e-3	29.0	0.0	0.129	0.248	0.00
	14972.2	6.1	76.8	189.0	0.041	239.8	4.84	24.00	0.129	2.213	13.371
0.5L : 71.57											
	93.2	7.0	79.8	13.454	0.0	-0.02e-3	28.9	0.0	0.129	0.248	0.00
	15197.7	6.1	76.8	189.0	0.023	242.1	4.89	24.00	0.129	4.000	13.454
0.6L : 85.89											
	167.5	7.0	79.8	13.454	0.0	-0.01e-3	29.0	0.0	0.129	0.248	0.00
	14972.2	6.1	76.8	189.0	0.041	239.8	4.84	24.00	0.129	2.213	13.371
0.7L : 100.20											
	243.3	7.0	79.6	13.020	0.0	-0.04e-3	28.9	25.6	0.129	0.248	0.00
	13384.4	5.9	76.7	189.0	0.059	244.7	4.95	24.00	0.129	1.543	12.963
0.8L : 114.52											
	320.8	7.0	79.4	12.586	0.0	-0.14e-3	28.5	91.1	0.129	0.310	0.00
	10365.6	5.6	76.6	189.0	0.078	265.3	5.37	24.00	0.129	1.358	11.925
0.9L : 128.83											
	399.8	7.0	79.0	11.284	0.0	-0.27e-3	28.1	147.8	0.206	0.930	0.00
	5847.2	5.0	76.5	189.0	0.098	296.4	6.01	24.00	0.129	2.170	10.706
Critical: 136.23											
	442.1	7.0	78.9	10.850	0.0	-0.38e-3	27.7	156.3	0.213	0.930	0.00
	2820.3	3.9	77.0	189.0	0.107	335.0	6.74	24.00	0.129	2.073	8.945
Transfer: 140.15											
	464.5	7.0	78.9	10.416	0.0	-0.34e-3	27.8	193.5	0.264	1.240	0.00
	1166.4	3.2	77.3	189.0	0.112	322.5	6.47	24.00	0.129	2.228	7.040
Bearing : 142.65											
	478.8	7.0	78.9	1.069	0.0	6.00e-3	50.0	487.7	1.478	2.480	0.00
	0.0	0.5	78.6	31.5	0.114	44.3	0.87	24.00	0.129	1.621	1.173

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

ANCHORAGE ZONE REINFORCEMENT (Art. 5.10.10)
Span : 1, Beam : 1
Fpi, kips = 2109.24
fs, ksi = 20.00
h/4, in = 19.50
Abrst_rqrd, in2 = 4.22

HORIZONTAL SHEAR (Art. 5.8.4) - Span : 1, Beam : 1
(Beam and Slab effects are INCLUDED in Vu).

Location (ft)	Vu (kips)	Vnh-req (kips)	de (in)	a (in)	dv (in)	s_max (in)	Avh-min (in2/ft)	Avh-sm (in2/ft)	Avh-rg (in2/ft)
Bearing :		0.00							
	478.8	6.76	78.92	0.55	78.64	24.00	0.600	0.063	0.000
Transfer:		2.50							
	464.5	6.68	78.92	3.23	77.30	24.00	0.600	0.060	0.000
Critical:		6.42							
	442.1	6.38	78.94	3.88	77.00	24.00	0.600	0.052	0.000
0.1L :		13.81							
	399.8	5.81	79.04	5.05	76.51	24.00	0.600	0.036	0.000
0.2L :		28.13							
	320.8	4.65	79.43	5.62	76.62	24.00	0.600	0.004	0.000
0.3L :		42.44							
	243.3	3.53	79.63	5.89	76.69	24.00	0.600	0.000	0.000
0.4L :		56.76							
	167.5	2.42	79.82	6.08	76.78	24.00	0.600	0.000	0.000
0.5L :		71.07							
	93.2	1.35	79.82	6.09	76.78	24.00	0.600	0.000	0.000
0.6L :		85.39							
	167.5	2.42	79.82	6.08	76.78	24.00	0.600	0.000	0.000
0.7L :		99.70							
	243.3	3.53	79.63	5.89	76.69	24.00	0.600	0.000	0.000
0.8L :		114.02							
	320.8	4.65	79.43	5.62	76.62	24.00	0.600	0.004	0.000
0.9L :		128.33							
	399.8	5.81	79.04	5.05	76.51	24.00	0.600	0.036	0.000
Critical:		135.73							
	442.1	6.38	78.94	3.88	77.00	24.00	0.600	0.052	0.000
Transfer:		139.65							
	464.5	6.68	78.92	3.23	77.30	24.00	0.600	0.060	0.000
Bearing :		142.15							
	478.8	6.76	78.92	0.55	78.64	24.00	0.600	0.063	0.000

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

CAMBER AND DEFLECTIONS: SERVICE I (Span : 1, Beam : 1; Units: in)

	Release	Mult	Erection	Mult	Final
At 0.1 x L = 13.81 ft					
Prestress	2.289	1.80	4.120	2.20	5.036
Self Wt.	-0.769	1.85	-1.423	2.40	-1.846
Deck + Haunch			-0.686	2.30	-1.577
DL-Prec. (DC)			-0.037	3.00	-0.112
Diaphragm			0.000	3.00	0.000
DL-Prec. (DW)			0.000	3.00	0.000
DL-Comp. (DC)			-0.042	3.00	-0.126
DL-Comp. (DW)			-0.041	3.00	-0.124
Live Load	Not Included				
Total	1.520		1.891		1.251
At 0.2 x L = 28.13 ft					
Prestress	4.076	1.80	7.337	2.20	8.968
Self Wt.	-1.445	1.85	-2.673	2.40	-3.467
Deck + Haunch			-1.312	2.30	-3.017
DL-Prec. (DC)			-0.071	3.00	-0.214
Diaphragm			0.000	3.00	0.000
DL-Prec. (DW)			0.000	3.00	0.000
DL-Comp. (DC)			-0.080	3.00	-0.240
DL-Comp. (DW)			-0.079	3.00	-0.238
Live Load	Not Included				
Total	2.631		3.122		1.792
At 0.3 x L = 42.44 ft					
Prestress	5.375	1.80	9.675	2.20	11.825
Self Wt.	-1.972	1.85	-3.649	2.40	-4.734
Deck + Haunch			-1.802	2.30	-4.143
DL-Prec. (DC)			-0.098	3.00	-0.293
Diaphragm			0.000	3.00	0.000
DL-Prec. (DW)			0.000	3.00	0.000
DL-Comp. (DC)			-0.110	3.00	-0.330
DL-Comp. (DW)			-0.109	3.00	-0.326
Live Load	Not Included				
Total	3.403		3.908		1.998
At 0.4 x L = 56.76 ft					
Prestress	6.144	1.80	11.059	2.20	13.517
Self Wt.	-2.304	1.85	-4.262	2.40	-5.529
Deck + Haunch			-2.109	2.30	-4.851
DL-Prec. (DC)			-0.115	3.00	-0.344
Diaphragm			0.000	3.00	0.000
DL-Prec. (DW)			0.000	3.00	0.000
DL-Comp. (DC)			-0.129	3.00	-0.386
DL-Comp. (DW)			-0.127	3.00	-0.382
Live Load	Not Included				
Total	3.840		4.318		2.025
At 0.5 x L = 71.07 ft					
Prestress	6.410	1.80	11.538	2.20	14.102
Self Wt.	-2.419	1.85	-4.475	2.40	-5.806
Deck + Haunch			-2.216	2.30	-5.098
DL-Prec. (DC)			-0.120	3.00	-0.361
Diaphragm			0.000	3.00	0.000
DL-Prec. (DW)			0.000	3.00	0.000
DL-Comp. (DC)			-0.135	3.00	-0.406
DL-Comp. (DW)			-0.134	3.00	-0.402
Live Load	Not Included				
Total	3.991		4.457		2.030

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

At 0.6 x L = 85.39 ft

Prestress	:	6.144	1.80	11.059	2.20	13.517
Self Wt.	:	-2.304	1.85	-4.262	2.40	-5.529
Deck + Haunch	:			-2.109	2.30	-4.851
DL-Prec. (DC)	:			-0.115	3.00	-0.344
Diaphragm	:			0.000	3.00	0.000
DL-Prec. (DW)	:			0.000	3.00	0.000
DL-Comp. (DC)	:			-0.129	3.00	-0.386
DL-Comp. (DW)	:			-0.127	3.00	-0.382
Live Load	:	Not Included				
Total	:	3.840		4.318		2.025

At 0.7 x L = 99.70 ft

Prestress	:	5.375	1.80	9.675	2.20	11.825
Self Wt.	:	-1.972	1.85	-3.649	2.40	-4.734
Deck + Haunch	:			-1.802	2.30	-4.143
DL-Prec. (DC)	:			-0.098	3.00	-0.293
Diaphragm	:			0.000	3.00	0.000
DL-Prec. (DW)	:			0.000	3.00	0.000
DL-Comp. (DC)	:			-0.110	3.00	-0.330
DL-Comp. (DW)	:			-0.109	3.00	-0.326
Live Load	:	Not Included				
Total	:	3.403		3.908		1.998

At 0.8 x L = 114.02 ft

Prestress	:	4.076	1.80	7.337	2.20	8.968
Self Wt.	:	-1.445	1.85	-2.673	2.40	-3.467
Deck + Haunch	:			-1.312	2.30	-3.017
DL-Prec. (DC)	:			-0.071	3.00	-0.214
Diaphragm	:			0.000	3.00	0.000
DL-Prec. (DW)	:			0.000	3.00	0.000
DL-Comp. (DC)	:			-0.080	3.00	-0.240
DL-Comp. (DW)	:			-0.079	3.00	-0.238
Live Load	:	Not Included				
Total	:	2.631		3.122		1.792

At 0.9 x L = 128.33 ft

Prestress	:	2.289	1.80	4.120	2.20	5.036
Self Wt.	:	-0.769	1.85	-1.423	2.40	-1.846
Deck + Haunch	:			-0.686	2.30	-1.577
DL-Prec. (DC)	:			-0.037	3.00	-0.112
Diaphragm	:			0.000	3.00	0.000
DL-Prec. (DW)	:			0.000	3.00	0.000
DL-Comp. (DC)	:			-0.042	3.00	-0.126
DL-Comp. (DW)	:			-0.041	3.00	-0.124
Live Load	:	Not Included				
Total	:	1.520		1.891		1.251

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

ULTIMATE - Span : 1, Beam : 1, STRENGTH I
(Mr-prvd computed by AASHTO equations, Art. 5.7.3.2/5.7.3.3)

Location (ft)	Mu k.ft	dp in	Aps in2	fps ksi	c in	a in	Mr-prvd k.ft	c/dt	Phi	1.2 Mcr k.ft	min Mr k.ft	Crkg Ratio	Mu-p/r Ratio
Transfer: 2.50													
1174.0	78.9	7.040	266.0	4.1	3.2	12064.7	0.050T	1.00	-	-	-	-	
H/2 : 3.69													
1716.6	78.9	7.509	265.8	4.4	3.4	12838.1	0.053T	1.00	-	-	-	-	
0.1L : 13.81													
5949.8	78.9	11.097	263.8	6.5	5.0	18640.6	0.078T	1.00	15322.0	7913.3	1.5	-	
0.2L : 28.13													
10730.8	79.2	12.372	263.1	7.2	5.6	20726.0	0.087T	1.00	16300.9	14271.9	1.5	-	
0.3L : 42.44													
14102.9	79.6	13.002	262.8	7.6	5.9	21829.3	0.091T	1.00	16379.6	16379.6	1.6	-	
0.4L : 56.76													
16121.7	79.8	13.427	262.6	7.8	6.1	22550.8	0.094T	1.00	16666.8	16666.8	1.6	-	
0.5L : 71.07													
16751.7	79.8	13.454	262.6	7.8	6.1	22603.4	0.094T	1.00	16563.5	16563.5	1.6	-	
0.6L : 85.39													
16121.7	79.8	13.427	262.6	7.8	6.1	22550.8	0.094T	1.00	16666.8	16666.8	1.6	-	
0.7L : 99.70													
14102.9	79.6	13.002	262.8	7.6	5.9	21829.3	0.091T	1.00	16379.6	16379.6	1.6	-	
0.8L : 114.02													
10730.8	79.2	12.372	263.1	7.2	5.6	20726.0	0.087T	1.00	16300.9	14271.9	1.5	-	
0.9L : 128.33													
5949.8	78.9	11.097	263.8	6.5	5.0	18640.6	0.078T	1.00	15322.0	7913.3	1.5	-	
H/2 : 138.46													
1716.6	78.9	7.509	265.8	4.4	3.4	12838.1	0.053T	1.00	-	-	-	-	
Transfer: 139.65													
1174.0	78.9	7.040	266.0	4.1	3.2	12064.7	0.050T	1.00	-	-	-	-	

Legend: C = Compression-Controlled (c/dt > 0.600)
: I = In-Transition (0.60 >= c/dt > 0.375)
: T = Tension-Controlled (c/dt <= 0.375)

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

DETENSIONING (Span : 1, Beam : 1; Groups 1-37; Units: ksi)

Grp	Str		Ys,in	3.00ft	8.00ft	13.00ft	18.00ft	23.00ft	28.00ft	33.00ft	48.00ft
1	2	E	3.00 Ft	0.067	0.251	0.422	0.578	0.720			
		M	3.00 Fb	0.087	-0.091	-0.254	-0.403	-0.54*			
2	1	E	25.00 Ft	0.081	0.266	0.436	0.593	0.735	0.863		
		M	25.00 Fb	0.149	-0.029	-0.193	-0.342	-0.476	-0.60*		
3	1	E	23.00 Ft	0.092	0.277	0.447	0.604	0.746	0.874		
		M	23.00 Fb	0.214	0.036	-0.128	-0.277	-0.412	-0.53*		
4	1	E	21.00 Ft	0.099	0.284	0.455	0.611	0.753	0.881	0.995	
		M	21.00 Fb	0.283	0.104	-0.060	-0.209	-0.344	-0.465	-0.57*	
5	1	E	19.00 Ft	0.103	0.288	0.458	0.615	0.757	0.885	0.999	
		M	19.00 Fb	0.355	0.176	0.012	-0.138	-0.273	-0.394	-0.50*	
6	1	E	17.00 Ft	0.103	0.288	0.459	0.615	0.757	0.886	1.000	1.258
		M	17.00 Fb	0.431	0.252	0.087	-0.063	-0.199	-0.320	-0.427	-0.67*
7	2	E	15.00 Ft	0.096	0.281	0.451	0.608	0.751	0.879	0.993	1.252
		M	15.00 Fb	0.590	0.410	0.244	0.093	-0.043	-0.165	-0.272	-0.52*
8	1	E	15.00 Ft	0.092	0.277	0.448	0.605	0.747	0.876	0.990	1.249
		M	15.00 Fb	0.669	0.489	0.323	0.172	0.035	-0.087	-0.195	-0.439
9	2	E	13.00 Ft	0.077	0.263	0.434	0.591	0.733	0.862	0.976	1.235
		M	13.00 Fb	0.835	0.653	0.487	0.335	0.198	0.075	-0.034	-0.278
10	2	E	13.00 Ft	0.063	0.248	0.419	0.576	0.719	0.848	0.963	1.222
		M	13.00 Fb	1.000	0.818	0.651	0.499	0.360	0.237	0.127	-0.118
11	1	E	13.00 Ft	0.056	0.241	0.412	0.569	0.712	0.841	0.956	1.215
		M	13.00 Fb	1.083	0.901	0.733	0.580	0.442	0.318	0.208	-0.038
12	2	E	11.00 Ft	0.034	0.219	0.391	0.548	0.691	0.820	0.935	1.195
		M	11.00 Fb	1.256	1.073	0.904	0.751	0.611	0.486	0.376	0.130
13	2	E	11.00 Ft	0.012	0.198	0.369	0.527	0.670	0.799	0.914	1.174
		M	11.00 Fb	1.428	1.245	1.075	0.921	0.781	0.655	0.544	0.297
14	2	E	11.00 Ft	-0.010	0.176	0.348	0.505	0.649	0.778	0.893	1.153
		M	11.00 Fb	1.601	1.416	1.247	1.091	0.950	0.824	0.712	0.464
15	1	E	11.00 Ft	-0.021	0.165	0.337	0.494	0.638	0.768	0.883	1.143
		M	11.00 Fb	1.687	1.502	1.332	1.177	1.035	0.908	0.796	0.547
16	2	E	9.00 Ft	-0.050	0.136	0.308	0.466	0.610	0.739	0.855	1.115
		M	9.00 Fb	1.867	1.681	1.510	1.354	1.212	1.084	0.970	0.721
17	2	E	9.00 Ft	-0.079	0.107	0.279	0.437	0.581	0.711	0.827	1.087
		M	9.00 Fb	2.046	1.860	1.688	1.531	1.388	1.260	1.145	0.895
18	2	E	9.00 Ft	-0.108	0.078	0.251	0.409	0.553	0.683	0.799	1.060
		M	9.00 Fb	2.226	2.039	1.866	1.708	1.565	1.435	1.320	1.069
19	2	E	9.00 Ft	-0.108	0.049	0.222	0.380	0.524	0.655	0.771	1.032
		M	9.00 Fb	2.226	2.218	2.044	1.886	1.741	1.611	1.495	1.243
20	1	E	9.00 Ft	-0.122	0.035	0.208	0.366	0.510	0.640	0.757	1.018

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

		M	9.00 Fb	2.315	2.307	2.133	1.974	1.829	1.699	1.582	1.330
21	2	E	7.00 Ft	-0.158	-0.001	0.172	0.330	0.475	0.605	0.722	0.983
		M	7.00 Fb	2.502	2.493	2.318	2.158	2.013	1.881	1.764	1.511
22	2	E	7.00 Ft	-0.195	-0.037	0.136	0.294	0.439	0.570	0.686	0.948
		M	7.00 Fb	2.689	2.679	2.503	2.343	2.196	2.064	1.945	1.692
23	2	E	7.00 Ft	-0.231	-0.073	0.100	0.258	0.403	0.534	0.651	0.913
		M	7.00 Fb	2.875	2.864	2.688	2.527	2.379	2.246	2.127	1.872
24	2	E	7.00 Ft	-0.231	-0.073	0.064	0.222	0.368	0.499	0.616	0.878
		M	7.00 Fb	2.875	2.864	2.873	2.711	2.563	2.429	2.309	2.053
25	2	E	7.00 Ft	-0.231	-0.073	0.064	0.187	0.332	0.463	0.581	0.843
		M	7.00 Fb	2.875	2.864	2.873	2.895	2.746	2.611	2.490	2.234
26	1	E	7.00 Ft	-0.249	-0.091	0.046	0.169	0.314	0.445	0.563	0.825
		M	7.00 Fb	2.968	2.957	2.966	2.987	2.838	2.703	2.581	2.324
27	2	E	5.00 Ft	-0.293	-0.135	0.002	0.126	0.271	0.403	0.521	0.783
		M	5.00 Fb	3.162	3.150	3.158	3.178	3.028	2.892	2.770	2.512
28	2	E	5.00 Ft	-0.336	-0.178	-0.041	0.083	0.228	0.360	0.478	0.741
		M	5.00 Fb	3.355	3.343	3.350	3.370	3.218	3.081	2.958	2.699
29	2	E	5.00 Ft	-0.380	-0.222	-0.084	0.040	0.186	0.317	0.436	0.699
		M	5.00 Fb	3.549	3.536	3.542	3.561	3.408	3.271	3.146	2.887
30	2	E	5.00 Ft	-0.380	-0.222	-0.084	0.040	0.143	0.275	0.393	0.656
		M	5.00 Fb	3.549	3.536	3.542	3.561	3.599	3.460	3.335	3.074
31	2	E	5.00 Ft	-0.380	-0.222	-0.084	0.040	0.143	0.232	0.351	0.614
		M	5.00 Fb	3.549	3.536	3.542	3.561	3.599	3.649	3.523	3.262
32	1	E	5.00 Ft	-0.401	-0.243	-0.106	0.018	0.121	0.211	0.330	0.593
		M	5.00 Fb	3.646	3.632	3.638	3.656	3.694	3.744	3.618	3.356
33	2	E	3.00 Ft	-0.452	-0.294	-0.156	-0.032	0.071	0.161	0.280	0.544
		M	3.00 Fb	3.846	3.832	3.836	3.854	3.891	3.940	3.813	3.550
34	2	E	3.00 Ft	-0.503	-0.345	-0.207	-0.083	0.021			
		M	3.00 Fb	4.047	4.031	4.035	4.052	4.09*			
35	2	E	3.00 Ft	-0.503	-0.345	-0.207	-0.083	0.021			
		M	3.00 Fb	4.047	4.031	4.035	4.052	4.09*			
36	2	E	3.00 Ft	-0.503	-0.345	-0.207	-0.083	0.021			
		M	3.00 Fb	4.047	4.031	4.035	4.052	4.09*			
37	1	E	3.00 Ft	-0.528							
		M	3.00 Fb	4.15*							

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

DESIGN SUMMARY

Span: 1, Beam: 1, Exterior beam
Beam type: I-Girder , Old FIB-78
Precast Length, ft: 143.15 Release Length, ft: 143.15
Strand Pattern: Straight
Strand: 6/10-270K-LL
Strand Es, ksi: 28500.0 No. of strands: 62
No. of strands, Draped: 0 No. of strands, Straight: 62
Concrete Strength, f'ci: 6.8 ksi f'c: 8.5 ksi f'ct 5.5 ksi
Initial losses: 10.09 % Final losses: 15.61 %

Specification

	Allowable	Computed	Location	Status
Release Stresses (ksi) (Art. 5.9.4.1) (Using Advanced Settings)				
Precast Bot (compression)	4.080	4.221*	0.2L/0.8L	NG
Outer 15.00 %:				
Precast Top w/ no reinf. (tension)	-0.247	-0.528	Trans	
Precast Top w/ reinf. (tension)	-0.989			
Center 70.00 %:				
Precast Top w/ no reinf. (tension)	-0.247	0.100	0.2L/0.8L	
Precast Top w/ reinf. (tension)	-0.495			
Strength I (Art. 3.4.1, 5.7.3.1.1)	Provided	Required	Location	Status
Ult. Moment (k.ft)	22603.39	16751.66	Midspan	OK
Debonding Limits (Art. 5.11.4.3)	Allowable	Computed		Status
Max. Debond per Row	40.00 %	36.36 %		OK
Max. Debond Total	25.00 %	22.58 %		OK

	Final 1			Final 2			Final 3		
Specification	Allow.	Comp.	Loc.	Allow.	Comp.	Loc.	Allow.	Comp.	Loc.
Positive Moment Envelope Stresses (ksi) (Art. 3.4.1 and 5.9.4.2)									
Service I Limit State - Compressive Stresses Only									
Top.Top:	3.300	0.771	Midspan	2.475	0.108	Midspan			
Pre.Top:	5.100	2.796	Midspan	3.825	2.259	Midspan			
Pre.Bot:	5.100	3.400	Transfer	3.825	3.517	Transfer			
Service III Limit State - Tensile Stresses Only									
Top.Top:	-0.446	-0.000	Bearing						
Pre.Top:	-0.554	-0.324	Transfer						
Pre.Bot:	-0.554	0.425	Midspan						
Fatigue I Limit State - Compressive Stresses Only									
Pre.Top:							3.400	1.465	Midspan
Pre.Bot:							3.400	1.681	Transfer

CAMBER / DEFLECTION: (PCI Design Handbook - 4th Ed.- Table 4.6.2)
0.5 x L = 71.07 ft

	Release	Mult	Erection	Mult	Final
Prestress	6.410	1.80	11.538	2.20	14.102
Self Wt.	-2.419	1.85	-4.475	2.40	-5.806
Deck + Haunch			-2.216	2.30	-5.098
DL-Prec. (DC)			-0.120	3.00	-0.361
Diaphragm			0.000	3.00	0.000
DL-Prec. (DW)			0.000	3.00	0.000
DL-Comp. (DC)			-0.135	3.00	-0.406
DL-Comp. (DW)			-0.134	3.00	-0.402
Live Load	Not Included				
Total	3.991		4.457		2.030

Positive values indicate upward deflection.

PROJECT: Sanibel Causeway Imrovements Bridge Cracks check

LIVE LOAD LIBRARY: Default.cs3

1 ID : Design Lane
Description: Design Lane as in AASHTO-LRFD
Type : Design Lane
Lane Load : Intensity = 0.64 klf, Width = 10.00 ft

2 ID : Design Tandem
Description: Design Tandem as in AASHTO-LRFD
Type : Design Tandem
First Axle Magnitude = 25.00 k, Wheel Spacing = 6.00 ft, Truck Width = 10.00 ft

#	Magnitude, k	Max Spacing,ft	Min Spacing,ft	Increment,ft
1	25.00	4.00	4.00	0.00

3 ID : Design Truck
Description: Design Truck as in AASHTO-LRFD
Type : Design Truck
First Axle Magnitude = 8.00 k, Wheel Spacing = 6.00 ft, Truck Width = 10.00 ft

#	Magnitude, k	Max Spacing,ft	Min Spacing,ft	Increment,ft
1	32.00	14.00	14.00	0.00
2	32.00	30.00	14.00	2.00

EXHIBIT O

LEE COUNTY DOT STATEMENT
SANIBEL BRIDGE INSPECTION REPORT

Friday, March 8, 2013 (Fort Myers, FL) - The Lee County Department of Transportation is in receipt of the first stage inspection reports for the Sanibel Bridges that were prepared by T.Y. Lin International. The inspections became necessary after the County found small cracks in some of the concrete beams under the bridge decks. The first stage inspection effort documented the extent of the cracking in each of the beams. T.Y. Lin has rated the structural elements of the three bridges as "good" or "very good" and states "(t)he beams are in overall good condition". Their initial recommendation is to continue monitoring the cracks in the beams for any increase in severity, to apply a protective coating over the cracks, and to repair five specific locations noted on two of the bridges.

T.Y. Lin will conduct a second stage inspection in approximately six months to determine if the cracks have stabilized. The extent, costs, and responsibility of any repairs will be determined after the County's inspections are completed.

Contact: David Loveland, Director, Lee County DOT
Phone: 533-8509
e-mail: dloveland@leegov.com

EXHIBIT P

LEE COUNTY
SOUTHWEST FLORIDA

Miscellaneous Structural Engineering Services
Sanibel Bridge Beam Inspections

Bridge No. 124114 - Structure C Sanibel Causeway over San Carlos Bay

3rd Structure South of Toll Plaza

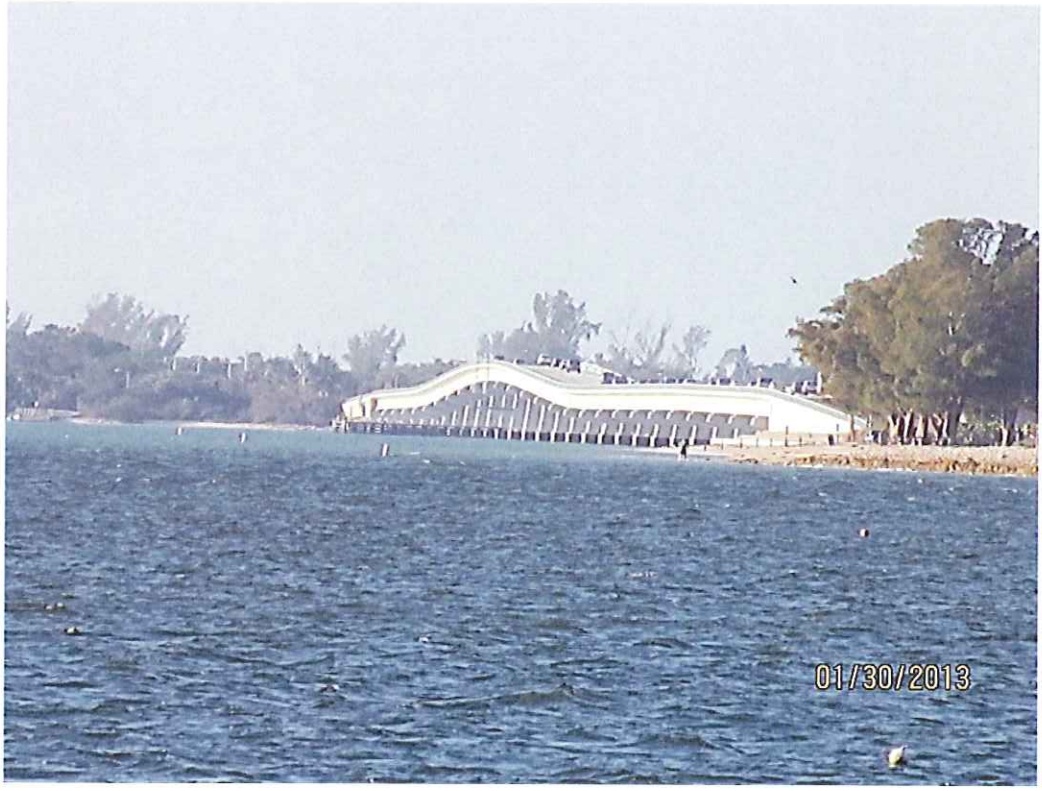
Prepared For:

Lee County

Prepared By:

T.Y. Lin International

January 2013



This report evaluates and makes recommendations of bridge maintenance for Bridge No. 124114 Sanibel Causeway over San Carlos Bay 3rd structure from toll plaza.
Solicit No.: CN-11-17 Contract No.: 5850

BRIDGE INSPECTION REPORT

PREPARED FOR: Lee County

SUBMITTED BY: T. Y. Lin International

CONTENTS OF REPORT

A. Condensed Inspection Report
B. Comprehensive Report of Deficiencies and Photos
* C. Evaluation of Previous Corrective Action
D. Recommended Maintenance Repair and Rehabilitation
* E. Methods, Quantities and Costs of Contract Corrective Action
* F. Channel Profile
* G. Fracture Critical Inspections
* H. Location Map
* I. Load Rating Analysis
* J. Underwater Report

* This section is not included in this report.

REPORT IDENTIFICATION

Bridge No. 124114

Bridge Name: Structure C Sanibel Causeway over San Carlos Bay

Location: 3rd Bridge South of Toll Plaza

NO	YES	
X		This bridge contains fracture critical components.
X		This bridge is scour critical.
X		This report identifies deficiencies which require prompt corrective action.

Type of Inspection: ☐ Routine ☐ Interim ☒ Special Evaluation – Beams Only

Field Inspection Date: Above Water 01/23/2013 Under Water N/A

Name of Inspector/Diver	Initials	PE Number	Certified Bridge Inspector Number
Charles W. Elliott (Lead)	CWE		00363
Kenneth F. Ulrich	KU		00288
Farszin Zafaranian	FZ	59558	
Emir Modarres	EMM	74130	

Reviewing Bridge Inspection Supervisor

Name Boon Chong P.E PE Number 48156 Initials BKC

Confirming Registered Professional Engineer

Name Boon Chong P.E 48156 Signature 8/6/2013

BOON KIM CHONG LICENSE No. 48156 STATE OF FLORIDA PROFESSIONAL ENGINEER

Lee County Condensed Bridge Inspection Report

Structure Name: Structure C Sanibel Causeway over San Carlos Bay

Location: 3rd Structure South of Toll Plaza

Prepared For: Lee County Transportation Department

Prepared By: T.Y. Lin International

Overall NBI Ratings

Note: The following ratings are from the Routine Inspection Report dated 11/17/2011.
Only the Superstructure was evaluated during this inspection that took place from 01/18/2013 to 01/23/2013.
No deficiencies were observed to warrant a change of the overall Rating of 7.

DECK = 7 Good
SUPERSTRUCTURE = 7 Good
SUBSTRUCTURE = 7 Good
CHANNEL = 7 Good
PERF. RATING: Good
SUFF. RATING: 79.0
HEALTH INDEX: 99.25

Note: Refer to chart on next page for Numerical Condition Rating Definitions

Scope:
The purpose of this Special Evaluation Inspection was to review and document deficiencies in the Beams/Girders of the Superstructure. The beam evaluations were performed over four days using the 50ft. Under Bridge Inspection truck by two CBI or PE qualified inspectors.

Summary:
The beams are in overall good condition. Several cracks which have a shear direction appearance were observed in the beams. These cracks primarily extend from the bearing areas and/or near the beam ends. The general appearances of the cracks in the exterior beams which are painted make the condition look worse than the cracks in the interior faces. The more significant lengths of cracking were marked with a permanent marker and dated 01/13.

Recommendations:
T. Y. Lin. recommends continuing to monitor the cracks in 6 months for any increase or growth in crack size. If findings show an increase in severity after the next inspection, then a repair recommendation would most likely be warranted.

NUMERICAL CONDITION RATING DEFINITIONS

Rating	Condition Category	Description
9	Excellent	
8	Very Good	No problems noted.
7	Good	Some minor problems. Minor maintenance may be needed.
6	Satisfactory	Structural elements show some minor deterioration. Major maintenance is needed.
5	Fair	All primary structural elements are sound but may have minor section loss, cracking, spalling, or scour. Minor rehabilitation may be needed.
4	Poor	Advanced section loss, deterioration, spalling, or scour. Major rehabilitation may be needed.
3	Serious	Loss of section, deterioration, spalling, or scour have seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present. Repair or rehabilitation required immediately.
2	Critical	Advanced deterioration of primary structural elements. Fatigue cracks in steel or shear cracks in concrete may be present or scour may have removed substructure support. Unless closely monitored, it may be necessary to close the bridge until corrective action is taken.
1	Imminent Failure	Major deterioration or section loss present in critical structural components, or obvious loss present in critical structural components, or obvious vertical or horizontal movement affecting structural stability. Bridge is closed to traffic, but corrective action may be sufficient to put the bridge back in light service.
0	Failed	Bridge is out of service and is beyond corrective action. Replacement necessary.

CONDENSED INSPECTION REPORT

Pontis Element 109 - PS Concrete Girders:

The exterior face of Beams 1 and 4 have a paint system. There are some isolated areas of peeling paint, mostly adjacent to the cracks along the bottom flanges. Refer to Photo 1.

The poured beam end diaphragms have shrinkage cracks up to 0.020in. wide with some spalling. No exposed steel was evident.

The bottom flange has intermittent length longitudinal cracks that are less than 0.01in. wide throughout. These cracks are most evident in the exterior beams possibly from exposure to adverse weather conditions. Refer to Photo 2.

The underside of the top flange has transverse and isolated longitudinal cracks less than 0.010in. wide x up to full flange width (24in. long) with some having light efflorescence. Refer to Photo 3.

The beam webs have horizontal cracks less than 0.010in. wide and lengths up to 16in. extending from random beam ends and they are typically located near mid-height.

The beam webs typically have intersecting diagonal cracks which begin in or near the bearing area of the bottom flange extending up and away giving them a shear crack appearance. These cracks are less than 0.010in. wide and typically are less than 4ft. long. A few of the previously marked cracks in the 2007 inspection have increased up to 24in. in length; however, the cracks did not grow in width. Adjacent to these cracks are multiple shorter length diagonal, horizontal and some pattern/map style cracks, all being less than 0.010in. wide. There are random beams having longer and more evident diagonal/shear cracks from up to 10ft. long and less than 0.01in. wide. Several cracks were marked with a permanent black marker and dated 01/13 for future reference. Refer to Photos 4 and 5. Also refer to the charts on Pages 6 through 8 for crack quantities and the sketch on Page 10 showing typical crack locations.

A single diagonal crack less than 0.010in wide is present in a few beams in the upper web areas. These cracks begin near the upper portion of the beam end and extend down and away from the top flange varying in length from 6 1/2in. to 37in. Refer to Photo 6. Also refer to the chart on Page 9 for crack lengths and the sketch on Page 10 showing typical crack locations.

Non-Typical findings:

Beam 2-1 west face beginning 30ft. from north end along the top flange to deck juncture has a 0.025in. wide x 45ft. longitudinal crack. Refer to Photo 7.

Beam 4-4 east face at north end in addition to the adjacent diagonal/shear cracks has one crack which extends 8ft. from the beam end across the bottom face of the top flange and across the deck over hang. Refer to Photo 8.

Beam 5-1 west face at north end has a diagonal/shear crack beginning at the beam end and extending 15ft. to the south. Refer to Photo 9.

Pontis Element 109 - PS Concrete Girders (Continued):

Beam 6-4 west face at north end has a delamination on the bottom flange 30in. long x 12in. high. Refer to Photo 10.

Beam 7-4 east face at north end in addition to the typical cracks has one diagonal/shear crack 0.010in. wide x 10ft. long.

Beam 8-4 east face beginning 10ft. from the south end along the top flange to deck juncture has a longitudinal crack 0.030in. wide extending 46 1/2ft. to the north. Along this crack is minor edge spalls less than 1/4in. deep. Refer to Photo 11.

Beam 8-4 east face at north end has similar diagonal/shear cracks which were previously marked during the 2011 inspection. This crack has grown 7in. in length and the quantity has increased from four to six cracks. Refer to Photo 12.

Beam 11-4 east face at south end has one diagonal/shear crack less than 0.010in. wide which extends up to and across the underside of the top flange.

Beam 15-1 west face at south end has multiple (5) diagonal/shear cracks beginning within the bearing area/beam end. These cracks turn horizontally near the center of the web and are less than 0.010in. wide x up to 17ft. long.

Beam 22-4 east face at south end has multiple pattern/map cracks less than 0.10in. wide within 2ft. of the beam end. These cracks connect to the adjacent diagonal/shear cracks.

Pontis Element 109 - PS Concrete Girders (Continued):

The following charts are provided for future reference to track increase in quantities of the diagonal/shear cracks in the beam webs. Only the cracks which were well defined in direction were quantified.

BEAM	SOUTH END		NORTH END	
	WEST FACE	EAST FACE	WEST FACE	EAST FACE
1-1	3	4	4	4
1-2	4	5	2	1
1-3	4	4	4	3
1-4	4	5	2	4
2-1	3	3	5	3
2-2	3	2	3	5
2-3	4	3	3	3
2-4	3	4	3	5
3-1	4	5	3	2
3-2	4	4	5	3
3-3	3	3	3	3
3-4	4	5	2	3
4-1	6	1	8	3
4-2	1	1	0	2
4-3	2	1	1	1
4-4	3	6	2	3
5-1	4	0	7	3
5-2	1	1	3	1
5-3	2	1	1	1
5-4	2	4	3	5
6-1	4	0	4	0
6-2	2	1	2	0
6-3	2	3	2	2
6-4	2	5	2	3
7-1	4	0	4	0
7-2	0	0	1	0
7-3	0	0	0	3
7-4	0	3	3	5
8-1	3	1	3	2
8-2	3	2	4	2
8-3	2	3	0	3
8-4	3	5	4	6
9-1	6	3	4	0
9-2	3	0	3	3
9-3	3	3	1	0
9-4	3	3	2	4

Pontis Element 109 - PS Concrete Girders (Continued):

BEAM	SOUTH END		NORTH END	
	WEST FACE	EAST FACE	WEST FACE	EAST FACE
10-1	4	3	4	4
10-2	1	1	3	3
10-3	3	3	1	2
10-4	0	4	2	4
11-1	3	0	1	0
11-2	1	0	0	0
11-3	1	1	2	0
11-4	0	3	2	2
12-1	3	3	4	2
12-2	2	2	2	2
12-3	2	3	3	3
12-4	2	4	4	6
13-1	3	5	5	2
13-2	4	3	3	5
13-3	3	2	6	3
13-4	2	4	0	7
14-1	2	2	5	4
14-2	4	3	4	3
14-3	4	4	4	5
14-4	5	5	4	6
15-1	5	5	3	3
15-2	3	2	3	3
15-3	4	5	1	1
15-4	3	6	4	5
16-1	5	0	4	3
16-2	4	4	3	4
16-3	2	2	5	5
16-4	3	4	4	3
17-1	4	4	6	5
17-2	1	2	6	7
17-3	3	3	4	3
17-4	2	6	5	6
18-1	5	5	4	3
18-2	5	4	3	5
18-3	4	3	4	5
18-4	4	4	2	4
19-1	4	3	4	6
19-2	3	3	3	2
19-3	3	4	5	4
19-4	4	6	4	7

Pontis Element 109 - PS Concrete Girders (Continued):

BEAM	SOUTH END		NORTH END	
	WEST FACE	EAST FACE	WEST FACE	EAST FACE
20-1	4	2	5	4
20-2	1	0	3	4
20-3	2	3	3	6
20-4	3	5	3	4
21-1	4	3	4	2
21-2	2	5	4	2
21-3	2	4	5	5
21-4	4	5	3	4
22-1	5	4	6	5
22-2	4	5	3	5
22-3	5	5	4	5
22-4	6	7	4	7
23-1	4	4	4	4
23-2	3	0	4	4
23-3	4	5	3	3
23-4	5	6	4	6
24-1	5	2	4	3
24-2	2	4	4	4
24-3	2	2	3	3
24-4	3	5	3	5
25-1	6	3	5	3
25-2	4	3	2	2
25-3	2	1	4	5
25-4	1	5	4	5
26-1	6	3	4	6
26-2	3	3	5	4
26-3	3	3	4	4
26-4	3	5	3	6
27-1	5	2	4	2
27-2	3	3	3	2
27-3	2	4	1	2
27-4	2	5	3	5

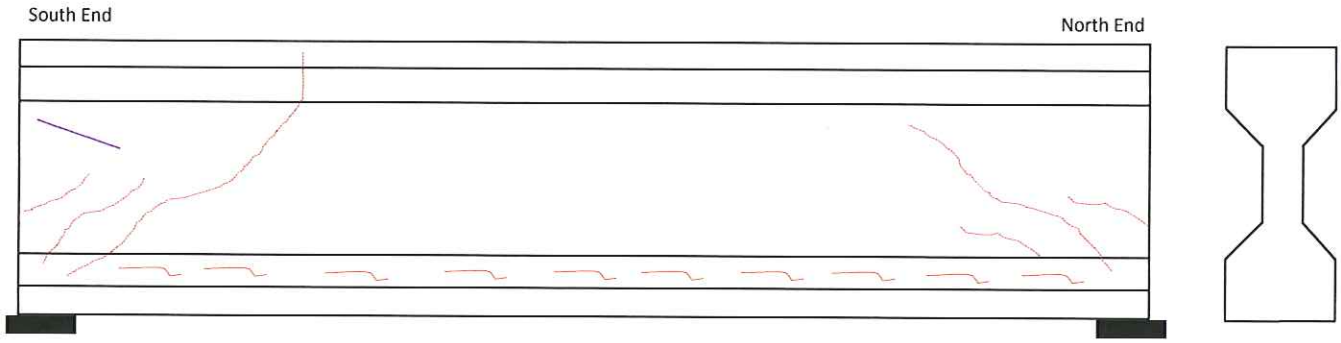
Pontis Element 109 - PS Concrete Girders (Continued):

The following chart is provided for future reference to track any crack length increases. These cracks begin in the upper portions of web area near the beam end and extend down and away.

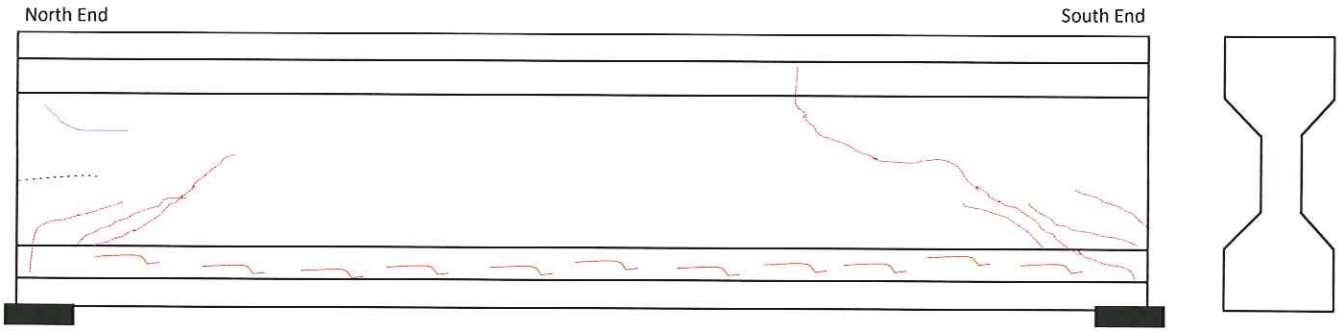
BEAM	SOUTH END		NORTH END	
	WEST FACE	EAST FACE	WEST FACE	EAST FACE
1-1		7in.		
1-4	11in.			
2-2	22in.	24in.		
3-1		22in.		
3-3	12in.	24in.		
4-4			7in.	
6-4	11 1/4in.			
7-1		26in.		
11-1		37in.		
11-2	21in.			
11-3	26in.	35in.		
11-4		33in.		
12-1				41in.
12-2		19in.		
21-1				32in.
22-4			9in.	
23-2	28in.			
27-4	20in.			
27-1		21in.		
27-2				6 1/2in.

BEAM SKETCHES

Note: The following shows the general direction and locations of the cracks in the beam webs and flanges:



East Elevation



West Elevation

Legend:

Blue line (-·-·-·-·-) indicates horizontal crack extending from beam end near mid height of web.

Gold line (solid) indicates short longitudinal cracks along bottom flanges.

Purple line (———) indicates diagonal cracks from top of web down and away.

Red Line (----------) indicate diagonal/shear cracks in beam webs extending from bearing areas or beam ends.

PHOTOS

Photo 1 – Typical areas of peeling paint (east face of Beam 25-4 at north end shown)

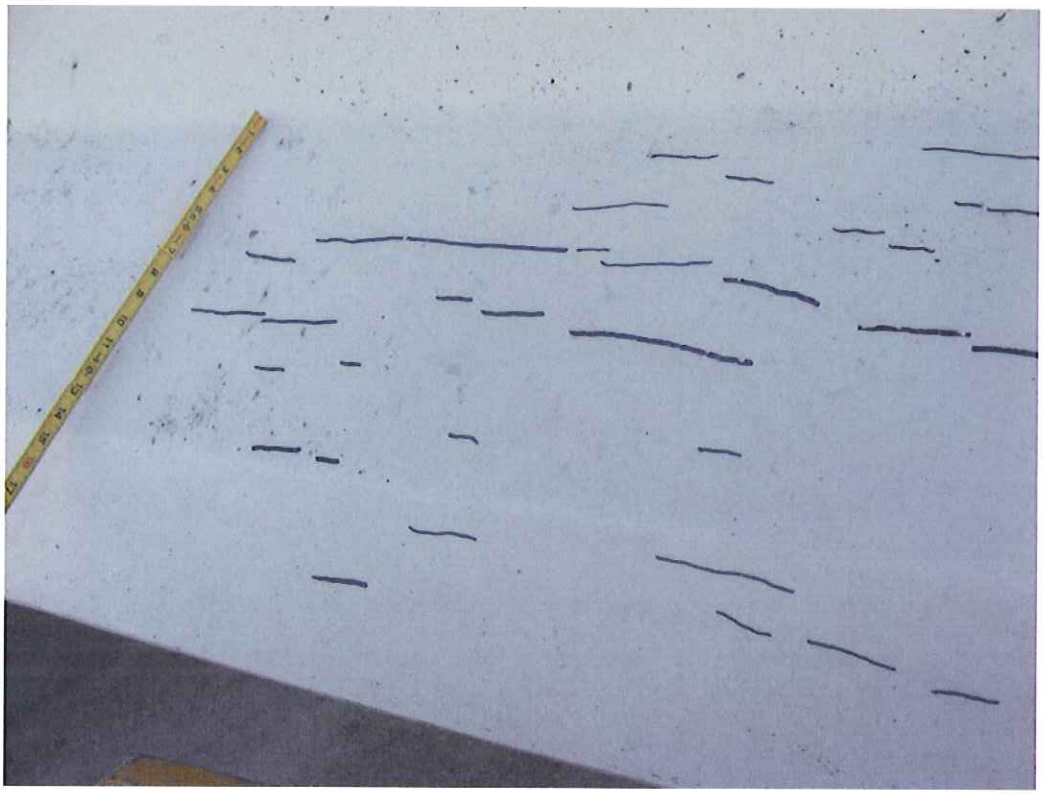


Photo 2 – Typical longitudinal cracks in the bottom flanges of the exterior faces

PHOTOS

Photo 3 – Typical of crack with light efflorescence in underside of the top flanges

Photo 4 – Typical diagonal/shear cracks in exterior beams extending from bearing areas

PHOTOS

Photo 5 – Typical width of diagonal/shear crack in beam webs near the bearing areas

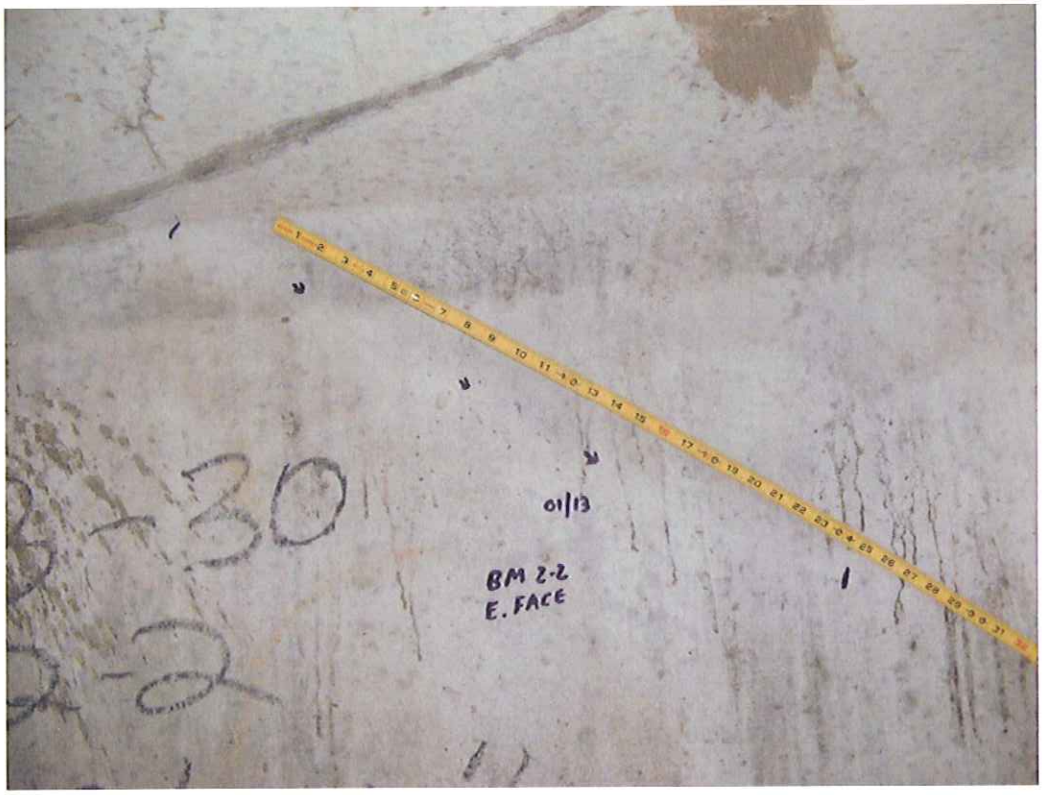


Photo 6 – Typical diagonal crack in beam web extending down and away from top flange

PHOTOS

Photo 7 – Longitudinal crack along west face of Beam 2-1 at web to top flange juncture

Photo 8 – Beam 4-4 east face north end diagonal crack across top flange and deck overhang

PHOTOS

Photo 9 – Beam 5-1 west face at north end diagonal/shear crack extending 15ft. to the south

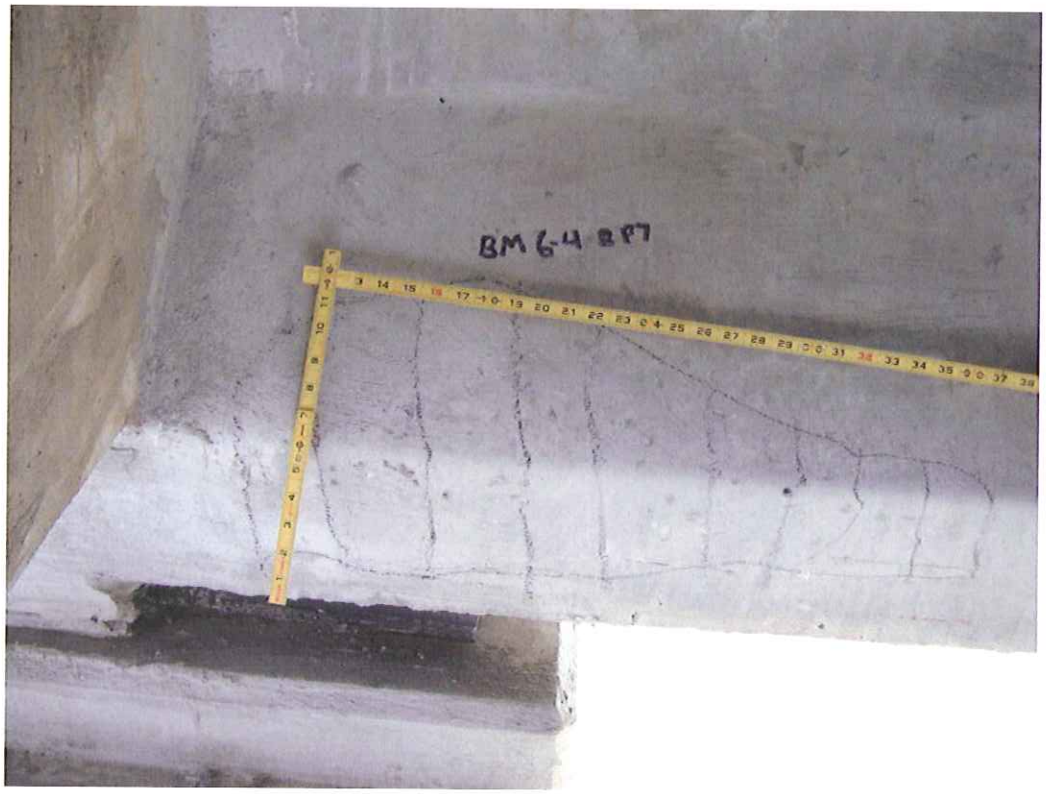


Photo 10 – Delamination on west face of Beam 6-4 at north end

PHOTOS

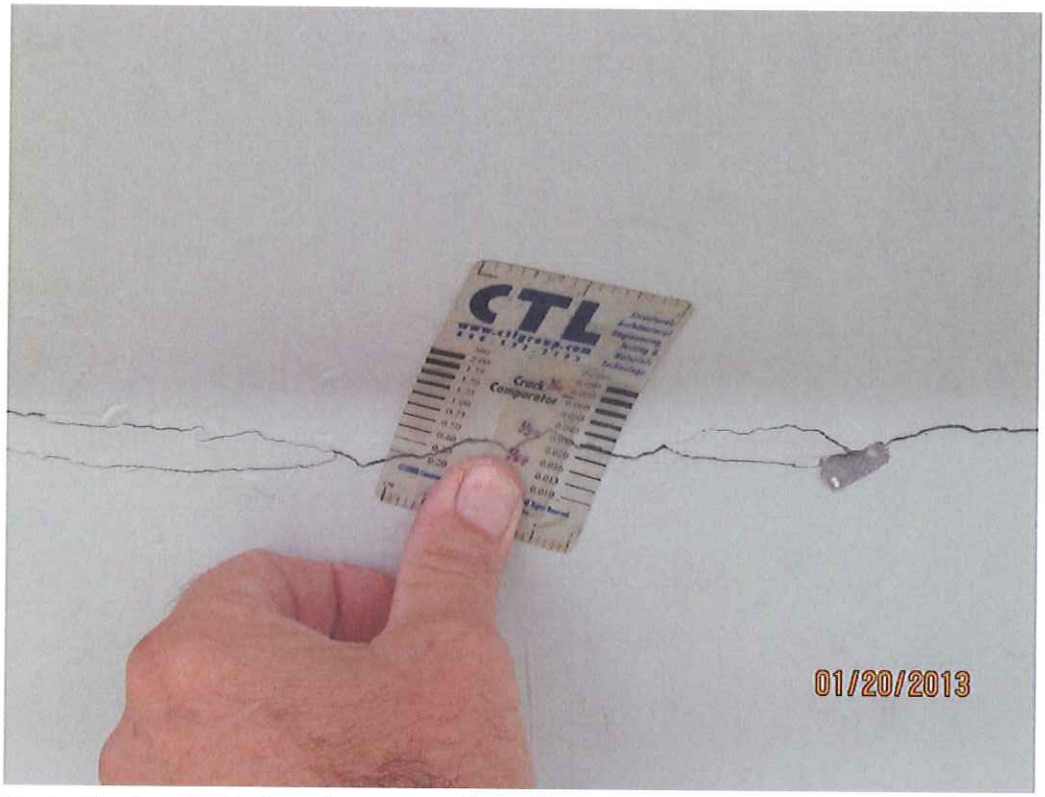


Photo 11 – Longitudinal crack along east face of Beam 8-4 at web to top flange juncture

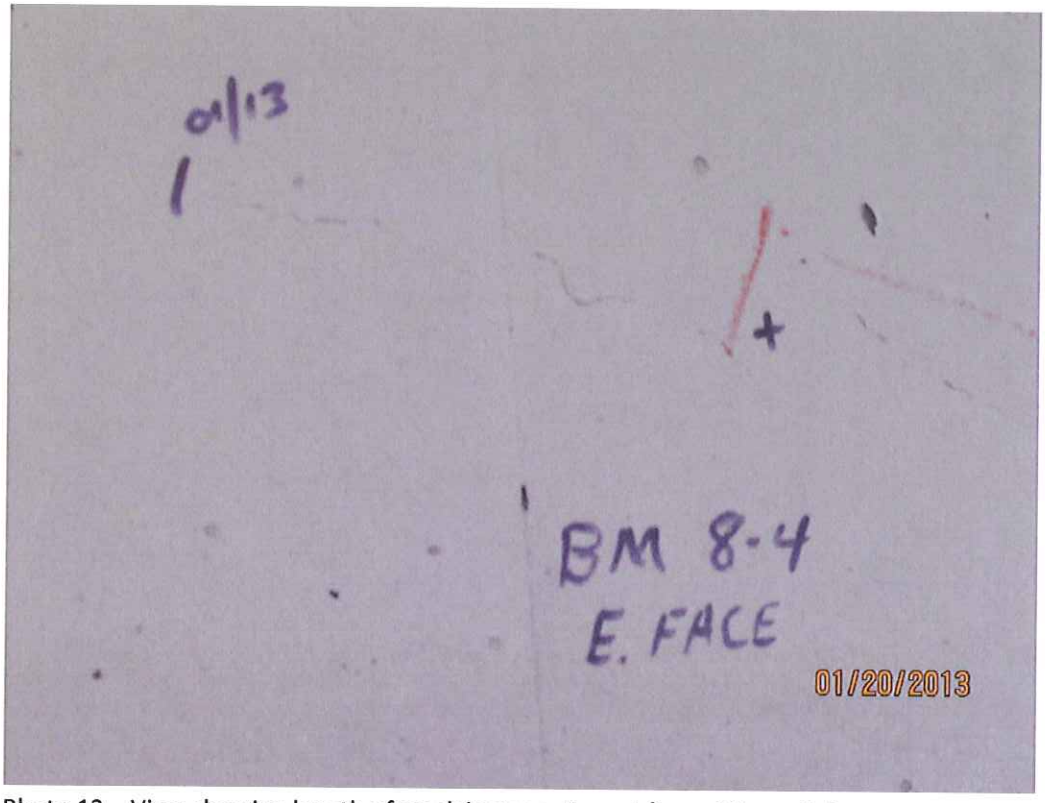


Photo 12 – View showing length of crack increase in east face of Beam 8-4

RECOMMENDED MAINTENANCE REPAIR AND REHABILITATION

Based on the findings of the bridge inspection from 1/18/2013 to 01/23/2013, the following actions are recommended:

(1) Continue to monitor cracks in the beams for any increase in severity by performing a follow up inspection in six months.
(2) Apply a protective coating over all cracks in the beam webs extending from beam ends.
(3) Repair 45ft. longitudinal crack along west face of Beam 2-1 at top flange to deck juncture beginning 30ft. from north end.
(4) Repair 46 1/2ft. longitudinal crack along east face of Beam 4-4 at top flange to deck juncture beginning 10ft. from south end.
(5) Repair 30in. x 12in. delamination in west face of Beam 6-4 bottom flange at the north end.

EXHIBIT Q

LEE COUNTY
SOUTHWEST FLORIDA

Miscellaneous Structural Engineering Services
Sanibel Bridge Beam Inspections

Bridge No. 124115 - Structure B Sanibel Causeway over San Carlos Bay

2nd Structure South of Toll Plaza

Prepared For:

Lee County

Prepared By:

T.Y. Lin International

January 2013

This report evaluates and makes recommendations of bridge maintenance for Bridge No. 124115 Sanibel Causeway over San Carlos Bay 2nd structure from toll plaza.
Solicit No.: CN-11-17 Contract No.: 5850

BRIDGE INSPECTION REPORT

PREPARED FOR: Lee County

SUBMITTED BY: T. Y. Lin International

CONTENTS OF REPORT

A. Condensed Inspection Report
B. Comprehensive Report of Deficiencies and Photos
* C. Evaluation of Previous Corrective Action
D. Recommended Maintenance Repair and Rehabilitation
* E. Methods, Quantities and Costs of Contract Corrective Action
* F. Channel Profile
* G. Fracture Critical Inspections
* H. Location Map
* I. Load Rating Analysis
* J. Underwater Report

* This section is not included in this report.

REPORT IDENTIFICATION

Bridge No. 124115

Bridge Name: Structure B Sanibel Causeway over San Carlos Bay

Location: 2nd Bridge South of Toll Plaza

NO	YES	
X		This bridge contains fracture critical components.
X		This bridge is scour critical.
X		This report identifies deficiencies which require prompt corrective action.

Type of Inspection: ☐ Routine ☐ Interim ☒ Special Evaluation – Beams Only

Field Inspection Date: Above Water 01/26/2013 Under Water N/A

Name of Inspector/Diver	Initials	PE Number	Certified Bridge Inspector Number
Charles W. Elliott (Lead)	CWE		00363
Kenneth F. Ulrich	KU		00288
Farszin Zafaranian	FZ	59558	
Emir Modarres	EMM	74130	

Reviewing Bridge Inspection Supervisor

Name Boon Chong P.E PE Number 48156 Initials BKC

Confirming Registered Professional Engineer

Name Boon Chong P.E 48156 Signature

BOON KIM CHONG LICENSE No. 48156 STATE OF FLORIDA PROFESSIONAL ENGINEER

3/6/2013

BRIDGE NAME 124115 Structure B INSPECTION DATE: 01/26/2013

Lee County Condensed Bridge Inspection Report

Structure Name: Structure B Sanibel Causeway over San Carlos Bay

Location: 2nd Structure South of Toll Plaza

Prepared For: Lee County Transportation Department

Prepared By: T.Y. Lin International

Overall NBI Ratings

Note: The following ratings are from the Routine Inspection Report dated 11/16/2011.
Only the Superstructure was evaluated during this inspection that took place from 01/24/2013 to 01/26/2013.
No deficiencies were observed to warrant a change of the overall Rating of 7.

DECK = 7 Good
SUPERSTRUCTURE = 7 Good
SUBSTRUCTURE = 8 Very Good
CHANNEL = 7 Minor Damage
PERF. RATING: Good
SUFF. RATING: 79.0
HEALTH INDEX: 99.3

Note: Refer to chart on next page for Numerical Condition Rating Definitions

Scope:
The purpose of this Special Evaluation Inspection was to review and document deficiencies in the Beams/Girders of the Superstructure. The beam evaluations were performed over three days using the 50ft. Under Bridge Inspection truck by two CBI or PE qualified inspectors.

Summary:
The beams are in overall good condition. Several cracks which have a shear direction appearance were observed in the beams. These cracks primarily extend from the bearing areas and/or near the beam ends. The general appearances of the cracks in the exterior beams which are painted make the condition look worse than the cracks in the interior faces. The more significant lengths of cracking were marked with a permanent marker and dated 01/13.

Recommendations:
T. Y. Lin. recommends continuing to monitor the cracks in 6 months for any increase or growth in crack size. If findings show an increase in severity after the next inspection then a repair recommendation would most likely be warranted.

NUMERICAL CONDITION RATING DEFINITIONS

Rating	Condition Category	Description
9	Excellent	
8	Very Good	No problems noted.
7	Good	Some minor problems. Minor maintenance may be needed.
6	Satisfactory	Structural elements show some minor deterioration. Major maintenance is needed.
5	Fair	All primary structural elements are sound but may have minor section loss, cracking, spalling, or scour. Minor rehabilitation may be needed.
4	Poor	Advanced section loss, deterioration, spalling, or scour. Major rehabilitation may be needed.
3	Serious	Loss of section, deterioration, spalling, or scour have seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present. Repair or rehabilitation required immediately.
2	Critical	Advanced deterioration of primary structural elements. Fatigue cracks in steel or shear cracks in concrete may be present or scour may have removed substructure support. Unless closely monitored, it may be necessary to close the bridge until corrective action is taken.
1	Imminent Failure	Major deterioration or section loss present in critical structural components, or obvious loss present in critical structural components, or obvious vertical or horizontal movement affecting structural stability. Bridge is closed to traffic, but corrective action may be sufficient to put the bridge back in light service.
0	Failed	Bridge is out of service and is beyond corrective action. Replacement necessary.

Condensed Inspection Report

Pontis Element 109 - PS Concrete Girders:

The exterior face of Beams 1 and 4 have a paint system. There are some isolated areas of peeling paint, mostly adjacent to the cracks along the bottom flanges.

The poured beam end diaphragms have shrinkage cracks up to 0.020in. wide with some minor spalling. No exposed steel was evident.

The bottom flange has intermittent length longitudinal cracks that are less than 0.01in. wide throughout. These cracks are most evident in the exterior beams possibly from exposure to adverse weather conditions. Refer to Photo 1.

The underside face of the beams top flange has transverse and isolated longitudinal cracks less than 0.010in. wide and lengths up to full flange width (24in. long) with some having light efflorescence.

The beam webs have horizontal cracks less than 0.010in. wide and lengths up to 16in. extending from random beam ends and they are typically located near mid-height.

The beam webs typically have intersecting diagonal cracks which begin in or near the bearing area of the bottom flange extending up and away giving them a shear crack appearance. These cracks are less than 0.010in. wide and typically are less than 5ft. long. Adjacent to these cracks are multiple shorter length diagonal, horizontal and some pattern/map style cracks, all being less than 0.010in. wide. There are random beams having longer more evident diagonal/shear cracks from up to 8.5ft. long and are less than 0.01in. wide. Several cracks were marked with a permanent black marker and dated 01/13 for future reference. Refer to Photos 2 and 3. Also refer to the charts on Pages 5 and 6 for crack quantities and the sketch on Page 7 showing typical cracks locations.

Non-Typical findings:

Beam 1-4 east face at north end in addition to the adjacent diagonal/shear cracks has one crack which extends 92in. from the bottom of the beam end/bearing area up and across the bottom face of the top flange. Refer to Photo 4.

Pontis Element 109 - PS Concrete Girders (Continued):

The following charts are provided for future reference to track any increase in quantities of the diagonal/shear cracks observed in the beam webs. Only the cracks which were well defined in direction and lengths were quantified.

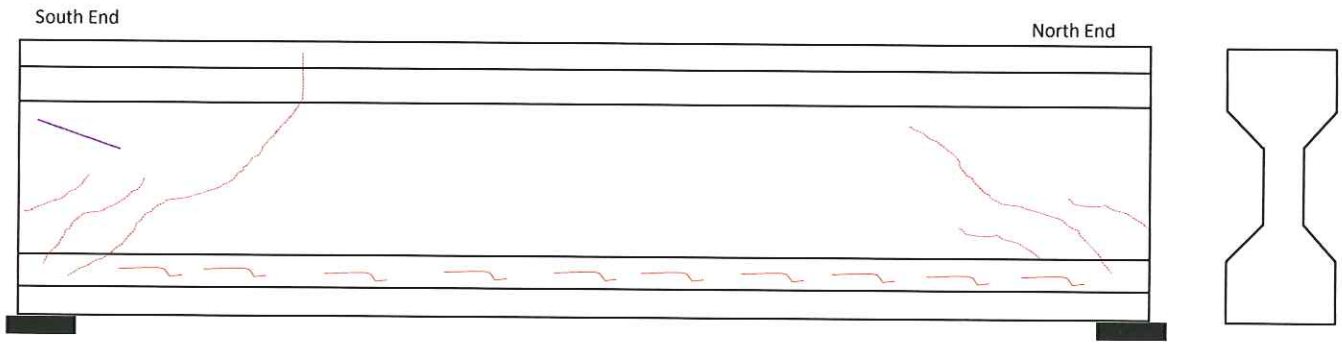
BEAM	SOUTH END		NORTH END	
	WEST FACE	EAST FACE	WEST FACE	EAST FACE
1-1	2	2	5	3
1-2	1	3	4	4
1-3	3	3	3	5
1-4	3	2	2	4
2-1	5	4	5	4
2-2	2	2	1	1
2-3	2	4	4	2
2-4	3	4	4	7
3-1	5	2	4	4
3-2	3	3	4	2
3-3	2	2	2	2
3-4	4	10	5	6
4-1	4	3	4	1
4-2	3	2	5	2
4-3	2	4	4	4
4-4	1	5	2	3
5-1	5	2	6	3
5-2	2	2	4	2
5-3	4	5	6	5
5-4	4	6	5	5
6-1	4	2	5	2
6-2	3	3	3	2
6-3	2	1	2	2
6-4	5	6	3	5
7-1	3	5	4	3
7-2	3	2	2	3
7-3	3	3	0	0
7-4	2	6	3	6
8-1	4	3	4	1
8-2	2	2	1	2
8-3	1	3	2	1
8-4	2	7	3	6
9-1	3	2	4	4
9-2	4	2	1	0
9-3	2	2	2	2
9-4	4	7	1	6

Pontis Element 109 - PS Concrete Girders (Continued):

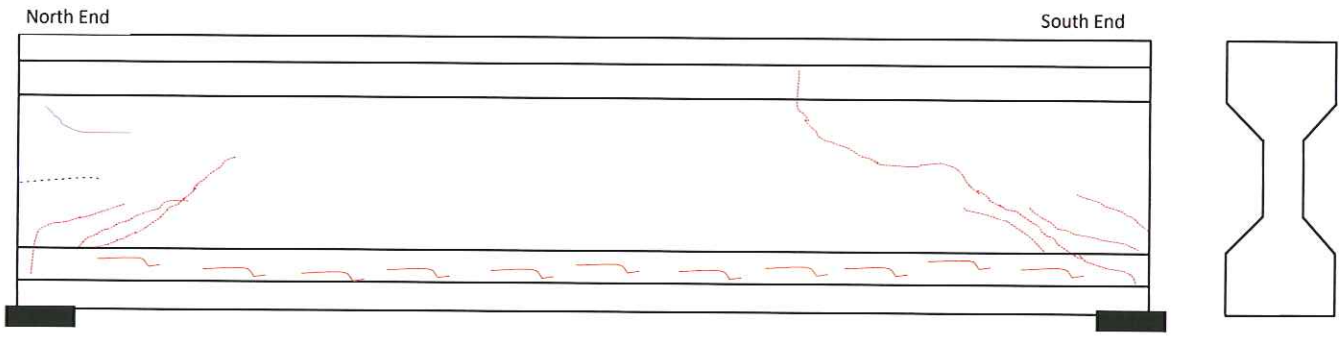
BEAM	SOUTH END		NORTH END	
	WEST FACE	EAST FACE	WEST FACE	EAST FACE
10-1	4	3	4	3
10-2	2	2	2	2
10-3	2	3	2	2
10-4	4	4	3	4
11-1	3	3	5	3
11-2	2	1	3	3
11-3	3	3	2	2
11-4	2	4	3	5
12-1	6	4	4	2
12-2	4	4	5	3
12-3	3	4	3	4
12-4	2	3	0	4
13-1	3	6	2	1
13-2	3	4	3	3
13-3	0	2	3	2
13-4	3	3	0	3

BEAM SKETCHES

Note: The following shows the general direction and locations of the cracks in the beam webs and flanges:



East Elevation



West Elevation

Legend:

Blue line (-·-·-·-·-) indicates horizontal crack extending from beam end near mid height of web.

Gold line (solid) indicates short longitudinal cracks along bottom flanges.

Purple line (———) indicates diagonal cracks from top of web down and away.

Red Line (----------) indicate diagonal/shear cracks in beam webs extending from bearing areas or beam ends.

PHOTOS

Photo 1 – Typical longitudinal cracks in bottom flanges of beams

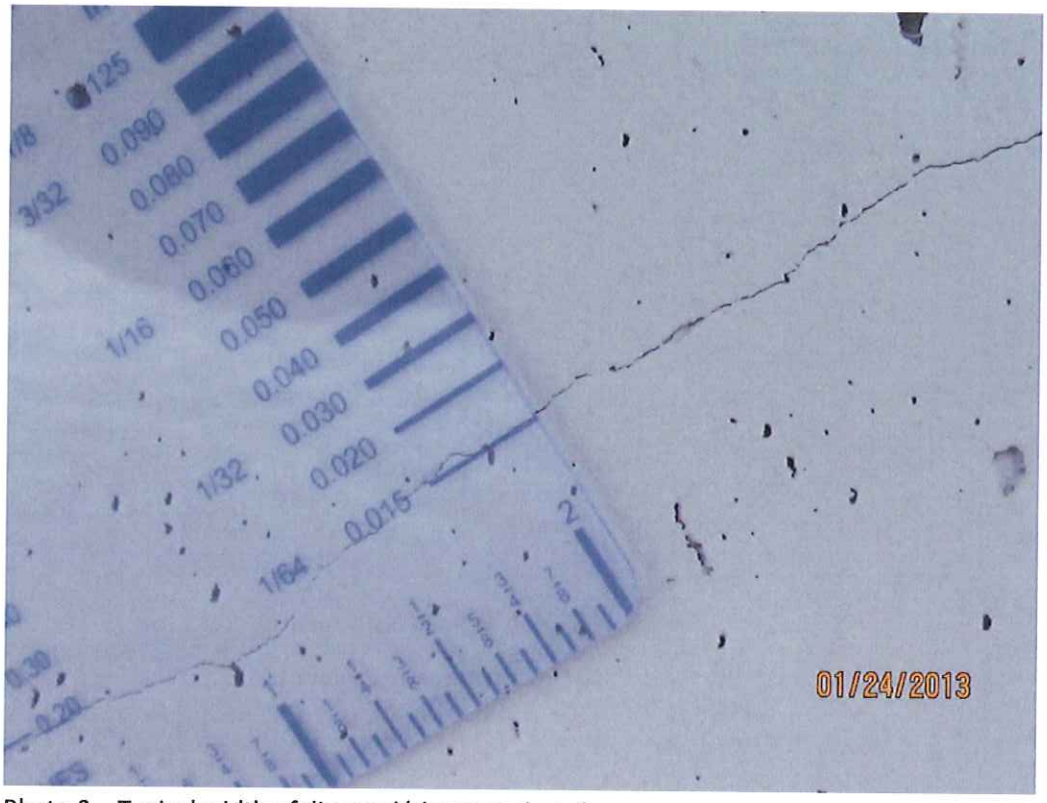


Photo 2 – Typical width of diagonal/shear cracks in beams

PHOTOS

Photo 3 – Typical diagonal/shear cracks in beams

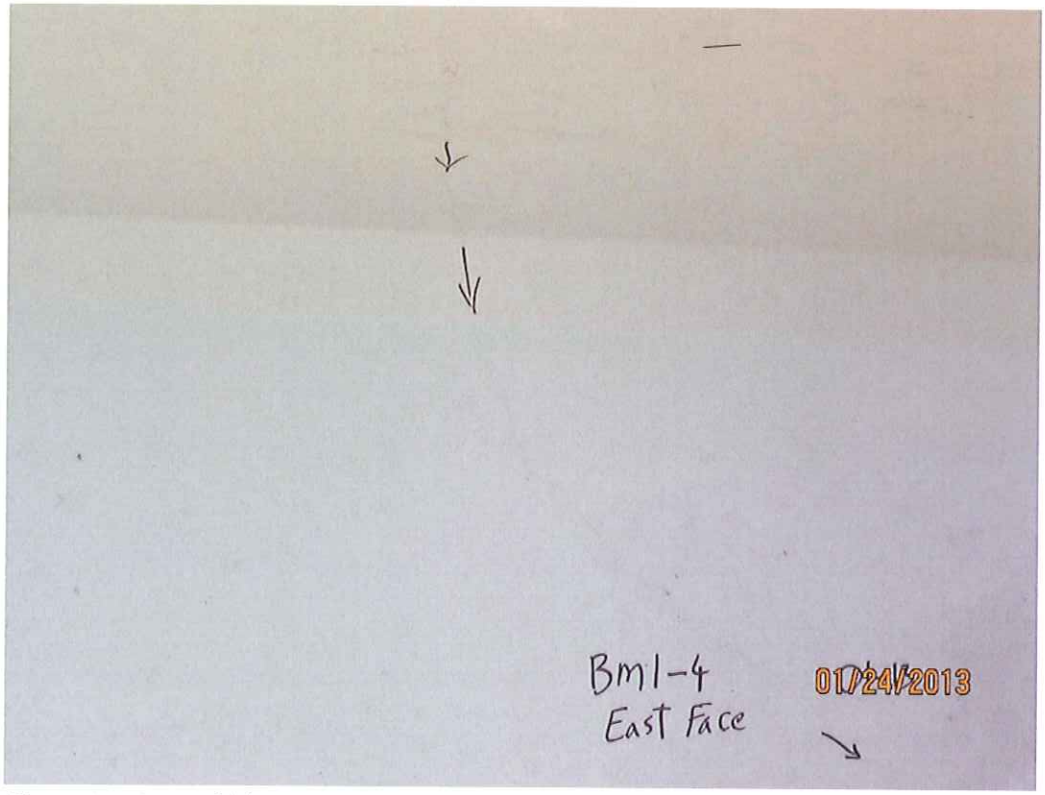


Photo 4 – Diagonal/shear crack extending from bottom bearing area across top flange

RECOMMENDED MAINTENANCE REPAIR AND REHABILITATION

Based on the findings of the bridge inspection from 1/23/2013 to 01/26/2013, the following actions are recommended:

(1) Continue to monitor cracks in the beams for any increase in severity by performing a follow up inspection in six months.
(2) Apply a protective coating over all cracks in the beam webs extending from beam ends.

EXHIBIT R

LEE COUNTY
SOUTHWEST FLORIDA

Miscellaneous Structural Engineering Services
Sanibel Bridge Beam Inspections

Bridge No. 124116 - Structure A Sanibel Causeway over San Carlos Bay

1st Structure South of Toll Plaza

Prepared For:

Lee County

Prepared By:

T.Y. Lin International

January 2013

This report evaluates and makes recommendations of bridge maintenance for Bridge No. 124116 Sanibel Causeway over San Carlos Bay 1st structure from toll plaza.
Solicit No.: CN-11-17 Contract No.: 5850

BRIDGE INSPECTION REPORT

PREPARED FOR: Lee County

SUBMITTED BY: T. Y. Lin International

CONTENTS OF REPORT

A. Condensed Inspection Report
B. Comprehensive Report of Deficiencies and Photos
* C. Evaluation of Previous Corrective Action
D. Recommended Maintenance Repair and Rehabilitation
* E. Methods, Quantities and Costs of Contract Corrective Action
* F. Channel Profile
* G. Fracture Critical Inspections
* H. Location Map
* I. Load Rating Analysis
* J. Underwater Report

* This section is not included in this report.

REPORT IDENTIFICATION

Bridge No. 124116

Bridge Name: Structure A Sanibel Causeway over San Carlos Bay

Location: 1st Bridge South of Toll Plaza

NO	YES	
X		This bridge contains fracture critical components.
X		This bridge is scour critical.
X		This report identifies deficiencies which require prompt corrective action.

Type of Inspection: ☐ Routine ☐ Interim ☒ Special Evaluation – Beams Only

Field Inspection Date: Above Water 01/31/2013 Under Water N/A

Name of Inspector/Diver	Initials	PE Number	Certified Bridge Inspector Number
Charles W. Elliott (Lead)	CWE		00363
Kenneth F. Ulrich	KU		00288
Farszin Zafaranian	FZ	59558	
Emir Modarres	EMM	74130	

Reviewing Bridge Inspection Supervisor

Name Boon Chong P.E PE Number 48156 Initials BKC

Confirming Registered Professional Engineer

Name Boon Chong P.E 48156 Signature

BOON KIM CHONG LICENSE No. 48156 STATE OF FLORIDA PROFESSIONAL ENGINEER

3/6/2013

Lee County Condensed Bridge Inspection Report

Structure Name: Structure A Sanibel Causeway over San Carlos Bay

Location: 1st Structure South of Toll Plaza

Prepared For: Lee County Transportation Department

Prepared By: T.Y. Lin International

Overall NBI Ratings

Note: The following ratings are from the Routine Inspection Report dated 11/18/2011.
Only the Superstructure was evaluated during this inspection. No deficiencies were observed to warrant a change of the overall Rating of 7.

DECK = 8 Very Good
SUPERSTRUCTURE = 7 Good
SUBSTRUCTURE = 7 Good
CHANNEL = 7 Good
PERF. RATING: Good
SUFF. RATING: 79.0
HEALTH INDEX: 98.94

Note: Refer to chart on next page for Numerical Condition Rating Definitions

Scope:
The purpose of this Special Evaluation Inspection was to review and document deficiencies in the Beams/Girders of the Superstructure. The beam evaluations were performed over four days using the 50ft. Under Bridge Inspection truck by two CBI or PE qualified inspectors.

Summary:
The beams are in overall good condition. Several cracks which have a shear direction appearance were observed in the beams. These cracks primarily extend from the bearing areas and/or near the beam ends. The general appearances of the cracks in the exterior beams which are painted make the condition look worse than the cracks in the interior faces. The more significant lengths of cracking were marked with a permanent marker and dated 01/13.

Recommendations:
T. Y. Lin. recommends continuing to monitor the cracks in 6 months for any increase or growth in crack size. If findings show an increase in severity in the next inspection then a repair recommendation would most likely be warranted.

NUMERICAL CONDITION RATING DEFINITIONS

Rating	Condition Category	Description
9	Excellent	
8	Very Good	No problems noted.
7	Good	Some minor problems. Minor maintenance may be needed.
6	Satisfactory	Structural elements show some minor deterioration. Major maintenance is needed.
5	Fair	All primary structural elements are sound but may have minor section loss, cracking, spalling, or scour. Minor rehabilitation may be needed.
4	Poor	Advanced section loss, deterioration, spalling, or scour. Major rehabilitation may be needed.
3	Serious	Loss of section, deterioration, spalling, or scour have seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present. Repair or rehabilitation required immediately.
2	Critical	Advanced deterioration of primary structural elements. Fatigue cracks in steel or shear cracks in concrete may be present or scour may have removed substructure support. Unless closely monitored, it may be necessary to close the bridge until corrective action is taken.
1	Imminent Failure	Major deterioration or section loss present in critical structural components, or obvious loss present in critical structural components, or obvious vertical or horizontal movement affecting structural stability. Bridge is closed to traffic, but corrective action may be sufficient to put the bridge back in light service.
0	Failed	Bridge is out of service and is beyond corrective action. Replacement necessary.

CONDENSED INSPECTION REPORT

Pontis Element 109 - PS Concrete Girders:

The poured beam end diaphragms have cracks up to 0.020in. wide with some spalling. No exposed steel was evident.

The exterior face of Beams 1 and 4 have a paint system. There are some isolated areas of peeling paint, mostly adjacent to the cracks along the bottom flanges. The worst conditions appear to be on Beam 17-4 near the south end of the west face and Beam 18-4 at the north end of the east face. Refer to Photo 1.

The underside face of the top flange has isolated areas of transverse and longitudinal cracks less than 0.010in. wide and lengths up to full flange width (24in. long) with some having light efflorescence.

Random beams have horizontal cracks less than 0.010in. wide x up to 20in. long extending from the beam ends and typically are located near mid-height.

The bottom flanges of nearly all beams in all spans have intermittent longitudinal cracks that are less than 0.010in. wide throughout. These cracks are most evident in the exterior beams possibly from exposure to adverse weather conditions. Refer to Photos 2, 3 and 6.

A few beams have a single diagonal crack up to 30in. long x less than 0.010in. wide in the upper web and top flange areas. These cracks begin near the beam end and extend down and away from the top flange. Refer to Photo 4. Also refer to the chart on Page 5 for list of beams with this type cracking and locations.

Several beam webs have vertical cracks up to 61in. long x less than 0.010in. wide with-in 24in. of the beam ends. Most of these cracks extend from the bottom flange/bearing area up to and across the underside of the top flange. Refer to Photo 5. Also refer to the chart on Page 5 for list of beams with this type cracking.

The beam webs typically have intersecting diagonal cracks which begin in or near the bearing area of the bottom flange extending up and away giving them a shear crack appearance. These cracks are less than 0.010in. wide and typically are less than 4ft. long with a few beams having longer more evident diagonal/shear cracks up to 10ft. long x less than 0.010in. wide. Adjacent to these cracks are multiple shorter length diagonal, horizontal and some pattern/map style cracks, all being less than 0.010in. wide. Several cracks throughout all spans were marked with a permanent black marker and dated 01/13 for future reference. Refer to Photo 6. Also refer to the charts on Pages 6 and 7 for crack quantities and the sketch on Page 8 for locations.

Non-Typical findings:

Beam 11-2 east face, at north end has intersecting diagonal cracks less than 0.010in. wide. One is 61in. long and extends from with-in the bottom flange up and across underside of the top flange. The second crack is 18in. long and extends down and away from the beam end. Refer to Photo 7.

Beam 12-4 west face, 20ft. from south end along the top flange to web juncture has a longitudinal crack 51in. long x less than 0.010in. wide. Refer to Photo 8.

Beam 13-1 east face, 20ft. from north end along the top flange to web juncture has a longitudinal crack 57in. long x less than 0.010in. wide.

Pontis Element 109 - PS Concrete Girders (continued):

The following chart is provided for future reference to track any length increases in the "diagonal" cracks which extend down and away from the top flanges, in the upper portions of the webs near the beam ends:

BEAM	SOUTH END		NORTH END	
	WEST FACE	EAST FACE	WEST FACE	EAST FACE
6-4	24in.			
6-2			24in.	24in.
8-1				27in.
8-2			12in.	
9-2	27in.			
9-4	28in.			
10-1		30in.		
11-2			20in.	
12-3	28in.			
13-4	18in.			
15-1		16in.		

The following chart is provided for future reference to track any length increases in the "vertical" cracks located in the webs with-in 24in. of the beam ends:

BEAM	SOUTH END		NORTH END	
	WEST FACE	EAST FACE	WEST FACE	EAST FACE
13-3			34in.	36in. & 18in.
17-2				48in.
17-3	24in.	28in.	48in.	45in.
18-2	48in.			
18-3	40in.			
19-3				3 crks up to 56in.
9-4	28in.			
10-1		30in.		
11-2			20in.	
12-3	28in.			
13-4	18in.			
15-1		16in.		

Pontis Element 109 - PS Concrete Girders (continued):

The following charts are provided for future reference to track any increase in quantities of the diagonal/shear cracks up to 61in. long in the beam webs which typically extend up and away from the bottom flange and or bearing areas. The beams identified with an (*) have one or more cracks which extend up to and across the entire underside of the top flanges. Only the cracks which were well defined in direction were quantified.

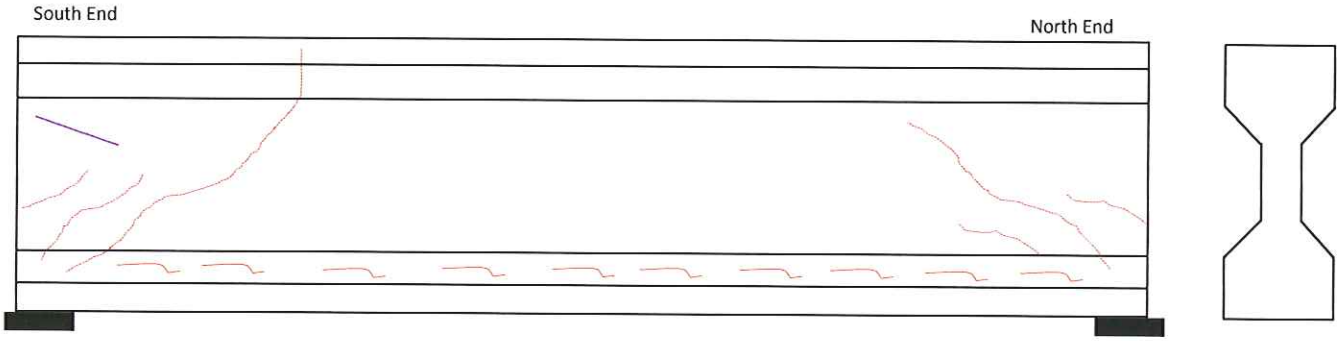
BEAM	SOUTH END		NORTH END	
	WEST FACE	EAST FACE	WEST FACE	EAST FACE
1-1	4	3	1	6
1-2	3	2	8	8
1-3	2	2	5	8
1-4	3	4	3	2
2-1	4	3	5	1
2-2	2	2	3	3
2-3	2	2	3	3
2-4	2	3	2	3
3-1	3	2	4	4
3-2	1	1	1	3
3-3	3	3	3	3
3-4	4	4	3	3
4-1	2	2	3	3
4-2	3	2	4	4
4-3	2	2	4	2
4-4	4	3	3	3
5-1	3	5	5	4
5-2	2	3	7	6
5-3	5	3	2	2
5-4	3	3	4	3
6-1	3	3	4	4
6-2	4	3	2	1
6-3	4	3	3	5
6-4	3	4	3	5
7-1	4	4	3	3
7-2	4	4	4	3
7-3	3	3	4	4
7-4	4	6	2	3
8-1	7	5	2	7
8-2	4	3	3	2
8-3	4	3	4	4
8-4	3	3	5	5
9-1	3	5	3	6
9-2	6	4	3	3
9-3	2	2	4	3
9-4	6	6	3	4
10-1	3	1	3	3
10-2	3	2	2	2
10-3	3	2	3	3
10-4	2	3	3	2

Pontis Element 109 PS Concrete Girders (continued):

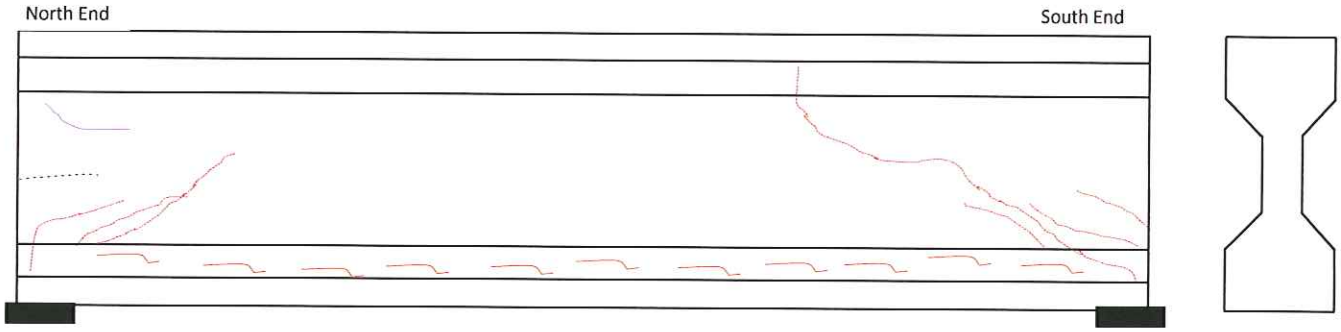
BEAM	SOUTH END		NORTH END	
	WEST FACE	EAST FACE	WEST FACE	EAST FACE
11-1	2	2	2	3
11-2 *	4	3	3	3
11-3 *	3	3	2	2
11-4 *	1	3	3	3
12-1 *	1	1	2	0
12-2 *	3	3	2	1
12-3 *	2	4	2	2
12-4	2	2	1	3
13-1	5	2	5	4
13-2 *	3	3	4	5
13-3 *	5	4	5	3
13-4	4	5	5	4
14-1	3	2	3	3
14-2	1	1	2	3
14-3 *	5	5	3	2
14-4 *	5	5	4	4
15-1	1	2	1	2
15-2 *	4	5	2	3
15-3 *	3	3	3	3
15-4	4	4	0	3
16-1	2	0	1	1
16-2 *	3	2	3	2
16-3 *	2	1	3	3
16-4	3	3	4	4
17-1	4	3	4	4
17-2 *	2	3	4	4
17-3 *	3	3	3	3
17-4	3	5	1	3
18-1	4	3	3	1
18-2	4	3	3	3
18-3 *	3	5	3	2
18-4	3	5	3	3
19-1	4	3	2	4
19-2 *	3	3	3	3
19-3 *	4	4	3	3
19-4	2	3	3	4
20-1	3	3	4	3
20-2 *	5	5	4	4
20-3 *	4	3	5	6
20-4	4	4	3	4
21-1	6	2	4	1
21-2 *	2	1	2	1
21-3 *	5	4	2	3
21-4	4	3	3	4

BEAM SKETCHES

Note: The following shows the general direction and locations of the cracks in the beam webs and flanges:



East Elevation



West Elevation

Legend:

Blue line (-·-·-·-·-) indicates horizontal crack extending from beam end near mid height of web.

Gold line (solid) indicates short longitudinal cracks along bottom flanges.

Purple line (———) indicates diagonal cracks from top of web down and away.

Red Line (----------) indicate diagonal/shear cracks in beam webs extending from bearing areas or beam ends.

PHOTOS

Photo 1 – Typical areas of peeling paint (east face of Beam 18-4 at north end shown)

Photo 2 – Typical crack width in the bottom flanges and beam webs

PHOTOS

Photo 3 – Typical longitudinal cracks in the bottom flanges of the exterior faces

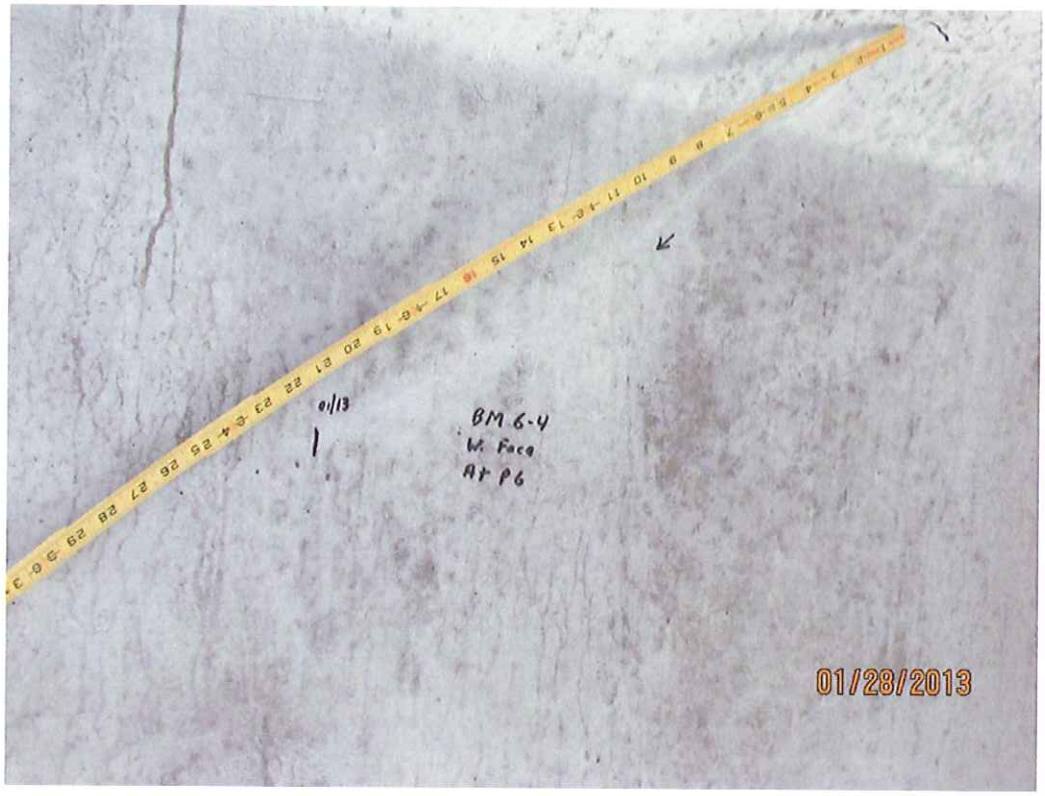


Photo 4 – Typical diagonal crack in beam web extending down and away from top flange

PHOTOS

Photo 5 – Typical vertical cracks in web and across the top flange at the beam ends

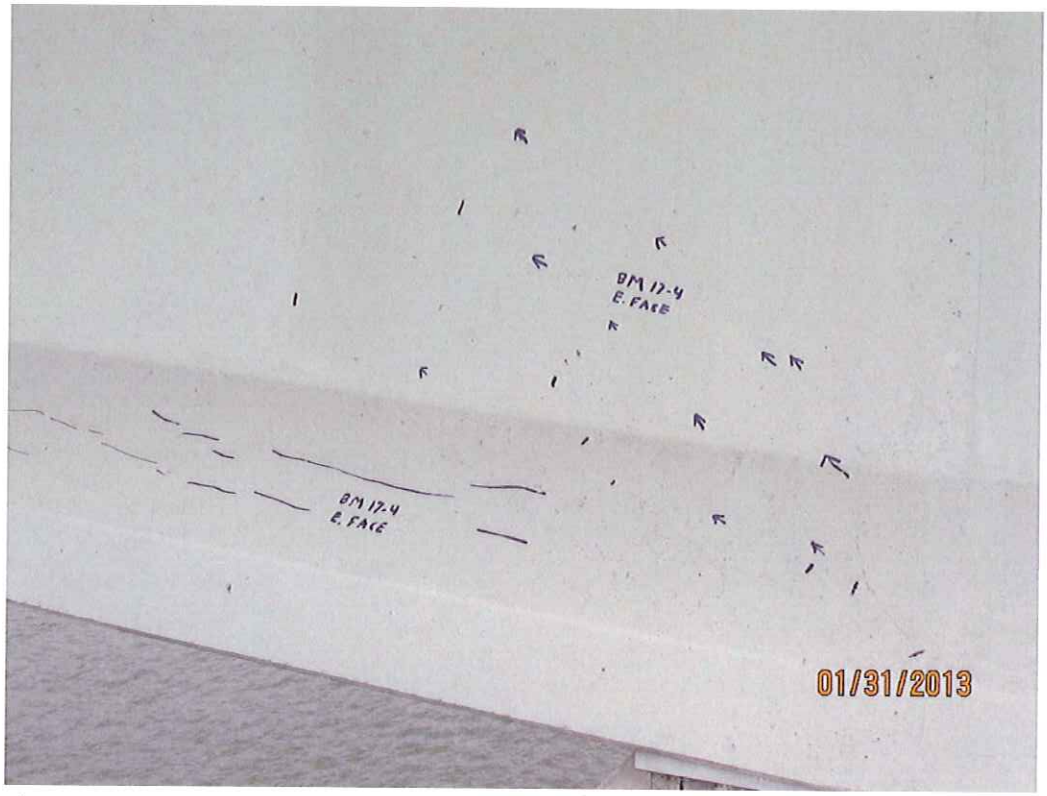


Photo 6 – Typical diagonal crack in beam web and horizontal cracks in bottom flange

PHOTOS

Photo 7 – Intersecting cracks on east face at north end of Beam 11-2

Photo 8 – Longitudinal crack along west face of Beam 12-4 at top flange juncture

RECOMMENDED MAINTENANCE REPAIR AND REHABILITATION

Based on the findings of the bridge inspection from 1/27/2013 to 01/31/2013, the following actions are recommended:

(1) Continue to monitor cracks in the beams for any increase in severity by performing a follow up inspection in six months.
(2) Apply a protective coating over all cracks in the beam webs extending from beam ends.
(3) Repair 51in. longitudinal crack in west face of Beam 12-4 beginning 20ft. from south end along the top flange to web juncture.
(4) Repair 57in. longitudinal crack in east face of Beam 13-1 beginning 20ft. from north end along the top flange to web juncture.

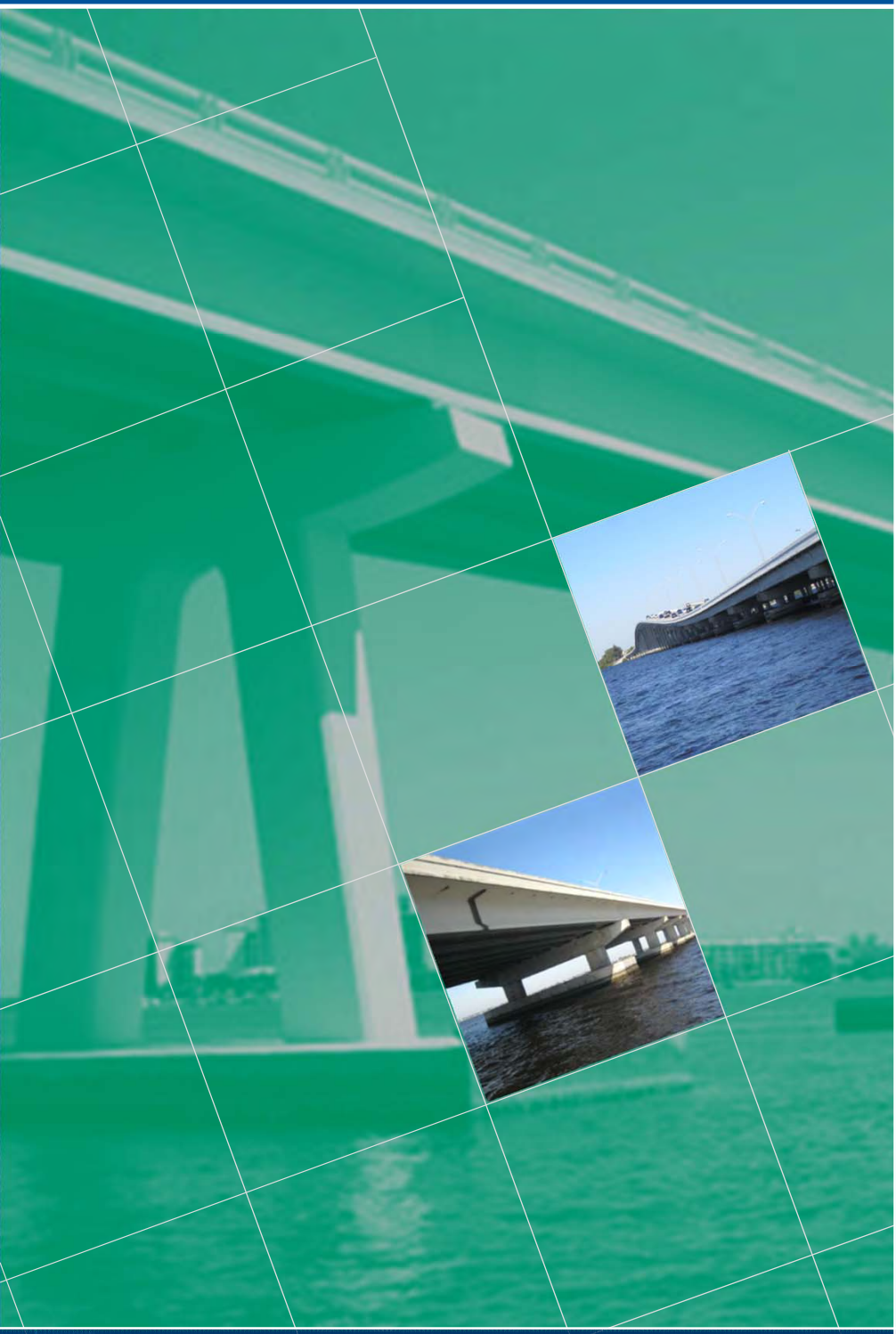
EXHIBIT S

Annual Traffic and Revenue Report
Fiscal Year 2012
Lee County Toll Facilities

Sanibel Causeway

Cape Coral Bridge

Midpoint Memorial Bridge



LEE COUNTY
SOUTHWEST FLORIDA

CDM Smith

Annual Traffic and Revenue Report
Fiscal Year 2012
Lee County Toll Facilities

April 2013

Sanibel Causeway
Cape Coral Bridge
Midpoint Memorial Bridge

LEE COUNTY
SOUTHWEST FLORIDA

CDM Smith

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CHAPTER 1

INTRODUCTION TO THE LEE COUNTY TOLL FACILITIES

REPORT PURPOSE AND STRUCTURE

This report is prepared on an annual basis for the Lee County Department of Transportation (LeeDOT) and is a summary of the FY 2012 annual performance characteristics of the three Lee County toll bridges. This analysis also includes a brief discussion of the external factors that contribute to total traffic demand and toll revenue generation. Any changes in sources or methodologies that have occurred since the last report are noted in the text.

Chapter 1 provides an introduction and history of the Lee County toll facilities and a brief overview of the physical and operating characteristics of each facility comprising the system. Both historical and current operating characteristics are presented in greater detail in Chapter 2, as well as any divergence observed from historical patterns. Chapter 3 presents historical and current socioeconomic trends through FY 2012. While macroeconomic conditions are always an important driver of traffic and toll revenue performance, the recession of 2007 through 2009 and its lingering effects are deserving of particular attention. Florida, particularly Lee and Charlotte Counties, were amongst the hardest hit in the nation, especially with respect to the precipitous decline in real estate values and home construction activity. The ongoing recovery and the speed and strength with which it progresses will continue to play a major role in the performance of the Lee County toll facilities.

Chapter 4 addresses FY 2012 transaction and revenue performance in the context of historical trends. Detailed information on annual toll program sales by toll payment type; violation enforcement and recovery; and any extenuating factors that may have affected toll collection are presented. Chapter 5 covers the County's financial position in relation to its fiscal obligations including debt service; obligatory payments to reserve funds; revenue sharing; and capital improvements. Chapter 6 presents the findings of the biennial bridge and facilities inspection report, which is a general review of the physical condition and characteristics of the three bridges based on a thorough inspection of those facilities conducted in March 2013.

Most of the metrics presented in this report are tabulated on a fiscal year basis. Lee County's fiscal year begins on October 1 of the previous calendar year, ending the following September 30. For example, FY 2012 began on October 1, 2011 and concluded September 30, 2012. Some external variables are not available on a monthly basis and cannot be converted to fiscal year. These values are presented on a calendar year basis.

SYSTEM HISTORY

The Lee County toll system consists of three tolled bridges: the Midpoint Memorial Bridge; the Cape Coral Bridge; and the Sanibel Causeway. A location map of the three facilities and the region they serve can be found in Figure 1-1. The first two toll facilities built by LeeDOT, the Sanibel Causeway and the Cape Coral Bridge, opened to traffic in 1963 and 1964, respectively. Tolls were removed from the Cape Coral Bridge in 1974 and reinstated in 1989 to help finance the construction of an additional span. The third and final toll facility, the Midpoint Memorial Bridge, opened to traffic in 1997 in response to growing demand for travel across the Caloosahatchee River.

Despite recent economic turbulence, particularly in Lee County where the effects of the housing crisis were especially pronounced, long-term historical growth in regional travel demand has been exceptionally high. During this time, socioeconomic indicators such as total population, households, employment, and median income have steadily increased at a pace considerably greater than the state and national averages. For example, between 1970 and 2007 (prior to the recent recession) Lee County's annual population growth averaged 4.7 percent per year, which is significantly higher than statewide growth and more than four times the national annual average. While economic growth has slowed considerably since late 2007, future regional growth is still forecast to exceed the state and national averages in both the short-term and over the next 30 years. Rapid expansion in the region and the corresponding growth in travel demand have led to continued improvements in Lee County's transportation infrastructure, including numerous operational and physical upgrades to the Lee County toll system. Both long- and short-term socioeconomic trends impacting toll traffic and revenue are discussed at greater length in Chapter 3, including a forecast of future growth, derived from external sources.

Facility Milestones

Table 1-1 lists major milestones in the history of Lee County's toll bridges. Over the past 16 years, several significant changes to infrastructure and toll collection have occurred. The first and one of the most significant milestones occurred in the fall of 1997, when the opening of the Midpoint Memorial Bridge coincided with the introduction of electronic toll collection (ETC) on all Lee County toll bridges. ETC, branded locally as LeeWay, has several advantages over traditional cash toll collection. Customers with a LeeWay transponder (and those from interoperable systems) do not have to stop to pay tolls and benefit from a reduced transaction time. This benefits Lee County as well, as toll facilities are able to handle larger volumes of traffic without the need for costly physical expansions or additional personnel. Additionally, LeeWay patrons with two-axle vehicles are eligible for a variety of discount and variable pricing programs not available to cash customers. While originally offered to only two-axle passenger cars, LeeWay expanded the variable pricing program to include all vehicles in December 2003.

In an effort to further enhance operational efficiencies, Lee County adopted a one-way toll collection policy on the Midpoint Memorial and Cape Coral Bridges, beginning on a trial basis in November 2007. The Sanibel Causeway has always featured one-way tolling. The conversion to one-way tolling entailed the elimination of tolls in the eastbound direction and a doubling of rates in the westbound direction, causing no change in the net cost of a round trip. The program was approved for permanent implementation in June 2008 and in November 2008, the last toll equipment was removed to fully accommodate one-way tolling.

Figure 1-1
Location Map

Since the permanent implementation of one-way tolling on the Midpoint Memorial and Cape Coral Bridges, Lee County has undertaken efforts to renovate toll plazas on both bridges to eliminate the eastbound toll booths (no longer in use) while adding westbound open-road tolling (ORT) lanes. This allows ETC patrons to pass through the toll plaza without slowing down to drive through a traditional toll booth. In July 2009, the Pay-by-Plate program was introduced for rental car customers. The program uses license plate information to identify rental vehicles and collect tolls electronically through agreements with three private companies. This allows rental car customers the same convenience as LeeWay customers to be able to use a toll facility without stopping at a toll booth. The reconstruction of the Midpoint Memorial Bridge plaza was completed in May 2011, and Cape Coral Bridge plaza renovations were completed in September 2012.

Table 1-1
Facility Milestone Dates

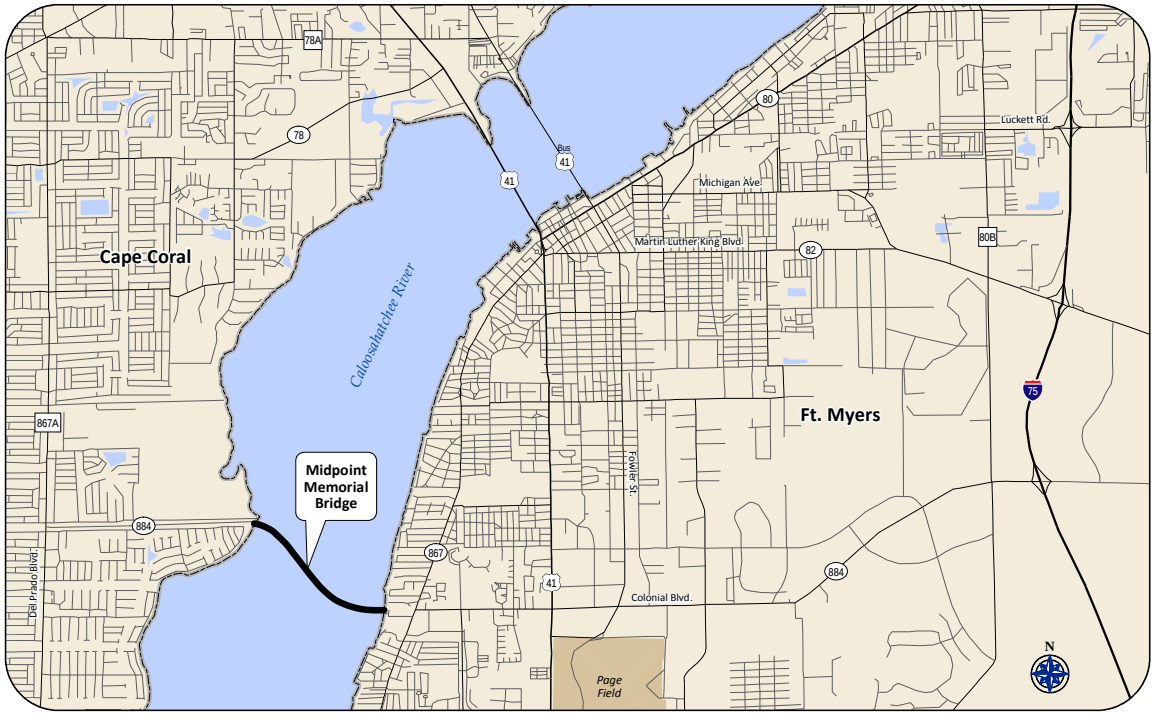
Date	Event
May 1963	Sanibel Causeway opened to traffic
March 1964	Cape Coral Bridge opened to traffic
1975	Tolls removed on the Cape Coral Bridge
November 1989	Parallel span of the Cape Coral Bridge opened
November 1989	Tolls reinstated on the Cape Coral Bridge
November 1994	Tolls increased on the Cape Coral Bridge
October 1997	Midpoint Memorial Bridge opened to traffic
November 1997	ETC (LeeWay) begins on Lee County facilities
August 1998	Variable Pricing introduced on the Cape Coral and Midpoint bridges
December 2003	ETC and variable pricing made available to vehicles with three or more axles
June 2004	LeeWay accepted on toll systems throughout the state of Florida
October 2004	Sunpass, E-Pass, and O-Pass accepted on the Lee County facilities
November 2004	Toll increased on the Sanibel Causeway
November 2005	Discount program tolls were reduced on the Sanibel Causeway
September 2007	New Sanibel Causeway grand reopening ceremony held
November 2007	One-year trial period for one-way tolling on the Cape Coral and Midpoint bridges begins
June 2008	Approval given for permanent one-way tolling on the Cape Coral and Midpoint bridges
November 2008	Last automatic coin machines (ACM) removed from Cape Coral and Midpoint bridges
July 2009	Pay-by-Plate tolling introduced for rental cars
May 2011	Midpoint Bridge toll plaza reconstruction complete: Open-road tolling introduced; remaining eastbound tolling infrastructure demolished
September 2012	Cape Coral Bridge toll plaza reconstruction complete: Open-road tolling introduced; remaining eastbound tolling infrastructure demolished

FACILITY PROFILES

Midpoint Memorial Bridge

The Midpoint Memorial Bridge, shown in Figure 1-2, connects Veterans Parkway in Cape Coral with Colonial Boulevard in Fort Myers. It is located approximately three miles north of the Cape Coral Bridge and three miles south of the Caloosahatchee Bridge (US 41). The bridge opened to traffic in October 1997. Concurrent with the construction of the Midpoint Memorial Bridge, major intersection improvements between Colonial Boulevard, C.R. 884, U.S. 41, and Del Prado Boulevard were also completed. The combined improvements provided an additional and much-needed river crossing, and provided greater mobility between the Cape Coral and Fort Myers communities.

Figure 1-2
Midpoint Memorial Bridge Location Map



General Usage Characteristics: Since the facility opened in FY 1998, traffic growth was substantial during its first decade of operation. Between FY 1999 and FY 2004, annual transactions grew at an average rate of 7.5 percent per year, and between FY 2004 and FY 2007 as the facility matured, traffic grew at an average of 2.0 percent per year. Due to the conversion to one-way tolling in November 2007, traffic volumes are currently monitored only in the westbound, tolled direction and are not directly comparable to volumes prior to FY 2009 (the first full year of one-way tolling).

Between FY 2010 and FY 2011, total annual transactions declined by 0.4 percent while revenue increased by 0.6 percent during this same time period, marking the first year of positive revenue growth since 2005. The MidPoint Memorial Bridge was the only facility to see a continued decline in traffic in FY 2011, which may be partly attributable to ongoing construction activities on that facility. Between FY 2011 and FY 2012, total annual transactions increased by 4.8 percent, the first year the facility has seen an increase in transactions since FY 2006. Revenue also increased by 4.9 percent during this same time period, marking the second consecutive year of positive revenue growth on the facility. A more detailed account of recent trends and a discussion of the potential causes and ramifications are covered in greater detail in Chapters 2 and 4 of this report.

With respect to traffic composition by vehicle class, 98.7 percent of total transactions on the Midpoint Memorial Bridge in FY 2012 were made by passenger cars and motorcycles. Peaking characteristics vary based on the day of the week. Weekday traffic in the westbound, tolled direction experiences peak volumes between 4:00 p.m. and 6:00 p.m. These two hours represent a combined 24.4 percent of total daily traffic in the tolled direction. Weekend peaking is much more muted and does not display the significant later afternoon spike experienced during weekdays. Weekend traffic climbs steadily over the morning hours, reaches and maintains peak volumes between noon and 6:00 p.m., and declines thereafter. Weekday peaking characteristics, along with reduced weekend volume, a high percentage of passenger cars, and a history of directional peaking patterns during the AM and PM peak traffic hours reaffirm the continued commuter-oriented nature of the facility. Usage characteristics are explored in greater depth in Chapter 2.

Facility Capacity: Based on information presented in the 2010 Highway Capacity Manual (HCM), a multilane highway facility such as the Midpoint Memorial Bridge, which is designed for speeds of 50 mph, can accommodate no more than 2,000 vehicles per hour per lane to maintain a level of service (LOS) "E." Based on this information, the bridge is theoretically capable of accommodating up to 4,000 vehicles per hour in each direction for a total of 8,000 vehicles per hour. However, actual capacity on the Midpoint Memorial Bridge is restricted by the amount of time it takes to pass through the toll plaza. This is known as transaction time, and is a valuable metric in evaluating operational capacity and efficiently managing toll plaza congestion. Capacity has effectively increased in recent years due to the introduction of one-way tolling in FY 2008, and the demolition of eastbound toll booths and addition of westbound ORT lanes in FY 2011. Determining the actual capacity of the facility would require detailed examination of transaction time for cash customers and the proportion of traffic using ORT lanes. A study of this nature may be beneficial to aid in future planning as traffic volumes resume growing.

Peaking Characteristics: Monthly transactions on the Midpoint Memorial Bridge peaked in March, averaging 21,676 tolled transactions per day, 6.4 percent higher than FY 2011. The peak 15-minute volume in the tolled, westbound direction of travel occurred on Wednesday, March 28, 2012 during the 15-minute period beginning at 4:45 p.m. with a volume of 933 vehicles. As discussed above, the unconstrained maximum capacity for this facility is 4,000 vehicles per hour per direction, or 1,000 per 15-minute interval. At no point during FY 2012 did traffic on the Midpoint Memorial Bridge exceed capacity at Level of Service (LOS) E.

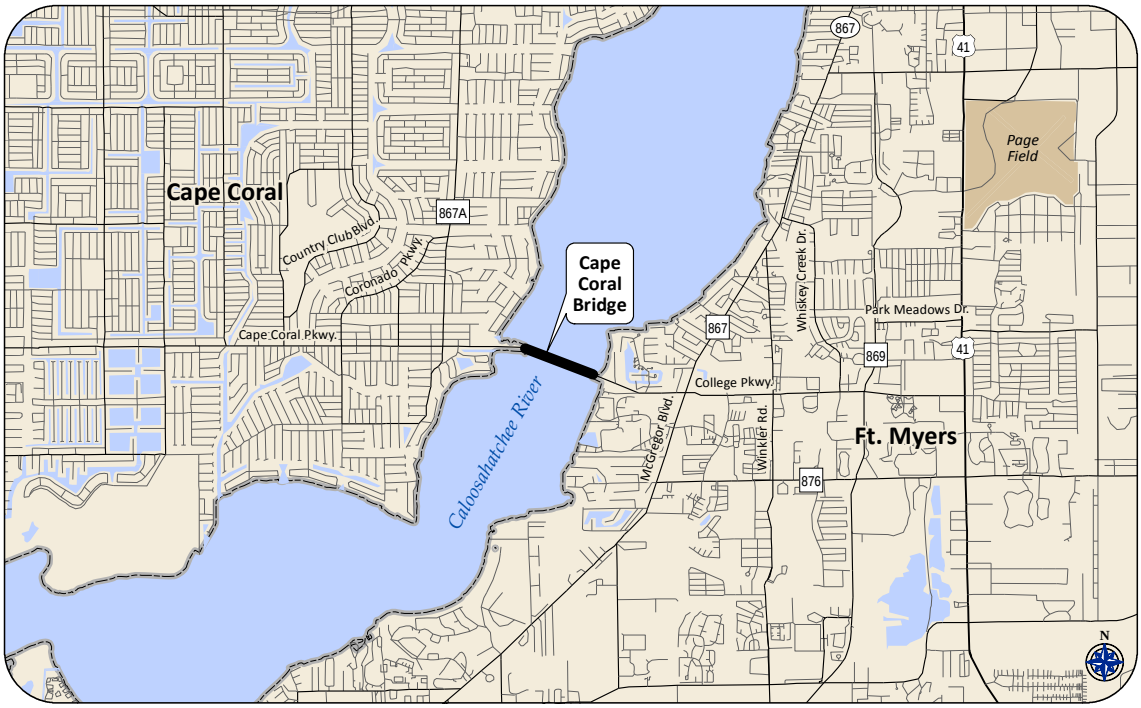
Future Improvements and Plans: Several projects were identified in the Lee County Capital Improvements Program (CIP) for future years including: upgrades to current hardware/software to

maintain interoperability with other toll agencies in FY 2013 and FY 2014, installation of a duplicate fiber ring to link the Midpoint Memorial toll facility to the Cape Coral toll facility in FY 2014, and replacement of the entire toll system in FY 2017 and FY 2018. A review of the FY 2013 through FY 2017 Lee County Metropolitan Planning Organization (MPO) Transportation Improvement Program (TIP) revealed no significant short-term planned improvements that would directly affect traffic on the Midpoint Memorial Bridge. Long-term, the Lee County MPO 2035 Long-Range Transportation Plan (LRTP) identifies widening of the Midpoint Memorial Bridge from four to six lanes as a long-term need, but such a project does not appear in the cost-feasible highway plan. Such a widening also appeared in the previous LRTP but was unfunded there as well.

Cape Coral Bridge

The Cape Coral Bridge, which opened in 1964, provided the first direct connection across the Caloosahatchee River between Fort Myers and Cape Coral. Approximately 3.3 miles south-southwest of the Midpoint Memorial Bridge, the Cape Coral Bridge connects Cape Coral Parkway in Cape Coral with College Parkway in Fort Myers, as shown in Figure 1-3. As previously stated, tolls were temporarily removed from the crossing between 1975 and 1989, after which tolls were reintroduced to help finance the construction of the second, parallel span. Currently, the original span carries traffic in the westbound direction while the newer span carries traffic in the eastbound direction. As with the Midpoint Memorial Bridge, one-way tolling was implemented in November 2007. Upon the completion of toll plaza renovations on the Midpoint Memorial Bridge, construction began on similar modifications to the Cape Coral Bridge. Construction began in May 2011 and was complete in September 2012. Several overnight closures occurred throughout the duration of the project in FY 2012.

Figure 1-3
Cape Coral Bridge Location Map



General Usage Characteristics: Like the Midpoint Memorial Bridge, historical traffic growth on the Cape Coral Bridge has been strong, averaging 4.5 percent per year between FY 1999 and FY 2004, and 1.9 percent per year between FY 2004 and FY 2007. This facility also experienced a similar pattern of declines in FY 2009 and FY 2010. Unlike the Midpoint Memorial Bridge, however, transactions increased slightly in FY 2011, rising 0.2 percent over the previous year. Revenue increased as well, following three consecutive years of decline. However, in FY 2012, transactions and revenue both declined by 3.4 percent and 2.0 percent, respectively, as a result of ongoing construction activity and closures on the facility.

With respect to traffic comparison by vehicle class, 98.9 percent of all transactions on the Cape Coral Bridge were made by two-axle passenger vehicles and motorcycles. Peaking characteristics are nearly identical to those on the Midpoint, with peak volumes in the tolled direction occurring between 4:00 and 6:00 p.m. Those two hours represent approximately 23.0 percent of total daily traffic in the tolled direction. Average weekend traffic volumes are approximately 31.1 percent lower than the average weekday volume, which is consistent with the historical variation between weekday and weekend traffic volumes. Like the Midpoint Memorial Bridge, these characteristics identify the Cape Coral Bridge as a predominantly commuter-oriented facility. Usage characteristics are explored in greater depth in Chapters 2 and 4.

Facility Capacity: Like the Midpoint Memorial Bridge, the Cape Coral Bridge has a maximum, theoretical hourly capacity of 4,000 vehicles per direction at LOS E. Capacity in the tolled direction is reduced by the need to stop and pay a toll, while capacity in the eastbound, non-tolled direction may be slightly impacted by the presence of the unused toll booths. Both of these constraints will be ameliorated following reconstruction of the toll plaza to offer ORT lanes in the tolled direction and

demolition of the unused toll booths in the untolled direction, which were both completed in September 2012.

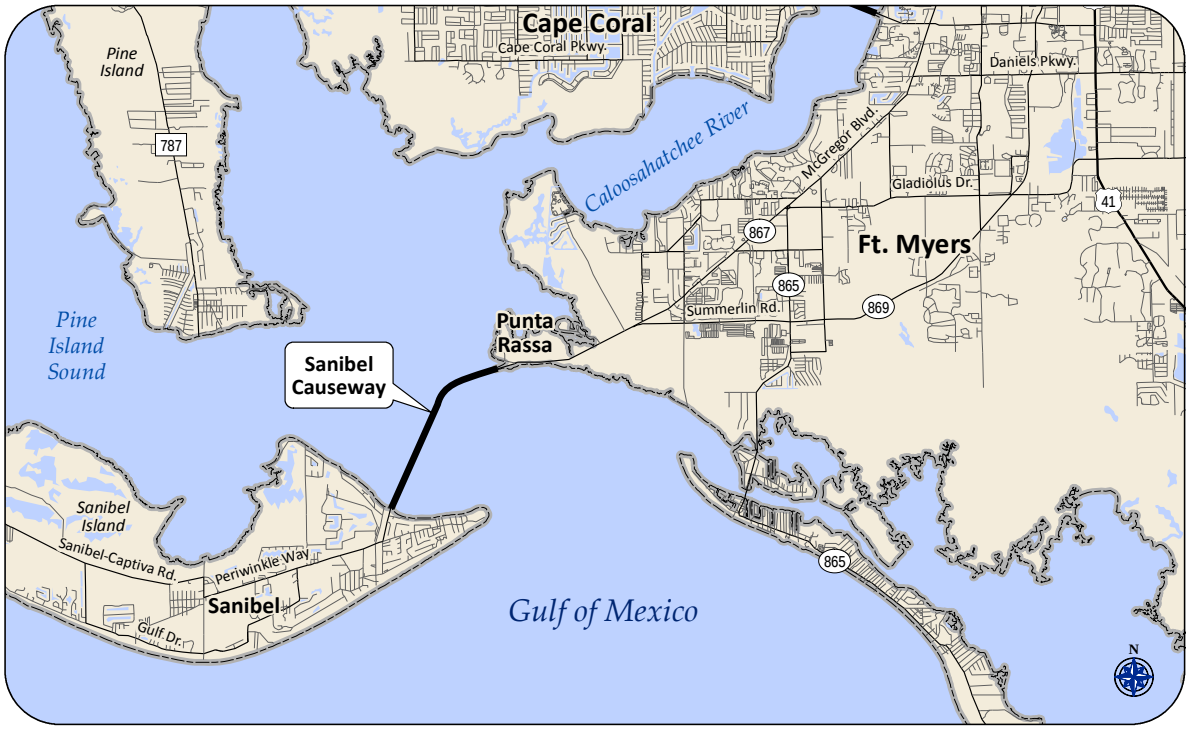
Peaking Characteristics: Average daily transactions on the Cape Coral Bridge reached their peak in March 2012 with an average daily volume of 23,212 transactions, an increase of 1.2 percent from FY 2011. The peak 15-minute tolled volume occurred on Wednesday, August 1, 2012 during the 15-minute period beginning at 5:15 p.m. with a total volume of 1,252 vehicles. With an unconstrained capacity of 4,000 vehicles per hour per direction—or 1,000 vehicles in a 15-minute time period—it is estimated that the facility operated at an LOS of E or better throughout the course of FY 2012.

Future Improvements and Plans: Following completion of the toll plaza modernization and ORT project at the Midpoint Memorial Bridge in May 2011, construction commenced on a similar project at the Cape Coral Bridge plaza, which was complete as of September 2012. Several projects were identified in the Lee County Capital Improvements Program (CIP) for future years including: upgrades to current hardware/software to maintain interoperability with other toll agencies in FY 2013 and FY 2014, installation of a duplicate fiber ring to link the Cape Coral toll facility to the Midpoint Memorial toll facility in FY 2014, and replacement of the entire toll system in FY 2017 and FY 2018. No other short-term facility improvements were identified in the FY 2013 TIP or the LRTP.

Sanibel Causeway

Replacing a ferry which had operated between Sanibel Island and mainland Florida, the Sanibel Causeway opened to traffic in 1963. Its location is illustrated in Figure 1-4. The Causeway consists of three bridges connecting mainland Fort Myers with Sanibel Island via two intermediate, engineered islands. These three individual spans, the two islands, and the toll plaza underwent a major reconstruction completed in early September 2007.

Figure 1-4
Sanibel Causeway Location Map



General Usage Characteristics: Unlike the steady historical growth seen on the Midpoint and Cape Coral Bridges, total annual transactions on the Sanibel Causeway have declined in six of the past ten fiscal years. Total transactions have dropped a total of 13.8 percent from a peak of nearly 3.5 million transactions in FY 2001 to nearly 3.0 million in FY 2012. The early part of the last decade included multiple toll rate adjustments and several significant hurricane disruptions, contributing to transaction declines during that period. Traffic began to increase once again between FY 2006 and FY 2008 when total transactions increased by 2.9 percent. However, this growth was followed by declines observed in FY 2009 and FY 2010. This is almost certainly a reflection of the recession and the general economic uncertainty and instability that followed. Traffic resumed growth in FY 2011, with transactions increasing by 1.3 percent over the previous year. In FY 2012, transactions continued to increase by 2.1 percent over FY 2011. Population growth and a stabilization of the employment market may have contributed to a resumption of growth. During FY 2012, revenue also increased by 3.1 percent, which reflects the first year of significant revenue growth since FY 2008. A more detailed account of recent transaction and revenue trends are discussed further in Chapters 2 and 4 of this report.

Traffic composition is quite similar to the other two Lee County toll bridges, with two-axle passenger vehicles and motorcycles accounting for 98.2 percent of all traffic on the bridge. While daily traffic characteristics vary depending on season, weekday traffic volume is typically greater than weekend volume on the Causeway. During FY 2012, average weekday volumes were 14.2 percent greater than weekend volumes with total transactions peaking on Fridays. Typical weekday traffic in the westbound, tolled direction peaks between 7:00 a.m. and 10:00 a.m. before gradually declining throughout the remainder of the day. On weekends, hourly volumes are similar to

weekdays with the exception of the morning peak, which is absent. The relatively strong weekend traffic performance on the Sanibel Causeway reflects the substantial amount of recreational traffic handled by the facility.

Facility Capacity: According to the 2010 HCM, at LOS E the maximum unconstrained capacity for the causeway is 1,700 vehicles per direction per hour, with a maximum total flow in both directions of 3,200 vehicles per hour. As with the other facilities, actual capacity is reduced in the westbound direction by toll plaza activities and is constrained by the ability of the island's transportation infrastructure to absorb incoming traffic.

Peaking Characteristics: In FY 2012, traffic volumes averaged 8,192 vehicles per day in the tolled direction, an increase of 2.5 percent over FY 2011. With respect to seasonal and daily variations, the Sanibel Causeway exhibits traits somewhat different from the Midpoint and Cape Coral facilities. Traffic on the Causeway has historically been highest from January to April, typically peaking during the same period as the other two bridges, but with greater variation between the highest and lowest months. In FY 2012, monthly traffic on the Sanibel Causeway peaked in March with an average daily volume of 10,943 vehicles—33.6 percent higher than the daily average for the year. While the Midpoint Memorial and Cape Coral Bridges also experienced peak demand in March, the average for that month was only 8.6 and 13.8 percent higher than the AADT on those facilities, respectively. The more pronounced peaking on the Sanibel Causeway is primarily due to the recreational nature of a large number of the trips using the causeway. The peak 15-minute volume of 326 vehicles was observed during the 15-minute period beginning at 9:30 a.m. on Wednesday, March 14, 2012. Based on the assumed hourly unconstrained capacity of 1,700 or a 15-minute capacity of 425, the Sanibel Causeway appears to be operating within its capacity.

Future Improvements and Plans: A few projects were identified in the Lee County Capital Improvements Program (CIP) for future years including: upgrades to current hardware/software to maintain interoperability with other toll agencies in FY 2013 and FY 2014 and replacement of the entire toll system in FY 2017 and FY 2018. A review of the current Lee County TIP found no major Causeway-related projects planned for the short-term. Long-term projects in the LRTP include open road tolling on the Sanibel Causeway, although no time frame is specified, and this project is not anticipated to take place in the foreseeable future.

TOLL RATE SCHEDULES

Toll rates on the Midpoint Memorial and Cape Coral Bridges are shown in Table 1-2 and vary based on the method of payment, vehicle class, and time of day. Tolls were doubled in November of 2007 on the MidPoint Memorial and Cape Coral Bridges in conjunction with the introduction of one-way tolling. Though tolls were doubled, one-way toll collection meant that the total toll for a round trip across the bridge remained unchanged. The current base toll rate for a cash transaction is $2.00 for the first two axles plus $2.00 for each additional axle. However, many discount programs are available to patrons using a LeeWay transponder.

The annual Unlimited Fare program allows for an unlimited number of trips at a flat rate of $330.00. A semiannual plan is also available for $200.00 and runs from either November through April or May through October. Both plans allow for unlimited travel on the Midpoint Memorial and the Cape Coral Bridges and may be prorated for shorter periods. Lee County also offers a Reduced Fare

program. Under this program, patrons pay a one-time fee, after which they receive a fare reduction of 50 percent on all subsequent trips. Like the Unlimited Fare program, the Reduced Fare program is available on an annual or semiannual basis at a cost of $40.00 and $24.00, respectively.

Table 1-2
Midpoint Memorial Bridge and Cape Coral Bridge Toll Schedule

	Vehicle Class			
Payment Type	**2-Axle**	**3-Axle**	**4-Axle**	**5-Axle**
Cash	$2.00	$4.00	$6.00	$8.00
Unlimited	0.00	--	--	--
Reduced Fare	1.00	--	--	--
Variable Pricing	1.50	3.00	4.50	6.00
Unlimited Variable	0.00	--	--	--
Reduced Variable	0.75	--	--	--
Program Fee				
Unlimited Annual	$330.00	--	--	--
Unlimited Semiannual	200.00	--	--	--
Reduced Fare Annual	40.00	--	--	--
Reduced Semiannual	24.00	--	--	--

In August 1998, Lee County introduced a Variable Pricing program. Under the program, tolls are reduced by 25 percent during designated periods before and after the AM and PM peak travel hours. These periods are referred to as the "peak shoulders." The intent is to attract motorists to the shoulder hours. In exchange for accepting a reduced rate, Lee County is able to free up capacity on the facility during its busiest hours. The shoulder periods are as follows (weekdays only, excluding holidays):

- 6:30 a.m. to 7:00 a.m.
- 9:00 a.m. to 11:00 a.m.
- 2:00 p.m. to 4:00 p.m.
- 6:30 p.m. to 7:00 p.m.

The Variable Pricing discount is available to any patron paying via ETC and reduces the toll rate from $2.00 for 2-axle vehicles to $1.50[(1)]. The Reduced Fare discount program can be used in conjunction with the Variable Pricing discount for LeeWay customers. The toll for a patron enrolled in the Reduced Fare program traveling in the shoulder hours would be as low as $0.75 for a two-axle vehicle. Unlike some variable toll systems, there is no corresponding increase in the peak period rates. Variable tolls are not applicable for LeeWay customers with an Unlimited Fare program discount.

[(1)] LeeWay customers must have a prepaid LeeWay account. All other transponder holders must be pre-approved by their respective issuing agencies.

Patrons of the Sanibel Causeway pay a toll in the westbound (on-island) direction only. Since November 2004, when tolls on the Sanibel Causeway were raised to help secure financing for the construction of the new causeway facility, cash rates have been $6.00 for two-axle vehicles and $3.00 per axle thereafter. A subsequent revision in November 2005 reduced tolls for patrons participating in the discount programs. Table 1-3 shows the rates and program fees that are currently in effect on the Sanibel Causeway. As indicated, the base toll for a two-axle passenger vehicle is $6.00, with $3.00 assessed for each additional axle. The Unlimited and Reduced Fare programs reflect the higher base toll. Annual and semiannual Unlimited Fare program fees are $400.00 and $300.00, respectively, while the annual and semiannual Reduced Fare programs cost $67.00 and $50.00, respectively. Unlike the two other Lee County facilities, there is no time of day pricing on the Sanibel Causeway.

Table 1-3
Sanibel Causeway Toll Schedule

	Vehicle Class			
Payment Type	**2-Axle**	**3-Axle**	**4-Axle**	**5-Axle**
Cash	$6.00	$9.00	$12.00	$15.00
Unlimited	0.00	--	--	--
Reduced Fare	2.00	--	--	--
Program Fee				
Unlimited Annual	$400.00	--	--	--
Unlimited Semiannual	300.00	--	--	--
Reduced Fare Annual	67.00	--	--	--
Reduced Semiannual	50.00	--	--	--

Due to the numerous combinations of axle class, discount programs, and time-of-day pricing, Tables 1-2 and 1-3 are not all-inclusive. For example, Lee County also offers Combined and Multiple Vehicle Discount programs. The Combined Discount program allows for discounted and/or unlimited travel on all three Lee County toll facilities. Combined Unlimited annual and semiannual programs are available for $730.00 and $500.00, respectively. Combined Reduced Fare annual and semiannual programs are also available at a cost of $107.00 and $74.00, respectively. Additionally, patrons can purchase mixed subscriptions that provide unlimited travel on the Sanibel Causeway, and discounted travel on the Midpoint and Cape Coral Bridges, or vice versa. Under the Multiple Vehicle Discount program, patrons pay the full price of any selected discount program on the first vehicle registered, and receive a 50 percent discount off the original program fee for a second vehicle. For instance, a patron who signs up for the Unlimited Annual Discount program would pay $330.00 for the first vehicle, but only $165 for the second vehicle registered under the same account. For each vehicle registered to a discount program at full cost, a second may be added at a 50 percent discount provided that vehicles are registered to the same individual. The Multiple Vehicle Discount program is only available for two-axle vehicles.

CHAPTER 2

FY 2012 OPERATING CHARACTERISTICS AND TRAFFIC PROFILE

This chapter addresses the overall usage patterns of the three Lee County toll facilities, including a description of monthly, daily, and hourly traffic variations as observed on each facility for Fiscal Year 2012. Additional detail regarding payment type, the distribution of discount program types, and vehicle classification data are also discussed. Note that data used in the creation of a significant portion of this analysis, specifically the information presented in Figures 2-4 through 2-9, are derived directly from lane controller recording devices, and therefore may not necessarily agree with audited traffic data presented throughout the remainder of this annual report. The transaction data from the lane controller recording devices do not account for any non-revenue transactions or post-processing that is included in the audited data. Additional analysis, including revenue and historical context, are presented in Chapter 4.

SEASONAL TRAFFIC VARIATIONS

Traffic variations by month were reviewed for each of the three Lee County toll bridges. The relative variability of traffic across each facility from one month to the next highlights periods of the year when traffic exceeds or drops below the normal pattern. For instance, a bridge which accommodates a large number of tourism-related trips will tend to demonstrate considerable variation, with peak traffic occurring during holidays and typical vacation months. By contrast, facilities used by commuters or with a large proportion of interstate commercial traffic tend to have more consistent year-round levels of traffic. In the tables that follow, monthly total traffic volumes are normalized to average daily transactions (ADT), adjusting for the varying numbers of days in each month. Using ADT allows for an easy comparison of the variations in relative travel demand across each facility at different times of the year.

Midpoint Memorial Bridge

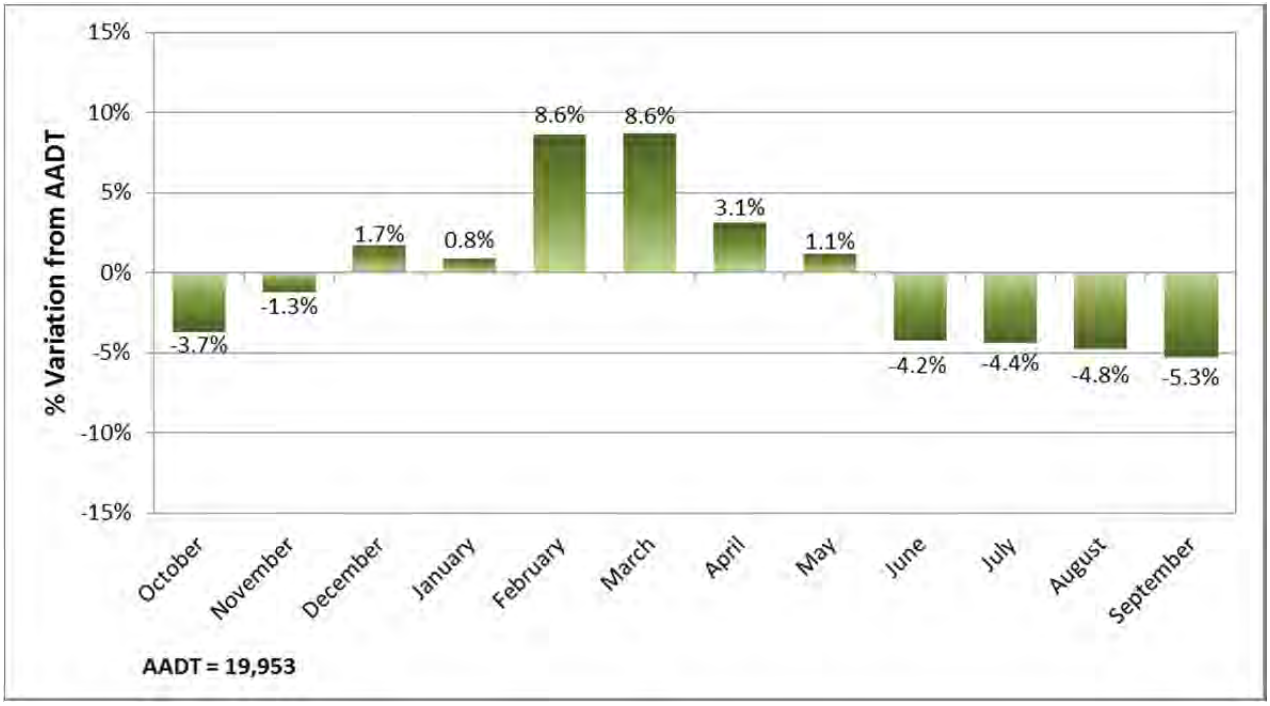
As presented in Table 2-1, monthly traffic volumes on the Midpoint Memorial Bridge remained relatively stable throughout FY 2012. Over the twelve month period, average daily transactions ranged from a high of 21,676 in March 2012 to a low of 18,888 in September 2012. Historically, February and March have carried the highest average daily traffic volumes and each represent over 9.0 percent of the annual traffic. September has historically been the month with the lowest average daily traffic volumes. For further discussion of relative year-over-year performance, see Chapter 4.

Table 2-1
Monthly Seasonal Variation in Toll-Paying Traffic
Midpoint Memorial Bridge

Month	Number of Days in Month	Total Toll Paying Transactions	Average Daily Transactions	Seasonal Factor
October	31	595,576	19,212	0.963
November	30	590,962	19,699	0.987
December	31	628,922	20,288	1.017
January	31	623,726	20,120	1.008
February	29	628,389	21,669	1.086
March	31	671,957	21,676	1.086
April	30	617,299	20,577	1.031
May	31	625,477	20,177	1.011
June	30	573,313	19,110	0.958
July	31	591,458	19,079	0.956
August	31	588,929	18,998	0.952
September	30	566,642	18,888	0.947
Average		***608,554***	***19,953***	***1.000***
Total Year	**366**	**7,302,650**		

This data is presented in a graphical format in Figure 2-1. Each month's ADT appears as a percentage of the AADT for the fiscal year. While total traffic volumes are higher than FY 2011 (see Chapter 4), the variations in monthly transactions are in line with historical patterns. The increase in transactions in FY 2012 can be attributed to customers utilizing this facility during construction activity on the Cape Coral Bridge throughout the year. The relatively small difference in volume from month to month is typical for a commuter-oriented facility, though a modest peak can be observed in the late winter and early spring months due to tourists and seasonal residents. Detailed comparative performance statistics are presented in Chapter 4 of this report, as well as additional historical perspective.

Figure 2-1
Variation in Average Daily Transactions, by Month (AADT)
Midpoint Memorial Bridge



Cape Coral Bridge

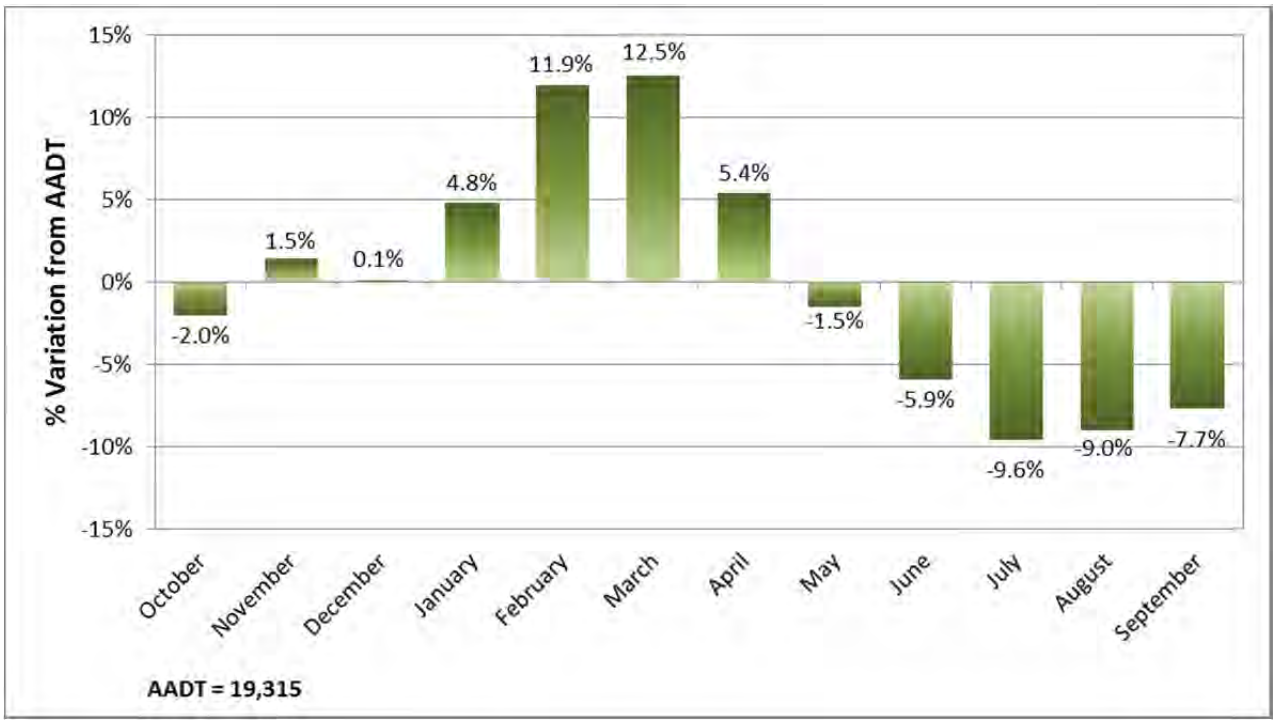
Table 2-2 presents the FY 2012 monthly seasonal traffic variation for the Cape Coral Bridge. As shown, it is quite similar to that of the Midpoint Memorial Bridge. The AADT of 19,315 is 3.2 percent lower than the 19,953 AADT on the Midpoint Memorial Bridge due to ongoing construction on the facility during the year Monthly ADT peaked in March 2012, totaling 21,730 transactions, while the lowest ADT of 17,463 occurred in July. February and March carried the highest average daily traffic volumes, each representing 9.3 and 9.4 percent of the annual traffic respectively. These monthly ADTs represent a range of 12.0 percent above to 10.0 percent below AADT, indicating considerably more month-to-month variation on the Cape Coral Bridge in comparison to the Midpoint Memorial Bridge. The pattern and range of monthly variation exhibited on the Cape Coral Bridge, as well as its relationship to the Midpoint Memorial Bridge, is consistent with recent years.

Table 2-2
Monthly Seasonal Variation in Toll-Paying Traffic
Cape Coral Bridge

Month	Number of Days in Month	Total Toll Paying Transactions	Average Daily Transactions	Seasonal Factor
October	31	586,683	18,925	0.980
November	30	587,940	19,598	1.015
December	31	599,488	19,338	1.001
January	31	627,808	20,252	1.048
February	29	627,021	21,621	1.119
March	31	673,621	21,730	1.125
April	30	610,592	20,353	1.054
May	31	589,916	19,030	0.985
June	30	545,209	18,174	0.941
July	31	541,351	17,463	0.904
August	31	544,895	17,577	0.910
September	30	534,884	17,829	0.923
Average		***589,117***	***19,315***	***1.000***
Total Year	**366**	**7,069,408**		

Monthly ADT variations are presented graphically in Figure 2-2. Like the Midpoint Memorial Bridge, distribution of Cape Coral Bridge traffic on a seasonal basis adheres to established historical peaking patterns. Compared with the Midpoint Memorial Bridge, monthly averages on the Cape Coral Bridge tend to be somewhat more variable. As in the past, October through December represent the most "average" period of the year, followed by a peak in traffic in the spring and a rapid decline through the late summer. Though still small in comparison to more seasonally-active facilities such as the Sanibel Causeway, the mid-fiscal year peak on the Cape Coral Bridge is more prominent than on the parallel Midpoint Memorial Bridge. Detailed comparative performance statistics are presented in Chapter 4 of this report.

Figure 2-2
Variation in Average Daily Transactions, by Month (AADT)
Cape Coral Bridge



Sanibel Causeway

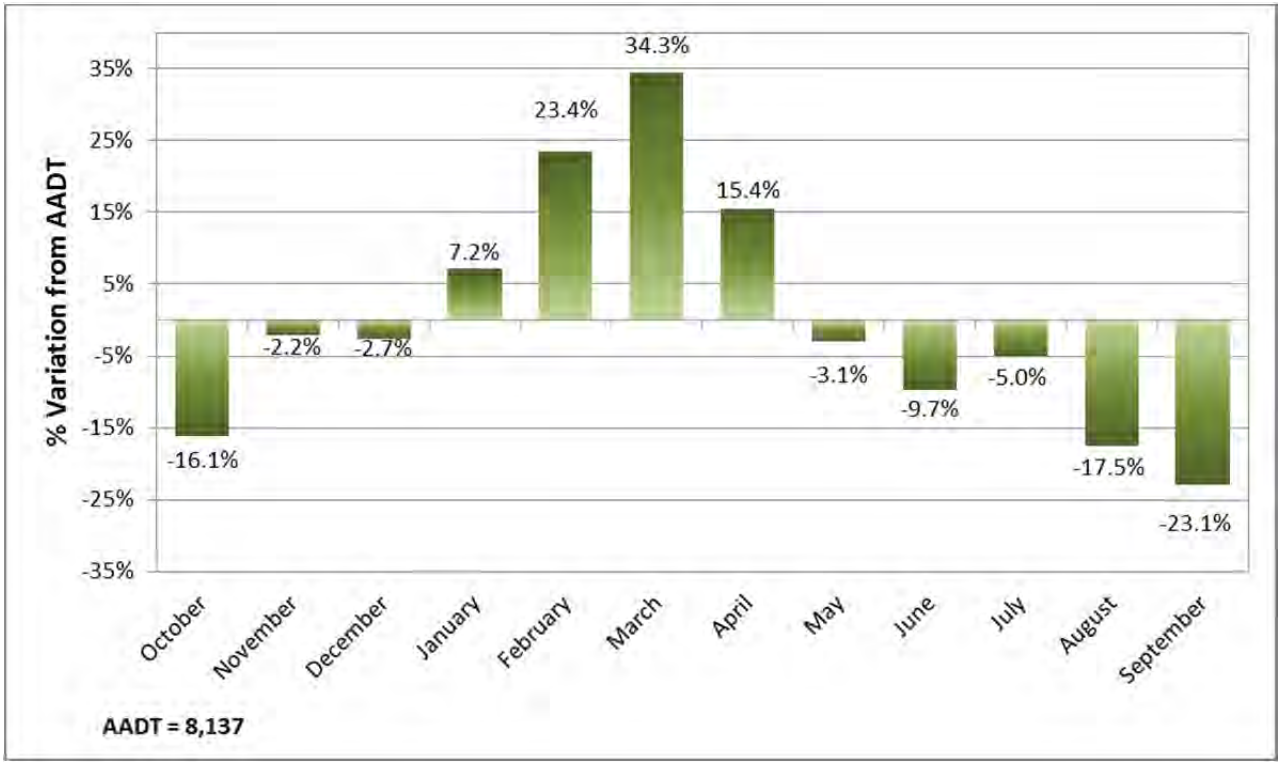
As shown in Table 2-3 and illustrated in Figure 2-3, the Sanibel Causeway exhibits much more significant seasonal peaking characteristics in comparison to the Cape Coral and Midpoint Memorial Bridges. March, the busiest month both historically and during FY 2012, experienced an ADT of 10,931—34.3 percent greater than the FY 2012 AADT of 8,137. In comparison, the percentage difference between the high month and annual average on the Midpoint Memorial and Cape Coral Bridges was only 9.0 percent and 12.0 percent, respectively. In addition to being well above the annual average, March volume on the Sanibel Causeway was 11.0 percent greater than the next busiest month (February), further illustrating the magnitude of that month's peak. September was the lightest month for traffic on the Sanibel Causeway, with an ADT of 6,261 that was 23.0 percent lower than the FY 2012 AADT and 6.0 percent lower than the next lowest month (August). With highs and lows observed during the months of March and September, respectively, FY 2012 was consistent with historical trends in seasonal variations, as well as the magnitude of those variations. Furthermore, all three facilities experienced peak demand during the month of March.

Table 2-3
Monthly Seasonal Variation in Toll-Paying Traffic
Sanibel Causeway

Month	Number of Days in Month	Total Toll Paying Transactions	Average Daily Transactions	Seasonal Factor
October	31	211,527	6,823	0.839
November	30	238,785	7,960	0.978
December	31	245,519	7,920	0.973
January	31	270,321	8,720	1.072
February	29	291,183	10,041	1.234
March	31	338,852	10,931	1.343
April	30	281,618	9,387	1.154
May	31	244,486	7,887	0.969
June	30	220,392	7,346	0.903
July	31	239,574	7,728	0.950
August	31	208,134	6,714	0.825
September	30	187,828	6,261	0.769
Average		***248,185***	***8,137***	***1.000***
Total Year	**366**	**2,978,219**		

The seasonal variation on the Sanibel Causeway is illustrated in Figure 2-3. In comparison to the Midpoint Memorial and Cape Coral Bridges, seasonal variation is quite pronounced. Beginning in October, monthly volumes climb each consecutive month, peaking in March with 10,931 ADT or 34.3 percent above AADT. Following the March peak, traffic volumes on the Causeway declined through the end of the fiscal year, reaching an annual low ADT of 6,261 in September or -23.0 percent below AADT.

Figure 2-3
Variation in Average Daily Transactions, by Month (AADT)
Sanibel Causeway



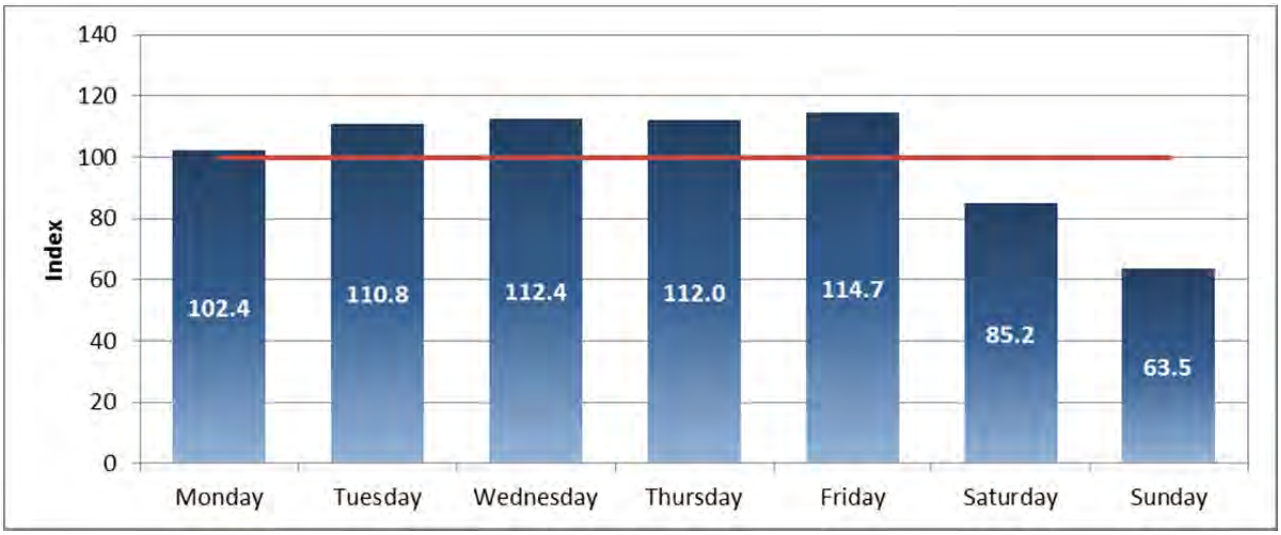
DAILY TRAFFIC VARIATIONS

Daily fluctuations in transactions were also reviewed to provide additional insight into the operating characteristics of each of the three Lee County toll facilities. Typically, commuter-oriented roadways such as the Midpoint Memorial and Cape Coral Bridges experience consistently high traffic volumes throughout the weekday period with volumes declining over the weekends. A facility like the Sanibel Causeway which accommodates a substantial number of leisure trips may experience higher traffic volumes on weekends and holidays as compared with commuter facilities. A combination of leisure and commuter traffic tends to result in peak traffic occurring on Fridays on all three facilities. The figures in this section compare tolled traffic by day of the week against average daily traffic. This data is presented as an index, where the annual average daily tolled traffic equals 100. An index value of 100 for a given day of the week would indicate that day's traffic was precisely the same volume as the facility's AADT. A value of 120 would indicate a day that has 20 percent greater volume than the AADT.

Midpoint Memorial Bridge

As shown in Figure 2-4, FY 2012 weekday traffic volumes on the Midpoint Memorial Bridge remained relatively consistent over the course of the five-day work week. Traffic was highest on Fridays, with an index value of 114.7 (14.7 percent higher than the average day), and volumes from Tuesday through Thursday were nearly identical. Bridge traffic declines significantly on Saturdays and Sundays, which have index values of 85.2 and 63.5, respectively. This pattern, as mentioned above, is typical of a facility primarily serving commuter traffic. These results are very consistent with those seen in FY 2011.

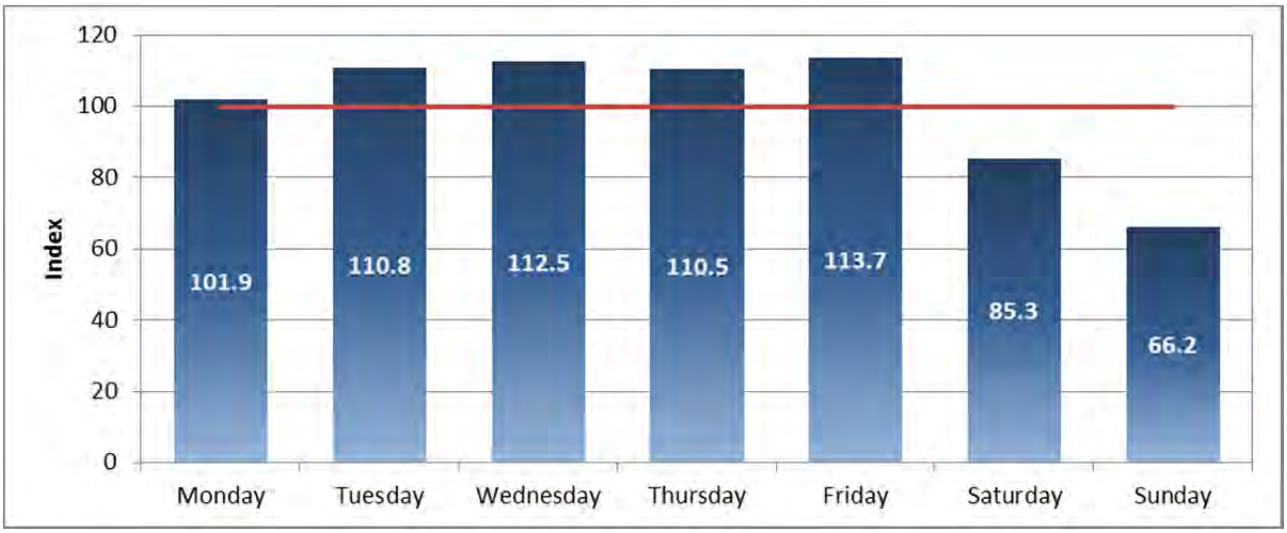
Figure 2-4
Variations in Transactions, by Day
Midpoint Memorial Bridge



Cape Coral Bridge

Figure 2-5 shows the FY 2012 daily variation in traffic on the Cape Coral Bridge. On both the Midpoint Memorial and Cape Coral Bridges, Monday traffic was approximately two percent above average. Traffic volumes on Tuesday through Friday are ten to fourteen percent higher than the average. Indexed traffic volumes from Wednesday through Friday range from 110.5 to 113.7, with Friday being the peak day. Traffic volumes decline on Saturdays and Sundays when volumes are 85.3 percent and 66.2 percent of AADT, respectively. In general, the Cape Coral profile closely matches the pattern observed on the Midpoint Memorial Bridge.

Figure 2-5
Variations in Transactions, by Day
Cape Coral Bridge

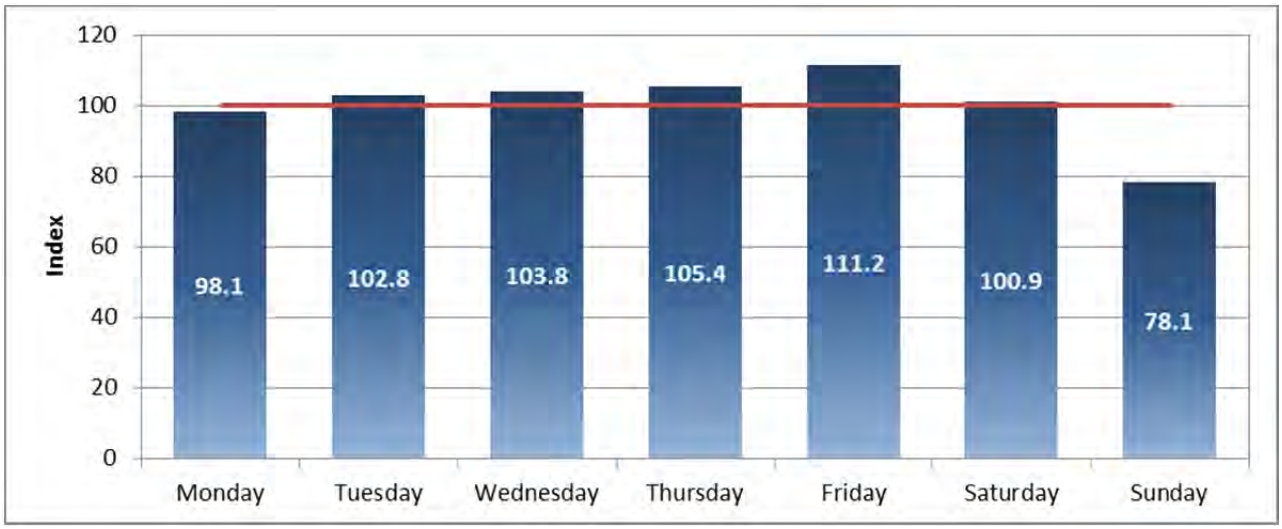


Sanibel Causeway

FY 2012 daily traffic variation on the Sanibel Causeway exhibits a usage trend that is substantially different from the Midpoint Memorial and Cape Coral Bridges due to the facility's orientation toward tourism and related traffic. As shown in Figure 2-6, traffic volumes rose gradually throughout the week, from 98.1 percent of the average on Mondays to a peak of 111.2 percent of the average on Fridays. Unlike the Midpoint Memorial and Cape Coral Bridges, Saturday volume actually exceeds the average slightly with an index value of 100.9. Sundays were typically the lightest travelled days with a volume that is 78.1 percent of the average. This is still a considerably higher index value than was observed on the other two toll facilities, where average Sunday traffic was between 63 percent and 66 percent of the average.

The less-pronounced variation in daily traffic should not be taken to mean that the Sanibel Causeway is entirely dissimilar from the Cape Coral and Midpoint Memorial Bridges. While the high weekend volume does reflect a substantial amount of leisure trips and discretionary usage, weekday volume remains strong and consistent. This implies that alongside the tourism-oriented travel there is also a substantial commuter component. This is likely a result of the sizable service and hospitality industry located on the island, and may also reflect a proportion of the island's residents commuting off-island for work. The FY 2012 daily traffic characteristics are relatively consistent with those of FY 2011.

Figure 2-6
Variations in Transactions, by Day
Sanibel Causeway



HOURLY TRAFFIC VARIATIONS

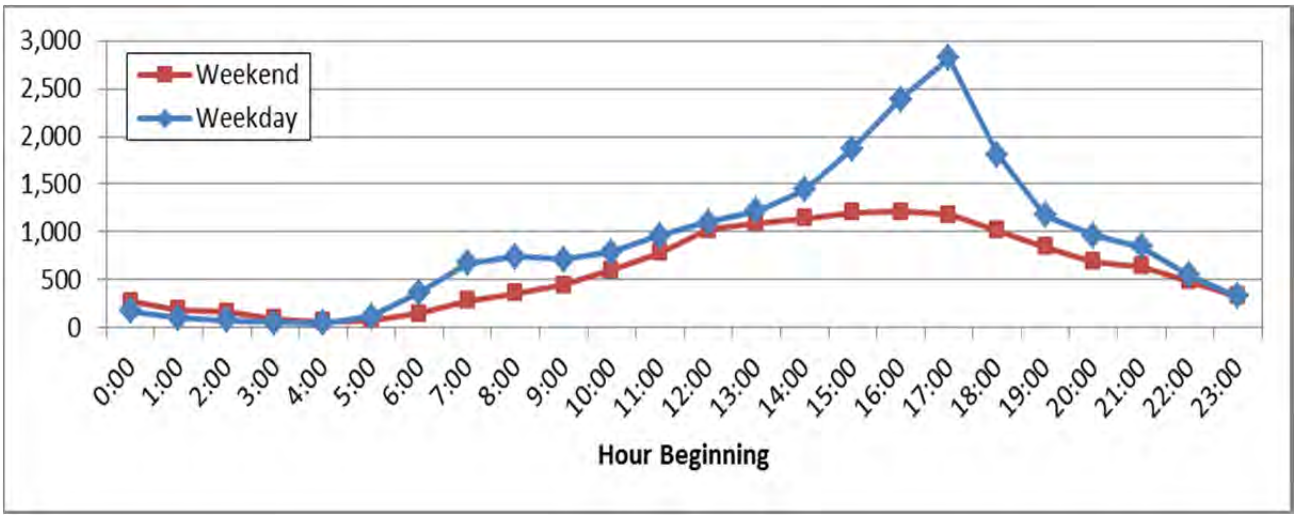
This section contains a review of traffic patterns by hour for each of the three toll bridges. Weekday and weekend traffic are presented separately due to significant differences in respective traffic patterns. As with the data presented previously, the figures contained in this section were developed from unaudited counts at the lane level. Analysis of annual totals and financial documents presented elsewhere in this chapter and in Chapter 4 are based on audited year-end reports and may not agree with the data presented here. In addition, since the conversion to one-way tolling in November 2007 data is available only in the tolled direction. This is important to keep in mind when observing the peaking patterns of traffic throughout the day. For instance, if a prominent morning peak is observed on weekdays in the tolled direction, this is likely due to daily commuters, and it can be inferred that a similar afternoon peak would be observed in the non-tolled direction. Should permanent counters be installed in the future, two-way data will be reported in future annual reports, as was done prior to the conversion to one-way tolling. The tolled direction on the Midpoint Memorial and Cape Coral Bridges is westbound (toward Cape Coral), while the tolled direction on the Sanibel Causeway is southbound (toward Sanibel Island).

Midpoint Memorial Bridge

Figure 2-7 shows the weekday and weekend day hourly traffic profiles on the Midpoint Memorial Bridge. On both weekdays and weekend days, traffic volumes gradually increase throughout the day, peaking in the late afternoon. On weekdays, the afternoon peak is quite steep, exceeding 2,800 vehicles during the busiest hour between 5:00 and 6:00 p.m. Because the tolled direction is westbound (toward Cape Coral), this suggests that commuters using the bridge primarily reside on the west side, traveling east to Fort Myers in the morning and returning home in the evening. Weekday morning tolled transactions begin to increase between 6:00 a.m. and 7:00 a.m., representing a modest reverse-commute peak in the morning before leveling off at 9:00 a.m. and rising slowly again during the midday and early afternoon period. Volumes grow rapidly between

2:00 p.m. and 5:00 p.m. reaching a daily peak of approximately 2,800 vehicles between 5:00 and 6:00 p.m. The peak-hour volume represents approximately 13.2 percent of total weekday transactions in the tolled direction. After 6:00 p.m. traffic drops precipitously, returning to early- to late-morning levels by 7:00 p.m. On weekends, neither the modest morning nor the significant afternoon peaks are present. Instead, traffic increases gradually from approximately 6:00 a.m. until mid-afternoon, reaching a peak of just over 1,200 vehicles in the 4:00 p.m. hour. After 6:00 p.m. traffic volumes steadily decline.

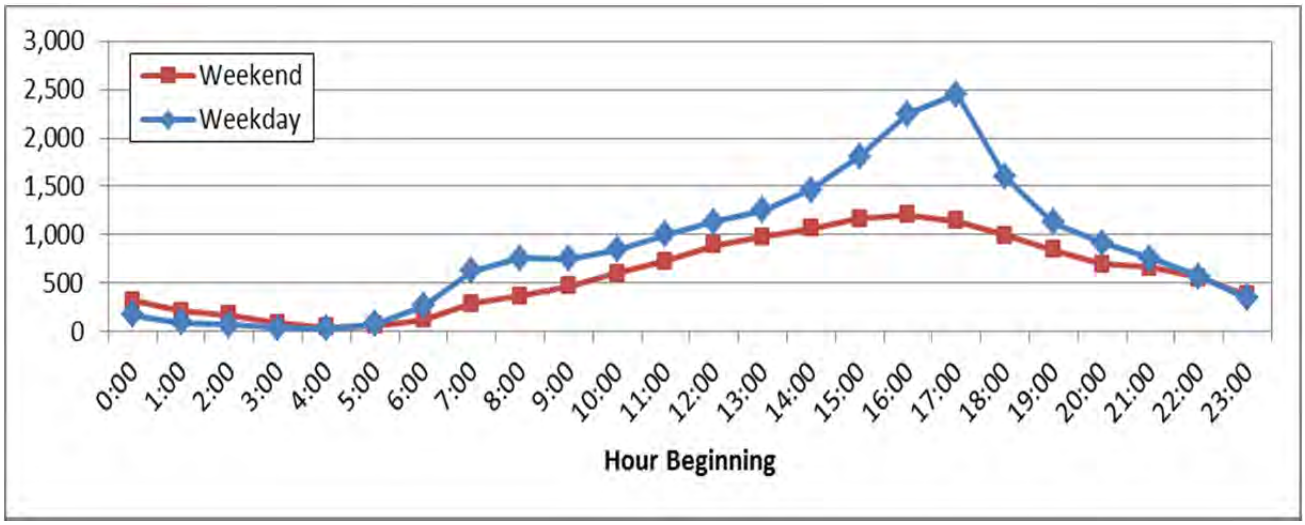
Figure 2-7
Hourly Traffic Profile
Midpoint Memorial Bridge



Cape Coral Bridge

Hourly variations in tolled transactions on the Cape Coral Bridge are nearly identical to those observed on the Midpoint Memorial Bridge. As shown in Figure 2-8, weekday tolled traffic reaches a morning peak in the 8:00 a.m. hour and continues to gradually increase throughout the day before a rapid buildup beginning between 2:00 p.m. and 3:00 p.m. As with the Midpoint Memorial Bridge, the peak hour occurs between 5:00 and 6:00 p.m., with a volume of slightly over 2,400 vehicles, or 12.0 percent of the weekday total. Weekend traffic also behaves similarly to the Midpoint Memorial Bridge, growing at a pace parallel to weekday traffic up through 2:00 p.m., though more steadily and without a morning peak. After 2:00 p.m., the rate of growth in traffic slows, reaching a peak of 1,202 vehicles between 4:00 p.m. and 5:00 p.m. followed by a steady decline.

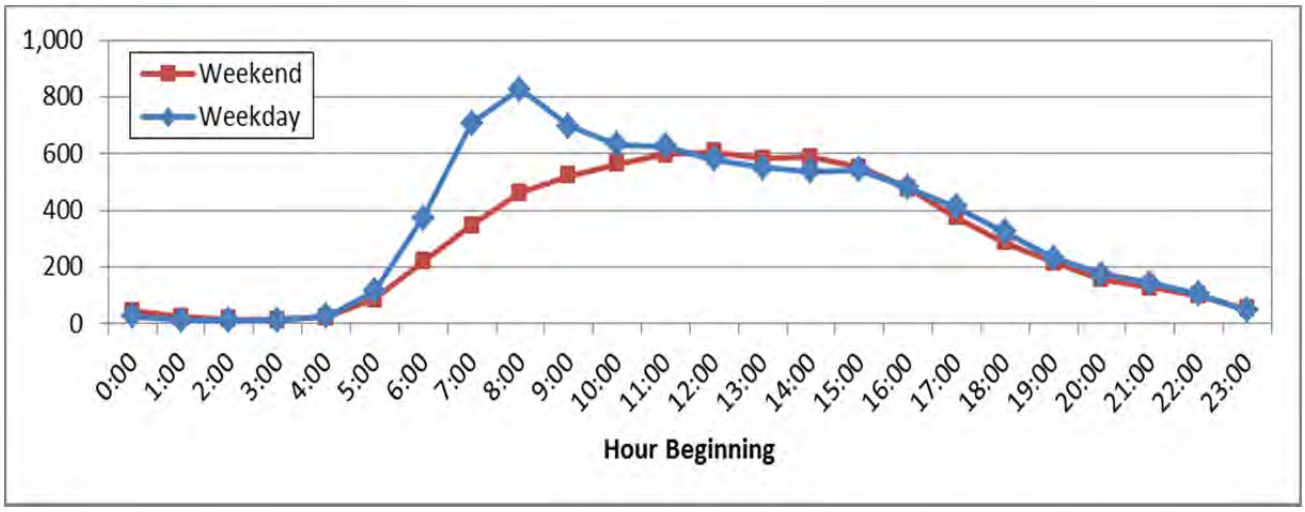
Figure 2-8
Hourly Traffic Profile
Cape Coral Bridge



Sanibel Causeway

As illustrated in Figure 2-9, the hourly traffic patterns on the Sanibel Causeway are quite different from the Midpoint Memorial and Cape Coral Bridges. Owing to the proportionally greater role of recreational traffic on this facility, weekday and weekend traffic patterns are nearly identical with the exception of the five-hour morning peak period occurring on weekdays. From near zero traffic during overnight hours, weekday tolled traffic toward Sanibel Island climbs rapidly beginning at 5:00 a.m. Traffic growth continues to build to a peak of just over 800 vehicles between 8:00 a.m. and 9:00 a.m., representing roughly 10.0 percent of weekday traffic. Following the decline from the morning peak, traffic remains relatively stable throughout the midday at between 500 and 600 vehicles per hour between 10:00 a.m. and 4:00 p.m. Traffic volumes decline steadily after 4:00 p.m., with no sign of an afternoon reverse-commute peak. Weekend traffic is nearly identical to weekdays, save for the lack of a morning peak. Volumes are similar for hours preceding 5:00 a.m. and after 11:00 a.m. During the hours when the morning peak occurs on weekdays, weekend traffic builds gradually, to a peak of 606 vehicles in the noon hour. These trends indicate a sizable number of commuters heading onto the island on weekdays, on top of a larger and steadier flow of recreational trips that occur on both weekdays and weekends, peaking in the middle of the day. As compared with the Midpoint Memorial and Cape Coral Bridges, peak-hour commuter traffic represents a smaller share of overall demand on the facility.

Figure 2-9
Hourly Traffic Profile
Sanibel Causeway



ETC PARTICIPATION

Table 2-4 shows the historical rates of ETC payment usage since ETC was first introduced on the three Lee County toll facilities in 1997. In addition to Lee County's branded ETC system, LeeWay, the Lee County toll facilities also accept the Florida Department of Transportation's SunPass and the Orlando-Orange County Expressway Authority (OOCEA) E-PASS[(1)] transponders. As shown in Table 2-4, ETC participation on Lee County toll facilities has increased from 45.5 percent of all transactions in FY 1997 to 58.1 percent during FY 2012. The systemwide ETC percentage has increased in 13 of 15 years since introduction in 1997, driven by steady growth on the Cape Coral and Midpoint Memorial Bridges.

ETC penetration on the Sanibel Causeway remained constant from its introduction in FY 1997 through FY 2005. This was followed by a small jump in growth in FY 2006, immediately following the series of rate adjustments on the facility. Since FY 2006, however, ETC participation on that facility has been virtually unchanged, however it increased to just over 61 percent in FY 2012. ETC participation on the Sanibel Causeway was historically higher than on the other two facilities, but has grown much more slowly, as ETC participation on the Midpoint Memorial and Cape Coral Bridges has gradually caught up. Systemwide growth in ETC penetration leveled off between FY 2009 and FY 2011 and increasing by one percent in FY 2012. It is possible that the facilities are reaching a plateau in ETC penetration, whereby the remaining cash patrons, for various reasons, are unlikely to adopt ETC unless further incentivized or compelled to do so.

(1) All Osceola Parkway O-Pass accounts have been converted to the OOCEA's E-PASS program.

Table 2-4
Systemwide ETC Participation Percentage (all classes)

Year	Sanibel Causeway	Cape Coral and Midpoint Bridges	Systemwide
FY 1997	57.3	43.2	45.5
FY 1998	56.0	43.7	45.3
FY 1999	56.4	45.8	47.1
FY 2000	56.4	47.5	48.5
FY 2001	56.5	49.7	50.5
FY 2002	56.8	50.3	51.0
FY 2003	57.2	50.5	51.1
FY 2004	55.9	49.3	49.8
FY 2005	57.0	50.4	50.9
FY 2006	60.2	51.2	51.9
FY 2007	60.7	53.9	54.4
FY 2008	60.3	56.1	56.7
FY 2009	60.1	56.1	56.8
FY 2010	60.4	56.1	56.8
FY 2011	60.7	56.4	57.1
FY 2012	61.1	57.5	58.1

On average, ETC penetration on the Sanibel Causeway has grown at approximately 0.4 percent per year. While low, this is not entirely unexpected due to the nature of the use of the facility and the island itself. The population deriving value from LeeWay, primarily residents and daily commuters, is relatively fixed due to growth constraints on the island. As such, LeeWay can, and likely did, reach full market saturation early on. Additional increases in the rate differential between ETC and cash, reducing the cost of the initial investment, or an intensive marketing campaign may grow that rate in the future. However, facility patrons not yet taking advantage of LeeWay are unlikely to adopt ETC under the existing rate and incentive structure. The remaining portion of the population using the Causeway is likely composed mostly of infrequent, leisure traffic. For these individuals, the benefits of a LeeWay account are greatly diminished. Any increase in this group would come from increased usage of SunPass as region-wide ETC adoption rates are still on the rise.

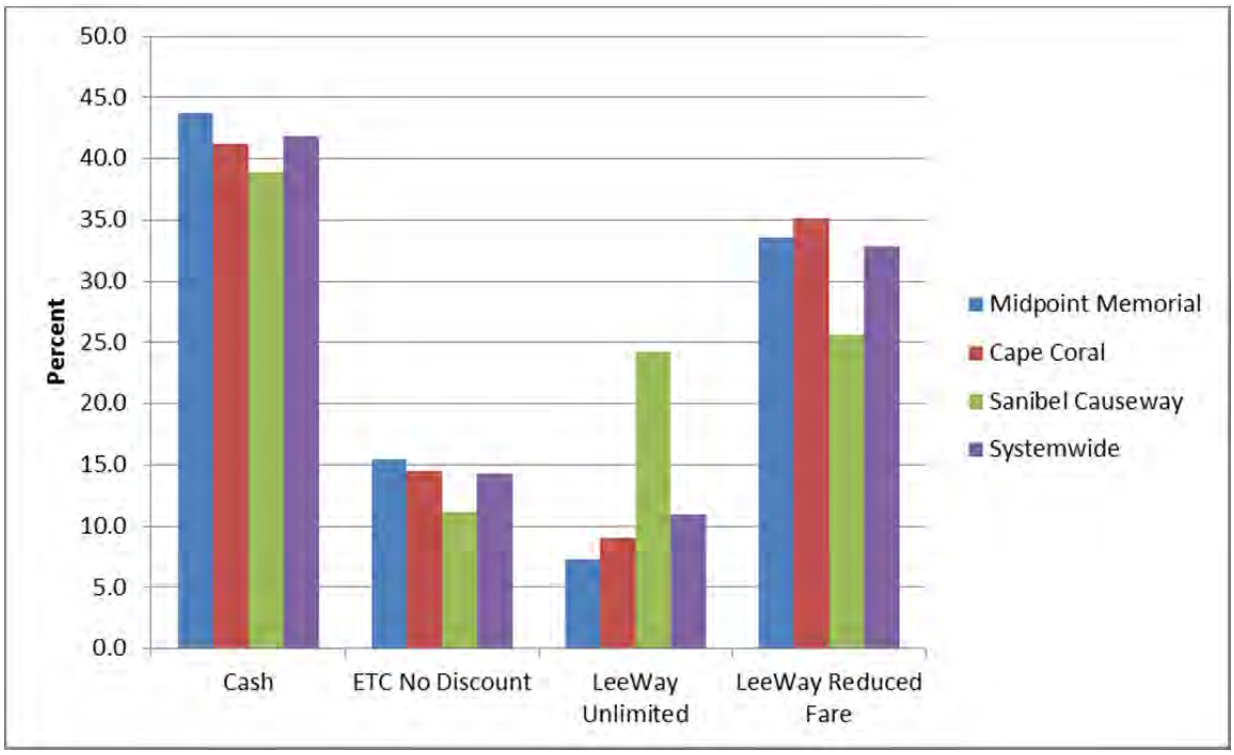
With respect to the ETC participation rate on the Cape Coral and Midpoint Memorial toll facilities, growth has averaged 1.8 percent per year. Overall market penetration remains lower than on the Sanibel Causeway, but the gap has narrowed significantly in recent years, even while growth in ETC participation on the Cape Coral and Midpoint Memorial Bridges has slowed as well. Given this recent slowdown in growth as the participation rate on those facilities has approached that of the Sanibel Causeway, it appears likely that ETC participation has reached market saturation, and further significant near-term growth is unlikely. Given the large discount offered to LeeWay patrons, specifically since the introduction of one-way tolling, it is unclear why patrons have not adopted LeeWay more readily. One possible reason may be the upfront $40.00 fee required to receive the discounted rate. While the discount itself is quite generous in comparison to similar facilities, the initial cash outlay may present a barrier to adoption. It is also likely that the relatively high rate of

facility use among out-of-town patrons, specifically tourists, has kept the rates lower than on peer facilities with higher shares of commuter traffic. Thus, future growth in ETC participation on the Lee County facilities may be at least partially dependent on external factors, including growth in ETC participation on existing regional facilities, introduction of new toll facilities in the region, and the potential for interoperability with E-ZPass or other transponder systems.

TRANSACTIONS BY PAYMENT TYPE

While the data presented thus far provides insight into the overall adoption of ETC, the actual use of LeeWay transponders is considerably more complex. This is due in large part to the many variations of available plan types, durations, discounts, and number of household vehicles. Moreover, the Sanibel Causeway serves a market with characteristics very different from the market served by the Cape Coral and Midpoint Memorial Bridges. Figure 2-10 presents the distribution of payment type by facility during FY 2012. Though there are dozens of variations of possible payment methods and plans, these plans can be classified in one of four ways: cash, ETC transactions receiving no discount, LeeWay Unlimited, and LeeWay Reduced Fare accounts. For further detail on the various discount programs available and the enrollment in those programs, see Chapter 4.

Figure 2-10
Percent of Payment Type by Facility



As shown, the Midpoint Memorial and Cape Coral Bridges have the highest percentage of cash transactions at 43.7 percent and 41.2 percent, respectively, which is a decline of 1.2 percentage points for this payment type on both facilities. Both bridges also experienced an increase in regular ETC transactions, which suggests that previous cash customers are converting to ETC. The distribution of ETC payments on these two facilities is quite similar, with the majority of ETC

transactions taking advantage of the Reduced Fare and Unlimited programs. LeeWay Reduced Fare transactions account for 33.6 percent and 35.1 percent of total transactions on the Midpoint Memorial and Cape Coral Bridges, respectively. The Unlimited program accounted for the smallest share, fewer than 10.0 percent of transactions on both facilities.

Cash accounted for 38.9 percent of transactions on the Sanibel Causeway. Compared to the other two facilities, a much larger proportion of users opted for the Unlimited program, which accounted for 24.2 percent of all transactions. This is likely due to the higher toll rate on the Sanibel Causeway and the greater savings resulting from the use of the Unlimited program. On the Sanibel Causeway, ETC transactions utilizing no discount account for the smallest segment of overall traffic.

Overall, the share of ETC transactions increased by approximately 3.0 percentage points compared to FY 2011. Full price ETC transactions increased by nearly 2.0 percentage points while the Unlimited and Reduced Fare program transactions decreased by 0.6 and 0.4 percentage points, respectively. Overall, cash transactions increased by 1.0 percentage point. This is a trend that has persisted for several years, and may shed some additional light on the overall lack of growth in ETC usage. As regular commuters are more likely to utilize a discount program, the reduction in the share of these transactions may be indicative of the continuing impact of the economic downturn, as users opt not to renew their Unlimited and Reduced Fare program subscriptions.

With respect to the type of ETC transponder used, the vast majority are Lee County LeeWay accounts. However, as previously mentioned, Lee County accepts both FDOT's SunPass and OOCEA's E-PASS. As shown in Table 2-5, 84.0 percent of systemwide ETC transactions use LeeWay transponders. This marks at least four consecutive years in which the LeeWay share of ETC transactions has declined, down from a high of 91.2 percent in FY 2008.

As the effects of the recession, including job losses and housing foreclosures, were more severe in Lee County than in the rest of the state, it is possible that transactions with local origins declined at a faster pace than those from outside the immediate area. Additionally, it may be indicative of growth in ETC usage on Florida's Turnpike System, or growing awareness among SunPass users of interoperability between the two systems. The share of ETC transactions utilizing SunPass transponders has increased steadily in recent years, from 9.7 percent in FY 2009 to 15.7 percent in FY 2012.

Table 2-5
Percent of ETC Transactions by Issuing Agency

Issuing Agency	Transponder Name	Midpoint Memorial Bridge	Cape Coral Bridge	Sanibel Causeway	Systemwide Total
Lee County	LeeWay	81.6	84.4	88.2	84.0
Florida's Turnpike	SunPass	18.0	15.2	11.2	15.7
OOCEA (1)	E-Pass	0.3	0.3	0.6	0.4
Total		**100.0**	**100.0**	**100.0**	**100.0**

Note: Due to rounding, totals may not add to exactly 100.0 percent.

Table 2-6 presents the distribution of ETC revenue by issuing agency. This includes Pay-by-Plate transactions, which were introduced in FY 2009. Pay-by-Plate allows rental car customers to pay tolls on Lee County toll facilities without using cash or carrying their own transponder. The Pay-by-

Plate transactions are charged toll rates equivalent to the cash rate plus a video processing fee of $0.06 per transaction. The service providers are charged an administrative maintenance fee of 8 percent of the monthly gross tolls paid from the provider's prepaid account. Three providers are currently enrolled in the program: American Traffic Solutions (Hertz and Advantage), Rent-A-Toll (Thrifty, Global, Penske, Dollar, and Sunshine), and Highway Toll Administration (Avis, Alamo, Enterprise, Budget, and National). All Pay-by-Plate transactions are ultimately accounted for as ETC transactions, although all ETC transactions contain a record as to whether they were originally transponder-based (LeeWay, SunPass, E-Pass) or image-based (Pay-by-Plate).

Table 2-6
Percent of ETC Revenue by Issuing Agency

Issuing Agency	Transponder Name	Midpoint Memorial Bridge	Cape Coral Bridge	Sanibel Causeway	Systemwide Total
Lee County	LeeWay	66.2	69.8	59.4	65.4
Florida's Turnpike	SunPass	32.1	28.0	32.9	30.9
OOCEA	E-Pass	0.8	0.7	1.8	1.1
Pay-by-Plate	N/A	0.9	1.4	5.9	2.6
Total		**100.0**	**100.0**	**100.0**	**100.0**

Note: Due to rounding, totals may not add to exactly 100.0 percent.

Note that the distribution of revenue presented in this table is not simply a multiple of gross transactions processed under each system or issuing agency, and does not reflect the frequency with which each system or agency is invoked. Due to discounts available to LeeWay customers and the markups associated with the Pay-by-Plate transactions, revenues do not necessarily correspond with frequency or prevalence of one system or agency over another. This is most notable when comparing the transaction and revenue distributions presented in Tables 2-6 and 2-7. For example, while SunPass transponders account for 18.0 percent of all Midpoint Memorial ETC transactions, Table 2-7 shows that these transactions account for 31.8percent of all Midpoint Memorial Bridge ETC toll revenues.

FY 2012 was the third full fiscal year in which Pay-by-Plate was available, and the payment method has continued to grow rapidly. In FY 2012, Pay-by-Plate accounted for 2.5 percent of systemwide ETC revenue, up from a 2.0 percent share in FY 2011 and a 0.3 percent share in FY 2009 when the program was first introduced. Overall, Pay-by-Plate still accounts for a very small proportion of total revenue.

TRANSACTIONS BY VEHICLE CLASS

Table 2-7 presents the distribution of traffic on each of the three Lee County toll facilities by vehicle class (number of axles). Systemwide, 98.0 percent of all transactions were made by 2-axle passenger vehicles, with little variation among the three facilities. The next most frequent vehicle class was the three-axle classification, which typically includes delivery and service vehicles. These vehicles accounted for 0.8 percent of all transactions systemwide. Motorcycles and four-axle vehicles represented 0.7 and 0.4 percent of total transactions, respectively, though motorcycles actually outnumber three-axle trucks on the Cape Coral Bridge for the third consecutive year. Trucks with

five or more axles represented just 0.1 percent of toll-paying traffic. The distribution of vehicle classes in FY 2012 was virtually unchanged from the previous fiscal year.

Table 2-7
Percent of Total Transactions by Vehicle Class

Vehicle Class	Midpoint Bridge	Cape Coral Bridge	Sanibel Causeway	Systemwide Total
Motorcycle	0.7	0.8	0.6	0.7
2-Axle	98.0	98.1	97.6	98.0
3-Axle	0.7	0.7	1.1	0.8
4-Axle	0.4	0.3	0.5	0.4
5 or More Axles	0.2	0.1	0.1	0.1
Total	**100.0**	**100.0**	**100.0**	**100.0**

CHAPTER 3

REGIONAL ECONOMIC GROWTH TRENDS

Usage of a tolled facility in relation to toll-free alternatives depends on three principal factors: the overall travel demand in the region; the potential time and distance savings associated with the facility; and the willingness of motorists to pay for the time and/or distance savings offered by a tolled facility. The first factor, regional travel demand, is driven predominantly by socioeconomic factors such as population, employment, and overall economic activity. Economic activity can be measured most directly in terms of gross regional product (GRP), and is also reflected in measures of retail sales, tourism, the real estate market, and aggregate income levels. Development trends and the relative attractiveness of various housing markets will also impact the distribution of traffic within the region. There are also socioeconomic reasons for travel between Cape Coral and Sanibel to and from Fort Myers. For example, customers only have one route when traveling to Sanibel and limited options for travel across the Caloosahatchee River. Additionally, residents with jobs in Cape Coral, Sanibel and Fort Myers need to use the bridges every day to commute to and from work. These determinants of aggregate travel demand will impact both tolled and toll-free facilities.

The second factor, travel time and distance savings offered by the toll facility, is based on the geographic location of the facility, the state of the overall network, and in particular the level of congestion along various competing routes. If a toll facility offers significant time or distance savings over the nearest toll-free route in a market for which travel demand exists, the facility will have an associated demand. While geography is a fixed attribute, relative congestion may change over time and have an associated impact on demand for the toll facility.

The third factor impacting toll facility usage is the ability and willingness of a potential patron to pay the toll. This factor will determine how many customers use that facility at a particular toll rate once the previous two factors are accounted for. Higher wages, and a higher proportion of commuter and business traffic, will generally result in a higher average value of time among potential toll facility patrons, resulting in a greater willingness to pay for the time and/or distance savings offered. However, if the toll is too high in relation to the time and/or distance savings offered and customer's values of time, demand will be low.

These factors can all be fundamentally traced to underlying socioeconomic variables, so it is important to understand the socioeconomic conditions in which the Lee County facilities have operated historically and in the most recent fiscal year. This chapter presents a number of socioeconomic parameters that are particularly relevant to this study area. Where appropriate and

available, extensive historical context is provided. Wherever possible, comparative data is presented for Lee County, the State of Florida, and the entire United States.

HISTORICAL SOCIOECONOMIC TRENDS

This section presents long-term historical socioeconomic trends under which the Lee County toll facilities have operated in previous years. Statistics are provided through Fiscal Year 2012, and generally extend as far back as 40 years. The data is drawn from a number of government, academic, and private sources.

Population

Between 1971 and 2012, the population of Lee County experienced tremendous growth increasing by nearly 450 percent. Between 1971 and 2008, county population grew every year, adding over 500,000 individuals during that time. Growth was briefly interrupted in 2009 when population declined by approximately 8,600 people or 1.4 percent. However, by 2010 growth had resumed. By 2011 previous population declines had been erased with the county growing by 1.1 percent to 625,310. In 2012, population growth in Lee County increased by 2.0 percent to 638,029. Since 1971, annual population growth has averaged 4.2 percent per year. As shown in Table 3-1, Lee County population growth has significantly outpaced the State of Florida, which, in turn, has grown faster than the nation as a whole over the same period. As a state, Florida's population almost tripled from 7,163,000 in 1971 to 19,074,434 in 2012.

Table 3-1
Historical Population Growth

Year	Lee County	Avg. Annual Percent Change	Florida	Avg. Annual Percent Change	United States	Avg. Annual Percent Change
1971	116,900	--	7,163,000	--	207,660,677	--
1981	214,867	6.3	10,105,957	3.5	229,465,714	1.0
1991	344,032	4.8	13,195,952	2.7	252,153,092	0.9
2001	454,918	2.8	16,331,739	2.2	285,081,556	1.2
2006	585,608	5.2	18,349,132	2.4	298,593,212	0.9
2007	615,741	5.1	18,680,367	1.8	301,579,895	1.0
2008	623,725	1.3	18,807,219	0.7	304,374,846	0.9
2009	615,124	-1.4	18,750,483	-0.3	307,006,550	0.9
2010	618,754	0.6	18,801,332	0.3	309,330,219	0.8
2011	625,310	1.1	18,905,048	0.6	311,591,917	0.7
2012	638,029	2.0	19,074,434	0.9	313,914,040	0.7
1971-2012		**4.2**		**2.4**		**1.0**

Source: Florida Office of Economic and Demographic Research April 1, 2012 Estimates (State and County, except 1971); U.S. Census Bureau July 1 Estimates (National, and State and County for 1971).

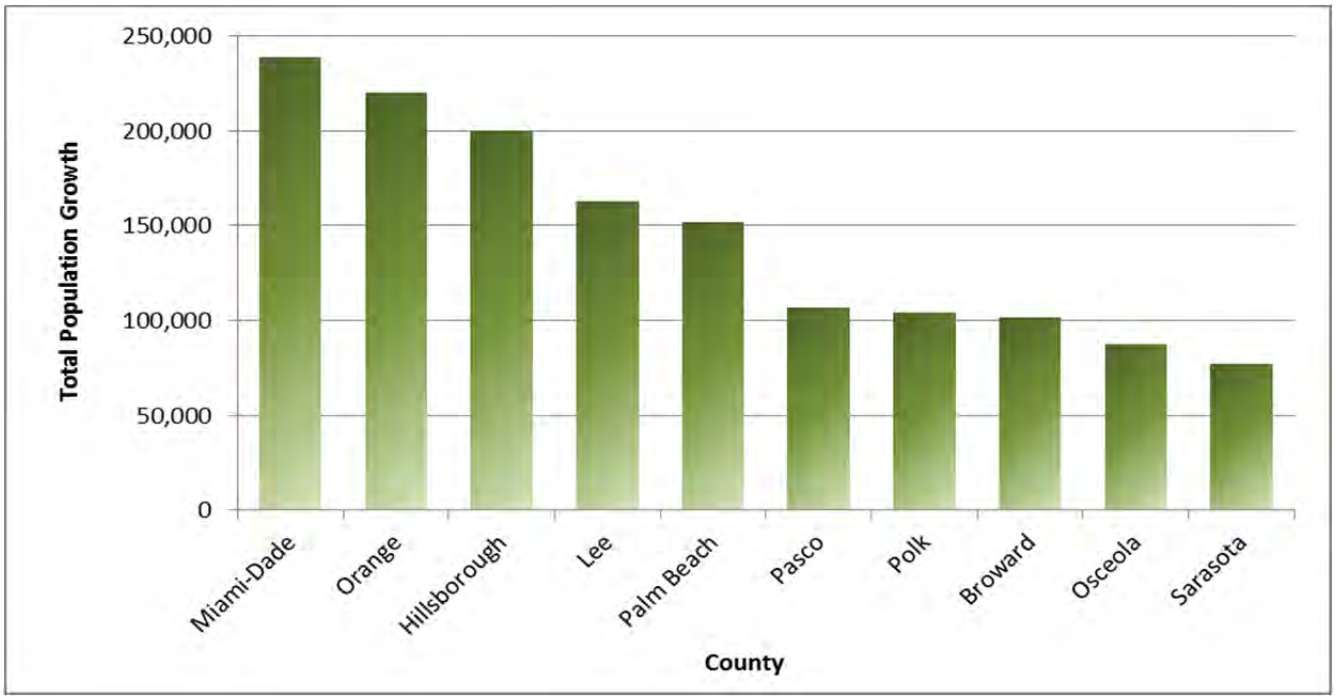
In terms of both absolute and percentage growth, Lee County ranked among the top 10 fastest growing counties in Florida between 2002 and 2012. Figures 3-1 and 3-2 present the ten fastest growing counties over that ten-year period, in terms of absolute growth and percent growth, respectively. These growth rates are based on annual population estimates developed by the Florida Office of Economic and Demographic Research using data from the U.S. Census Bureau. Between

2002 and 2012, Lee County population grew by nearly 163,000 residents, the fourth-highest among all Florida counties in absolute terms, and by 34.3 percent, the sixth-highest in terms of percentage. Both the absolute and percentage growth rates have declined somewhat compared to ten-year periods ending in 2011, 2010 and 2009 (as reported in previous Annual Reports) due to the slower population growth in Lee County since 2007. However, since this trend has generally been mirrored throughout the State of Florida, Lee County's ranking relative to other counties has remained unchanged.

Employment

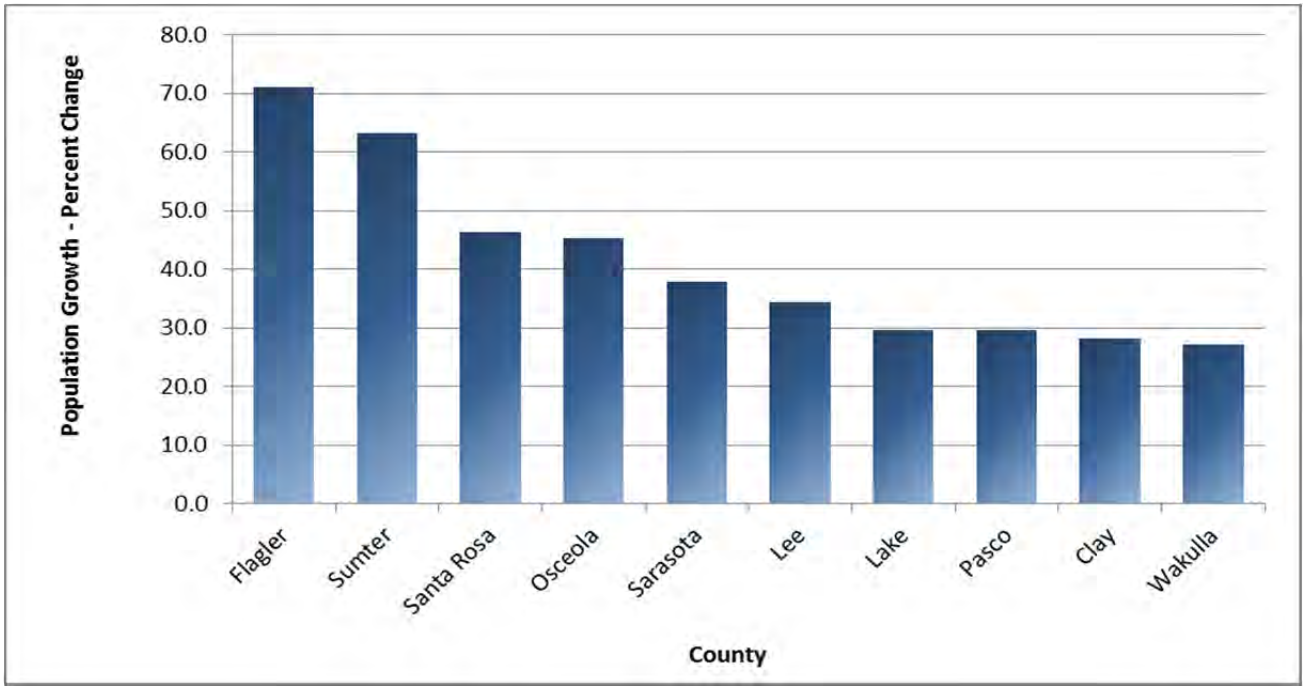
Table 3-2 shows total employment at the county, state, and national level since 1981. Lee County employment growth has significantly outpaced both statewide and national employment growth since 1991. Between 1991 and 2012 employment growth in Lee County averaged 2.6 percent per year. This compares with a statewide average annual growth rate of 1.6 percent and a national average annual growth of 0.9 percent. An examination of other BLS sources dating back to the 1980s indicates that employment growth in Lee County was greatest during that decade, but it remained strong throughout the 1990s and early 2000s. Following 2006, this pattern of rapid employment growth abruptly reversed. As shown in Table 3-2, employment in Lee County declined for three consecutive fiscal years from 2008 to 2010. Prior to 2007 employment growth in Lee County outpaced the state which, in turn, outpaced the nation. This trend was reversed in FY 2011, with Lee County experiencing positive employment growth of 2.9 percent. Lee County employment growth continued in FY 2012 with an increase of 2.1 percent over FY 2011 but has not returned to pre-recessionary numbers. In FY 2012, Florida and the nation both saw an increase in employment by 2.4 and 1.3 percent respectively.

Figure 3-1
Top Ten Counties, Absolute Population Growth
2002-2012



Source: Florida Office of Economic and Demographic Research April 1, 2012 Estimates.

Figure 3-2
Top Ten Counties, Percent Population Growth
2002-2012



Source: Florida Office of Economic and Demographic Research April 1, 2012 Estimates

Table 3-2
Historical Employment Growth

Fiscal Year	Lee County	Avg. Annual Percent Change	Florida	Avg. Annual Percent Change	United States	Avg. Annual Percent Change
1981	N/A	--	4,170,906	--	100,310,800	--
1986	N/A	N/A	5,165,465	4.4	109,075,334	1.7
1991	148,624	N/A	6,065,506	3.3	118,137,580	1.6
1996	168,314	2.5	6,767,525	2.2	127,430,323	1.5
2001	209,039	4.4	7,661,757	2.5	137,370,374	1.5
2006	272,508	5.4	8,519,275	2.1	142,986,450	0.8
2007	280,388	2.9	8,806,208	3.4	145,047,352	1.4
2008	267,330	-4.7	8,734,837	-0.8	145,325,615	0.2
2009	248,811	-6.9	8,243,223	-5.6	140,974,820	-3.0
2010	241,914	-2.8	8,064,961	-2.2	139,012,852	-1.4
2011	249,018	2.9	8,227,798	2.0	140,219,187	0.9
2012	254,260	2.1	8,427,087	2.4	142,024,272	1.3
1991-2012		**2.6**		**1.6**		**0.9**

Source: United States Bureau of Labor Statistics (BLS), Local Area Unemployment Statistics (LAUS) program. Average Annual Percent Change for Lee County is measured from 1991 to 2012, as data was unavailable prior to 1991.

Household Income

Table 3-3 shows the median household income for Lee County, the State of Florida, and the United States from 1969 through 2011. For the years ending 1969, 1979, 1989, and 1999, the data comes from the Decennial Census conducted the year after (1970, 1980, etc). For the years 2004 through 2011, the data comes from American Community Survey (ACS) data released in 2005 through 2012. Each year's values are adjusted for inflation to constant 2011 dollars using the BLS Consumer Price Index for Urban Consumers Research Series (CPI-U-RS). CPI-U-RS is the same index used by the Census Bureau to adjust income between years. Since the previous Annual Report showed the values in 2010 dollars, the historical values shown in Table 3-3 will not match those shown in previous Annual Reports for the same years.

Between 1969 and 2011, Lee County median household income grew by an average of 0.4 percent annually. Over the same period, statewide median household income grew at an average rate of 0.3 percent per year, while national growth was 0.2 percent per year. By 1989, Lee County median household income exceeded the statewide median, and surpassed the national median by 2004. However, slow growth followed by steep declines resulted in Lee County median household income falling below the national median in 2007. County median household income declined by a total of 17.6 percent between 2007 and 2010, falling to over $6,000 below the national average by 2010. County, state, and national median household income all declined for three consecutive years, reflecting above-average unemployment levels and falling salaries. For the first time since the 1980s, in 2010 Lee County median household income fell behind the State of Florida. In FY 2011, Lee County median household income declined slightly by 0.1 percent and once again exceeded the average for the State of Florida. The Lee County average remains approximately $5,000 below the national average.

Table 3-3
Historical Median Household Income Growth
(Constant 2011 Dollars)

Year	Lee County	Avg. Annual Percent Change	Florida	Avg. Annual Percent Change	United States	Avg. Annual Percent Change
1969	$38,433	--	$39,508	--	$46,773	--
1979	42,881	1.1	43,067	0.9	49,422	0.6
1989	49,822	1.5	48,132	1.1	52,638	0.6
1999	54,423	0.9	52,399	0.9	56,684	0.7
2004	53,673	-0.3	49,100	-1.3	53,205	-1.3
2005	53,057	-1.1	48,886	-0.4	53,274	0.1
2006	54,161	2.1	50,750	3.8	54,047	1.5
2007	54,995	1.5	51,854	2.2	55,039	1.8
2008	53,010	-3.6	49,909	-3.8	54,349	-1.3
2009	47,556	-10.3	46,909	-6.0	52,660	-3.1
2010	45,322	-4.7	45,810	-2.3	51,625	-2.0
2011	45,266	-0.1	44,299	-3.3	50,502	-2.2
1969-2011		**0.4**		**0.3**		**0.2**

Source: United States Census Bureau and Bureau of Labor Statistics. Values are adjusted for inflation to constant 2011 dollars using the BLS Consumer Price Index for Urban Consumers Research Series (CPI-U-RS),

Gross Regional Product

Gross Regional Product (GRP), also referred to as Gross Domestic Product (GDP) at the national level, is an important measure in gauging the overall health of an economy. It includes the value of all goods and services provided (or consumed) within that region, including government spending, and is intended to represent the sum total of all economic activity. GRP and GDP are estimated on an annual basis for the states, metropolitan areas, and the nation, by the Bureau of Economic Analysis (BEA). Table 3-4 shows the historical GRP for Lee County, the State of Florida, and the United States, for 2001 through 2011. 2012 data was not available as of the writing of this report. Values are shown in constant 2005 dollars, as reported by BEA.

As shown in Table 3-4, 2011 saw a slight decline in GRP/GDP growth at the county level with an increase at both the state and national levels. This decline at the county level of 0.4 percent follows a year of modest growth in FY 2011. The state and national levels increased for the second consecutive year after two years of decline. In the first half of the last decade, Lee County economic growth generally exceeded both the state and the nation. The recessionary trend began in Lee County earlier, with negative GRP growth in 2007, while Florida's and the United States economies continued to grow. Even after the recession took hold nationally, Lee County saw significantly steeper declines in economic activity. Lee County continues to lag the larger economy. As of 2011, the GRP in Lee County remained 16.5 percent below the peak level of 2006. By comparison, the statewide GRP in Florida was 7.5 percent lower than its peak, which occurred in 2007, and the national GDP has exceeded the previous 2007 peak by 0.04 percent as of 2011.

Table 3-4
Historical Gross Regional Product
(Millions of 2005 Dollars)

Year	Lee County	Avg. Annual Percent Change	Florida	Avg. Annual Percent Change	United States	Avg. Annual Percent Change
2001	$16,149	--	$563,294	--	$11,365,110	--
2002	16,579	0.3	583,005	0.3	11,559,801	0.2
2003	17,250	0.4	610,448	0.5	11,809,034	0.2
2004	18,664	0.8	641,330	0.5	12,199,532	0.3
2005	20,587	2.0	681,225	1.2	12,539,116	0.6
2006	21,266	3.3	707,896	3.9	12,875,816	2.7
2007	20,768	-2.3	714,630	1.0	13,103,341	1.8
2008	19,312	-7.0	689,445	-3.5	13,016,791	-0.7
2009	17,778	-7.9	651,982	-5.4	12,527,057	-3.8
2010	17,810	0.2	657,717	0.9	12,918,931	3.1
2011	17,747	-0.4	661,091	0.5	13,108,674	1.5
2001-2011		**0.9**		**1.6**		**1.4**

Source: United States Bureau of Economic Analysis.

Building Permits

Growth in the U.S. housing sector was a significant factor in the economic expansion experienced throughout the 2000s, and an equally significant factor in the economic downturn towards the end of the decade as the "housing bubble" burst. Areas such as Lee County saw large increases in

population and employment associated with significant new construction of housing during the growth years. As such, when home values began to fall and home sales declined, the economic impact in Lee County was particularly severe. This trend is reflected in the previous tables, which illustrate that while Lee County experienced above average growth in the first half of the last decade, the subsequent decline has been equally steep in relation to the state and the nation. The trend is underscored by the precipitous drop in new home construction in the region.

Table 3-5 presents the estimated number of new housing units for which building permits were issued in Lee County, the State of Florida, and the United States between fiscal years 2002 and 2012. As illustrated, Lee County experienced double-digit percent increases in the number of building permits issued each year until FY 2005, followed by double digit declines each year through FY 2009. In fiscal years 2010 and 2011, the number of permits issued rose slightly, with a significant increase of 54.3 percent in FY 2012. While the percentage increases over the past three years may appear substantial, they represent growth following a 96.4 percent decline between 2005 and 2009. The 2,045 permits issued in FY 2012 are still 92.8 percent fewer than the peak year of FY 2005, when over 28,000 units were permitted. Both the State of Florida and the United States also saw a peak in new housing units permitted in FY 2005. Since then, permits issued in Florida have dropped 78.5 percent, and nationally the rate of new building permits has dropped 64.9 percent. The trend in Lee County mirrors that of the State of Florida and the nation, but at greater amplitude. All three geographic areas saw modest rates of growth in 2010, with Lee County once again outpacing the state and the nation. In 2011 growth continued at the county and state level, but the number of permits issued nationwide declined once again. All three levels experienced significant growth in FY 2012, which could indicate the recovery of the housing market.

Table 3-5
Building Permit Growth – Total Units Permitted

Fiscal Year	Lee County	% Change	Florida	% Change	United States	% Change
2002	10,708	-	175,018	-	1,700,300	-
2003	13,239	23.6	182,436	4.2	1,853,700	9.0
2004	19,099	44.3	234,458	28.5	2,045,000	10.3
2005	28,428	48.8	276,073	17.7	2,151,100	5.2
2006	22,073	-22.4	230,923	-16.4	1,971,000	-8.4
2007	7,633	-65.4	121,214	-47.5	1,485,200	-24.6
2008	1,707	-77.6	70,951	-41.5	1,030,100	-30.6
2009	1,022	-40.1	36,602	-48.4	590,200	-42.7
2010	1,209	18.3	39,736	8.6	612,000	3.7
2011	1,325	9.6	40,832	2.8	600,605	-1.9
2012	2,045	54.3	59,387	45.4	753,928	25.5

Source: United States Census Bureau

Tourism

Traffic on the Lee County toll bridges, particularly the Sanibel Causeway, is heavily influenced by regional tourism as well as the employment generated by the tourism and hospitality industries. Annual historical data is presented for both the state and the Lee County region in Table 3-6. Due to

a change in the methodology employed by the Florida Commission for Tourism, statewide tourism estimates prior to calendar year 2009 are incompatible with the data available for the three most current calendar years. As a result, statewide data prior to FY 2010 has been excluded from the table. At the county level, consistent data was available as far back as July 2007 and is reported for the past five fiscal years. The current sources will be used in all future annual reports provided they remain available and methodologically consistent.

As shown in Table 3-6, the number of visitors in Lee County and statewide both increased in 2012, while paid accommodations in Lee County declined by 0.6 percent. This may be due to the relatively slow pace of economic recovery in Florida as compared with the rest of the nation. A larger proportion of visitors in paid accommodations come from faraway origins such as New York, Chicago, and overseas locations, whereas visitors staying with friends and relatives are more likely to originate from nearby locations.

Table 3-6
Statewide and Lee County Tourism

	Lee County				State of Florida	
Fiscal Year	Total Visitors	Percent Change	Paid Accommodations	Percent Change	Total Visitors	Percent Change
2008	4,307,261	--	1,883,064	--	N/A	N/A
2009	4,347,122	0.9	1,993,058	5.8	N/A	N/A
2010	4,273,362	-1.7	2,078,547	4.3	81,430,510	N/A
2011	4,165,540	-2.5	2,228,795	7.2	86,800,000	6.6
2012	4,293,025	3.1	2,215,763	-0.6	88,500,000	2.0

Source: VisitFlorida.org and Lee County Visitor and Convention Bureau

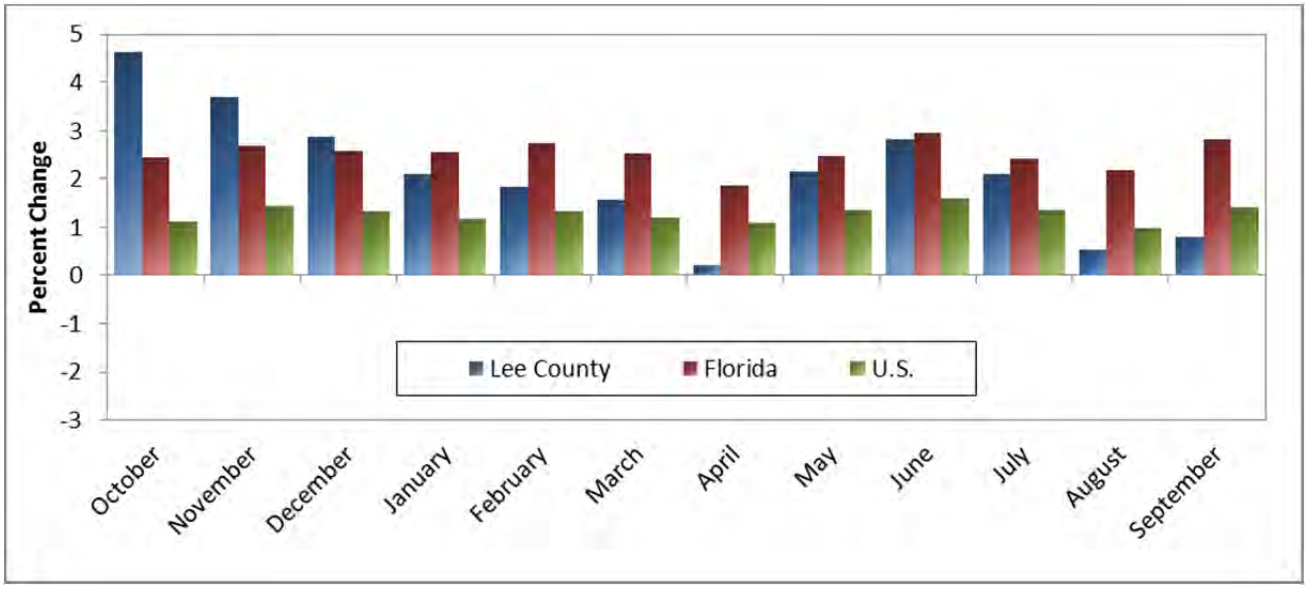
SHORT-TERM RECENT SOCIOECONOMIC STATISTICS

This section presents recent trends in economic indicators such as employment, unemployment, retail sales, and building permit activity. The measures reviewed in this section are presented on a monthly basis, for one or more recent years. These short-term economic variables provide additional insight into the current trends that will immediately affect traffic and toll revenues, especially given the volatility of the current economic climate.

Employment

Figure 3-3 presents the year-over-year percent changes in monthly total employment between Fiscal Years 2011 and 2012 for Lee County, the State of Florida, and the United States. The values are derived from the Bureau of Labor Statistics (BLS) Local Area Unemployment Statistics (LAUS) estimates and are current as of January 2013. As shown, Lee County experienced increases in total employment for all twelve months of the fiscal year. Employment at the state and national levels also increased at relatively consistent levels throughout the year. Figure 3-3 is notable because it illustrates that Florida has continued its growth at a rate that outpaces the nation, and that this trend was consistent throughout the year.

Figure 3-3
Percent Change in Total Employment
2012 vs. 2011

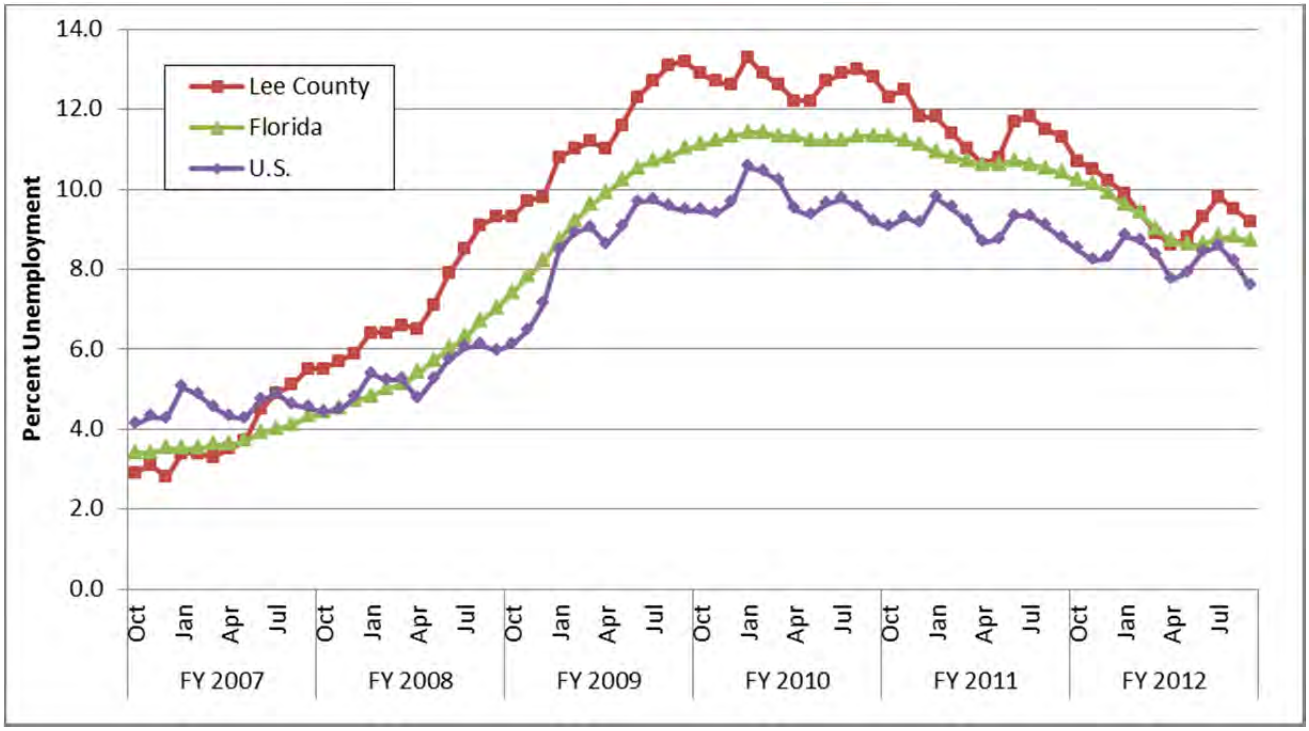


Source: United States Bureau of Labor Statistics, Local Area Unemployment Statistics.

Figure 3-4 shows the unemployment rate, as reported by BLS, for the past six fiscal years. The data presented in Figure 3-4 is derived from the same BLS data set as the previous figure, and is current as of January 2013. As shown, unemployment levels at the county, state, and national levels remained fairly stable through early 2007. Prior to that time, county and statewide unemployment were typically very similar to one another, and consistently one to two percentage points below the national rate. Historically, the unemployment rate in Lee County was lower than the statewide rate. Beginning in the summer of 2007, county unemployment levels increased rapidly, peaking at 13.3 percent in August 2010. Lee County unemployment has exceeded the statewide rate since April 2007, however was slightly lower than the statewide rate during the months of March and April 2012. The Lee County unemployment rate has exceeded the national rate since July 2007. Statewide unemployment has also exceeded the national rate since April 2008.

In FY 2011 the state and county unemployment rates began gradually declining, which has been a continuing trend through FY 2012. For the first time since December 2008, Lee County unemployment has been below 10 percent starting in January 2012. The statewide unemployment rate has also been below 10 percent starting in December 2011. The downward trends have generally been consistent at the national, state, and county level, although Lee County has consistently remained two or more percentage points above the national rate.

Figure 3-4
Unemployment Rate by Month
FY 2007 through FY 2012

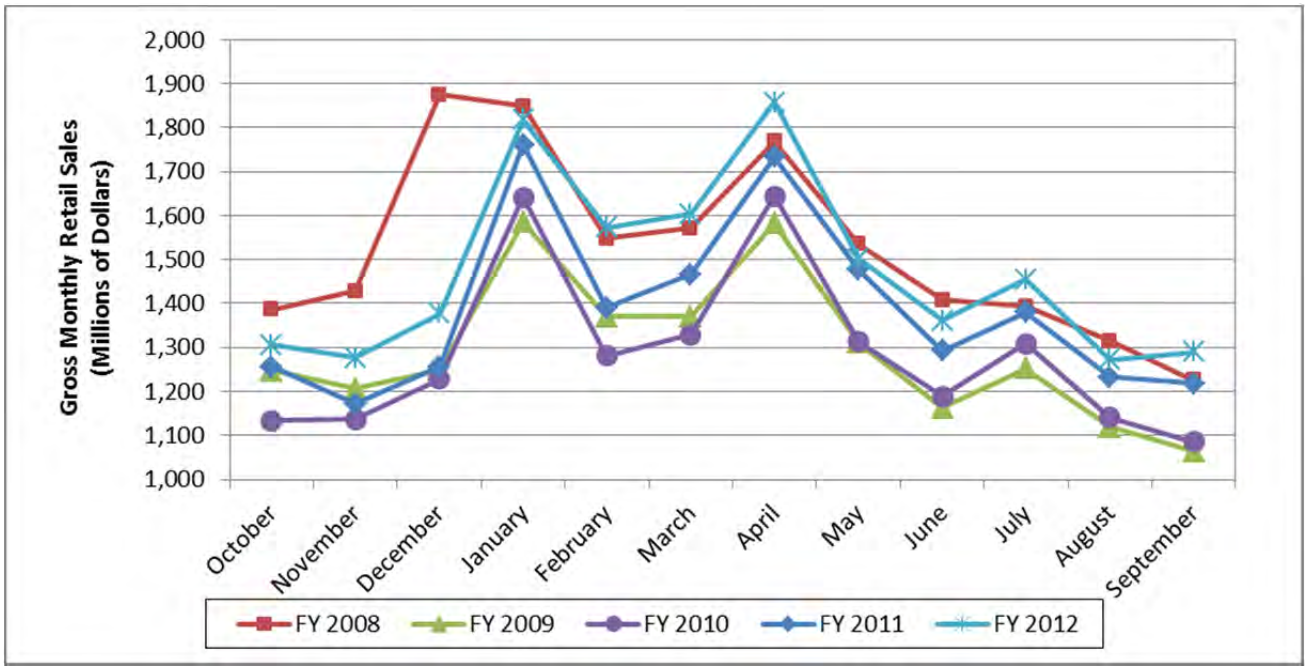


Source: United States Bureau of Labor Statistics, Local Area Unemployment Statistics.

Gross Retail Sales

Gross retail sales in Lee County are presented in Figure 3-5, by month, for Fiscal Years 2008 through 2012. The data presented in this figure was published by the Florida Department of Revenue. As indicated, gross retail sales in Lee County exceeded FY 2008 levels during five out of twelve months in FY 2012. While FY 2009 and FY 2010 were nearly identical for most months, some upward movement can be observed in FY 2011, particularly in the latter half of the fiscal year. FY 2012 gross retail sales growth exceeded the levels seen in FY 2011 for all twelve months. It is still too early to say with confidence that a recovery in the retail sector has taken hold, but a continuation of this pattern in the current fiscal year would indicate considerable recovery since retail sales reached a low point in early FY 2010.

Figure 3-5
Lee County Monthly Gross Retail Sales
FY 2008 through FY 2012



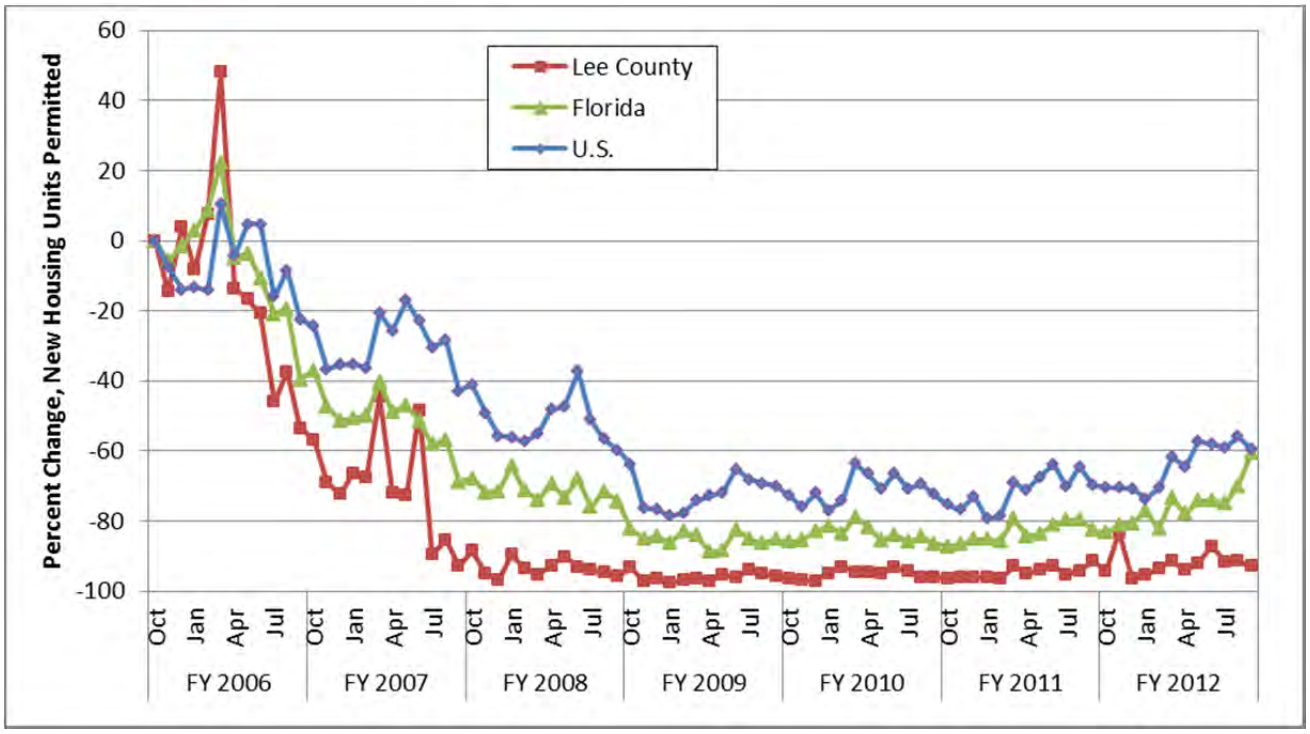
Source: Florida Department of Revenue, Florida Sales Tax Return Data

Building Permits

As previously discussed, the housing market in Lee County has historically been quite volatile, experiencing explosive growth in the early 2000s followed by a near total halt beginning in 2007. The regional housing market is a good indicator of a strong regional economy, and is particularly significant in a market where housing has had such a considerable economic impact in the past. Not only are construction jobs associated with home construction, but new home construction is a leading indicator of population growth, both of which likely result in higher traffic volumes. Figure 3-6 presents the number of new housing units for which permits were issued in Lee County, the State of Florida, and the United States. These values are presented as a percentage of the number issued in October 2005 (the beginning of FY 2006). Showing the number of permits issued as an index value allows for a direct comparison between local, state, and national trends on the same set of axes.

As shown, steady declines at both the state and county levels began to appear in the middle of 2006, and continued through late 2008 before stabilizing. Since that time, new permit activity in Lee County has consistently been between 83 and 98 percent below the historical rate, with the statewide rate of building permits holding steady at 80 to 90 percent lower than in FY 2006, prior to the collapse of the housing market. FY 2012 statewide new permit activity has slightly improved reaching 61 percent lower than in FY 2006 as of September 2012. National declines followed approximately the same pattern, though declines began slightly later and were not as severe. The stabilization seen in Lee County since FY 2008 does not necessarily indicate an increase in demand. Rather, with only a few dozen permits issued per month, the demand for building permits in Lee County may simply have hit a point at which demand could erode no further. Some seasonal variation has been observed at all geographic levels, but this too has been more muted in Lee County than statewide or nationally. The local housing market has yet to observe sustained recovery.

Figure 3-6
Percent Change in Building Permits for New Housing Units
FY 2006 through FY 2012



Source: U.S. Census Bureau, Manufacturing, Mining, and Construction Statistics.

Cape Coral Development

While economic development typically proceeds at a measured pace, some changes in the landscape are concentrated and significant enough that they may potentially affect travel patterns. Historically, many of the regional retail destinations have been located in Fort Myers. In order to access basic goods and services, many Cape Coral residents had to cross the river via one of the four local river crossings. However, in recent years the City of Cape Coral has undertaken an initiative to provide more of these services "on island." This represents a substantial shift in the local economic landscape, and may reduce the demand for cross-river trips. This, in turn, could gradually reduce demand on the Cape Coral and Midpoint Memorial bridges, or at least dampen the rate of growth with respect to the overall socioeconomic picture of the region. Conversely, however, several new developments of a regional nature, including a major new Veterans Affairs (VA) medical facility, may lead to new demand for trips to Cape Coral from surrounding communities.

According to the Cape Coral Economic Development Office, the City of Cape Coral was recognized several times in the national marketplace in 2012 with awards for Best Mid-Sized City for Job Growth (New Geography); Top Digital City (Center for Digital Government); One of the 200 Best Places for Business and Careers in the Nation (Forbes); and among 25 Best Places to Retire (Money Magazine). New business licenses and permits are showing an increase every month as more national, regional and local enterprises seek to take advantage of the improving market conditions and locate or expand within Cape Coral.

Pine Island Road (State Route 78) continues to be focal point of new commercial growth in Cape Coral. To accommodate future growth, the City of Cape Coral has reached an agreement with the Florida Department of Transportation that will result in the widening of the remaining two-lane portion of Pine Island Road between Chiquita Boulevard and Burnt Store Road. This project is currently being executed and may lead to future development along the western portion of the highway, where significant undeveloped space remains. Planned developments include a Sam's Club and Super Wal-Mart Plaza with available property for a regional shopping and entertainment center.

The completed Department of Veterans Affairs Outpatient Clinic opened in December 2012, replacing a facility in Fort Myers that served 800 patients per day, and approximately 200,000 veterans in a six-county area. The new 220,000 square foot facility is located at the intersection of Diplomat Parkway and Corbett Road in the northeastern part of Cape Coral. The City of Cape Coral continues to market the area within 3 miles of the new clinic as a Veterans Investment Zone (VIZ). The Army Reserve has already started construction of a new 51,000 square foot training facility which will be used to educate over 300 soldiers on weekends. This project is expected to be finished in late 2013.

PROJECTED SOCIOECONOMIC GROWTH

Despite the recent economic uncertainty in Lee County and the nation as a whole, growth in total population, employment, and gross regional product is expected to resume over the long term. As shown in the early part of this chapter, population growth has resumed in Lee County, while employment declines have slowed, and statewide growth indicates the likelihood for a resumption of growth in the local employment market.

This section presents a brief overview of forecasted growth in population, employment, and GRP based on data from the Bureau of Economic and Business Research at the University of Florida (BEBR) and Woods & Poole Economics, Inc. While the most up-to-date information has been included in the tables, the condition of the national, state, and local economies remain uncertain, as do economic forecasts. Depending on the strength and duration of the recovery from the recent recession, long-term forecasts of economic and socioeconomic growth could differ substantially from these projections.

Table 3-7 presents a summary of growth forecasts for Lee County, the State of Florida, and the United States. BEBR was used for the Lee County and Florida forecasts, while Woods & Poole was used for the nationwide population forecast. In each case, the specific values presented in Table 3-7 were developed by using the *growth rates* from the outside forecasts, and applying those rates to the actual 2012 population values as presented in Table 3-1 (also shown in Table 3-7). Therefore, the actual population numbers shown in Table 3-7 will not precisely match those presented in the Woods & Poole and BEBR data sets. The change was made so that projected future growth would be directly comparable to historical trends.

In their March 2012 population forecast (the latest edition available as of the writing of this report), BEBR estimated that Lee County population will experience average annual growth of 1.9 percent through 2040. Over the same period, BEBR projects that the State of Florida will experience average annual population growth of 1.1 percent. Woods & Poole projects average annual growth of 0.9 percent for the nation over that period. As indicated, Lee County growth is expected to return to

levels nearly double those of the state and nation. While the BEBR forecast is not available in one-year increments, the BEBR forecast for Lee County, covering the period from 2012 to 2015, suggests that robust growth is expected to resume in the short term, gradually slowing over time. The Woods & Poole forecast tends to show less variation in the growth rate over time than does the BEBR forecast.

Table 3-7
Population Growth Forecast

	Lee County	Avg. Annual Percent Change	Florida	Avg. Annual Percent Change	United States	Avg. Annual Percent Change
2012	638,029	--	19,074,434	--	313,914,040	--
2015	672,221	1.8	19,595,447	0.9	323,419,224	1.0
2020	760,058	2.5	20,947,248	1.3	339,747,882	1.0
2025	844,508	2.1	22,250,522	1.2	356,347,687	1.0
2030	924,677	1.8	23,483,645	1.1	372,865,967	0.9
2035	1,000,364	1.6	24,643,230	1.0	389,238,856	0.9
2040	1,072,864	1.4	25,755,581	0.9	405,683,575	0.8
2012-2040		**1.9**		**1.1**		**0.9**

Source: University of Florida Bureau of Economic and Business Research Florida Population Studies Bulletin 162 Revised March 2012 (Lee County and Florida), Woods & Poole Economics, Inc. 2012 CEDDS (U.S.).

Table 3-8 shows the employment growth forecast for Lee County, the State of Florida, and the United States from 2012 through 2040. Woods & Poole was the source of the forecasts for all three geographic areas. Like the population forecast the table was developed by applying growth rates from the Woods & Poole forecast to the actual 2012 employment numbers shown in Table 3-3.

Table 3-8
Employment Growth Forecast

	Lee County	Avg. Annual Percent Change	Florida	Avg. Annual Percent Change	United States	Avg. Annual Percent Change
2012	254,260	--	8,427,087	--	142,024,272	--
2015	268,818	1.9	8,863,581	1.7	147,842,730	1.3
2020	294,415	1.8	9,633,300	1.7	158,075,154	1.3
2025	321,739	1.8	10,458,694	1.7	169,015,620	1.3
2030	350,862	1.7	11,343,322	1.6	180,713,208	1.3
2035	381,855	1.7	12,290,913	1.6	193,220,536	1.3
2040	414,800	1.7	13,305,448	1.6	206,593,470	1.3
2012-2040		**1.8**		**1.6**		**1.3**

Source: Woods & Poole Economics, Inc. 2012 CEDDS.

As with population, employment growth in Lee County is forecasted to outpace the state and the nation, though by less significant margins than pre-recession history. As shown in Table 3-8, Lee County total employment is forecast to increase by an average of 1.8 percent annually through 2040. Statewide and national annual average employment growth is forecast to be 1.6 and 1.3 percent, respectively, over the 28-year period. Consistent with Woods & Poole's population forecast, the employment forecast shows minimal variation in the growth rates over time, with growth at the national level remaining virtually unchanged, and county and state levels slowing just slightly.

Table 3-9 shows the forecasted growth in Gross Domestic Product (GDP) and Gross Regional Product (GRP) for Lee County, the State of Florida, and the United States. Unlike the previous year tables, the base year in Table 3-9 is 2011, as this is the last year for which historical data was available at all geographic levels. Like the previous two tables, this table was developed by applying growth rates from the Woods & Poole forecast to the historical base.

According to the Woods & Poole forecast, Lee County and Florida GRP is projected to increase by an average of 2.6 percent annually between 2011 and 2040. The United States is projected to experience slightly lower growth in annual GRP and GDP, with an average annual forecasted growth rate of 2.2 percent. The table indicates that Woods & Poole projects slower growth over the initial five-year interval, followed by a steep uptick and subsequent slight tapering. In actuality, the Woods & Poole forecast concentrates the initial slow growth entirely in 2012, followed by an immediate resumption of rapid growth, with 2013 being the highest growth year of the entire forecast.

Table 3-9
Gross Product Growth Forecast
(Millions of 2005 Dollars)

	Lee County	Avg. Annual Percent Change	Florida	Avg. Annual Percent Change	United States	Avg. Annual Percent Change
2011	17,747	--	661,091	--	13,108,674	--
2015	19,578	2.5	729,916	2.5	14,253,083	2.1
2020	22,400	2.7	830,187	2.6	15,940,624	2.3
2025	25,564	2.7	943,057	2.6	17,830,084	2.3
2030	29,105	2.6	1,069,983	2.6	19,946,297	2.3
2035	33,059	2.6	1,212,579	2.5	22,317,324	2.3
2040	37,466	2.5	1,372,636	2.5	24,974,613	2.3
2011-2040		**2.6**		**2.6**		**2.2**

Source: Woods & Poole Economics, Inc. 2012 CEDDS.

CHAPTER 4

TOTAL TRANSACTIONS AND GROSS TOLL REVENUE

Chapter 4 presents detailed transaction and toll revenue performance data for the Lee County toll facilities through Fiscal Year 2012, with an emphasis on historical trends. Performance metrics reviewed include traffic and total toll transactions; toll revenue; average toll rates; and discount program sales and revenue. The historical trend analysis takes into account extenuating factors which may have affected transaction and revenue performance, such as toll rate increases, highway construction, and major weather events. The information presented in this chapter is derived from Lee County Department of Transportation (DOT) administration records, and may differ slightly from values presented elsewhere in this report, which are derived from operational records and sample data. It should be noted that the terms traffic and transactions are both used in this report. Traffic refers to the greater category of vehicles using the Lee County roadways, while transactions refer to vehicles that have passed through an actual toll collection location.

FISCAL YEAR 2012 TOLLED TRANSACTIONS AND REVENUE

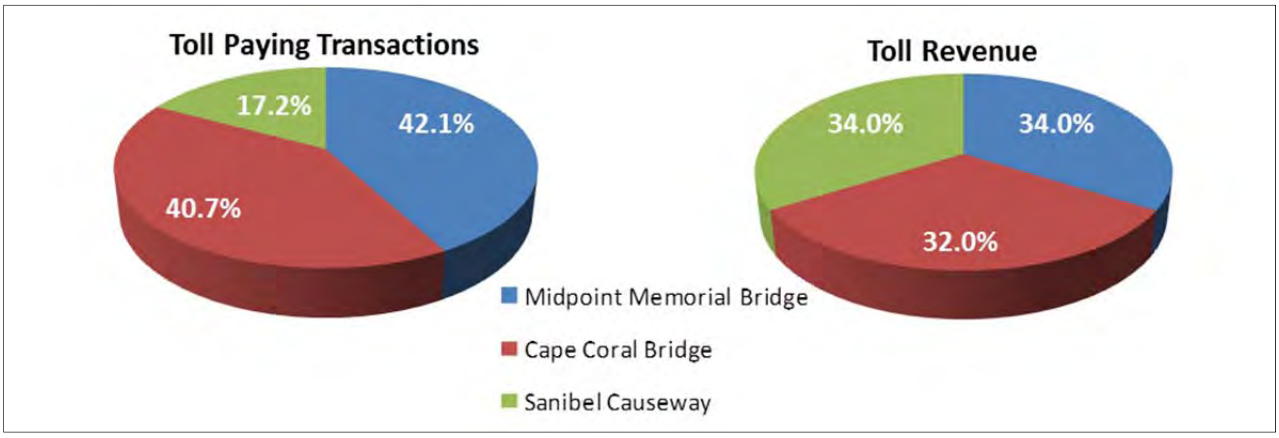
In Fiscal Year 2012, total systemwide transactions and revenue grew for the second consecutive year. However, growth in both categories was minimal, and transaction and revenue totals remain well below peaks experienced in pre-recession years and reflect the continuing impact of the economy in Lee County and the State of Florida as a whole. As shown in Table 4-1, the Cape Coral Bridge was the only facility to experience a net annual decline in transactions and revenue in FY 2012. As previously mentioned, this decline can be attributed to closures throughout the year during construction activities at the Cape Coral toll plaza. Traffic on the Sanibel Causeway increased 2.1 percent while revenues increased 3.1 percent over FY 2011. Midpoint Memorial Bridge reported the largest increase in both transactions and revenues at 4.8 percent and 4.9 percent, respectively, over the prior year. This significant transaction and revenue increase is due in part to the impact of customers utilizing the facility during construction activities at the Cape Coral Bridge plaza.

Figure 4-1 presents the relative proportions of transactions and revenues generated by each of the three Lee County toll bridges. As shown, the Cape Coral and Midpoint Memorial Bridges accounted for almost equal shares of systemwide transactions in FY 2012, collectively representing 82.8 percent of total toll transactions. The remaining 17.2 percent of systemwide transactions were on the Sanibel Causeway. Total toll revenue was almost evenly split between the three facilities, with Sanibel and Midpoint Memorial each accounting for 34.0 percent of toll revenues, despite Sanibel accounting for the least amount of systemwide transactions.

Table 4-1
Total Transactions and Revenue
Fiscal Year 2012

	Transactions			Revenue		
Facility	**FY 2011**	**% Change**	**FY 2012**	**FY 2011**	**% Change**	**FY 2012**
Midpoint Memorial Bridge	6,966,395	4.8	7,302,650	$12,262,048	4.9	$12,865,906
Cape Coral Bridge	7,315,500	-3.4	7,069,408	12,332,351	-2.0	12,086,478
Sanibel Causeway	2,918,285	2.1	2,978,219	12,447,914	3.1	12,833,459
Total	**17,200,180**	**0.9**	**17,350,277**	**37,042,313**	**2.0**	**37,785,844**

Figure 4-1
Percent Share of FY 2012 Transactions and Revenue by Facility



HISTORICAL TOLL TRANSACTIONS AND REVENUE

Systemwide

Table 4-2 presents a comprehensive historical record of systemwide transactions and revenues from FY 1988 through FY 2012. The data is also presented visually in Figure 4-2. As shown, transactions have remained relatively flat since FY 2009, the first full year in which tolls were collected in one direction only, and also the year in which the most recent recession was at its most severe point. While revenue declines in FY 2008 and FY 2009 may be partially attributable to the conversion to one-way tolling, the continued declines through FY 2010 and minimal recovery in FY 2011 and FY 2012 indicate a substantial impact resulting from the recession. Furthermore, transactions and revenue were both showing signs of stagnation and decline as far back as FY 2006, predating both the conversion to one-way tolling and the most recent recession. Some of those earlier declines are likely attributable to substantial toll increases on the Sanibel Causeway, but may also be partly indicative of the early precursors of economic problems in the region. The housing market in Lee County began faltering some time before the nation entered recession, with building permits declining by over 20 percent in FY 2006.

In FY 2012, both transactions and revenues grew for the second consecutive year since prior to both the most recent recession and the conversion to one-way tolling. This growth follows an inflection

point over 2009-2010 in which the rates of decline in both transactions and revenues slowed, foreshadowing the likelihood of a return to growth.

Table 4-2
Systemwide Toll Transactions and Revenue
FY 1988-2012

Fiscal Year	Toll-Paying Transactions	Percent Change	Total Revenue	Percent Change
1988	2,732,066	--	$4,811,558	--
1989	2,855,493	0.0	5,069,730	0.1
1990 [1]	14,457,854	406.3	13,975,140	175.7
1991	16,757,147	15.9	15,408,724	10.3
1992	17,639,750	5.3	14,992,775	-2.7
1993	18,511,508	4.9	15,743,853	5.0
1994	19,384,938	4.7	16,352,214	3.9
1995 [2]	19,216,585	-0.9	19,091,562	16.8
1996	19,699,530	2.5	19,817,736	3.8
1997	20,017,383	1.6	20,147,383	1.7
1998 [3, 4]	25,212,859	26.0	24,456,317	21.4
1999	28,000,708	11.1	27,064,956	10.7
2000	29,826,111	6.5	28,550,966	5.5
2001	31,516,014	5.7	30,052,651	5.3
2002	33,034,201	4.8	31,424,582	4.6
2003 [5]	34,468,398	4.3	30,948,684	-1.5
2004	36,074,005	4.7	33,146,862	7.1
2005 [6]	38,224,394	6.0	43,189,002	30.3
2006 [7]	38,267,295	0.1	40,852,877	-5.4
2007 [8,9]	37,724,435	-1.4	41,538,709	1.7
2008 [10]	19,724,229	-47.7	38,468,500	-7.4
2009	17,508,626	-11.2	37,542,070	-2.4
2010	17,178,058	-1.9	36,913,422	-1.7
2011	17,200,180	0.1	37,042,313	0.3
2012	17,350,277	0.9	37,785,844	2.0

(1) Tolling reinstated on Cape Coral Bridge November 1, 1989.
(2) Toll increase applied on Cape Coral Bridge November 1, 1994.
(3) Midpoint Memorial Bridge opened to traffic October 19, 1997.
(4) Variable pricing program introduced on Cape Coral and Midpoint bridges August 1998.
(5) Traffic restrictions imposed on Sanibel Causeway due to structural failures identified in January 2003.
(6) Toll increase applied on Sanibel Causeway November 1, 2004.
(7) Tolls reduced on Sanibel Causeway November 1, 2005.
(8) Construction completed on Sanibel Causeway and three new spans opened to traffic in September 2007.
(9) New violation enforcement system implemented on Midpoint Bridge (January 2007) and Sanibel Causeway (June 2007).
(10) One-way tolling introduced on the Midpoint and Cape Coral bridges on November 1, 2007.

Figure 4-2
Systemwide Annual Toll Transactions and Revenue
FY 1988-2012

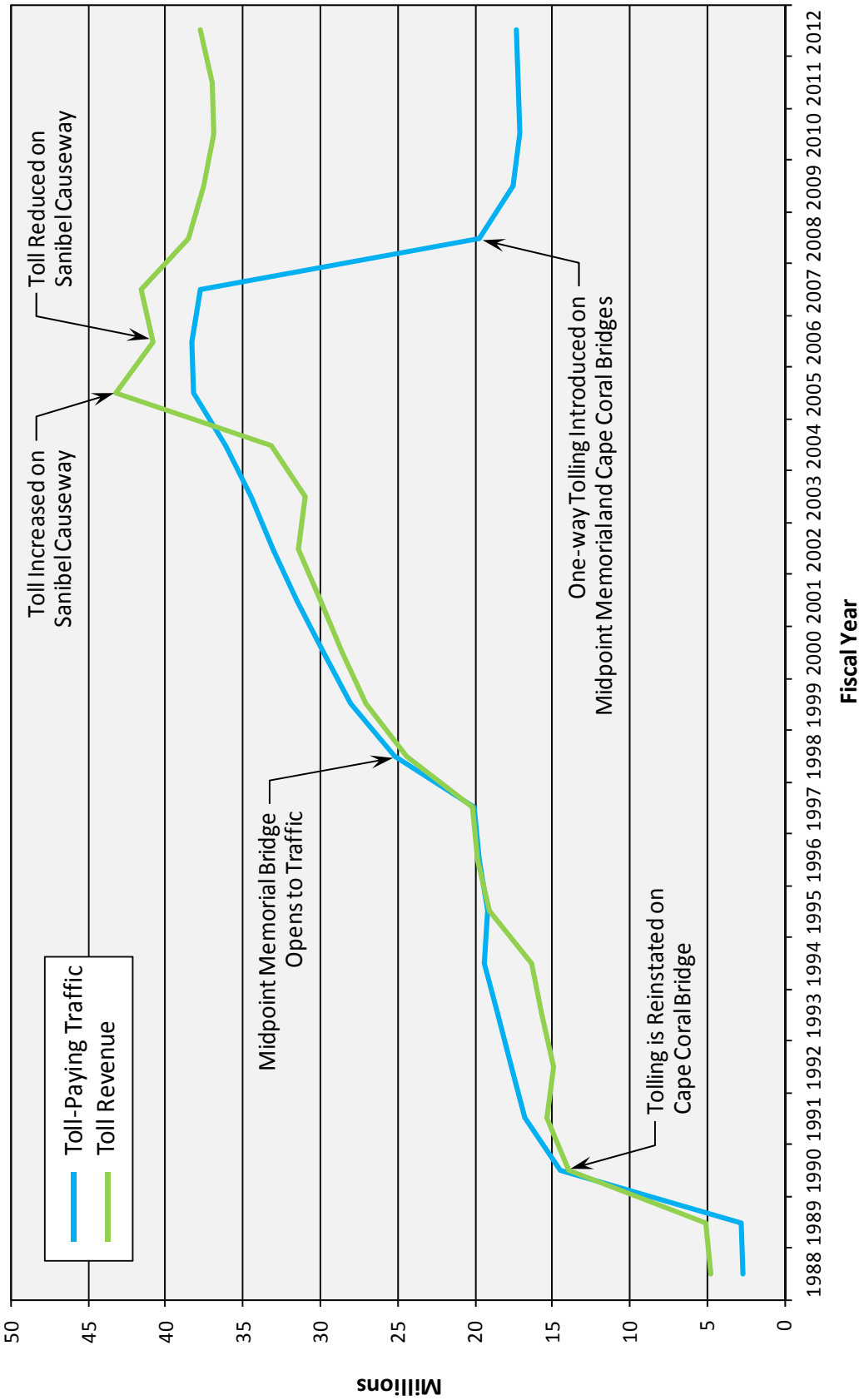
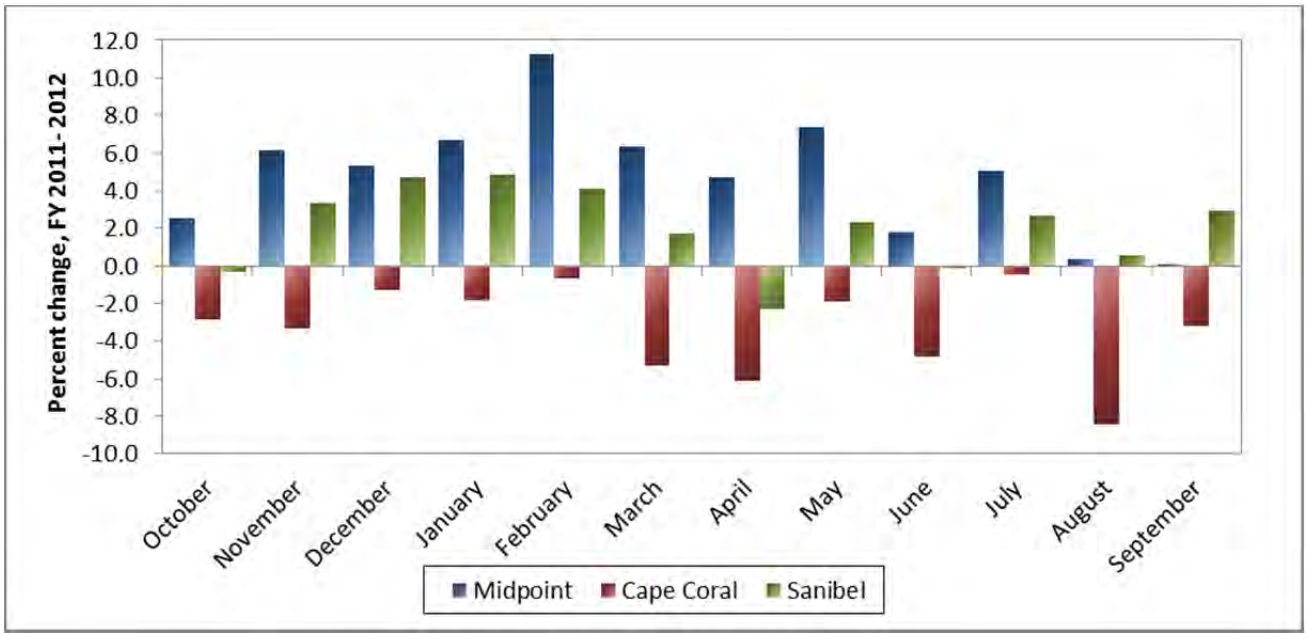


Figure 4-3 presents the percent change in transactions between FY 2011 and FY 2012 by month for each of the three facilities. As shown, the Midpoint Memorial Bridge experienced the largest monthly increases in transactions over the prior year with diminished growth during the second half of the year. The Sanibel Causeway also followed the same pattern with strong transaction growth during the first half of the year then slightly tapering off beginning in March. Transactions during the month of April declined by over 2.0 percent compared to FY 2011. The Cape Coral Bridge experienced the largest declines in all twelve months, including significant declines in months where one or both of the other toll facilities actually experienced growth.

Figure 4-3
Percent Change in Transactions between FY 2011 and FY 2012, by Month
Cape Coral Bridge, Midpoint Memorial Bridge, and Sanibel Causeway



Midpoint Memorial Bridge

Table 4-3 presents historical trends in transactions and revenue on the Midpoint Memorial Bridge from its opening in FY 1998 through FY 2012. As shown, historical transaction and revenue growth was consistently strong for the first seven years of the facility's operation, followed by a period of stagnation and loss in transaction volume. The trajectory of transaction and revenue growth shifted sharply beginning in FY 2006, which marked the first of five consecutive years of declining revenue. Transactions grew only 0.1 percent in FY 2006, and declined by 2.3 percent in FY 2007. The conversion to one-way tolling resulted in additional changes in motorist behavior, evident in FY 2008 and FY 2009, though these impacts were compounded by the economic recession which was occurring simultaneously. For additional detail on the impacts of the conversion to one-way tolling, please refer to the 2008 Annual Report.

In FY 2011 transactions once again declined, for the fifth consecutive year (preceding both the one-way tolling conversion and the national recession). Revenue, however, grew for the first time since FY 2006, albeit by a modest 0.6 percent. In FY 2012, transactions and revenue both increased significantly due in part to customers using the facility during ongoing construction on the Cape

Coral Bridge. As of FY 2012, the total revenue of $12.9 million remained 15.5 percent below the peak of $15.2 million in FY 2005.

Table 4-3
Midpoint Memorial Bridge Toll Transactions and Revenue
FY 1998-2012

Fiscal Year	Toll-Paying Transactions	Percent Change	Total Revenue	Percent Change
1998 [1, 2]	9,241,802	--	$7,858,703	--
1999	11,546,609	24.9	9,852,929	25.4
2000	12,890,554	11.6	10,846,020	10.1
2001	13,700,380	6.3	11,454,241	5.6
2002	14,880,050	8.6	12,536,421	9.4
2003	15,795,078	6.1	12,825,878	2.3
2004	16,578,145	5.0	13,810,222	7.7
2005	17,958,287	8.3	15,228,546	10.3
2006	17,981,689	0.1	15,194,485	-0.2
2007 [3]	17,571,604	-2.3	15,144,492	-0.3
2008 [4]	8,296,227	-52.8	13,125,459	-13.3
2009	7,096,132	-14.5	12,515,963	-4.6
2010	6,997,015	-1.4	12,191,049	-2.6
2011 [5]	6,966,395	-0.4	12,262,048	0.6
2012	7,302,650	4.8	12,865,906	4.9

(1) Midpoint Memorial Bridge opened to traffic October 19, 1997.
(2) Variable pricing program introduced on Cape Coral and Midpoint Bridges August 1998.
(3) New violation enforcement system implemented in January 2007.
(4) One-way tolling introduced on November 1, 2007.
(5) Toll plaza reconstruction, including construction of high-speed ORT lanes and demolition of unused eastbound lanes completed May 2011.

Table 4-4 shows the year-over-year change in transactions between FY 2011 and FY 2012, on a monthly basis. The table shows both total transactions (from audited reports) and average weekday transactions (derived from lane controller data). In general, both average weekday traffic and overall traffic show similar growth trends. The 11.3 percent increase in February can be attributed to an additional day in 2012 due to it being a leap year. Throughout FY 2012, the monthly year-over-year increase in transactions is likely due to customers using this facility during construction taking place on the Cape Coral Bridge through September 2012. This also explains the lower growth during the last two months of the fiscal year after construction was complete.

Table 4-4
Comparison of FY 2011 and FY 2012 Monthly Toll Paying Traffic
Midpoint Memorial Bridge

Month	Monthly Total Transactions			Average Weekday Transactions		
	FY 2011	% Change	FY 2012	FY 2011	% Change	FY 2012
October	580,793	2.5%	595,576	20,447	1.4%	20,743
November	556,517	6.2	590,962	19,174	8.4	20,782
December	597,033	5.3	628,922	20,480	5.1	21,526
January	584,578	6.7	623,726	20,678	4.2	21,547
February	564,677	11.3	628,389	21,516	6.6	22,934
March	631,556	6.4	671,957	21,805	6.3	23,173
April	589,458	4.7	617,299	20,964	6.4	22,302
May	582,410	7.4	625,477	20,120	5.7	21,270
June	563,309	1.8	573,313	19,935	3.1	20,543
July	562,942	5.1	591,458	19,706	4.0	20,493
August	586,643	0.4	588,929	19,974	1.9	20,347
September	566,479	0.0	566,642	20,068	1.9	20,444
Total	**6,966,395**	**4.8**	**7,302,650**	**20,400**	**4.6**	**21,340**

In Table 4-5 year-over-year transaction growth on the Midpoint Memorial Bridge is presented by method of payment, plan type, and vehicle class. Following three consecutive years of declines, LeeWay Unlimited program transactions declined once again, by 0.5 percent. This occurred amid an across-the-board increase in all other discount program transactions. Transactions in the full fare and variable discount LeeWay categories increased significantly by 21.9 percent and 19.6 percent, respectively, suggesting that former discount program subscribers were instead opting to pay full fares. In absolute terms, discount program traffic increased by 77,000 transactions and full fare LeeWay traffic grew by over 190,000. Cash transactions increased by 2.0 percent after a decline of 0.8 percent in FY 2011 and two prior years of declining transactions in this category. In total, every two-axle vehicle payment category experienced year-over-year increases after declines seen during the past three fiscal years.

Three-plus-axle vehicles paying cash grew by 4.9 percent in FY 2012, though this remains the lowest volume category shown in the table, representing approximately 0.5 percent of total volume. This increase in commercial traffic may be an indicator of the continuing economic recovery. Motorcycle transactions also grew by 13.1 percent while three-or-more-axle ETC transactions slightly decreased by 0.3 percent.

Due to the continuing shift away from cash and discount programs toward full-fare LeeWay transactions, overall market share among payment types is gradually changing. Full fare LeeWay (no variable discount) accounted for over 21 percent of transactions for the first time in FY 2012. Overall, full fare transactions gained approximately 0.9 percentage points of market share compared with FY 2011, matching a 0.9 percentage point decline in discount program market share. Again, this suggests that motorists were less able or willing to make the initial outlay of funds required to enroll in the discounted programs, or simply took fewer trips. Individual categories saw shifts of less

than ±1.0 percent, and cash remains the largest single payment category, accounting for 43.4 percent of transactions. These are consistent with the trends seen on the facility in FY 2011.

Table 4-5
Comparison of FY 2011 and FY 2012 Annual Traffic by Payment and Vehicle Type
Midpoint Memorial Bridge

Full Fare (2-Axle Vehicles)	FY 2011	% Market Share	FY 2012	% Market Share	Change	% Change	% Change in Market Share
Full Fare Cash	3,043,461	44.6%	3,104,483	43.4%	61,022	2.0%	-1.2%
Full Fare LeeWay	690,107	10.1%	841,294	11.8%	151,187	21.9	1.6%
Full Fare LeeWay Variable Discount	201,809	3.0%	241,326	3.4%	39,517	19.6	0.4%
Subtotal – Full Fare	***3,935,377***	***57.7%***	***4,187,103***	***58.5%***	***251,726***	***6.4***	***0.8%***
LeeWay Discounted Programs (2-Axle Vehicles)							
LeeWay Reduced Fare	1,854,027	27.2%	1,923,191	26.9%	69,164	3.7	-0.3%
LeeWay Reduced Fare Variable Discount	505,096	7.4%	515,441	7.2%	10,345	2.0	-0.2%
Subtotal – Reduced Fare	***2,359,123***	***34.6%***	***2,438,632***	***34.1%***	***79,509***	***3.4***	***-0.5%***
LeeWay Unlimited	530,602	7.8%	530,482	7.4%	-120	0.0	-0.4%
Subtotal – LeeWay Discounted Programs	***2,889,725***	***42.3%***	***2,969,114***	***41.5%***	***79,389***	***2.7***	***-0.8%***
All Vehicles							
Motorcycles	45,058	0.7%	50,965	0.7%	5,907	13.1	0.1%
3+ Axle Vehicles - Cash	36,010	0.5%	37,760	0.5%	1,750	4.9	0.0%
3+ Axle Vehicles - ETC	57,866	0.8%	57,708	0.8%	-158	-0.3	0.0%
Subtotal – 2-Axle Vehicles	***6,825,102***	***98.0%***	***7,156,217***	***98.0%***	***331,115***	***4.9***	***0.0%***
Subtotal – Toll-Paying Traffic	***6,964,036***		***7,302,650***		***338,614***	***4.9***	
Exempt/Non-Revenue	74,168		73,749		-419	-0.6	
Total	**7,038,204**		**7,376,399**		**338,195**	**4.8**	

As a complement to the previous table, Table 4-6 presents estimated revenues by vehicle class and payment category. The revenue estimates presented in Table 4-6 are calculated based on total transactions and average toll rates within each payment category. Additionally, revenues generated through the sales of discount programs have been included in this table, but they are not a factor when looking at actual transactions. These values are estimates only and, as such, do not match the audited revenue figures presented elsewhere in this report, including the preceding Tables 4-1, 4-2, and 4-3. Nevertheless, the sums of these estimates are within 1.7 percent of audited revenues and provide useful insight into the distribution of revenues on the Lee County toll facilities.

The change in revenue by payment and vehicle class closely follows the change in transactions identified above. While full fare transactions grew at a rate approximately equal to the decline in reduced fare transactions, the higher toll rate for full fare transactions led to a modest increase in total revenue. While Reduced Fare toll transactions increased by 3.4 percent, revenue from Reduced Fare subscriptions, a sizable portion of total Reduced Fare revenue, increased by only 0.4 percent. Additionally, while Unlimited Program traffic declined by 0.5 percent, revenue from program sales declined by 4.7 percent. It is important to note that program sales revenue accrues at the time the plan is purchased, which in many cases will correspond to transactions in the following fiscal year. Therefore, the continued decline in Unlimited Program sales revenue may indicate further declines in traffic in FY 2013, whereas Reduced Fare program sales revenue was nearly unchanged, which may suggest stabilization in that component of traffic.

Table 4-6
Comparison of FY 2011 and FY 2012 Estimated Annual Revenue by Payment and Vehicle Type
Midpoint Memorial Bridge

Full Fare (2-Axle Vehicles)	FY 2011	% Market Share	FY 2012	% Market Share	Change	% Change	% Change in Market Share
Full Fare Cash	$6,086,922	50.3%	$6,208,966	49.1%	$122,044	2.0%	-2.4%
Full Fare LeeWay	1,380,214	11.4%	1,682,588	13.3%	302,374	21.9	16.6%
Full Fare LeeWay Variable Discount	302,714	2.5%	361,989	2.9%	59,276	19.6	14.4%
Subtotal – Full Fare	***7,769,850***	***64.2%***	***8,253,543***	***65.3%***	***483,694***	***6.2***	***1.6%***
LeeWay Discounted Programs (2-Axle Vehicles)							
LeeWay Reduced Fare	1,854,027	15.3%	1,923,191	15.2%	69,164	3.7	-0.8%
LeeWay Reduced Fare Variable Discount	378,822	3.1%	386,581	3.1%	7,759	2.0	-2.4%
LeeWay Reduced Fare Program Sales	842,005	7.0%	845,174	6.7%	3,168	0.4	-4.0%
Subtotal – Reduced Fare	***3,074,854***	***25.4%***	***3,154,945***	***25.0%***	***80,091***	***2.6***	***-1.9%***
LeeWay Unlimited Program Sales	766,002	6.3%	730,290	5.8%	-35,712	-4.7	-8.8%
Subtotal – LeeWay Discounted Programs	***3,840,856***	***31.8%***	***3,885,235***	***30.7%***	***44,379***	***1.2***	***-3.2%***
All Vehicles							
Motorcycles	45,058	0.4%	50,965	0.4%	5,907	13.1	8.2%
3+ Axle Vehicles - Cash	176,832	1.5%	186,574	1.5%	9,742	5.5	0.9%
3+ Axle Vehicles - ETC	261,386	2.2%	267,051	2.1%	5,665	2.2	-2.3%
Subtotal – 2-Axle Vehicles	***11,610,706***	***96.0%***	***12,138,778***	***96.0%***	***528,073***	***4.5***	***0.0%***
Total	**12,093,982**		**12,643,368**		**549,386**	**4.5**	

Cape Coral Bridge

Historical transaction and revenue trend data for the Cape Coral Bridge is presented in Table 4-7. As shown, total FY 2012 toll transactions decreased by 3.4 percent from the previous year, while total revenue decreased by 2.0 percent. The decline in both transactions and revenue can be attributed to lane closures throughout the fiscal year due to construction on the facility. Overall, revenue of $12,086,478 in FY 2012 is 14.4 percent lower than the revenue peak of $14,124,429 generated in FY 2007.

Table 4-8 presents the year-over-year change in total monthly transactions and average weekday transactions, by month, for the two most recent fiscal years. Although the Midpoint Memorial Bridge and the Cape Coral Bridge both handle similar volumes of traffic and serve the same overall market, there were some differences in their respective performance over the course of FY 2012. While the Midpoint Memorial Bridge saw increases during all twelve months of the fiscal year, the Cape Coral Bridge transactions reflected the opposite with year-over-year declines in all twelve months. This was expected during FY 2012 since customers used the Midpoint Memorial Bridge while construction was taking place on the Cape Coral Bridge. The significant decline of 21.0 percent in average weekday transactions in May 2012 is due to lane closures in both directions during construction and also during a fatal accident on the bridge. The month of February 2012 included an extra day of transactions due to it being a leap year. As a result, it is difficult to identify a clear long-term trend in facility usage.

Table 4-7
Cape Coral Bridge Toll Transactions and Revenue
FY 1990-2012

Fiscal Year	Toll-Paying Transactions	Percent Change	Total Revenue	Percent Change
1990 [1]	11,485,172	--	$8,622,127	--
1991	13,750,424	0.2	9,995,504	0.2
1992	14,610,123	6.3	9,499,384	-5.0
1993	15,360,381	5.1	10,007,292	5.3
1994	16,193,397	5.4	10,610,187	6.0
1995 [2]	16,002,042	-1.2	13,332,077	25.7
1996	16,420,656	2.6	13,903,043	4.3
1997	16,728,651	1.9	14,206,099	2.2
1998 [3, 4]	12,671,536	-24.3	10,527,194	-25.9
1999	13,074,094	3.2	10,870,181	3.3
2000	13,536,062	3.5	11,261,177	3.6
2001	14,359,196	6.1	11,944,838	6.1
2002	14,747,594	2.7	12,070,099	1.0
2003	15,423,942	4.6	12,051,150	-0.2
2004	16,303,265	5.7	13,099,139	8.7
2005	17,355,653	6.5	14,094,534	7.6
2006	17,450,273	0.5	13,996,781	-0.7
2007	17,263,048	-1.1	14,124,429	0.9
2008 [5]	8,509,797	-50.7	12,844,287	-9.1
2009	7,505,751	-11.8	12,541,967	-2.4
2010	7,300,593	-2.7	12,288,494	-2.0
2011	7,315,500	0.2	12,332,351	0.4
2012 [6]	7,069,408	-3.4	12,086,478	-2.0

(1) Tolls reinstated on Cape Coral Bridge November 1, 1989.
(2) Toll increase applied on Cape Coral Bridge November 1, 1994.
(3) Midpoint Memorial Bridge opened on October 19, 1997.
(4) Variable pricing program introduced on Cape Coral and Midpoint Memorial Bridges in August 1998.
(5) One-way tolling introduced on November 1, 2007.
(6) Toll plaza reconstruction, including construction of high-speed ORT lanes and demolition of unused eastbound lanes completed September 2012.

Table 4-8
Comparison of FY 2011 and FY 2012 Monthly Toll-Paying Traffic
Cape Coral Bridge

	Monthly Total Transactions			Average Weekday Transactions		
Month	**FY 2011**	**% Change**	**FY 2012**	**FY 2011**	**% Change**	**FY 2012**
October	603,619	-2.8%	586,683	21,305	-3.4%	20,581
November	607,913	-3.3	587,940	21,688	-4.0	20,812
December	607,288	-1.3	599,488	20,987	-1.7	20,627
January	639,328	-1.8	627,808	22,659	-4.2	21,700
February	631,177	-0.7	627,021	24,283	-5.2	23,012
March	711,008	-5.3	673,621	24,471	-5.1	23,212
April	650,176	-6.1	610,592	23,332	-5.9	21,955
May	601,156	-1.9	589,916	20,741	-21.0	16,380
June	572,714	-4.8	545,209	20,249	-4.3	19,372
July	543,748	-0.4	541,351	18,724	-1.7	18,397
August	594,805	-8.4	544,895	19,669	-0.1	19,657
September	552,568	-3.2	534,884	19,696	-1.3	19,431
Total	**7,315,500**	**-3.4**	**7,069,408**	**21,465**	**-4.9**	**20,405**

A full breakdown of Cape Coral Bridge traffic by class and payment method is provided in Table 4-9. As indicated, the largest decline in any single category was 188,608 transactions, or 6.3 percent, for two-axle vehicles in the full fare cash category. Unlimited Program transactions saw the largest decline, decreasing by 60,687, or 8.6 percent. Reduced Fare transactions declined by 4.6 percent Overall, discount program transactions declined by 179,756 or 5.5 percent. Transactions in the full fare and variable discount categories increased significantly by 14.4 and 13.1 percent; however, the decline in cash transactions resulted in an overall decline of 1.7 percent in full fare transactions.

In terms of the relative distribution of various payment categories, no single category's share changed by more than 1.7 percent. In total, the movement toward more full fare transactions resulted in a 1.0 percent decline in the share of reduced fare transactions and an equal increase in full fare transactions. Among 2-axle vehicles, cash remained the most popular individual payment category, representing 40.7 percent of all traffic. In total, the market share for 2-axle vehicles remained the same as FY 2011. The decrease in all traffic categories can be attributed to construction on the facility during the year.

Table 4-9
Comparison of FY 2011 and FY 2012 Annual Traffic by Payment and Vehicle Type
Cape Coral Bridge

Full Fare (2-Axle Vehicles)	FY 2011	% Market Share	FY 2012	% Market Share	Change	% Change	% Change in Market Share
Full Fare Cash	3,012,402	42.0%	2,823,794	40.7%	-188,608	-6.3%	-1.2%
Full Fare LeeWay	679,362	9.5%	777,446	11.2%	98,084	14.4	1.7%
Full Fare LeeWay Variable Discount	201,218	2.8%	227,500	3.3%	26,282	13.1	0.5%
Subtotal – Full Fare	***3,892,982***	***54.2%***	***3,828,740***	***55.2%***	***-64,242***	***-1.7***	***1.0%***
LeeWay Discounted Programs (2-Axle Vehicles)							
LeeWay Reduced Fare	2,011,156	28.0%	1,921,194	27.7%	-89,962	-4.5	-0.3%
LeeWay Reduced Fare Variable Discount	574,934	8.0%	545,827	7.9%	-29,107	-5.1	-0.1%
Subtotal – Reduced Fare	***2,586,090***	***36.0%***	***2,467,021***	***35.6%***	***-119,069***	***-4.6***	***-0.4%***
LeeWay Unlimited	701,839	9.8%	641,152	9.2%	-60,687	-8.6	-0.5%
Subtotal – LeeWay Discounted Programs	***3,287,929***	***45.8%***	***3,108,173***	***44.8%***	***-179,756***	***-5.5***	***-1.0%***
All Vehicles							
Motorcycles	57,154	0.8%	54,355	0.8%	-2,799	-4.9	0.0%
3+ Axle Vehicles - Cash	35,001	0.5%	35,785	0.5%	784	2.2	0.0%
3+ Axle Vehicles - ETC	42,434	0.6%	42,355	0.6%	-79	-0.2	0.0%
Subtotal – 2-Axle Vehicles	***7,180,911***	***98.2%***	***6,936,913***	***98.1%***	***-243,998***	***-3.4***	***0.0%***
Subtotal – Toll-Paying Traffic	***7,315,500***		***7,069,408***		***-246,092***	***-3.4***	
Exempt/Non-Revenue	54,755		48,959		-5,796	-10.6	
Total	**7,370,255**		**7,118,367**		**-251,888**	**-3.4**	

Estimated revenues by payment type and vehicle class are presented in Table 4-10. The revenue estimates shown in this table are based upon the number of transactions, average toll rates, and total program sales revenues. As such, they do not precisely match audited revenue figures presented elsewhere in this report. Nonetheless, total estimated revenues are within 1.9 percent of audited revenues and provide valuable insight into the distribution of revenues on the Cape Coral Bridge.

In terms of comparative performance, overall bridge revenues were down by 2.3 percent in FY 2012. The largest decrease in terms of absolute revenue was full fare cash transactions as customers switch to the ETC method of payment, which generated $377,216less than FY 2011, a decline of 6.3 percent. The next largest decline in revenue was in Leeway Unlimited Program sales, which generated $35,712 (or 4.7 percent) less than in FY 2011. (This figure is identical to the Midpoint Memorial Bridge as the same Unlimited Program subscription covers both bridges). Total LeeWay Reduced Fare revenue declined by $108,624, or 3.3 percent. This decline was primarily driven by fewer toll transactions, as program sales revenue increased by 0.4 percent. Full fare LeeWay and full fare LeeWay variable discount programs posted gains of 14.4 and 13.1 percent, respectively, accounting for $235,591 in revenue growth. Revenue also increased in the three-or-more-axle vehicles cash and ETC categories. In light of the continued decline in Unlimited Program sales revenue, which is accrued to the year in which the subscription is sold, it is likely that Unlimited Program traffic will continue to decline in FY 2013. Reduced Fare program sales, however, increased by 0.4 percent and may indicate further growth in transactions in that category for FY 2013.

Table 4-10
Comparison of FY 2011 and FY 2012 Estimated Annual Revenue by Payment and Vehicle Type
Cape Coral Bridge

Full Fare (2-Axle Vehicles)	FY 2011	% Market Share	FY 2012	% Market Share	Change	% Change	% Change in Market Share
Full Fare Cash	$6,024,804	49.6%	$5,647,588	47.6%	-$377,216	-6.3%	-4.0%
Full Fare LeeWay	1,358,724	11.2%	1,554,892	13.1%	196,168	14.4	17.2%
Full Fare LeeWay Variable Discount	301,827	2.5%	341,250	2.9%	39,423	13.1	15.8%
Subtotal – Full Fare	***7,685,355***	***63.3%***	***7,543,730***	***63.6%***	***-141,625***	***-1.8***	***0.5%***
LeeWay Discounted Programs (2-Axle Vehicles)							
LeeWay Reduced Fare	2,011,156	16.6%	1,921,194	16.2%	-89,962	-4.5	-2.2%
LeeWay Reduced Fare Variable Discount	431,201	3.6%	409,370	3.5%	-21,830	-5.1	-2.8%
LeeWay Reduced Fare Program Sales	842,005	6.9%	845,174	7.1%	3,168	0.4	2.8%
Subtotal – Reduced Fare	***3,284,362***	***27.1%***	***3,175,738***	***26.8%***	***-108,624***	***-3.3***	***-1.0%***
LeeWay Unlimited Program Sales	766,002	6.3%	730,290	6.2%	-35,712	-4.7	-2.4%
Subtotal – LeeWay Discounted Programs	***4,050,364***	***33.4%***	***3,906,028***	***32.9%***	***-144,336***	***-3.6***	***-1.3%***
All Vehicles							
Motorcycles	57,154	0.5%	54,355	0.5%	-2,799	-4.9	-2.6%
3+ Axle Vehicles - Cash	169,434	1.4%	174,180	1.5%	4,746	2.8	5.2%
3+ Axle Vehicles - ETC	176,936	1.5%	178,731	1.5%	1,795	1.0	3.4%
Subtotal – 2-Axle Vehicles	***11,735,719***	***96.7%***	***11,449,758***	***96.6%***	***-285,961***	***-2.4***	***-0.1%***
Total	**12,139,243**		**11,857,024**	**100.0%**	**-282,219**	**-2.3**	

Sanibel Causeway

Table 4-11 presents the historical transaction and revenue trends for the Sanibel Causeway from FY 1988 to the current reporting year. In FY 2012, total transactions increased by 2.1 percent when compared to FY 2011 levels. Revenues increased by 3.1 percent from FY 2011 after no growth in the prior year. Transactions have largely stabilized after substantial declines in the early 2000s with the first year of significant growth since FY 2008. The 2,978,219 transactions recorded in FY 2012 were 13.8 percent below the peak of 3,456,338 transactions in FY 2001. It is worth noting that in November 2004, tolls were doubled from $3 to $6, resulting in a substantial decline in traffic. Such a large increase in tolls can have long-lasting effects on travel decisions. However, when considering the historical trends, wherein transactions have declined for six of the past ten years dating to FY 2002, it is likely that economic factors, and lack of growth in travel demand to and from Sanibel Island, are also significant contributing factors.

Monthly transaction figures for the Sanibel Causeway are presented in Table 4-12. In FY 2012, the monthly traffic totals reflected consistent and stable growth patterns similar to the prior year. In both total monthly transactions and average weekday transactions, growth was positive in nine of twelve months. All months during the fiscal year saw positive growth except for October 2011, April 2012 and June 2012. The month of February 2012 included an extra day of transactions due to it being a leap year.

Table 4-11
Sanibel Causeway Toll Transactions and Revenue
FY 1988-2012

Fiscal Year	Toll-Paying Transactions	Percent Change	Total Revenue	Percent Change
1988	2,732,066	--	$4,811,558	--
1989	2,855,493	0.0	5,069,730	0.1
1990	2,972,682	4.1	5,353,013	5.6
1991	3,006,723	1.1	5,413,220	1.1
1992	3,029,627	0.8	5,493,391	1.5
1993	3,151,127	4.0	5,736,561	4.4
1994	3,191,541	1.3	5,742,027	0.1
1995	3,214,543	0.7	5,759,485	0.3
1996	3,278,874	2.0	5,914,693	2.7
1997	3,288,732	0.3	5,941,284	0.4
1998	3,299,521	0.3	6,070,420	2.2
1999	3,380,005	2.4	6,341,846	4.5
2000	3,399,495	0.6	6,443,769	1.6
2001	3,456,438	1.7	6,653,572	3.3
2002	3,406,557	-1.4	6,818,062	2.5
2003 [1]	3,249,378	-4.6	6,071,656	-10.9
2004	3,192,595	-1.7	6,237,501	2.7
2005 [2]	2,910,454	-8.8	13,865,922	122.3
2006 [3]	2,835,333	-2.6	11,661,611	-15.9
2007 [4]	2,889,783	1.9	12,269,788	5.2
2008 [5]	2,918,205	1.0	12,498,753	1.9
2009	2,906,743	-0.4	12,484,140	-0.1
2010	2,880,450	-0.9	12,433,879	-0.4
2011	2,918,285	1.3	12,447,914	0.1
2012	2,978,219	2.1	12,833,459	3.1

(1) Traffic restrictions imposed on Sanibel Causeway due to structural failures identified in January 2003.
(2) Toll increase applied on Sanibel Causeway November 1, 2004 and transactions impacted by several major hurricanes.
(3) Tolls reduced on Sanibel Causeway November 1, 2005.
(4) New violation enforcement system implemented in June 2007.
(5) Construction completed on Sanibel Causeway and three new spans opened to traffic in September 2007.

Table 4-12
Comparison of FY 2011 and FY 2012 Monthly Toll-Paying Traffic
Sanibel Causeway

	Monthly Total Transactions			Average Weekday Transactions		
Month	**FY 2011**	**% Change**	**FY 2012**	**FY 2011**	**% Change**	**FY 2012**
October	212,135	-0.3%	211,527	7,035	-0.8%	6,981
November	231,035	3.4	238,785	7,839	2.4	8,027
December	234,469	4.7	245,519	7,902	4.3	8,239
January	257,741	4.9	270,321	8,623	4.1	8,973
February	279,624	4.1	291,183	10,138	1.4	10,280
March	332,964	1.8	338,852	10,659	2.7	10,943
April	288,098	-2.2	281,618	9,506	-0.3	9,476
May	238,803	2.4	244,486	7,578	0.8	7,637
June	220,635	-0.1	220,392	7,199	-0.3	7,177
July	233,356	2.7	239,574	7,333	2.8	7,541
August	206,977	0.6	208,134	6,586	2.5	6,752
September	182,448	2.9	187,828	6,085	2.8	6,257
Total	**2,918,285**	**2.1**	**2,978,219**	**8,027**	**2.1**	**8,193**

Table 4-13 presents a breakdown of the current and previous fiscal years' traffic by method of payment and vehicle class for the Sanibel Causeway. As indicated, the largest growth in terms of absolute volume occurred in LeeWay full fare transactions, with 32,692 or 11.6 percent more transactions than in FY 2011. This is consistent with the past two fiscal years, in which LeeWay full fare transactions grew even as most other categories experienced decline. The Cash and LeeWay reduced fare categories also grew, by 8,604 (0.8 percent) and 20,780 (2.8 percent), respectively. The only two-axle vehicle payment category to decline was Unlimited Program transactions, which lost a modest 7,293 (1.0 percent) transactions compared with FY 2011. All three-or-more-axle categories experienced increases in transactions, with the highest in ETC transactions of 2,140 or 6.4 percent. Every category improved upon the previous year's performance, which is consistent with the trend seen in the prior year. Like the Cape Coral and Midpoint Memorial Bridges, Unlimited Program transactions declined, but similar to Midpoint Memorial Bridge the Sanibel Causeway saw an increase in overall discount program transactions. Both the Midpoint Memorial Bridge and Sanibel Causeway also reported an increase in cash transactions whereas these transactions declined on the Cape Coral Bridge. All three facilities saw full fare transactions outpacing discounted transactions.

In terms of the distribution of transactions across the various payment categories, there were no major shifts in market share. The biggest year-over-year change was in LeeWay full fare transactions, which saw a 0.9 percentage point increase in market share. Historically, Sanibel Causeway has been the only one of the three Lee County facilities in which discount program transactions account for approximately 50 percent of total traffic. That remained the case in FY 2012, although full fare transactions gained 0.5 percentage points in market share and now stand at 49.0 percent of total transactions.

Table 4-13
Comparison of FY 2011 and FY 2012 Annual Traffic by Payment and Vehicle Type
Sanibel Causeway

Full Fare (2-Axle Vehicles)	FY 2011	% Market Share	FY 2012	% Market Share	Change	% Change	% Change in Market Share
Full Fare Cash	1,115,488	39.1%	1,124,092	38.7%	8,604	0.8%	-0.4%
Full Fare LeeWay	281,276	9.9%	313,968	10.8%	32,692	11.6	0.9%
Full Fare LeeWay Variable Discount [1]	0	0.0%	0	0.0%	0	0.0	0.0%
Subtotal – Full Fare	***1,396,764***	***49.0%***	***1,438,060***	***49.5%***	***41,296***	***3.0***	***0.5%***
LeeWay Discounted Programs (2-Axle Vehicles)							
LeeWay Reduced Fare	734,455	25.7%	755,235	26.0%	20,780	2.8	0.2%
LeeWay Reduced Fare Variable Discount [1]	0	0.0%	0	0.0%	0	0.0	0.0%
Subtotal – Reduced Fare	***734,455***	***25.7%***	***755,235***	***26.0%***	***20,780***	***2.8***	***0.2%***
LeeWay Unlimited	721,550	25.3%	714,257	24.6%	-7,293	-1.0	-0.7%
Subtotal – LeeWay Discounted Programs	***1,456,005***	***51.0%***	***1,469,492***	***50.5%***	***13,487***	***0.9***	***-0.5%***
All Vehicles							
Motorcycles	15,488	0.5%	17,424	0.6%	1,936	12.5	0.1%
3+ Axle Vehicles - Cash	16,536	0.6%	17,611	0.6%	1,075	6.5	0.0%
3+ Axle Vehicles - ETC	33,492	1.2%	35,632	1.2%	2,140	6.4	0.0%
Subtotal – 2-Axle Vehicles	***2,852,769***	***97.8%***	***2,907,552***	***97.6%***	***54,783***	***1.9***	***-0.1%***
Subtotal – Toll-Paying Traffic	***2,918,285***		***2,978,219***		***59,934***	***2.1***	
Exempt/Non-Revenue	16,958		15,853		-1,105	-6.5	
Total	**2,935,243**		**2,994,072**		**58,829**	**2.0**	

[1] Variable discount is not offered on the Sanibel Causeway.

Table 4-14 presents estimated annual toll revenues by payment category for the Sanibel Causeway over the past two fiscal years. As with the other two Lee County facilities, these revenues are estimates only and may not agree with audited values presented elsewhere in the report. As shown, the changes in revenue by vehicle class and payment type mirror changes observed in transactions on the Causeway, with gains in revenue in the LeeWay full fare and reduced fare categories, and reductions in Unlimited Program transactions. Notably, while Unlimited Program transactions declined 1.0 percent, program sales revenues only declined 0.2 percent. In previous years, program sales declined by more than transactions, suggesting that infrequent users were opting out of the program. As that trend has now reversed, and given that program sales tend to be a leading indicator, it appears as though unlimited program transactions may have reached a bottom, with the potential to stabilize or begin growing again.

Table 4-14
Comparison of FY 2011 and FY 2012 Estimated Annual Revenue by Payment and Vehicle Type
Sanibel Causeway

Full Fare (2-Axle Vehicles)	FY 2011	% Market Share	FY 2012	% Market Share	Change	% Change	% Change in Market Share
Full Fare Cash	$6,692,928	53.2%	$6,744,552	52.2%	$51,624	0.8%	-1.9%
Full Fare LeeWay	1,687,656	13.4%	1,883,808	14.6%	196,152	11.6	8.7%
Subtotal – Full Fare	***8,380,584***	***66.7%***	***8,628,360***	***66.8%***	***247,776***	***3.0***	***0.2%***
LeeWay Discounted Programs (2-Axle Vehicles)							
LeeWay Reduced Fare	1,468,910	11.7%	1,510,470	11.7%	41,560	2.8	0.1%
LeeWay Reduced Fare Program Sales	914,296	7.3%	937,186	7.3%	22,890	2.5	-0.2%
LeeWay Unlimited Program Sales	1,335,020	10.6%	1,332,774	10.3%	-2,246	-0.2	-2.8%
Subtotal – LeeWay Discounted Programs	***3,718,226***	***29.6%***	***3,780,430***	***29.3%***	***62,204***	***1.7***	***-1.0%***
All Vehicles				0			
Motorcycles	30,976	0.2%	34,848	0.3%	3,872	12.5	9.5%
3+ Axle Vehicles - Cash	173,280	1.4%	183,333	1.4%	10,053	5.8	3.0%
3+ Axle Vehicles - ETC	268,333	2.1%	286,388	2.2%	18,055	6.7	3.9%
Subtotal – 2-Axle Vehicles	***12,098,810***	***96.2%***	***12,408,790***	***96.1%***	***309,980***	***2.6***	***-0.2%***
Total	**12,571,399**		**12,913,359**		**341,960**	**2.7**	

COMPARATIVE PERFORMANCE

Other Florida Toll Facilities

To provide additional context in analyzing the performance of the Lee County toll facilities, this section discusses performance on other toll roads and bridges throughout Florida. Table 4-15 presents the 2011 and 2012 transaction and revenue data for a number of such facilities. It is important to note the facilities shown in the table operate on a different fiscal year. All of the facilities shown are owned or operated by either Florida's Turnpike Enterprise or the Florida Department of Transportation, and run on a fiscal year of July through June as opposed to the Lee County fiscal year which runs from October to September. Given the differences in accounting calendars and the fluid nature of the economy during this reporting period, the operating results shown in Table 4-15 are not directly comparable to the Lee County performance. In addition, a number of physical and operational changes may have occurred on these facilities over the past two years, and it is therefore difficult to control for all possible variables affecting traffic and revenue. Nevertheless, the comparative performance data provides an additional lens through which to analyze performance on Lee County's three toll facilities.

A review of the available data indicates continued volatility, though a trend toward recovery, throughout the State of Florida, with the Lee County facilities comparable to the growth seen on other facilities. Of the 13 facilities shown in the table, three saw a decline in transactions exceeding 1.0 percent, while only four saw increases of 1.0 percent or more. In terms of revenue, four facilities experienced decline, seven experienced increases exceeding 1.0 percent including Lee County, and only one saw an increase in excess of 5.0 percent. The discrepancy between transaction and revenue performance can be attributable to toll rate increases on a number of facilities over the past year.

Averaging the year-over-year percent change in transactions and revenue on all facilities in the table, on average transactions increased by 0.8 percent while revenue increased by 1.6 percent, indicating that Lee County performed better than its statewide peers in FY 2012, ranking fifth out of thirteen in percent change in transactions, and ranking sixth in revenue.

Table 4-15
Comparative Performance
Selected Florida Toll Facilities

Toll Facility	County	Length (miles)	Operator	Transactions 2011	Transactions % Change	Transactions 2012	Revenue 2011	Revenue % Change	Revenue 2012
Alligator Alley	Collier/Broward	78	FDOT	7,471,000	0.7	7,524,000	$19,737,000	-0.5	$19,647,000
Beachline East Expwy	Orange/Brevard	15	FDOT	17,967,000	-4.5	17,167,000	4,584,000	-3.3	4,432,000
Beachline West Expwy	Orange	8	FDOT	24,998,179	2.6	25,641,208	14,986,890	4.8	15,707,823
Garcon Point Bridge	Santa Rosa	3.5	FDOT	1,251,000	3.1	1,290,000	4,276,000	7.4	4,592,000
Lee County Toll System	**Lee**	**3.5**	**Lee County**	**17,200,180**	**0.9**	**17,350,277**	**37,042,313**	**2.0**	**37,785,844**
Mid-Bay Bridge	Okaloosa	3.5	FDOT	6,489,000	0.5	6,521,000	15,472,000	1.5	15,699,000
Pinellas Bayway	Pinellas	15.2	FDOT	9,225,000	-1.0	9,135,000	3,605,000	-1.9	3,535,000
Polk Pkwy	Polk	25	FTE	26,607,899	3.0	27,394,617	21,775,541	3.9	22,614,726
Sawgrass Expwy	Broward	23	FTE	70,583,814	2.3	72,178,681	50,314,133	2.1	51,360,305
Seminole Expwy	Osceola/Orange/Seminole	55	FTE	31,117,002	0.5	31,265,315	30,762,844	2.3	31,457,245
Suncoast Pkwy	Hillsborough/Pasco/Hernando	42	FTE	28,151,260	-2.0	27,592,360	21,232,784	-2.2	20,768,736
Sunshine Skyway	Pinellas/Manatee	17.4	FDOT	18,005,000	0.8	18,150,000	16,427,000	0.8	16,555,000
Veterans Expwy	Hillsborough	15	FTE	50,932,999	0.7	51,288,330	32,466,407	0.9	32,757,522

Source: Florida's Turnpike Enterprise Traffic Engineer's Annual Report, 2012.

Caloosahatchee River Screen Line

While the previous analysis compared traffic growth on the Lee County toll bridges against other toll facilities in Florida, it is also important to determine whether or not these declines are disproportionate in terms of overall travel demand within the Lee County region. This section examines traffic across the Cape Coral and Midpoint Memorial Bridges in comparison with traffic over two other toll-free bridges that cross the Caloosahatchee River. Collectively, the four crossings – two tolled and two toll-free – form a screen line that captures the majority of movements between Cape Coral and Fort Myers, the two principal cities in the metropolitan area. The change in traffic between FY 2011 and FY 2012 was compared on the tolled versus the toll-free crossings. Sanibel Causeway is not addressed in this analysis because, as the only link between mainland Florida and Sanibel and Captiva Islands, no similar comparison can be made between the facility and a competing toll-free route. This may explain in part the facility's comparatively stronger performance over the past several years.

Table 4-16 compares the year-over-year change in tolled transactions on the two Lee County toll facilities that cross the Caloosahatchee River, as well as the change in total traffic across the two toll-free crossings. While in previous years this analysis looked at the total distribution of traffic among the four bridges, we are no longer able to make this screen line comparison due to the lack of two-way traffic data on the Midpoint Memorial and Cape Coral Bridges. Should this data become available again in the future, the market share approach will be resumed. In the meantime, year-over-year growth serves as an adequate proxy. Data for the toll-free crossings was derived from Lee County Department of Transportation Annual Count Reports for calendar years 2011 and 2012, based on permanent count stations positioned adjacent to each crossing. Each annual count report includes the calendar year AADT at each location, as well as monthly factors. These were used to estimate a fiscal year AADT, which is shown in Table 4-16.

As shown in Table 4-16, the tolled bridges outperformed the toll-free crossings in terms of year-over-year traffic growth, which is the same trend seen last year in FY 2011. The Midpoint Memorial Bridge was the only facility to see an increase in traffic in FY 2012 compared with FY 2011. The Caloosahatchee Bridge and Cape Coral Bridge experienced the largest declines, a year-over-year

drop of 3.4 percent. While the tolled facilities lost considerable amounts of traffic since FY 2008, the toll-free facilities saw only modest change, meaning that the most recent year may be as much an indication of a new equilibrium as a recovery based on the Midpoint Memorial Bridge performance. As previously mentioned, the Cape Coral Bridge was under construction during FY 2012 so it is difficult to determine if this facility will see the beginning signs of recovery going forward.

Table 4-16
Caloosahatchee River Bridge Crossing Traffic Growth
FY 2011-2012

	Annual Average Daily Traffic		
Facility	**FY 2011**	**FY 2012**	**Percent Change**
Edison Bridge - U.S. 41 Business [1]	25,816	25,254	-2.2
Caloosahatchee Bridge - U.S. 41 [1]	39,808	38,473	-3.4
Midpoint Memorial Bridge - Tolled Direction [2]	19,086	20,007	4.8
Cape Coral Bridge - Tolled Direction [2]	20,042	19,368	-3.4

(1) Fiscal Year AADT estimated based on calendar year AADTs and monthly factors. Source: Traffic Count Reports, 2011, and 2012, Lee County DOT.
(2) Tolled direction only.

AVERAGE TOLL

While total transactions play a significant role in gross toll revenue, a shift in the distribution of vehicles types can also have an impact on gross toll revenues, as larger vehicles are assessed higher toll rates. This is addressed in some detail earlier in this chapter, such as tables 4-5, 4-6, 4-9, 4-10, 4-13, and 4-14. The combined effect of shifting payment method distribution and vehicle type distribution can be viewed concisely by examining the average tolls on each of the Lee County facilities. Table 4-17 presents the historical average toll rates for Fiscal Years 1998 through 2012 for each of the three toll bridges. As indicated, changes have been minimal over the last three years. The most obvious and most significant driver of average toll is the base toll rate itself, which last changed on the Cape Coral and Midpoint Memorial Bridges in FY 2008, and on the Sanibel Causeway in FY 2006.

Systemwide, the average toll rate increased from $2.15 to $2.18 in FY 2012. This figure includes revenue from transactions, as well as program sales. Among the three individual facilities, the largest change over the most recent fiscal year was a 4 cent increase in the average toll on the Sanibel Causeway, representing a 0.9 percent increase. This change in average toll was likely caused by the significant increase in full fare payments in addition to large increases in three-or-more-axle vehicles on the facility and also the decline in Unlimited Pass usage.

Table 4-17
Historical Average Toll
FY 1998-2012

Fiscal Year	Midpoint Memorial Bridge	Cape Coral Bridge	Sanibel Causeway	Systemwide
1998 [1]	$0.85	$0.83	$1.84	$0.97
1999	0.85	0.83	1.88	0.97
2000	0.84	0.83	1.90	0.96
2001	0.84	0.83	1.92	0.95
2002	0.84	0.82	2.00	0.95
2003	0.81	0.78	1.87	0.90
2004 [2]	0.83	0.80	1.95	0.92
2005 [3]	0.85	0.81	4.76	1.13
2006 [4]	0.84	0.80	4.11	1.07
2007	0.86	0.82	4.25	1.10
2008 [5]	1.58	1.51	4.28	1.95
2009	1.76	1.67	4.29	2.14
2010	1.74	1.68	4.32	2.15
2011	1.76	1.69	4.27	2.15
2012	1.76	1.71	4.31	2.18

(1) Variable pricing program introduced on Cape Coral and Midpoint Memorial Bridges August 1998.
(2) Traffic restrictions imposed on Sanibel Causeway January 2003.
(3) Toll increase applied on Sanibel Causeway November 2004.
(4) Tolls reduced on Sanibel Causeway November 2005.
(5) Toll rates doubled on November 1, 2007 on Cape Coral and Midpoint Bridges, in conjunction with the conversion to one-way tolling.

PROGRAM SALES

Table 4-18 provides a detailed accounting of the sale of discount program subscriptions by facility and plan type. In total, the sale of discount programs represents a significant share of total toll revenue collected by Lee County. As indicated, a total of 68,406 discount program subscriptions were sold in FY 2012, generating $5,420,887 in revenue, or 14.3 percent of the total systemwide toll revenues. This represents a 0.3 percent reduction in program sales and a 0.8 percent decline in revenue over FY 2011, when 68,173 program sales generated $5,465,331 in gross revenue. It is also notable that the share of total systemwide revenue attributable to program sales declined, from 14.8 percent in FY 2011, reflecting the shift toward more full fare transactions, as observed earlier in this chapter.

The Cape Coral/Midpoint Memorial Annual Reduced Fare discount program accounted for 55.4 percent of all programs sold in FY 2012. The Sanibel Annual Reduced program, at 12.4 percent, was the only other program to account for more than 10 percent of programs sold. With respect to program sales revenues, 67.3 percent of all program revenue was generated by just three program types: the Cape/Midpoint Annual Reduced Fare (25.5 percent), the Cape/Midpoint Annual Unlimited (22.3 percent), and the Sanibel Annual Unlimited (19.5 percent).

Table 4-18
Discount Program Sales and Revenue
FY 2012

Program Description	Quantity	Revenue
Sanibel Annual Unlimited	2,857	$1,055,558
Sanibel Semiannual Nov thru Apr Unlimited	77	22,050
Sanibel Semiannual May thru Oct Unlimited	97	23,575
Sanibel Annual Reduced	8,455	528,865
Sanibel Semiannual Nov thru Apr Reduced	2,302	111,975
Sanibel Semiannual May thru Oct Reduced	637	30,950
Cape/Midpoint Annual Unlimited	4,126	1,209,609
Cape/Midpoint Semiannual Nov thru Apr Unlimited	192	34,544
Cape/Midpoint Semiannual May thru Oct Unlimited	264	44,992
Cape/Midpoint Annual Reduced	37,871	1,384,560
Cape/Midpoint Semiannual Nov thru Apr Reduced	3,094	70,440
Cape/Midpoint Semiannual May thru Oct Reduced	3,446	78,636
Sanibel and Cape/Midpoint Annual Unlimited	428	300,586
Sanibel and Cape/Midpoint Semiannual Nov thru April Unlimited	12	5,754
Sanibel and Cape/Midpoint Semiannual May thru Oct Unlimited	16	7,098
Sanibel and Cape/Midpoint Annual Reduced	3,581	360,751
Sanibel and Cape/Midpoint Semiannual Nov thru April Reduced	416	29,637
Sanibel and Cape/Midpoint Semiannual May thru Oct Reduced	275	19,610
Annual Sanibel Reduced and Cape/Midpoint Unlimited	95	35,144
Semiannual Nov thru April Sanibel Reduced and Cape/Midpoint Unlimited	1	250
Semiannual May thru Oct Sanibel Reduced and Cape/Midpoint Unlimited	5	1,250
Annual Sanibel Unlimited and Cape/Midpoint Reduced	152	62,986
Semiannual Nov thru April Sanibel Unlimited and Cape/Midpoint Reduced	1	324
Semiannual May thru Oct Sanibel Unlimited and Cape/Midpoint Reduced	6	1,744
Total	**68,406**	**$5,420,887**

The data in Table 4-18 is consistent with previous years in that there is little variation in terms of semiannual program participation in the first and second halves of the year on the Cape Coral and Midpoint Memorial Bridges. Semiannual subscriptions for the first half of the year (November-April) accounted for 47.0 percent of total sales, compared with 53.0 percent for the second half (May-October). The opposite is true for the Sanibel Causeway, where a high peak in the spring means that approximately 76.4 percent of all semiannual subscriptions were for the first half of the year.

In Table 4-19, the comprehensive list of all program type sales listed in Table 4-18 is condensed into five categories. The Cape Coral/Midpoint Unlimited category includes variations on that plan type, including annual and semiannual plans. The Cape Coral/Midpoint Reduced Fare category similarly condenses all annual and semiannual variants into a single category. The same is true of the two Sanibel categories. Finally, a fifth category includes combination plans that cover all three facilities (Reduced Fare, Unlimited, or a combination of the two).

Table 4-19
Summary of Program Sales
FY 2012

Program	Total Count	Percent of Total
Cape Coral/Midpoint Unlimited	4,582	6.7
Cape Coral/Midpoint Reduced Fare	44,411	64.9
Sanibel Unlimited	3,031	4.4
Sanibel Reduced Fare	11,394	16.7
Combination	4,988	7.3
Total	**68,406**	**100.0**

TRANSPONDER SALES

Additional revenues are generated directly through the sale of LeeWay transponders. Figure 4-4 and Figure 4-5 show monthly transponder revenue and transponders sold in FY 2012 compared to FY 2011. During FY 2012, Lee County generated additional gross revenues of $156,741 through the sale of 13,196 transponders. Transponder sales peaked in October with 1,644 transponders sold. Transponder sales were 14.4 percent higher in FY 2012 as compared with the previous year, while revenue was 10.5 percent higher. In FY 2010, transponder sales increased while revenue decreased, due to a shift in customer preferences from traditional replaceable battery transponders, which cost $32, to mini-transponders, which cost $10. Over the past two fiscal years the transponder sales and revenues have both increased. The fact that transponder sales and revenues are now trending in the same direction indicates that the distribution of sales between the replaceable-battery units and the mini-transponders has remained stable. Mini-transponders were first offered in April 2009. As of August 1, 2012 Lee County no longer offers replaceable battery units and instead offers customers a battery free hard case transponder.

Figure 4-4
Comparison of FY 2011 and FY 2012
Systemwide Monthly Transponder Revenues

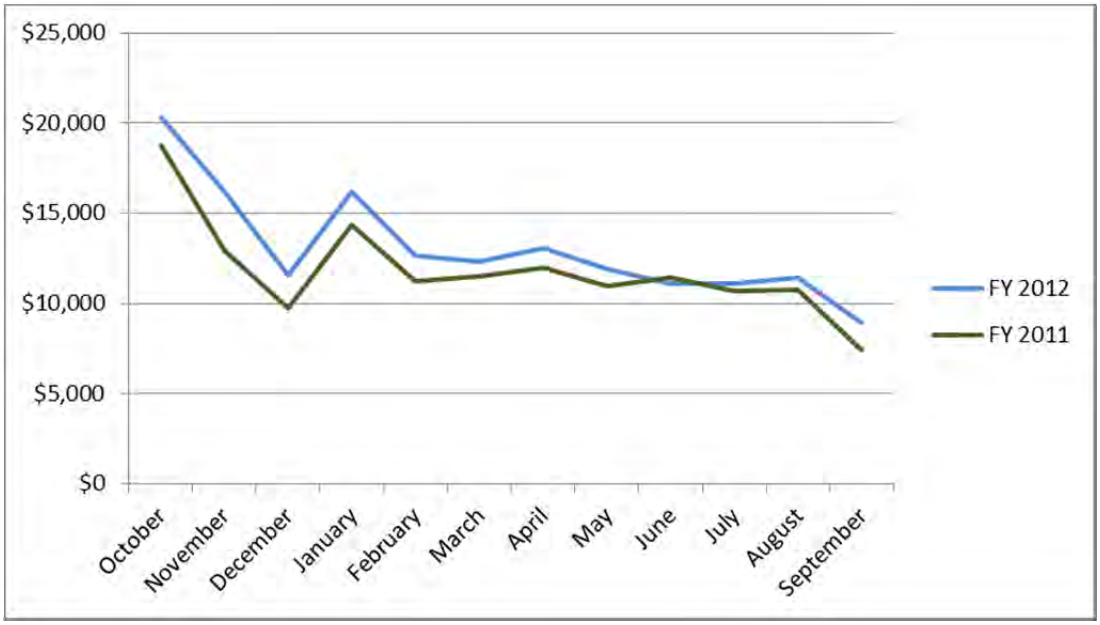
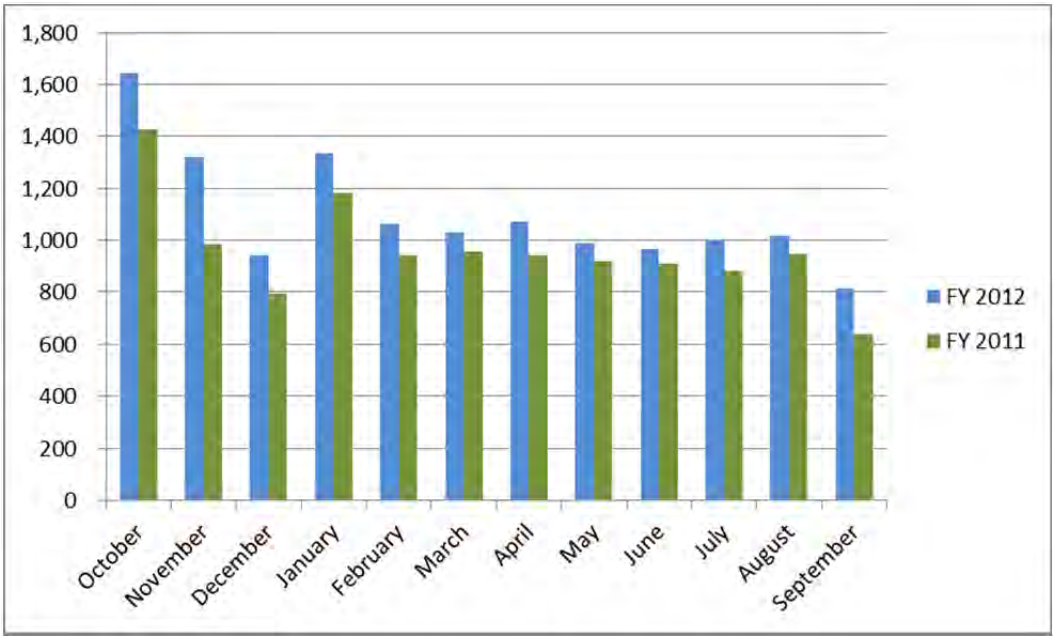


Figure 4-5
Comparison of FY 2011 and FY 2012
Systemwide Monthly Transponder Sales



VIOLATION ENFORCEMENT SYSTEM

During 2007, a violation enforcement system (VES) was installed at the toll plazas for each of the three Lee County toll facilities. When a patron passes through a toll plaza without paying or with an invalid LeeWay account, the VES system employs a system of cameras and sensors to photograph the license plate of the offending vehicle. Violation images are reviewed through a double-blind procedure to obtain license plate information for each recordable violation. Under a double-blind review process, each review is independent of the previous one, and the reviewer has no knowledge of the conclusion reached by the other reviewer. If both reviewers reach the same conclusion, the read is accepted. If there is a discrepancy between the two, the image is sent for additional review. Some images are considered unreadable due to factors such as sunlight or objects obscuring a clear view. If a license plate cannot be conclusively identified, the violation is "coded off" and the violator is not pursued.

Violations for which an image is available are then forwarded for additional processing. If the license plate corresponds to a LeeWay, SunPass, E-Pass, or rental car toll collection service provider account on record, the appropriate toll amount is deducted from the account. This is referred to as Video Tolling, or a "V Toll." If no ETC account information is available for the plate, the license plate information is provided to the Highway Safety Motor Vehicles Department so they may look up the first registered owner of the vehicle. The registered owner's information is used to open a VES account and a Toll Due Notice (TDN) is generated and mailed to the owner. If the toll is not paid or contested within 30 days, a uniform traffic citation (UTC) is issued. Owners who receive a UTC have 40 days to pay the toll plus a $100.00 fee. If not paid within the time specified the UTC is turned into the Lee County court system and the fine increases to include court costs and 3 points may be added to the owner's driver's license.

In an effort to reduce operational costs and create a more efficient work environment, toll collectors have been tasked with reviewing violation images during normal work shifts. This allows toll collectors to still be productive when not being utilized in the toll lanes. It also provides additional help for the VES staff so more images can be processed through the system in a timely manner. This innovative method has helped LeeWay achieve significant operational savings and contributes to the continued success of the VES system.

Table 4-20 presents a summary of systemwide violation transactions by month for FY 2012. As shown, 3.0 percent of total transactions were violation transactions. Of these, approximately 14.3 percent were coded off because photos of license plates could not be read. The number of code-offs increased from FY 2011, though as a percentage of total violations, code-offs actually declined. Total violations increased by approximately 27.0 percent from FY 2011 to FY 2012, though the overall rate of collected transactions remained essentially unchanged. In total, 99.6 percent of all Lee County transactions were either paid at the toll plaza or processed for payment through the violation enforcement system.

Table 4-20
Monthly Violation Transactions
FY 2012

Month	Total Traffic	% of Violations	Total Violations	VES Code-Offs	Collection %
Oct	1,393,786	3.2%	43,954	5,471	99.6%
Nov	1,417,687	3.1%	43,655	7,145	99.5%
Dec	1,473,929	2.9%	42,702	6,595	99.6%
Jan	1,521,855	2.7%	41,212	7,649	99.5%
Feb	1,546,593	2.6%	40,044	6,121	99.6%
Mar	1,684,430	2.6%	43,494	7,060	99.6%
Apr	1,509,509	2.8%	42,328	5,634	99.6%
May	1,459,879	2.9%	42,735	6,933	99.5%
Jun	1,338,914	3.3%	43,730	7,021	99.5%
Jul	1,372,383	3.5%	48,102	5,307	99.6%
Aug	1,341,958	3.4%	45,328	5,251	99.6%
Sep	1,289,354	3.4%	43,282	4,097	99.7%
Total	**17,350,277**	**3.0%**	**520,566**	**74,284**	**99.6%**

Table 4-21 presents a summary of revenue collection activities resulting from violations reported from the lane level system. In FY 2012 $1,221,788 in violation revenue was registered by the Lee County system, an increase from $951,822 in FY 2011. $673,021 of that total, or 55.1 percent, was collected by billing tolls to existing ETC accounts or to rental car companies through the Pay-by-Plate program. Another $221,193, or 18.1 percent, was collected through the issuance of Toll Due Notices and Uniform Traffic Citations. $327,574 in originally registered violation revenue was never collected. However, an additional $713,995 in revenue was collected in fines, fees, and other miscellaneous revenues related to the VES. In total, after accounting for uncollectible revenues and additional fees and fines that were collected, $386,421 in additional revenue was generated through the VES system, over and above the amounts originally owed.

Table 4-21
Monthly Violation Revenue Collections
FY 2012

Month	Outstanding Revenue Collection	AVI - Pay by Plate Revenue Collection	Non AVI Outstanding Violation Collection	VES and Court Collected Toll	Outstanding Collections, Losses, and False Transactions	Service Center Fees, Fines, and Misc. Revenue	Balance
Oct	-$101,510	$59,455	-$42,055	$16,016	-$26,039	$43,245	$17,206
Nov	-106,457	50,968	-55,489	17,108	-38,382	50,623	12,242
Dec	-96,888	52,862	-44,026	17,194	-26,832	55,220	28,388
Jan	-94,569	52,479	-42,090	19,649	-22,441	66,973	44,532
Feb	-96,754	53,638	-43,116	18,150	-24,966	70,662	45,697
Mar	-109,605	63,139	-46,466	18,048	-28,418	65,505	37,086
Apr	-107,953	64,159	-43,794	17,678	-26,115	59,120	33,004
May	-104,748	48,775	-55,973	17,430	-38,543	57,191	18,648
Jun	-103,640	46,458	-57,182	18,266	-38,917	60,549	21,632
Jul	-113,472	67,666	-45,806	19,322	-26,484	59,388	32,904
Aug	-81,340	67,793	-13,547	22,669	9,122	65,089	74,210
Sep	-104,850	45,629	-59,221	19,663	-39,558	60,431	20,873
Total	**-$1,221,788**	**$673,021**	**-$548,767**	**$221,193**	**-$327,574**	**$713,995**	**$386,421**

EVENTS INFLUENCING TOLL TRANSACTIONS AND REVENUE

In addition to the ongoing construction activities on the Cape Coral Bridge, FY 2012 was relatively free of major service interruptions. The following events, incidents, and construction activities were identified as potentially impacting traffic and revenue:

- The Midpoint Memorial Bridge was closed on November 11, 2011 between 6:30 p.m. and 8:30 p.m. for a Veterans Day celebration.

- On March 19-20, 2012, the Midpoint Memorial Bridge eastbound lanes were closed from 10:40 p.m. to 12:05 a.m. due to a traffic accident.

- On May 14-15, 2012, the Cape Coral Bridge westbound lanes were closed from 8:30 p.m. to 5:30 a.m. and the eastbound lanes were closed from 10:00 p.m. to 1:00 a.m. due to construction.

- The Midpoint Memorial Bridge westbound lanes were closed on May 29, 2012 from 2:40 a.m. to 6:00 a.m. due to a fatal accident.

- From 6:15 a.m. on July 4 until 2:00 a.m. on July 5, 2012, the Cape Coral Bridge was closed for a Fourth of July celebration.

- Tolls were suspended on the Midpoint Memorial Bridge, Cape Coral Bridge and Sanibel Causeway from 10:00 a.m. on August 26 to 5:00 p.m. on August 27, 2012, as a result of Tropical Storm Isaac.

- From 9:00 p.m. on September 19 until 4:50 a.m. on September 20, 2012, the westbound lanes on the Cape Coral Bridge were closed due to construction.

No other major weather events, emergencies, or major accidents were reported.

CHAPTER 5

NET AND EXCESS TOLL REVENUE

All toll revenues generated by the Lee County toll system are covered by a strictly prescribed series of bond covenants and interlocal agreements which determine the manner and order in which revenues are distributed. Chapter 5 addresses operating and maintenance costs, net revenues, deposits and withdrawals of covenanted and pledged funds, and bond obligations. Other financial transactions required by covenant or agreement are presented as well. The data in this chapter is obtained from the Lee County Excess Revenue Report.

NET TOLL REVENUE

Net toll revenue is calculated by deducting maintenance and operating (M&O) expenses from gross toll revenues. Table 5-1 presents FY 2012 gross toll revenues, M&O expenditures, and the resulting net revenues for the entire Lee County system and the three toll facilities individually. As shown, systemwide net toll revenues totaled approximately $27.8 million in FY 2012. Each of the three facilities contributed a roughly equal proportion of gross toll revenues. However, the Sanibel Causeway had considerably lower M&O costs, resulting in net revenue that was 38.8 percent of the systemwide total, compared with 29.4 percent and 31.9 percent on the Cape Coral and Midpoint Memorial Bridges, respectively.

Table 5-1
Net Revenue by Facility
FY 2012

	Midpoint Memorial Bridge	Cape Coral Bridge	Sanibel Causeway	Total
Gross Toll Revenue	$12,865,906	$12,086,478	$12,833,459	$37,785,844
M&O Costs	-4,022,023	-3,935,365	-2,061,644	-10,019,032
Net Toll Revenue	**$8,843,883**	**$8,151,113**	**$10,771,815**	**$27,766,812**

Table 5-2 compares FY 2012 M&O costs and net revenues by facility against the estimates set forth in the 2005B Bond Official Statement (OS). While the comparison is important, it is significant to note that the forecasts included in the 2005B Bond OS did not account for the implementation of one-way tolling which occurred in FY 2008.

As Table 5-2 indicates, actual total M&O expenses were 23.5 percent lower than projected M&O costs. Much of the savings in actual overestimated costs is a direct result of the conversion to one-way tolling. However, FY 2012 net revenues also fell short of the 2005 OS forecast by 7.7 percent. This is primarily because the revenue forecast was produced prior to any signs of recession and

could not have accounted for the state of the local, regional, and national economy in recent years, including three consecutive years of revenue decline. In fact, since FY 2005, actual systemwide gross toll revenue has declined by 12.5 percent, although the 2005B Bond OS predicted annual growth in every year of its forecast.

Table 5-2
Comparative M&O Expenses and Net Toll Revenues by Facility
FY 2012

	Maintenance and Operations Expense			Net Toll Revenue		
Facility	**2005B OS Estimate**	**FY 2012 Actual**	**Percent Difference**	**2005B OS Estimate**	**FY 2012 Actual**	**Percent Difference**
Midpoint Memorial Bridge	-$5,200,000	-$4,022,023	-22.7	$10,028,546	$8,843,883	-11.8
Cape Coral Bridge	-5,500,000	-3,935,365	-28.4	8,594,534	8,151,113	-5.2
Sanibel Causeway	-2,400,000	-2,061,644	-14.1	11,465,922	10,771,815	-6.1
Total	**-$13,100,000**	**-$10,019,032**	**-23.5**	**$30,089,002**	**$27,766,812**	**-7.7**

Table 5-3 shows the year-over-year change in M&O expenses by facility. As indicated, expenses increased by 15.8 percent systemwide, with the Sanibel Causeway experiencing the largest percent increase in M&O expenses at 48.8 percent.

Table 5-3
Comparative M&O Expenses by Facility
FY 2011 and 2012

Facility	**FY 2011 Actual**	**FY 2012 Actual**	**2005B OS Estimate of FY 2012**	**Percent Change over FY 2011**	**Percent Change from Estimate**
Midpoint Memorial Bridge	-$3,803,467	-$4,022,023	-$5,200,000	5.7	-22.7
Cape Coral Bridge	-3,459,911	-3,935,365	-5,500,000	13.7	-28.4
Sanibel Causeway	-1,385,237	-2,061,644	-2,400,000	48.8	-14.1
Total	**-$8,648,616**	**-$10,019,032**	**-$13,100,000**	**15.8**	**-23.5**

EXPENDITURES AND EXCESS REVENUE

As previously stated, net toll revenues generated by the three tolled facilities must be disbursed in a prescribed manner. The order in which funds are disbursed is presented in Figure 5-1.

Senior Lien Debt Obligation

After paying all M&O expenses, the first obligation is to service senior lien debt. Senior lien debt is composed of debt service to the Series 2001, 2004, 2005A, and 2005B bonds. The ratio of net revenue versus the amount of senior lien debt due in that fiscal year is referred to as the coverage ratio. By covenant, Lee County is required to maintain a coverage ratio of 1.20, or 120 percent net revenue in excess of total senior lien debt obligations. In FY 2012, the coverage ratio for senior lien debt equaled 1.78, as shown in Table 5-4. The coverage ratio in FY 2011 was 1.75, so this is virtually unchanged in the most recent year.

Figure 5-1
Flow of Funds

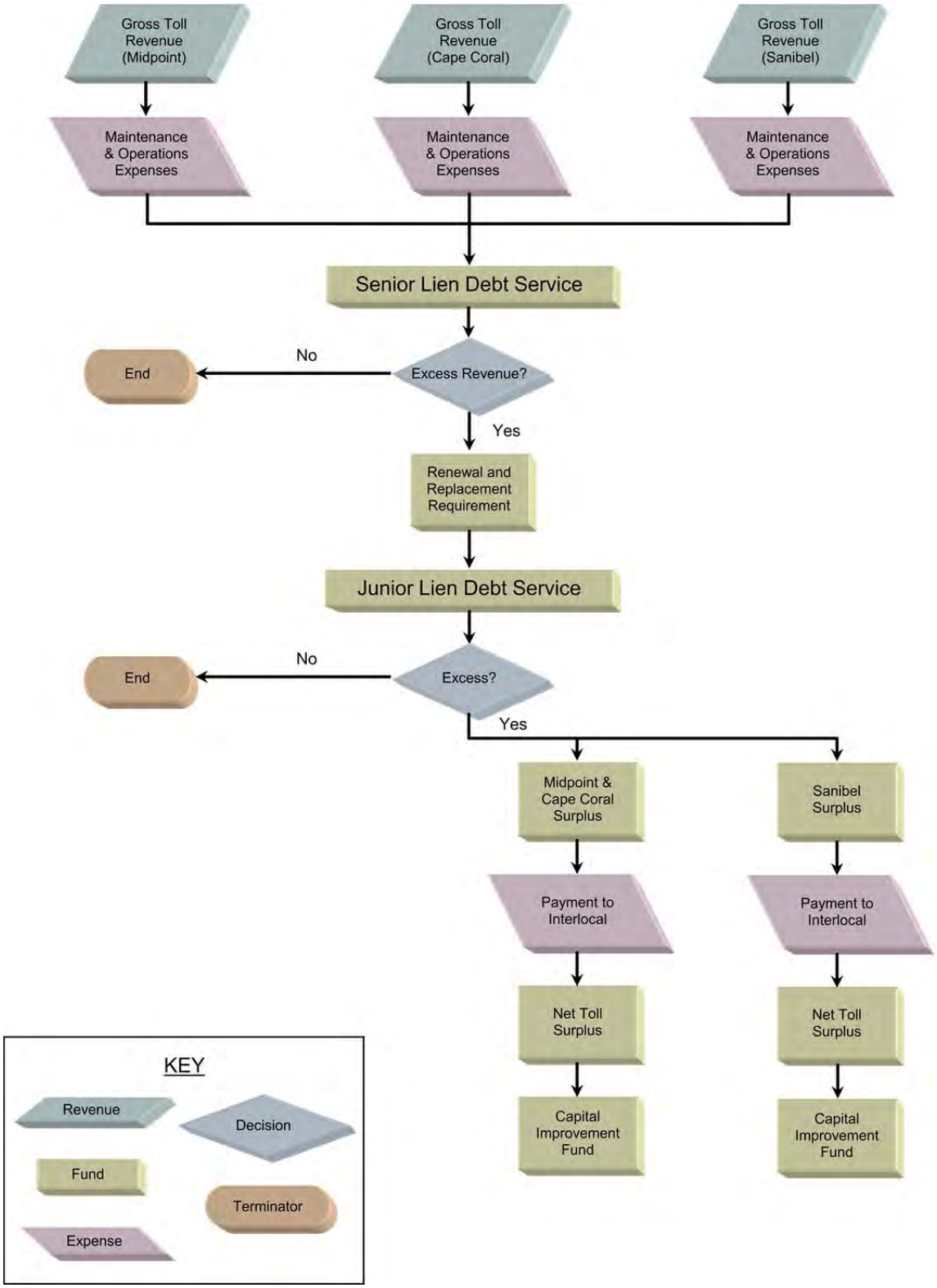


Table 5-4
Senior Lien Bond Coverage
FY 2012

Line Item	Amount
Total Gross Revenues	$37,785,844
Total M&O Costs	-10,019,032
Total Net Revenue	27,766,812
Annual Debt Service	-15,600,000
Debt Coverage Ratio	**1.78**

Renewal and Replacement Fund

After fulfilling bond and debt obligations, Lee County is required to maintain a renewal and replacement (R&R) account for each facility. These accounts are required to have a minimum balance of either $500,000 or 5.0 percent of the previous year's gross toll revenues, whichever is greater. Funds in these accounts can be used for a limited number of specific purposes including, but not limited to: major improvements or additions; unusual and extraordinary maintenance or repairs: maintenance activities not recurring annually; renewal and replacement of major equipment; and repairs or maintenance resulting from an emergency. The latter item is conditional, and can only be used in cases where money from the maintenance and operations account and insurance proceeds do not cover the total cost of said emergency. As presented in Table 5-5, expenditures totaling $77,994 were made from the three R&R accounts. Deposits totaling $97,218 were made to these three accounts to maintain the required minimum balance. Almost all of the deposits and expenditures were to and from the Cape Coral Bridge R&R account.

Table 5-5
Deposits and Expenditures, Renewal and Replacement Fund
FY 2012

Line Item	Midpoint Memorial Bridge	Cape Coral Bridge	Sanibel Causeway	Total
Deposits	$981	$75,975	$20,262	**$97,218**
Expenditures	0	-56,594	-21,400	**-$77,994**

Interlocal Agreements

After meeting the debt obligations outlined above and satisfying covenanted fund requirements, remaining revenues are subject to Lee County's existing interlocal agreements with the City of Sanibel and the City of Cape Coral. The interlocal agreement with Cape Coral is attached as Appendix A. A copy of the settlement agreement with the City of Sanibel, which includes the interlocal agreement, is attached in Appendix B. The following sections provide brief overviews of these agreements and the general terms of each interlocal agreement.

Sanibel Interlocal Agreement: The interlocal agreement with the City of Sanibel went into effect in November 1987 and was amended and restated in June 2002. In January 2004, a lawsuit was filed by the City of Sanibel against Lee County based primarily on the county's plan to replace Span A of the causeway with a fixed-span bridge rather than a drawspan similar to the original Span A. This

case was dismissed on March 1, 2005, at which time a settlement agreement was reached between Lee County and the City of Sanibel. Under this settlement agreement, the City of Sanibel agreed to use its share of surplus toll revenues to reduce the cost of commuter discount program fees and tolls. Accordingly, a new toll schedule was implemented in November 2005.

As part of the current agreement, Lee County is required to remit to the City of Sanibel 21.0 percent of the net surplus revenues generated from the operation of the Sanibel Causeway. Net surplus revenues are defined as total gross revenues minus causeway operating expenses, the debt service requirement for bonds issued related to the causeway, and payments into the causeway R&R account. In FY 2012, 21.0 percent equated to $1,057,618.06.

Cape Coral Interlocal Agreement: The interlocal agreement between Lee County and the City of Cape Coral was entered into on March 22, 1995 and has been amended three times, in May 2001, November 2002, and August 2004. The agreement states that 40.0 percent of the net surplus toll revenues generated by the Midpoint Memorial and Cape Coral Bridges be paid to the City of Cape Coral. Net surplus revenues are defined as total gross toll revenues minus Midpoint Memorial Bridge operating expenses, debt service payments, and deposits into the R&R fund. However, both Lee County and the City of Cape Coral have since agreed that these payments be made into a mutually acceptable transportation project fund. As such, no direct transfer of funds between the county and the city occurs. Rather, excess revenues are deposited into one of two capital improvement funds to be discussed in the section that follows.

Capital Improvement Program

Revenue remaining after meeting the conditions of the interlocal agreements must be deposited into a capital improvements fund. The projects being funded through the capital improvement program include the Cape Coral plaza reconstruction, software/hardware upgrades to maintain toll operability with other toll agencies on all three facilities, a duplicate fiber ring linking the Cape Coral and Midpoint Memorial toll facilities, and complete toll system replacement on all three facilities. In the case of the Sanibel Causeway, FY 2012 ended with excess revenue of $636,856. This excess revenue was applied to interfund loans and toward anticipated operational expenses for the following fiscal year.

Based on a standing agreement between the City of Cape Coral and Lee County, payments due under the interlocal agreement and excess revenues were deposited into the CIP fund. In FY 2012, $2,884,821 of the $2,984,821 excess revenues on the Cape Coral and Midpoint Memorial Bridges was applied to the CIP fund. The remaining excess revenues, approximately $100,000, were carried forward to cover anticipated operations costs in FY 2013.

CHAPTER 6

GENERAL INSPECTION OF TRANSPORTATION FACILITIES

CDM Smith conducted a general condition review of Lee County's toll facilities, including the buildings, adjacent roadways, sign structures, and six toll bridges in March 2013. Information pertaining to the physical condition of each facility, ongoing and completed construction, and planned improvements was compiled and reviewed. Subsequently, a walk-through visual review of each facility was completed with the assistance of County staff.

This general inspection of transportation facilities was conducted in compliance with Section 5.07 of the Composite Transportation Facilities Revenue Bond Resolution No. 86-4-12. CDM Smith, as consulting engineer to the County, has provided this biennial inspection report to document our opinion of the conditions of the facilities.

LEE COUNTY TOLL FACILITIES

This report documents the conditions of the following County-owned facilities:

Bridges

Cape Coral Bridge – Westbound – Bridge No. 124044
Cape Coral Bridge – Eastbound – Bridge No. 124065
Midpoint Memorial Bridge – Bridge No. 124096
Sanibel Causeway Structure A – Bridge No. 124116
Sanibel Causeway Structure B – Bridge No. 124115
Sanibel Causeway Structure C – Bridge No. 124114

Buildings

LeeWay Service Center – 1366 Colonial Blvd., Ft. Myers
Cape Coral Toll Facility – 10100 College Parkway, Ft. Myers
Midpoint Toll Facility – 1930 S.E. 23rd Terrace, Cape Coral
Sanibel Toll Facility – 18700 McGregor Blvd., Ft. Myers

Sign Structures

Cape Coral Bridges – 3 overhead span structures, 1 cantilever structure (all westbound)
Midpoint Bridge – 2 overhead span structures, 5 cantilever structures (all westbound)
Sanibel Bridge – 3 overhead span structures, 1 traffic signal pole (all westbound)

Lighting & Drainage

Various light standards and fixtures at each bridge & toll building
Catch basins/scuppers at each bridge & toll building

Inspection Team

Site visits to each bridge structure and their adjacent toll facility buildings were conducted by CDM Smith staff accompanied by Lee County personnel. On March 5, 2013, Mr. Erik LeClair, PE, Senior Structural Engineer, performed general walk-through inspections of the Cape Coral eastbound and westbound bridges, the Midpoint Memorial Bridge, and the Sanibel Causeway Bridges A, B & C for the above-deck portions of each structure. Mr. LeClair was accompanied at each site by Mr. Ehab Guirguis, PE, Senior Engineer, Lee County Department of Transportation (DOT).

On March 7, 2013, Mr. LeClair completed a general inspection of each bridge structure from below deck utilizing Lee County DOT's work barge (Midpoint & Cape Coral) and Lee County's Division of Natural Resources work boat (Sanibel Causeway Structures). He was accompanied at each site by Mr. Douglas Busbee, Maintenance Foreman, Lee County Department of Transportation – Operations Division and other Lee County DOT and Natural Resources department staff.

Inspection of the bridges was preceded by a review of the most recent FDOT biennial bridge inspection reports. Review of the August 2011 (Cape Coral), November 2011 (Sanibel), and January 2012 (Midpoint) reports was completed in February prior to arrival on site.

Site visits to view the roadway and sign structure conditions were conducted at all three sites by Mr. LeClair on March 4, 2013.

Site visits to the bridge toll facility buildings were conducted by Mr. LeClair on March 6, 2013. He was accompanied at the individual buildings by Mr. Wilks Hale (Cape Coral – Site Technician), Mr. Ken Johnston (Midpoint – Site Technician), and Mr. James Gehrlein (Sanibel – Site Manager). At the LeeWay Service Center, he was accompanied by Ms. Susan Hopwood, LeeWay Service Center Manager.

Bridge Condition Review Process

The Operations Division of Lee County's Department of Transportation provided bridge record plans and current biennial and interim inspection reports to CDM Smith for review. Discussions with the DOT bridge engineer and Operations Division maintenance foreman provided further information on current and planned maintenance programs.

After reviewing the available bridge inspection reports prepared by others for the Florida Department of Transportation and Lee County, CDM Smith staff visited each bridge and performed a general walk-through inspection to observe the physical condition of each structure. The purpose of this visual review was not to re-inspect the bridges, but for CDM Smith staff to evaluate the overall condition of the structures and to view any repairs made since the FDOT inspections were performed.

All six of the county's toll bridge structures have been inspected by FDOT within the past two years through its biennial bridge inspection program. The inspections were performed by the consultant

firm of Volkert & Associates Inc. Underwater inspections of the bridge piers and piles were performed in conjunction with the structure inspections by Bolt Underwater Services. The level of effort by these consultants included visual inspection of the deck, girders, abutments, piers, and piles in all spans. Inspectors accessed the structures by foot and by using under bridge inspection unit vehicles, an inspection boat, and underwater dive equipment.

Toll Facility Condition Review Process

CDM Smith's inspector met with and interviewed the LeeWay Service Center Manager to discuss the current condition and any ongoing or planned capital projects at the service center building. After the interview, the inspector toured the service center facility interior and exterior to review the layout, observe available equipment and its condition, and evaluate the general condition of the building and grounds. Inspections of each facility building were visual only and no detailed measurements were taken. No testing of materials or systems was performed.

Site visits at each bridge toll facility building were conducted in a similar manner as the service center review. CDM Smith's inspector, accompanied by the previously noted on-site staff, reviewed the building layout and condition. During the review, the inspector discussed current and planned maintenance and capital projects with the toll facility personnel. The frequency of equipment testing (standby generators & fire protection systems) and recently completed projects were also discussed.

Roadway Condition Review Process

A general review of the roadway, lighting, and drainage conditions was conducted during site visits to each facility and bridge. The roadway, lighting and drainage conditions were observed by travel through each corridor, with intermediate stops where deteriorated conditions were observed.

A detailed condition review of each sign structure was conducted by visual and hands-on inspection methods at each sign location. All of the sign structures were inspected from ground level, with no special access equipment.

CAPE CORAL BRIDGES AND TOLL FACILITY

The Cape Coral Bridge and toll facilities are located approximately eight miles south of downtown Fort Myers on College Parkway at its junction with the Caloosahatchee River. The toll plaza and administration building are located approximately one mile east of the river as shown in the Figure 6-1 below.

Figure 6-1
Cape Coral Bridge Toll Plaza Location Map

Cape Coral Bridge Toll Plaza

The existing main toll plaza consists of six westbound tolling lanes and two eastbound non-toll lanes with an administration building at the north side of College Parkway. In 2012, the toll equipment, barrier, and canopy were completely replaced and reconfigured to eliminate the barrier structure from the non-toll eastbound lanes and install new open road toll (ORT) collection in the westbound direction.

The new westbound toll barrier configuration consists of three attended toll lanes, one electronic toll collection only lane, and two ORT lanes. Two of the three attended lanes are also equipped with an electronic toll collection system. The ORT lanes are located in the two southern-most, westbound lanes and are separated from the westbound attended lanes and eastbound non-toll lanes by concrete barrier walls.

The two eastbound lanes are now free-flowing, with no barrier or canopy structure overhead. They are fully separated from the westbound lanes by a concrete barrier median. All signs related to toll collection have been removed from the eastbound travel direction.

Cape Coral Toll Plaza – Attended Lanes Canopy Structure

Cape Coral Toll Plaza – Administration Building

The three attended lanes are 11 feet wide and each lane is separated by a 6 foot wide concrete island. The electronic tolling lane is 14 feet wide to accommodate wide loads. Each of the lanes is covered by a canopy structure that is comprised of reinforced concrete columns and support beams, with a precast concrete panel roof. The two ORT lanes are 12 feet wide, with a full lane width shoulder on the right and a 6 foot shoulder on the left.

Open Road Tolling Lanes Equipment Gantry Structure

Concrete Barrier Between Eastbound & ORT Lanes

The current administration building was constructed and opened in 1989, and was expanded to add a larger conference room in 1999. Miscellaneous repairs and material upgrades, such as replacement of tile facing on exterior surfaces and new windows have been made at various times. The employee break room/locker area was expanded and renovated in 2006. Total square footage of the building is approximately 3,390 ft^2.

As part of the toll plaza reconfiguration in 2012, the toll lane canopy was removed from above the administration building. An access tunnel was also added that connects the administration building

to the northern-most attended lane island, thus eliminating the need for toll attendants to cross the electronic tolling lane.

A new storage building was added in 2012 at the northeast corner of the administration building in an area where the trash corral was previously located. The storage building is insulated and has air conditioning to allow it to be used as a technician's workshop, if necessary. The trash corral was relocated to the southeast corner of the employee parking area.

New Storage Building

Relocated Trash Corral

At the rear (north) side of the administration building, the employee break area has been relocated to a screened enclosure with a concrete floor and metal roof attached to the building.

Architectural Condition

The interior of the building appears to be in very good condition overall with only one maintenance issue noted. In the conference room there appears to be an electrical problem with a portion of the overhead lighting. Elsewhere, flooring, paint, and fixtures typically showed minor signs of wear, but have clearly been maintained on a regular basis.

A portion of the interior office space at the northeast side of the administration building has been reconfigured to provide a single, larger room for housing the data servers and toll lane controllers. The lane controllers were previously housed in a separate room with the standby generator at the north side of the building that was only accessible from an exterior door. The new combined room provides a significant improvement in space for equipment and the ability to provide proper climate control for the controller room. To accommodate this change, the facility supervisor and technician room were also re-sized.

New vinyl flooring tiles and drop ceiling tiles have been installed in the main hallway. A previous lack of storage space for supplies and equipment has been addressed by a reconfiguration of some of the interior office space and the addition of the exterior storage building.

New Tile Flooring Installed In Hallway

Relocated Data Controllers

Fiber optic communications have been completed between the LeeWay Service Center and the Cape Coral facility. The connection was also recently upgraded from 1GB to 10GB capacity. With this connection, all three toll facilities are now connected to the LeeWay Center and the main County offices in downtown Fort Myers.

As part of the toll canopy reconfiguration, a new latex membrane roof system was installed on the administration building. The roof membrane is in very good condition with no deterioration noted. However, there is a low area that ponds water near the central portion of the roof below the communications wire conduits. There were no signs of leakage on the interior of the building that were associated with this area. The stagnant water traps debris and promotes algae growth, which creates a slippery walking surface. Also, several of the interior downspout drains have a minor buildup of debris at the inlet grate that should be cleaned/removed.

Administration Building Roof
New Latex Membrane Installed

Administration Building Roof
Ponded Water With Algae & Debris

The new toll canopy has a rolled asphalt roof covering that is in new condition. The roof surface slopes towards the east side of the canopy, where it drains through an interior downspout. In the

vicinity of the downspout, the roof surface is slightly lower than the downspout inlet causing some very minor ponding.

Toll Canopy Roof
Minor Ponding Near Downspout

Access Ladder From Administration
Building to Toll Canopy Roof

The exterior walls are in fair to good condition. However, due to the age of the wall tile surface, it is very difficult to purchase matching tiles when they are damaged or require replacement. The county is currently working on plans to replace the exterior tile surface on the administration building with stucco. The stucco will make for a more durable and easier to maintain surface, and will match the façade of the new toll canopy structure.

Structural Condition

The administration building appears to be in very good structural condition. No indications of structural distress were observed. The concrete toll canopy frame and columns, and the highway-speed toll equipment gantry are in new condition with no notable deterioration observed.

New Toll Booths

New Impact Attenuators

As part of the toll plaza reconfiguration, all of the toll collection booths, concrete islands and vehicle impact attenuators were replaced and are in new condition. The new toll booths are equipped with rear-entry doors, providing a safer work environment for the toll attendants. All signage within the toll canopy area has also been replaced and was in very good condition.

Mechanical and HVAC Condition

No deficiencies were noted in the plumbing fixtures of the bathrooms, break room and janitor's closet. The bath rooms and data room have been equipped with motion-sensing light switches. The dual interior air handling units and exterior condensing units were in good condition and operating properly at the time of inspection. A separate roof top AC/heating unit that serves the conference room also appeared to be working properly.

A new ceiling mounted AC unit has been installed in the expanded data/controller room due to the excessive heat generated by the data equipment.

Mechanical Room

The standby generator for this facility is in good condition. It is tested under load automatically on a weekly basis, and is serviced monthly to ensure it is in working condition at all times. The 1000 gallon capacity above ground diesel fuel tank for the generator is in very good condition.

Data/Controller Room, New UPS

Above Ground Fuel Tank

As part of continuous technology upgrades with the toll collection equipment, the lane controllers and lane monitoring cameras have been upgraded in the non-ORT lanes. A new Uninterruptible Power Supply (UPS) has been installed in the data/controller room.

The security camera and monitoring system was in good condition and operating in appropriate areas of the administration building and toll plaza. Interior and exterior door locks were functional in all parts of the building. The fire alarm and security systems appeared to be functioning properly. There are no sprinklers in the administration building.

Site/Civil Condition

The asphalt concrete employee parking area has been repaved as part of the toll plaza reconfiguration and was in new condition. The parking spaces have also been recently re-striped. A total of 23 parking spaces plus two handicap-only spaces are available in the employee lot.

Employee Parking Area
New Pavement and Striping

New Sidewalk With Old
Landscaping Removed

The concrete sidewalks in the parking area and in front of the administration have been replaced and are in new condition. The sidewalks at the side and rear of the building were also in good condition. The county is currently designing new landscaping and a ground-mounted toll facility sign to be installed along the front of the administration building and around the employee parking area. This work was identified as a potential cost savings, rather than including it with the toll plaza reconfiguration contract.

Sound barrier walls along the east approach and fencing adjacent to the administration building appear to be in good condition.

Roadway Conditions

The asphalt concrete pavement near the toll plaza approaches is in new condition and provides an excellent ride quality. The pavement extending east to the McGregor Blvd overpass bridge, and west to the deck of the Cape Coral bridges was replaced as part of the toll plaza reconfiguration. The pavement striping is also in very good condition.

The roadway shoulders near the toll plaza, on the bridges and their approaches have been recently cleaned and had very little trash or debris buildup. These areas are routinely cleaned on a monthly basis. Paint is typically applied at vehicle impact locations on the bridge barriers on an as-needed basis.

The drainage system in the employee parking area appeared to be functioning adequately, but was in need of clean out. At the west side customer turn out area, the catch basin is approximately 30% clogged with debris and garbage. There was no evidence of standing water. In the employee parking lot, the catch basin had shallow standing water present.

There were no signs of frequent backup or ponding near the basin. The catch basins are cleaned out on an annual basis.

Catch Basin at West Side Turn out
30% Clogged w/ Debris

Employee Parking Lot
Catch Basin with Standing Water

The roadway lighting has been replaced on both approaches to the toll plaza. There are both dual and single head light standards placed mainly on the median barrier and along the north side of the roadway near the toll canopy. All of the plaza lighting was in new condition, with no deterioration or malfunction noted.

Sign Structure Condition

Each sign structure on the bridge approaches that has bridge-related signs was inspected. There are a total of four sign structures that are associated with the Cape Coral Bridge, including three overhead span structures and one monopole cantilever structure. All signs are located at the east side of the bridge, on the westbound approach lanes.

The first two overhead span sign structures encountered at the east approach had areas with minor loss of the galvanizing coating on the post and truss members, and light to moderate rust on the electrical conduits. Structurally, they appear to be in very good condition. At the first overhead sign (1-1/4 mile from bridge) the electrical pullbox near the right foundation has a broken cover, potentially allowing moisture to reach the conductors inside.

As part of the toll plaza reconfiguration, the overhead sign closest to the toll plaza was completely replaced. The new sign structure is in excellent condition, with no notable deterioration observed.

A cantilever sign structure was also added near the merge point of the Caloosa Yacht & Racquet Club access road. The sign is mounted on the dividing median and was also in excellent condition.

At the west side of the toll plaza, a sign structure previously used for eastbound toll collection information has been removed.

WB OSS at 1-1/4 Mile From Plaza
General Configuration

WB OSS at 1-1/4 Mile From Plaza
Broken Electric Pullbox Cover

WB OSS at 100 Yards From Plaza
New Overhead Structure

WB OSS at 1/4 Mile From Plaza
New Cantilever Structure

The sign panels at all four structures were in good condition, with the exception of some loose bolts on the 1 Mile and 1-1/4 Mile structures. Lighting on the sign structures was functioning at the time of inspection.

Cape Coral Bridge – Westbound

A general walk-through inspection of the above deck components for this facility (Bridge No. 124044) was completed on March 5, 2013. The below deck components and non-submerged substructure were inspected from a work barge on March 7, 2013. Prior to arrival at the site, the most recent biennial inspection report issued by FDOT (8/23/2011) was reviewed and all current and recently completed repair work was discussed with the owner's bridge engineer and maintenance supervisor.

The structure carrying Cape Coral Bridge Road westbound over the Caloosahatchee River was originally constructed in 1963. It carries two lanes of traffic from Fort Myers to Cape Coral, is 3,417 feet long, and consists of 49 precast concrete multi-girder spans with three steel multi-girder main spans. Its most recent sufficiency rating is 66.7 on a rating scale of 0-100, with federal condition ratings of 7 (good) for the deck and superstructure, 6 (satisfactory) for the substructure, and 7 (minor damage) for the channel. The bridge is currently tolled for all users.

The biennial inspection report notes only minor condition deficiencies. These deficiencies include minor isolated areas of concrete spalls, delamination, cracking and surface map cracking on the top surface and underside of the deck; minimal deterioration of the joints, minor paint loss and surface corrosion on the steel girders in the main channel spans (17, 18, and 19); minor areas of cracks, spalls, and delamination on the precast concrete girders; minor cracking, splitting, deterioration, and shear deformation of the elastomeric bearings; moderate cracks, spalls, scaling, and delamination of the piles and pile caps. None of these deficiencies have a significant effect on the traffic volume or load capacity of the bridge.

Cape Coral Bridge Westbound – North Elevation View

In 2009, an epoxy/aggregate overlay was installed on the deck to address concrete cracking noted in an FDOT inspection report. The wearing surface overlay is in very good condition, and recent inspection by the county Operations Division indicated that there were no areas that required patching or repair.

The focus of repairs within the past two years for this structure has been on the concrete footings, columns, pedestals, and beam ends. The Operations Division recently completed a full pier footing pile cap repair that included removal and replacement of up to 6" of concrete around the full perimeter of the pile cap. Since the depth of concrete removal did not reach the depth of the existing reinforcing bars, the county drilled and grouted a new layer of reinforcing bar around the perimeter to support the new concrete. The repair was completed in a professional manner and is in excellent condition.

Elsewhere, the county has completed pier cap beam repairs at several locations on the eastern end of the structure. The repairs included removal of cracked and delaminated concrete, forming, and repouring new concrete on the underside of the cap beam. In the same location on the bridge, the county repaired cracked and delaminated concrete below the fascia beam bearing area. This procedure included temporary jacking to support the fascia beam, removal of the deteriorated concrete, and repouring new concrete pedestals below the beams. All of these repairs were accomplished from work barges, with no disruption of traffic.

WB Bridge – Recent Full Perimeter Repair of cracked and Spalled Concrete Pile Cap

WB Bridge – Pier Capbeam Repair Below Fascia Beam

Lee County conducts routine maintenance of the bridge and its approaches, including cleaning the shoulders on a quarterly basis with a sweeper vehicle to remove debris and garbage. The drainage catch basins at the bridge approaches are cleaned with a vacuum truck on an annual basis to remove sediment and garbage. By doing so, the county receives credit towards its NPDES storm water management obligations for removal of the sediment. Every four months the barriers are repainted.

Overall the structure was found to be in good repair, working order, and condition. It routinely operates at its normal traffic capacity, with no vehicle weight restrictions.

Cape Coral Bridge – Eastbound

A general walk-through inspection of the above deck components for this facility (Bridge No. 124065) was completed on March 5, 2013. The below deck components and non-submerged substructure were inspected from a work barge on March 7, 2013. Prior to arrival at the site, the most recent biennial inspection report issued by FDOT (8/23/2011) was reviewed and all recently completed repair work was discussed with the owner's bridge engineer and maintenance supervisor.

The structure carrying Cape Coral Bridge Road eastbound over the Caloosahatchee River was originally constructed in 1989. It carries two lanes of traffic from Cape Coral to Fort Myers, is 3,412 feet long, and consists of 39 precast concrete multi-girder spans. Its most recent sufficiency rating is 98.2 on a rating scale 0-100, with federal condition ratings of 7 (good) for the deck, superstructure, and substructure, and 7 (minor damage) for the channel. There is currently no toll collection on the eastbound structure.

The biennial inspection report notes only minor condition deficiencies. Items noted include minor transverse and longitudinal cracks in isolated areas on the concrete deck surface; minor, isolated cracks, small spalls, and delaminations on the precast concrete girders; minor, isolated cracks on the concrete columns, footings, and pile caps; and minor cracks with some delaminations on the concrete pier cap beams. None of these deficiencies have a significant effect on the traffic volume or load capacity of the bridge.

In response to a comment in the FDOT biennial inspection report, the Traffic Division has installed reflectors on the concrete barrier at the north side of the bridge. Since their installation, many of the reflectors have been damaged or knocked off of the barrier due to vehicle impact.

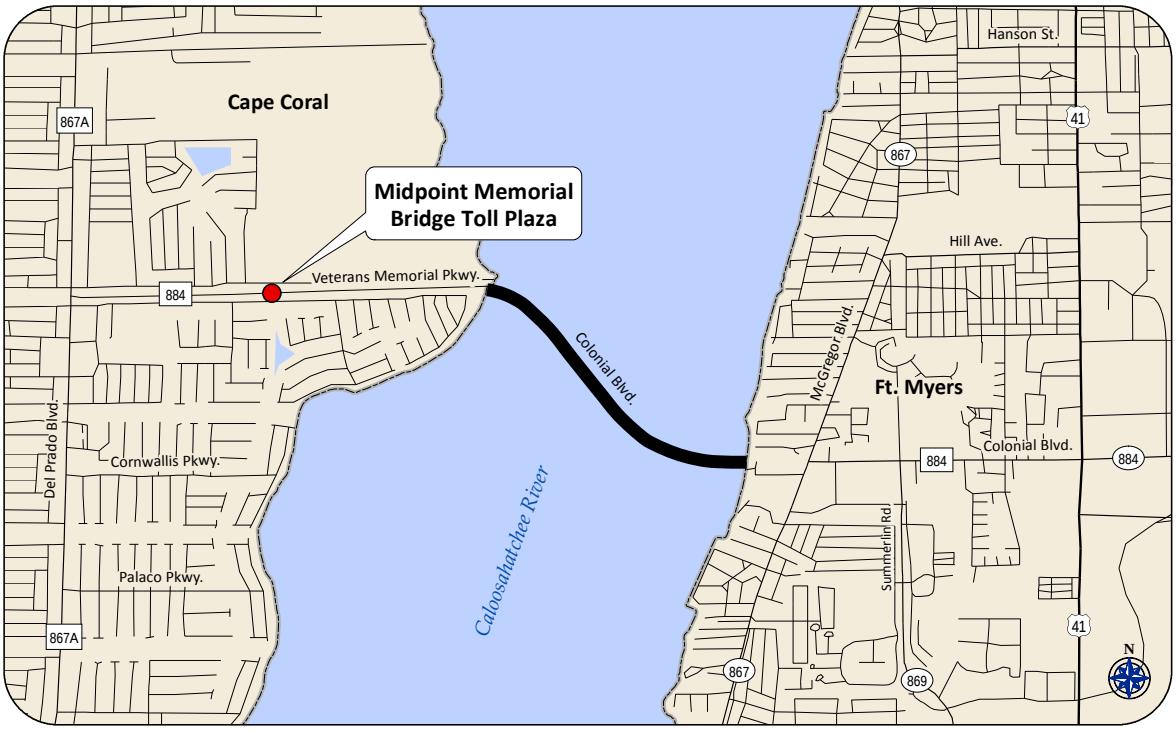
Due to the good overall condition of the eastbound Cape Coral Bridge, Lee County currently has no significant ongoing repairs. They are continuing with routine maintenance of the bridge and its approaches. This includes cleaning the shoulders on a quarterly basis with a sweeper vehicle to remove debris and garbage. The drainage catch basins at the bridge approaches are cleaned with a vacuum truck on an annual basis to remove sediment and garbage. By doing so, the county receives credit towards its NPDES storm water management obligations for removal of the sediment. Every four months the barriers are repainted.

Overall the structure was found to be in good repair, working order, and condition. It routinely operates at its normal traffic capacity, with no vehicle weight restrictions.

MIDPOINT MEMORIAL BRIDGE AND TOLL FACILITY

The Midpoint Memorial bridge and toll facility are located approximately seven miles south of downtown Fort Myers on Colonial Boulevard at its junction with the Caloosahatchee River. The toll plaza and administration building are located approximately 3/4 mile west of the river as shown in Figure 6-2.

Figure 6-2
Midpoint Memorial Bridge Toll Plaza Location Map



Midpoint Memorial Bridge Toll Plaza

The Midpoint toll plaza configuration consists of a total of six toll lanes and two non-toll lanes with an administration building at the north side of Colonial Boulevard. Tolls are collected in the westbound direction only with a combination of attended, electronic only, and open road tolling (ORT) lanes. The current six lane toll canopy layout was constructed in 2011, with two ORT lanes at the center of the roadway, followed by three attended lanes, and one electronic tolling only lane, respectively as the canopy progresses to the north. The ORT lanes are separated from the attended lanes by a concrete barrier wall that begins approximately 750 feet east of the toll canopy.

The southern two lanes of the roadway are used exclusively for eastbound traffic with no toll collection. All previous tolling infrastructure (canopy, collection equipment, lane dividers, & overhead signs) has been removed. The eastbound lanes are now separated from the westbound ORT lanes by a continuous concrete barrier on both approaches.

Lane 1 of the new configuration is 14 feet wide to accommodate wide loads and all other lanes are 11 feet wide. Adjacent to lane 1 is a delineated bicycle lane. Each of the attended/AVI lanes is separated by a six foot wide concrete island. All westbound toll lanes are covered by the original

concrete facade canopy supported by concrete columns. At the west side of the toll plaza canopy, the previous vehicle turn-out lane adjacent to the plaza administration building has been eliminated.

Midpoint Bridge Toll Plaza – East Fascia

Midpoint Bridge Toll Plaza – West Fascia

The administration building and toll plaza were constructed in 1997. There have been no major expansions since that time. Total square footage of the building is approximately 4,238 ft^2. The booth access tunnel is 2,900 ft^2 and two small outbuildings add 80 and 240 ft^2, respectively, to the available storage area. A 360 ft^2 screened employee break/smoking room is attached to the larger storage building.

Open Road Tolling Lanes and Canopy

Dividing Barriers Between Eastbound, ORT Lanes and Attended Lanes

Architectural Condition

The building interior appears to be in good condition overall, with no significant maintenance items noted. The office flooring, paint, fixtures and doors were typically in good condition, with minor signs of wear, but are being well maintained on a regular basis. Employee offices, locker room and interior break room were well kept, with minimal excess material storage. There have been no

significant interior modifications to the toll facility building office space since the last inspection in 2010.

The building exterior appears to be in good condition overall. No deficiencies were noted in the brick facade or windows. The roof system on the administration building and the toll canopy has been replaced as part of the toll plaza reconfiguration and is comprised of an asphalt-based rolled roofing material with liquid asphalt/tar sealant. The roof is drained via fascia scuppers and downspouts.

Toll Facility Lower Roof
New Asphalt Material

New Roof Access Ladder Between
Administration Building and Canopy

Roofing material on both roof levels is in excellent condition. The lighting ground system has also been replaced and is in new condition.

New Canopy Roof

New Lightning Arrest System

The original access tunnel between the administration building and the attended booths has been reconfigured to provide access to both the attended booths and the median island area between the ORT and eastbound lanes. It has also been shortened and no longer extends underneath the

eastbound travel lanes. The toll collection controller cabinets are still maintained along the east wall of the tunnel. The previous problems with drainage entering the tunnel through the controller cabinet conduits have been repaired and a continuous trench drain has been installed along the tunnel floor.

Tunnel with Lane Controller Cabinets

Tunnel Trench Drain

The metal conduit chases between each lane controller box have been repainted, eliminating past surface corrosion due to past leakage from the old coin collection equipment conduits.

IT & Toll Collection Equipment Improvements

The IT infrastructure at this facility is under continuous upgrade to keep pace with evolving technology for toll collection and to accommodate new interconnectivity needs. The Midpoint facility houses the main data servers that monitor transactions at all three toll facilities and communicate the information with the LeeWay Service Center and the County's downtown offices.

Some of the recent upgrades that have been implemented are completion of the fiber optic communications link between Sanibel, Cape Coral, and the LeeWay Service Center; increasing the capacity of the fiber optic line from 1GB to 10GB; installation of VES cameras in all non-ORT lanes; and upgrading WebARCS software.

Structural Condition

The administration building, tunnel, concrete canopy façade, canopy columns, toll booths, concrete islands and vehicle impact attenuators all appear to be in very good structural condition. No indications of structural distress were observed. As noted previously, the tunnel and toll canopy have been reconstructed as part of the toll plaza reconfiguration.

The outdoor break room and both small storage buildings behind the main administration building were also in good condition.

Mechanical and HVAC Condition

Supplemental AC Units - New Condition

Wall Mount Single Room AC Units

No deficiencies were noted in the plumbing fixtures of the bathrooms, employee break room, instant hot water system, plumbing and janitorial closet. Both interior air handling units were in good condition and operating properly at the time of inspection. The units are inspected monthly by Lee County Facilities personnel. Also at the north side of the building, two standalone supplemental AC systems for the site supervisor's office and the count room were working properly.

The standby generator for this facility is in good condition and is tested automatically for 30 minutes under load on a weekly basis. The above ground fuel storage tank is also in good condition and is enclosed in a fenced paddock area.

The security camera and monitor systems are operating in appropriate areas of the administration building and toll plaza. Interior and exterior door locks were functional in all parts of the building. The fire alarm and security systems appeared to be functioning properly. There are no sprinklers in the administration building.

The 15 kVa UPS in the equipment paddock of the tunnel is functioning properly.

Uninterruptible Power Supply

Site/Civil Condition

The asphalt concrete employee parking area was resurfaced during the toll plaza reconstruction and is in good condition. Striping for the parking spaces is in good condition, with 27 regular and 2 handicap-only spaces delineated.

Employee Parking Lot – Asphalt Pavement in Good Conditon

New Sidewalk and Landscaping at Front Entrance

The sidewalk from the employee parking lot to the front entrance has been replaced, and new landscaping has been installed. Elsewhere, the concrete sidewalks in the parking area and at the rear of the building were typically in fair condition, with isolated minor cracks, but no spalling or other serious deterioration. Concrete-filled steel bollard posts adjacent to the exterior AC units were in good condition.

The vinyl fencing installed along the north perimeter of the administration building, and forming a paddock area around the generator fuel storage tank and trash dumpsters, was in very good condition.

Roadway Conditions

The asphalt concrete pavement at both sides of the toll plaza was in new condition with a very smooth ride quality. The lane striping was also in very good condition.

Away from the toll plaza, on the east and west approaches to the bridge, the striping was in good condition. Maintenance vehicle turn-outs and gates were in good condition along the west approach. Guide railing and median barrier typically consist of corrugated beam steel along the right and left shoulders, with F-shape concrete in the median. Both were in good condition, with no significant deterioration or impact damaged sections noted.

The drainage system appeared to be functioning properly with no serious deficiencies noted. Adjacent to the toll barrier, new light standards have been installed on the median barrier between the eastbound and westbound lanes, with a new circuit connecting them to the system on Del Prado. The light standards appear to be in good condition and were functioning at the time of inspection.

Westbound Lanes at Toll Barrier Entry

Lane Reconfiguration at West Side of Toll Barrier

The noise barrier wall on the west approach to the bridge consists of steel H-piles with precast concrete panels. The wall was in very good condition with some minor mildew buildup, but no significant deterioration noted.

Sign Structure Condition

Each sign structure on the bridge approaches that has bridge-related signs was inspected. Following are descriptions of the individual signs, in order as they are encountered when approaching the bridge and toll plaza in the westbound direction.

The first overhead span sign (ID #12S224) was in good condition overall, but had several minor deficiencies. At the left post base, the ground wire cable is broken. On the left sign panel, the lettering is peeling on the "Pay Toll" portion of the sign. The right post base plate is partially covered with mulch.

Sign 12S224 - Broken Ground Wire Cable

The next sign is a cantilever structure (ID #12S225) that is in good condition overall. At the base of the pole there are two broken electrical conduit clamps. The conduit is loose, but there are no exposed wires. The pole base also has several impact scrapes along the right side of the pole, and a 2.5" long rust delamination/crack on the left side 6" above grade.

The last overhead span sign structure (ID #12S226) at the east side of the river is in fair to good condition. The galvanic coating on the posts is in fair condition, but several diagonal members of the span truss have light surface rust. The Transcore traffic monitoring device installed at the left sign panel, its cabinet, and conduits are in good condition. A nearby tree in the median is encroaching on the left post and equipment cabinets.

Sign 12S225 – Disconnected Conduit Clamp on Pole

At the west side of the river, the two cantilever structures at 1 mi. and ½ mi. (ID #12S239 & 12S240, respectively) from the toll plaza, westbound direction, had areas of light rust bleed and a minor loss of galvanizing coating on the posts and truss members. Both also have rusted electrical conduit near the pole base, and neither sign panels meet current reflectivity standards.

Two new cantilever sign structures have been installed on the approach to the toll barrier. These new signs are a replacement for a single overhead sign structure (ID #12S241). Both sign structures are in excellent condition, with no notable deterioration.

New Cantilever Sign Structure at 0.25 Miles East of Toll Barrier

New Cantilever Sign Structure at 250 Yards East of Toll Barrier

The sign panels on the east side of the toll plaza canopy have all been replaced and have updated text to identify the new lane configuration. The sign panels of all the westbound structures are lighted. Lighting on the sign structures was functioning at the time of inspection.

All sign structures west of the toll plaza over the eastbound lanes have been removed as part of the toll plaza reconfiguration.

Midpoint Memorial Bridge

A general walk-through inspection of the above deck components for this facility (Bridge No. 124096) was completed on March 5, 2013. The below deck components and non-submerged substructure were inspected from a work barge on March 7, 2013. Prior to arrival at the site, the most recent biennial inspection report issued by FDOT (1/30/2012) was reviewed and all recently completed repair work was discussed with the owner's bridge engineer and maintenance supervisor.

Midpoint Memorial Bridge – South Elevation View

The Midpoint Memorial Bridge, which carries C.R. 884/Veterans Parkway over the Caloosahatchee River, was originally constructed in 1997. It carries two lanes of traffic in each direction between Cape Coral and Fort Myers, is 7,172 feet long, and consists of 63 precast concrete multi-girder spans. Its most recent sufficiency rating is 85.0 on a rating scale of 0-100, with federal condition ratings of 7 (good) for the deck, superstructure, and substructure, and 7 (minor damage) for the channel. The bridge is currently tolled in the westbound direction only.

The biennial inspection report notes only minor condition deficiencies. Items noted include minor isolated spalls on the underside of the concrete deck and bridge footings; light surface corrosion at the joints; missing/broken reflectors on the median barrier; a separated drainage pipe; minor isolated spalled/delaminated areas and exposed rebar on the piers; delaminated areas on the approach slabs; and minor cracking on the deck surface with areas of map cracking on the underside of the deck. None of these deficiencies have a significant effect on the traffic volume or load capacity of the bridge.

Pier Shear Block Height Reduced

Pier Face Cracks Sealed

In response to the 2012 biennial inspection report comments, the county Traffic Division has installed reflectors on the median barrier. However, many of the reflectors have been damaged or broken off due to traffic impact.

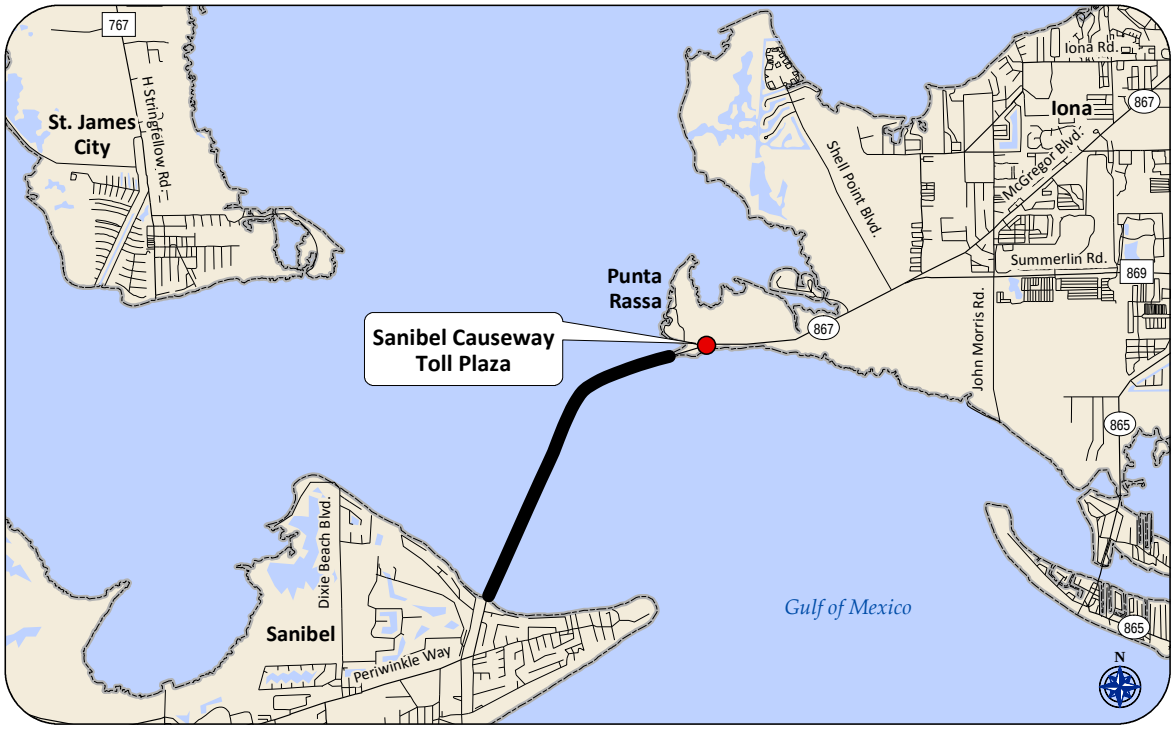
Since the last inspection, the county has completed work on the piers to reduce the height of the seismic shear blocks below the fascia bays. Previous biennial inspection reports identified damage to the precast beam ends resulting from the seismic shear blocks impacting the end diaphragms when the bridge underwent thermal movements. The county addressed the issue by reducing the height of the shear blocks, thus preventing them from impacting the end diaphragms. After this work was complete, the county repaired all of the affected beam ends, and applied sealant to the hairline cracks on the face of each affected pier.

Overall the structure was found to be in good repair, working order, and condition. It routinely operates at its normal traffic capacity, with no vehicle weight restrictions.

SANIBEL CAUSEWAY AND TOLL FACILITY

The Sanibel Causeway bridges and toll facility are located approximately 17 miles south of downtown Fort Myers on County Road 867 (McGregor Boulevard) at San Carlos pass between Pine Island Sound and the Gulf of Mexico. The toll plaza/administration building is located on the southwestern tip of Punta Rassa as shown in Figure 6-3. The causeway is the only surface transportation link between the mainland and Sanibel and Captiva Islands. The main bridge structure spans the Okeechobee waterway at mile 151.

Figure 6-3
Sanibel Causeway Toll Plaza Location Map



Sanibel Causeway Toll Plaza

The existing toll plaza consists of three conventional westbound toll lanes and a double-width, non-tolled, eastbound lane with administrative offices located above the toll lane canopy. The plaza is configured for one-way tolling in the westbound direction only. The right and center lanes (1 & 2) are equipped for use by an attendant to accommodate customers who require exact change or a receipt, and also for LeeWay Electronic Toll Collection. The left lane (3) is equipped for LeeWay ETC only. In cases of emergency (e.g. hurricane evacuation), the non-tolled eastbound plaza lane is wide enough to accommodate two lanes of traffic.

Sanibel Toll Plaza & Administration Building

The outer lane in the westbound direction accommodates wide loads and the remaining lanes are 14 feet +/- in width. Each lane is separated by a six foot wide concrete island. All lanes are covered by a reinforced concrete framed canopy, which also supports the administrative offices. A stair and elevator tower which also houses the generator and fire pump rooms is located at the north side of the structure. A secondary stairwell is attached to the south side of the structure.

Construction of the new toll plaza/administration building was completed late 2007. Total square footage of the building is approximately 5,650 ft^2.

There was no major work in progress during the inspection. Please refer to the individual condition sections below for additional recent maintenance, upgrades, and planned repairs.

Architectural Condition

The interior and exterior of the building is in very good condition throughout. No significant deterioration or items requiring maintenance were observed.

In 2012, the entire exterior of the facility was repainted. The paint system is in very good condition, with no deterioration noted.

New Paint on South Side of Facility Building

New Paint on Underside of Toll Canopy

No significant deterioration of the structure was observed. There is ample space for the staff offices, toll equipment and electronics, counting room, training room, employee break room, screened porch area and storage rooms within the administrative level of the structure.

Structural Condition

The administration building, concrete canopy, toll booths, concrete islands and vehicle impact attenuators all appear to be in excellent structural condition. No indications of structural distress were observed. At the south side exterior stairwell, concrete cracks were noted at each landing point at the interface between the landing and the stair section. The cracks were generally hairline to 1/32 width. This condition shows very little change (increase in severity) since the 2011 inspection.

Concrete Cracks at Stairwell / Landing Interface

Mechanical and HVAC Condition - The plumbing fixtures in the bathrooms, employee break room, and janitorial closet were in good condition and functioning properly. Motion sensing light switches have been installed in the men's and women's restrooms.

General air conditioning supply to the building is provided by a split system, with dual air handling units and exterior condensing units. The system is in good condition overall, with only some minor surface rust noted on the air handling units.

In the data room, one of the two wall-mounted single room AC units has failed. The unit is scheduled to be replaced in March 2013 and a temporary unit was in use at the time of the inspection.

Malfunctioning AC Unit in Data Room

Temporary AC Unit in Data Room

At north side of the facility, the steel rack system that supports two small AC units serving the elevator area below the generator fuel tank platform had moderate surface rust.

A wall mounted, single room AC unit has been added in the shift supervisor's office to supplement the general facility air conditioning. The office experiences higher temperatures than other rooms in the facility due to its size and location on the west side of the building.

The standby generator for this facility is in good condition and is tested automatically on a weekly basis to ensure it is in working condition at all times. The 1000 gallon fuel storage tank is located on the second level of the stair tower within a fenced area adjacent to the generator room. A fire pump supplies water to the sprinkler system located in all areas of the building. The fire pump system operability is checked weekly and the sprinkler system is serviced on a quarterly basis by the system manufacturer.

An extensive security camera system monitors nearly every room and entry point to the building. The system and its monitors were also in good condition. Interior and exterior door locks operate on a card swipe system and were functional in all parts of the building. A video conferencing monitor formerly mounted in the conference room has been moved to the Cape Coral facility. The fire alarm and security systems appeared to be functioning properly.

Site/Civil Condition

The concrete employee parking area, including sidewalks and curbing is in good condition. There is one handicapped space marked and the striping at the toll facility parking area is in good condition.

New Landscaping

Toll Plaza Employee Parking Area

New landscaping has recently been installed around the north and west sides of the facility building.

Roadway Conditions

The asphalt concrete pavement and all striping on the approaches to the toll plaza and between each of the causeway bridges were in very good condition. No deterioration was observed. Similarly, the concrete apron and steel impact attenuators within the westbound toll lanes were in new condition. The concrete barriers at the west side of the toll plaza which prevent entry or exit from the causeway between the toll plaza and the first bridge were also in new condition.

The roadway drainage system consists of catch basins within the shoulder area at the ends of each causeway bridge. All are in new condition with no significant build-up of trash or debris. These catch basins are pumped out and cleaned on a yearly basis. The shoulders are swept once a month to keep debris build-up to a minimum. At the toll facility, drainage from the booths and parking area flows to a dry swale and outlet structure at the south west quadrant of the building grounds. The swale and outlet structure are in good condition.

Sanibel Roadway Pavement & Striping Conditions

Lighting is provided in the toll plaza area only. The aluminum light standards have square, full cut-off fixtures and are in new condition. All were functioning at the time of inspection.

Sign Structure Condition

Each sign structure on the east approach to the toll plaza was inspected.

The first overhead span sign structure encountered in the westbound direction has severe structural deterioration with following deterioration noted:

- Right trussed post has 1 broken diagonal and second with rust perforations
- Left trussed post has 2 of 5 diagonals broken, and a third with rust perforations
- Widespread loss of galvanic coating on the overhead truss and posts
- Sign panel damage - full height bend at left edge and 1 ft^2 missing at lower left corner
- Sign panels have inadequate retro-reflectivity

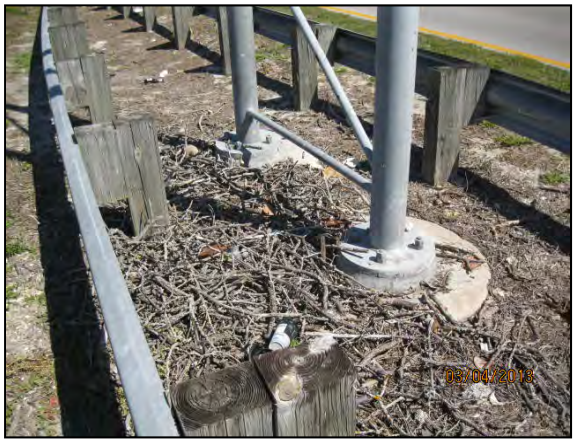
Sanibel Causeway OSS at Left Posts
Broken Diagonal Brace

Sanibel Causeway OSS at Midspan
Bent Sign Panel

The second overhead sign was also in poor condition with the following deterioration noted:

- Widespread loss of galvanic coating on the overhead truss and posts
- Right post, second diagonal is severed due to serious section loss
- Right post, first diagonal has heavy corrosion and perforations
- Heavy debris buildup around left post foundation

Sanibel Causeway OSS at Right Trussed
Posts Severed Diagonal Member



Sanibel Causeway OSS Left Foundation
Heavy Debris on Foundation

The third overhead sign was also in poor condition with the following deterioration noted:

- Widespread loss of galvanic coating on the overhead truss and posts
- The sign panel is bent at the upper right corner and does not meet the current retro-reflectivity standards
- Right foundation base plates are covered with debris up to 1” deep
- The end right post base is missing mortar, exposing an anchor bolt

Sanibel Causeway OSS – Debris Around Right Post Baseplates

Sanibel Causeway OSS - Loose/Damaged Sign Panel

A monopole cantilever traffic signal structure is located near the toll plaza at the intersection of CR 867 and Punta Rassa Road. This structure was in very good condition.

All three overhead sign structures have lighting that was functional at the time of inspection. At the traffic signal, the backlit sign panels were also functioning.

Sanibel Causeway – Structure A

A general walk-through inspection of the above deck components for this facility (Bridge No. 124116) was completed on March 5, 2013. The below deck components and non-submerged substructure were inspected from a work barge on March 7, 2013. Prior to arrival at the site, the most recent biennial inspection report issued by FDOT (11/18/2011) was reviewed and all recently completed repair work was discussed with the owner's bridge engineer and maintenance supervisor.

Sanibel Causeway – Structure A

The Sanibel Causeway consists of three separate structures linking Fort Myers to Sanibel Island over San Carlos Bay. It carries C.R. 867/McGregor Boulevard and was constructed in 2007. Structure A is the tallest and northernmost structure of the causeway, with a high span to accommodate boat traffic on the Intracoastal Waterway. It carries one lane of traffic in each direction, is 3,003 feet long, and consists of 21 precast concrete multi-girder spans. Its most recent sufficiency rating is 68.0 on a rating scale of 0-100, with federal condition ratings of 8 (very good) for the deck and channel, and 7 (good) for the superstructure and substructure. The causeway is currently only tolled for vehicles entering Sanibel Island.

Ongoing maintenance consists of deck and shoulder cleaning on a quarterly basis. It was noted at the time of the biennial inspection that the accumulation of dirt and debris in the shoulder areas and the joints on the deck had been removed. The owner's bridge engineer indicated that all three structures (Structures A, B and C) have diagonal web cracks in the bearing areas of every beam. This condition was also noted during the biennial inspection, but the inspection report does not fully document the length, size, and widespread extent of the cracking. The cracks are particularly visible on the painted fascia beams. The county has previously applied clear sealer to the cracked areas, as recommended by the bridge design firm.

In June 2012, the county retained CDM Smith to evaluate the beam end cracks, review the original design of the beams for compliance with AASHTO and FDOT specifications at the time of design, and offer an opinion as to the cause of the cracking. The evaluation concluded that the beams were code and practice compliant at the time of design, and that the cracking appeared to be induced by large internal prestress forces in the beam ends. The CDM Smith letter report recommended that the county initiate a crack monitoring program to fully document the cracking and provide a basis for determining whether the cracks are stabilized or continue to grow.

In late 2012, the county retained TY Lin to implement a crack monitoring program as recommended by CDM Smith. That work was currently ongoing at the time of this inspection. To date, TY Lin has

inspected the beams, and documented the current length and size of the cracks in all three causeway bridges. After six months, the cracks will be inspected again to document any changes.

Sanibel Causeway Structure A
Exterior Beam End with Applied Sealer

Sanibel Causeway Structure A
Piers in Good Condition

Other items noted in the biennial report included repairs made to the scupper down spouts, which have been shimmed and anchored to the beams. Underwater inspection of Piles 4-1, 11-17 and 17-10 revealed spalls with no exposed steel. Underwater inspection of pile cap footings edge scrapes and concrete formed sides that have vertical cracks with no corrosion staining up to full height x 1/16 in. wide with efflorescence. Bank protection is in need of minor repairs. The north bulkhead cap is intermittently spalled and delaminated with corrosion stains. Underwater inspection revealed scattered timber debris along the fender system and minimal marine growth on several pilings.

Overall the structure was found to be in good repair, working order, and condition with the exception of the beam cracking problem. Continued monitoring and development of an appropriate maintenance/repair method for the cracks is recommended. The bridge routinely operates at its normal traffic capacity, with no vehicle weight restrictions.

Sanibel Causeway – Structure B

A general walk-through inspection of the above deck components for this facility (Bridge No. 124115) was completed on March 5, 2013. The below deck components and non-submerged substructure were inspected from a work barge on March 7, 2013. Prior to arrival at the site, the most recent biennial inspection report issued by FDOT (11/16/2011) was reviewed and all recently completed repair work was discussed with the owner's bridge engineer and maintenance supervisor.

Sanibel Causeway – Structure B

The Sanibel Causeway consists of three separate structures linking Fort Myers to Sanibel Island over San Carlos Bay. It carries C.R. 867/McGregor Boulevard and was constructed in 2007. Structure B is the smallest and central structure of the causeway. It carries one lane of traffic in each direction, is 1,872 feet long, and consists of 13 precast concrete multi-girder spans. Its most recent sufficiency rating is 79.0 on a rating scale of 0-100, with federal condition ratings of 8 (very good) for the substructure, and 7 (good) for the deck and superstructure, and 7 (minor damage) for the channel.

Ongoing maintenance consists of deck and shoulder cleaning on a quarterly basis.

The recent biennial inspection noted that the superstructure beams have multiple hairline diagonal cracks in the lower flange and web up to 8 feet long near the bearing areas. The cracks extend upward and away from the bearing. The FDOT inspector also noted that the bottom flanges of the exterior beams have horizontal cracks up to 2 feet long. The owner's bridge engineer indicated that all three structures (Structures A, B and C) have diagonal web cracks in the bearing areas of every beam. This condition was also noted during the biennial inspection, but the inspection report does not fully document the length, size, and widespread extent of the cracking. The cracks are particularly visible on the painted fascia beams. The county has previously applied clear sealer to the cracked areas, as recommended by the bridge design firm. Elsewhere, there were also several locations where the poured beam end diaphragms have delaminations up to 8 inch x 10 inch in area.

At the topside, the concrete deck was noted as having diagonal and transverse cracking up to 1/64 inch wide throughout, and isolated areas of map cracking that was less than 1/64 inch wide. The undersides of the overhangs have full width up to 1/64 in. wide transverse cracks with some efflorescence.

Underwater inspection revealed scour holes around piles up to 18 inches deep. Bank protection is in need of minor repairs. The ground line was found to be sloping upward to 4 feet away from the west side of piling and 10 feet out from the piling on several bents. Some channel measurements have a 2 feet or greater change since the previous inspection.

None of the deficiencies noted in the biennial reports have any effect on the traffic volume or load capacity of the bridge.

Overall the structure was found to be in good repair, working order, and condition with the exception of the beam cracking problem. Continued monitoring and development of an appropriate maintenance/repair method for the cracks is recommended. The bridge routinely operates at its normal traffic capacity, with no vehicle weight restrictions.

Sanibel Causeway – Structure C

A general walk-through inspection of the above deck components for this facility (Bridge No. 124114) was completed on March 5, 2013. The below deck components and non-submerged substructure were inspected from a work barge on March 7, 2013. Prior to arrival at the site, the most recent biennial inspection report issued by FDOT (11/17/2011) was reviewed and all recently completed repair work was discussed with the owner's bridge engineer and maintenance supervisor.

Sanibel Causeway – Structure C

The Sanibel Causeway consists of three separate structures linking Fort Myers to Sanibel Island over San Carlos Bay. It carries C.R. 867/McGregor Boulevard and was constructed in 2007. Structure C is the longest and southernmost structure of the causeway. It carries one lane of traffic in each direction, is 3,867 feet long, and consists of 27 precast concrete multi-girder spans. Its most recent sufficiency rating is 79.0 on a rating scale of 0-100, with federal condition ratings of 7 (good) for the deck, superstructure and substructure, and 7 (minor damage) for the channel.

Ongoing maintenance consists of deck and shoulder cleaning on a quarterly basis. The bridge rails have minor vehicle impact-related scrapes.

The recent biennial inspection noted that the superstructure beams have multiple hairline diagonal cracks in the lower flange and web up to 10 feet long near the bearing areas. The cracks extend upward and away from the bearing. The FDOT inspector also noted that the exterior beams have numerous hairline horizontal cracks up to 30 inches long throughout the length of the beams. The owner's bridge engineer indicated that all three structures (Structures A, B and C) have diagonal web cracks in the bearing areas of every beam. This condition was also noted during the biennial inspection, but the inspection report does not fully document the length, size, and widespread extent of the cracking. The cracks are particularly visible on the painted fascia beams. The county has previously applied clear sealer to the cracked areas, as recommended by the bridge design firm.

The recent biennial inspection also noted that on the exterior face of Beam 11-1, there is a 1/32 inch wide horizontal crack in the chamber between the web and top flange that extends from Pier 11 to midspan. During this inspection, a similar crack was observed on the Span 9 (based on the Pier numbers), south fascia beam. Continued monitoring and development of an appropriate maintenance/repair method for the crack is recommended.

At the topside, the biennial inspection noted that the abutment joints were filling with dirt and debris, but were functioning. The report also noted that there is a 16 inch long section of the joint gland at Pier 10 that has pulled out of its slot in the left shoulder. The concrete deck has minor transverse

and diagonal cracks up to 1/64 inch wide in numerous spans and transverse cracks up to 1/32 inch wide over some bents with no expansion joints.

Horizontal Crack in Web/Flange Chamfer at Span 9

Beam End Cracks Labeled by Inspectors

Underwater inspection revealed spalls with no exposed steel up to 24 inch x 12 inch x 8 inch on pile caps 2, 5, 6, 7, 14, and 19. It also noted repairs had been made to spalls on footings 4, 8, 9, 22, and 23. Some channel measurements have a 2 ft or greater change since the previous inspection. None of the deficiencies noted in the biennial report have effect on the traffic volume or load capacity of the bridge.

Overall the structure was found to be in good repair, working order, and condition with the exception of the beam cracking problem. Continued monitoring and development of an appropriate maintenance/repair method for the cracks is recommended, along with further investigation of the horizontal crack at Span 9. The bridge routinely operates at its normal traffic capacity, with no vehicle weight restrictions.

LEEWAY SERVICE CENTER

The LeeWay Service Center is located approximately 4 miles south of downtown Fort Myers on Colonial Boulevard as shown in Figure 6-4. The service center houses the main administrative offices for toll collection operations, customer service, toll enforcement and transponder service.

Figure 6-4
LeeWay Service Center Location Map

LeeWay Service Center Building

The service center building was purchased by the County in 1998 and converted from its previous use as a bank to house the operations and customer service staff. Since that time it has undergone several major renovations. In 2003, the bank's outdoor canopy was converted to additional office space at the south side of the building. In early 2008, a large file storage area at the south side of the building was converted to a conference room and offices. Numerous smaller renovations and updates have also been made, such as installation of outdoor canopies at the transponder service entrance and the employee break area. Total square footage of the building is approximately 7,150 ft^2.

LeeWay Service Center

The building typically houses 15-20 permanent employees, but has adequate space to accommodate an additional 20-25 seasonal workers during the peak service renewal period.

Architectural Condition

The interior of the building appears to be in good condition overall with no serious maintenance items noted. Fixtures typically showed minor signs of wear, but have clearly been maintained on a regular basis. Storage capacity appears to be adequate for office supplies, files, transponders and other equipment with designated areas for storage of each.

The exterior of the building also appears to be in good condition overall. The painted brick façade and hurricane glass windows installed in 2010 are in very good condition. The LeeWay signs on the east and north sides of the building are in good condition, but the internal lighting of the sign at the north side of the building was not working at the time of inspection.

The service center roof consists of asphalt and stone impregnated, rolled material with internal drains at various locations. The surface material is generally in fair condition throughout, with several discolored areas that may indicate minor ponding due to improper or inadequate sloping of the roof towards the drains. The discolored areas were approximately 3' W X 12' L at the northwest corner, 6' W X 35' L at the southeast corner, and 4' W X 12' L & 10' diameter (two areas) at the southwest corner. These areas are approximately the same size as was noted in the 2011 inspection.

LeeWay Service Center Roof at Northeast Bubble Area in Roofing Material

LeeWay Service Center Roof at Southeast Corner Discolored Roofing Material & Ponding

There is also a minor bubbling of the roofing material near the northeast corner. Subsequent to the inspection, the county repaired several areas of bubbling on the roof.

Electrical and Communication Improvements

The fiber optic communications connections between the LeeWay Service Center and the toll plazas at Cape Coral and Sanibel have been completed and are now active.

A complete upgrade of the WebARCS database and customer interaction software has been completed. The upgraded system allows more online customer interaction with their account.

Structural Condition

The administration building appears to be in very good structural condition. No indications of structural distress were observed.

Mechanical and HVAC Condition

No deficiencies were noted in the plumbing fixtures of the bathrooms. In the employee break room, a supplemental hot water heater under the sink was in new condition.

Supplemental Undersink Water Heater

The employee break room and janitor's closet are in good condition. The HVAC system was working properly at the time of inspection.

The standby generator for this facility was salvaged from the Sanibel site when the new toll plaza was completed in 2007. It is in fair condition and is tested automatically on a weekly basis to ensure it is in working condition at all times. It is enclosed in a fenced, locked paddock area next to the service center building.

The security camera and monitor system was in good condition and operating in appropriate areas of the service center building. Security cameras are also installed in toll booths at all facilities and installation of security cameras for the employee parking areas is under consideration. Interior and exterior door locks were functional in all parts of the building and operate on a card swipe basis. The fire alarm and security systems appeared to be functioning properly. There are no sprinklers in the building.

Site/Civil Condition

The asphalt concrete employee parking area was generally in fair condition. The asphalt is bleached from sun exposure, but is generally smooth with occasional narrow cracks and isolated areas of alligator cracking.

Striping is in very good condition and appears to have been recently repainted. The concrete sidewalks in the parking area and surrounding the building were typically in fair condition, with isolated minor cracks, but no spalling or other serious deterioration.

Customer Parking Area Handicap Spaces Striping in Very Good Condition

A LeeWay ETC transponder test lane is set up at the west side of the building. Customers experiencing problems with their transponders can use this test lane to recreate problems they may be having with their equipment, and then have it diagnosed by service center staff. The test lane consists of a monopole cantilever structure with transponder reading equipment and a signal light. The equipment and test system was working properly at the time of inspection. The monopole cantilever structure was in good condition.

LeeWay Transponder Test Lane

Sign Structure Conditions

There are no sign structures associated with the service center. Directional guide signs for the service center on surrounding streets were typically in fair condition, with a faded surface and reduced reflectivity. At the service center parking area, the northwest driveway entrance sign is in very good condition. Elsewhere, the northeast driveway entrance and parking signs are faded, but remain legible.

Faded LeeWay Entrance Sign

Drainage for the employee and customer parking areas is accomplished through catch basins near the center of each area. Both are functioning, but have a buildup of leaf debris that is partially reducing the outflow pipe opening. There are no signs of backup during storm events.

The trash corral at the southwest corner of the entrance driveway is in fair condition. The painted brick walls are solid & appear stable, with no severe cracking or damage. The concrete slab is deteriorated at the interface with the asphalt parking area.

Parking Lot Catch Basin – Partly Filled with Debris

Appendix A
Interlocal Agreement – City of Cape Coral

SECOND AMENDMENT TO THE LEE COUNTY/CITY OF CAPE CORAL EAST-WEST CORRIDOR INTERLOCAL AGREEMENT

This Amendment to the Lee County/City of Cape Coral East-West Corridor Interlocal Agreement dated March 22, 1995 and Amended and Restated Lee County/City of Cape Coral East-West Corridor Interlocal Agreement dated May 22, 2001, is made and entered into this 26 day of November, 2002, by and between LEE COUNTY, a political subdivision of the State of Florida, hereinafter referred to as "COUNTY" and the CITY OF CAPE CORAL, a Florida municipal corporation located within Lee County, hereinafter referred to as "CITY", collectively, the "Parties".

WHEREAS, pursuant to the powers and authority granted the Parties under the constitution of the State of Florida and by statute, each has planned, separately and in cooperation with the other, an integrated road network; and

WHEREAS, in a cooperative effort between the Parties to accomplish shared transportation objectives, certain interrelated capital transportation facilities known as the "Midpoint Bridge (from DeLeon Street in the City of Fort Myers to the Del Prado Interchange in the City of Cape Coral, the "East-West Corridor" [now known as the "Veterans Memorial Parkway"]) from the Del Prado Interchange west to the County Line including Burnt Store Road from Pine Island Road north to the County Line and Colonial Boulevard from DeLeon Street to Solomon Boulevard in the City of Fort Myers) (collectively, the "PROJECT") have been planned and are, or are being constructed; and

WHEREAS, the CITY and COUNTY entered into an Interlocal Agreement regarding their respective duties and responsibilities for the PROJECT; and

WHEREAS, it is in the public's interest of both the CITY and the COUNTY to amend the Interlocal Agreement dated March 22, 1995 and Amended and Restated Lee County/City of Cape Coral East-West

Corridor Interlocal Agreement dated March 22, 2001, attached hereto as Exhibits "A" and "B" respectively,

WHEREAS, the cooperative effort of the Parties has included successful participation in the litigation and related expense to establish the authority of the Parties to plan and construct the PROJECT, as reflected in *Lee County and the City of Cape Coral v. the City of Fort Myers*, Case No. 88-598-CA; and,

WHEREAS, the cooperative effort of the Parties has included shared expense of preliminary engineering and the preparation and approval through the public hearing process of the Environmental Impact Statements (E.I.S.) for the PROJECT; and

WHEREAS, the Parties seek to continue the cooperative effort through the financing, design, right-of-way, acquisition, and construction of the PROJECT in a manner that fairly accomplishes the Parties' respective transportation goals and objectives; and

WHEREAS, the Parties seek to utilize the "Toll Revenues" and "Net Surplus Toll Revenues" as herein defined, to equitably distribute same, so as to meet future CITY and COUNTY transportation needs.

NOW, THEREFORE, in consideration of the above promises and other good and valuable consideration, the sufficiency of which is hereby acknowledged by the Parties, the CITY and COUNTY hereby agree to amend the Interlocal Agreement as follows:

1. The Recitals as set forth above are incorporated into the terms of this Agreement as if set out herein at length.

2. The Amended and Restated Agreement is hereby amended as follows, with underlined language being the amendment to previously adopted text and deleted language being shown by struck-through type.

On each April 1, following the first September 30 subsequent to completion of the Midpoint Bridge,

the COUNTY shall remit to the CITY from monies available in the Surplus Account established by the Resolution, forty percent (40%) of the Net Surplus Toll Revenues as defined herein derived from operation of the Bridges during the preceding fiscal year (October 1 to September 30) prior to each payment date, along with an accounting for such payment. Such percentage may be reviewed and renegotiated by the Parties in good faith, each five (5) years following the execution of this Agreement.

For purposes of this Agreement, "Net Surplus Toll Revenues" shall mean Gross Revenues of the Bridges less (i) Operating Expenses of the Bridges; (ii) the Bridges Debt Service Requirement; (iii) the Renewal and Replacement Costs of the Bridges pursuant to the Lee County Bond Covenants; (iv) any payments made by the COUNTY to reimburse the CITY for debt service pursuant to Section 3 hereof; (v) debt service payments made by the COUNTY with respect to its Capital and Transportation Facilities Refunding Revenue Bonds, Series 1993A; (vi) any debt service payments made by the COUNTY with respect to obligations it issues to pay for costs of the PROJECT other than the Bonds and the obligations of the COUNTY secured by a pledge of the COUNTY's share of the gas tax levied by the COUNTY pursuant to Section 336.025(1), Florida Statutes, as described in the Interlocal Agreement between the Parties dated June 27, 1994 (Lee County Contract No. C-93-0835); (vii) any repayment of the Toll Facilities Revolving Trust Fund (TFRTF) loan by the State of Florida for Veteran's Memorial Parkway between Santa Barbara and Surfside Boulevard; (viii) any repayments to the commercial paper debt incurred for the construction of Veteran's Memorial Parkway between Santa Barbara Boulevard and Miracle Parkway; (ix) any project costs, including land acquisition, professional fees, permits and construction of Veteran's Memorial Parkway between Santa Barbara Boulevard and Surfside; (x) construction costs, including any monies advanced by COUNTY for construction of "Veteran's Memorial Parkway Extension", from Surfside Boulevard to approximately 800 feet north of Pine Island Road,

including the intersection of Veteran's and Pine Island Road and project costs relating to Burnt Store Road from SR 78 (Pine Island Road) north to the County line; (xi) State of Florida Infrastructure bank loans, or any other enhancement projects as mutually agreed to by both government entities; ~~and~~ (xii) any other debt service payments on any of the outstanding bonds as defined in subsection 9. above, if necessary; (xiii) and the Cape Coral Toll Plaza Rehabilitation, and (xiv) technology relating to electronic toll collection for Cape Coral and Midpoint Toll Facilities.

3. The County will undertake a corridor study for this roadway from Burnt Store Road at the north county line to Colonial Boulevard's interchange with Interstate I-75. The County will also provide street lighting at Veterans Parkway intersection with State Road 78. Additional street lighting will be provided when warranted and consistent with the adopted County policy on street lighting. Also, the County will construct turn lane improvements at Ceitus Parkway.

4~~3~~. All of the remaining terms in the Interlocal Agreement dated March 22, 1995 and the Amended and Restated Agreement dated March 22, 2001, attached hereto, remain the same.

IN WITNESS WHEREOF, the parties hereto have caused the execution hereby by their duly authorized officials on the date set forth above.

ATTEST:

By: _____
City Clerk

CITY OF CAPE CORAL

By: _____
Arnold Kempe, Mayor

APPROVED AS TO FORM:

By: _____
City Attorney

ATTEST:
CHARLIE GREEN, CLERK

By: _____
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

By: _____
Vice - Chairman

APPROVED AS TO FORM BY:

_____
Office of the County Attorney

AMENDED AND RESTATED
LEE COUNTY / CITY OF CAPE CORAL
EAST-WEST CORRIDOR INTERLOCAL AGREEMENT

This Amended and Restated Interlocal Agreement is made and entered into this 22nd day of May, 20 01, by and between LEE COUNTY, FLORIDA, a political subdivision of the State of Florida, (hereinafter "COUNTY") and the CITY OF CAPE CORAL, FLORIDA, a Florida municipal corporation located within Lee County; (hereinafter "CITY"), collectively, the "Parties" hereto.

WHEREAS, pursuant to the powers and authority granted the Parties under the constitution of the State of Florida and by statute, each has planned, separately and in cooperation with the other, an integrated road network; and,

WHEREAS, in a cooperative effort between the Parties to accomplish shared transportation objectives, certain interrelated capital transportation facilities known as the "Midpoint Bridge" (from Deleon Street in the City of Fort Myers to the Del Prado Interchange in the City of Cape Coral, the "East-West Corridor" [now known as the "Veterans Memorial Parkway"] (from the Del Prado Interchange to Burnt Store Road in the City of Cape Coral) and Colonial Boulevard from Deleon Street to Solomon Boulevard in the City of Fort Myers (collectively, the "PROJECT") have been planned and are, or are being constructed; and,

WHEREAS, the cooperative effort of the Parties has included successful participation in the litigation and related expense to establish the authority of the Parties to plan and construct the PROJECT, as reflected in Lee County and The City of Cape

Coral v. The City of Fort Myers, Case No. 88-5598-CA; and,

WHEREAS, the cooperative effort of the Parties has included shared expense of preliminary engineering and the preparation and approval through the public hearing process of the Environmental Impact Statements (E.I.S.) for the PROJECT; and,

WHEREAS, the Parties seek to continue the cooperative effort through the financing, design, right-of-way acquisition, and construction of the PROJECT in a manner that fairly accomplishes the Parties' respective transportation goals and objectives; and,

WHEREAS, the cooperative financing effort includes a proposal to utilize a share of the CITY'S debt capacity to fund the construction of a portion of the PROJECT; and,

WHEREAS, the Parties seek to utilize the "Toll Revenues" and "Net Surplus Toll Revenues" as herein defined, in order to mitigate the effect of the pledge of the CITY'S credit, and to equitably distribute same, so as to meet future CITY and COUNTY transportation needs.

NOW THEREFORE, in consideration of the mutual covenants and promises contained herein, the Parties agree as follows:

1. The Parties agree that the PROJECT shall be included within the Lee County Road System for the purposes of superintendence and control by the COUNTY as set forth in the "Florida Transportation Code" Chapter 334.01 et. seq., Florida Statutes, and for all other legal purposes.

2. The Parties acknowledge and agree that the COUNTY shall use all reasonable efforts to finance, design, construct and maintain the transportation facility known as the "Midpoint Bridge" project. The "Midpoint Bridge" project herein referred to

shall consist of construction of the toll funded multi-laned road and bridge from Deleon Street in the City of Fort Myers to Del Prado Boulevard in the City of Cape Coral. The Parties further acknowledge and agree that the COUNTY shall use all reasonable efforts to finance, design, construct, acquire right-of-way for and maintain the Del Prado Boulevard Interchange, which connects the "Midpoint Bridge" project with the "East-West Corridor".

3. The Parties acknowledge that an extension of the "East-West Corridor" project west of Santa Barbara Boulevard to Miracle Parkway is a future additional, essential link in the PROJECT in order to establish a continuous facility from the eastern to the western limits of the CITY. The Parties agree that the COUNTY shall use all reasonable efforts to design that portion of the "East-West Corridor" from Santa Barbara Boulevard to connect with Miracle Parkway. The Parties agree that the CITY may, but is not required to, conduct advance right-of-way acquisition for the Santa Barbara Boulevard to Miracle Parkway portion of the PROJECT in order to expedite construction and to control cost. Unless otherwise agreed to by the CITY under official CITY action, the actual costs of the advance right-of-way cost (not including "internal" or "in-house" costs), shall be reimbursed to the CITY by the COUNTY at or prior to commencement of construction. Such reimbursement shall be conditioned upon COUNTY'S approval of CITY'S purchase price and costs for any property acquired by CITY prior to closing of each parcel. Such approval shall not be unreasonably withheld by COUNTY. COUNTY agrees to construct this portion of the corridor when necessary, appropriate and financially feasible.

4. The Parties acknowledge that both the existing Cape Coral Bridge and the

future Midpoint Bridge facility will produce certain toll revenues. The Parties further acknowledge that based upon revenue projections by the feasibility and financial consultants retained by the COUNTY, there may be at some point in time, "Net Surplus Toll Revenues" as herein defined, generated by the Cape Coral Bridge and Midpoint Bridge facilities.

For purposes of this Section 4., the terms used herein shall have the following meaning:

1. "Additional Obligations" shall mean indebtedness payable on a parity with the Outstanding Bonds, whether such indebtedness is initially issued on a parity basis or achieves parity status by accession as set forth in the Resolution.

2. "Bonds" shall mean the Outstanding Bonds and any Additional Obligations.

3. "Bridges" shall mean the Cape Coral Bridge and the Midpoint Bridge.

4. "Bridges Debt Service Requirement" shall mean the sum of (a) the product of the Debt Service Requirement for the Outstanding Bonds multiplied by the ratio derived by dividing the sum of the amount or proceeds of the Outstanding Bonds used to finance the Bridges and extensions and improvements thereto and any capitalized interest in connection therewith by the total proceeds of the Outstanding Bonds less the sum of (i) any accrued interest, (ii) all issuance costs including any bond insurance premium or other credit enhancement fees, and (iii) any deposit to the Reserve Subaccount established pursuant to the Resolution, and (b) the product of the Debt Service Requirement for any outstanding Additional Obligations and Subordinated Indebtedness multiplied by the ratio derived by dividing the amount of proceeds of any such Additional Obligations and

Subordinated Indebtedness used to finance improvements, modifications or extensions to the Bridges and any capitalized interest in connection therewith by the total proceeds of such Additional Obligations and Subordinated Indebtedness less the sum of (i) any accrued interest, (ii) all issuance costs including any bond insurance premium or other credit enhancement fees, and (iii) any deposit to the Reserve Subaccount established pursuant to the Resolution or to any reserve account for Subordinated Indebtedness.

5. "Debt Service Requirement" for any annual period shall mean the aggregate amount of (a) interest paid or to be paid on account of the Bonds or any Subordinated Indebtedness during such annual period, except to the extent that such interest is paid from the proceeds of such Bonds or Subordinated Indebtedness, (b) principal of the Bonds or Subordinated Indebtedness paid or to be paid during such period whether such payment is due to maturity or mandatory redemption, (c) any deposits to the Reserve Subaccount required by the Resolution, or to any reserve account for Subordinated Indebtedness, during such period, and (d) disbursements for the expenses, liabilities and compensation of any paying agent, registrar, credit bank or depository related to the Bonds or Subordinated Indebtedness during such period.

6. "Gross Revenues" shall have the meaning provided therefor in the Resolution.

7. "Net Revenues" shall mean Gross Revenues less Operating Expenses.

8. "Operating Expenses" shall have the meaning provided therefor in the Resolution.

9. "Outstanding Bonds" shall mean (a) the Lee County, Florida Transportation

Facilities Revenue Bonds, Series 1987, (b) the Lee County, Florida Transportation Facilities Refunding Revenue Bonds, Series 1991, (c) the Lee County, Florida Transportation Facilities Refunding Revenue Bonds, Series 1993 & 1993A, and (d) the Lee County, Florida Transportation Facilities Revenue Bonds, Series 1995.

10. "Renewal and Replacement Costs" shall mean an amount equal to five percent (5%) of the Gross Revenue of the Bridges.

11. "Resolution" shall mean Resolution No. 86-4-12 of the COUNTY, as restated, amended and supplemented.

12. "Subordinated Indebtedness" shall mean indebtedness secured by Net Revenues on a basis junior and subordinate to the Bonds.

On each April 1, following the first September 30 subsequent to completion of the Midpoint Bridge, the COUNTY shall remit to the CITY from monies available in the Surplus Account established by the Resolution, forty percent (40%) of the Net Surplus Toll Revenues as defined herein derived from operation of the Bridges during the preceding fiscal year (October 1 to September 30) prior to each payment date, along with an accounting for such payment. Such percentage may be reviewed and renegotiated by the Parties in good faith, each five (5) years following the execution of this Agreement.

For purposes of this Agreement, "Net Surplus Toll Revenues" shall mean Gross Revenues of the Bridges less (i) Operating Expenses of the Bridges, (ii) the Bridges Debt Service Requirement, (iii) the Renewal and Replacement Costs of the Bridges pursuant to the Lee County Bond Covenants, (iv) any payments made by the COUNTY to reimburse the CITY for debt service pursuant to Section 3 hereof, (v) debt service payments made

by the COUNTY with respect to its Capital and Transportation Facilities Refunding Revenue Bonds, Series 1993A, (vi) any debt service payments made by the COUNTY with respect to obligations it issues to pay for costs of the PROJECT other than the Bonds and the obligations of the COUNTY secured by a pledge of the COUNTY'S share of the gas tax levied by the COUNTY pursuant to Section 336.025(1), Florida Statutes, as described in the Interlocal Agreement between the Parties dated June 27, 1994 (Lee County Contract No. C-93-0835), (vii) any repayment of the Toll Facilities Revolving Trust Fund (TFRTF) loan by the State of Florida for Veteran's Memorial Parkway between Santa Barbara Boulevard and Surfside Boulevard; (viii) any repayments to the commercial paper debt incurred for the construction of Veteran's Memorial Parkway between Santa Barbara Boulevard and Miracle Parkway; (ix) any project costs, including land acquisition, professional fees, permits and construction of Veteran's Memorial Parkway between Santa Barbara Boulevard and Surfside; (x) construction costs, including any monies advanced by COUNTY for construction of Veteran's Memorial Parkway, of that portion of road segment formally known as "Veteran's Memorial Parkway Extension", from Surfside Boulevard to approximately 800 feet north of Pine Island Road, including the intersection of Veteran's and Pine Island Road; State of Florida Infrastructure bank loans, or any other enhancement projects as mutually agreed to by both government entities, and (xi) any other debt service payments on any of the outstanding bonds as defined in subsection 9. above, if necessary.

"Net Surplus Toll Revenues" shall be calculated prior to any deduction of debt service payments by the COUNTY for bonded transportation projects other than the

PROJECT, which for purposes of this provision, shall also include the proposed road improvements from Santa Barbara to the Burnt Store Road Extension in the City of Cape Coral.

Funds paid to the CITY pursuant to this Agreement shall be used for any transportation purpose as authorized by applicable Florida Statutes.

It is expressly understood and agreed by the CITY that the obligation of the COUNTY to make payments to the CITY required by this Agreement is in all respects subject to the Resolution, and that such payments shall be made only from the Surplus Account established pursuant to the Resolution, to the extent monies are available therein for such purpose, and are junior and subordinate to all payments required by the Resolution.

Finally, except for the Gas Tax Bonds as contemplated by this Agreement and as issued by the CITY, nothing herein shall be construed or interpreted to create or constitute an obligation or responsibility of the CITY for any deficits in the revenues from the PROJECT.

5. The "Burnt Store Road Extension" of the Veteran's Memorial Parkway consists of the continuation of Burnt Store Road south of State Road 78 to the East-West Corridor at Surfside Boulevard. This Agreement shall not affect the existing Interlocal Agreement between the Parties pertaining to the Burnt Store Road Extension" of the Veteran's Memorial Parkway. Prior to the disbursement of any Net Surplus Toll Revenues, any costs for construction of the Veteran's Memorial Parkway Extension will be deducted as previously provided in Section Four, subparagraph five herein.

The CITY and the COUNTY acknowledge that the construction of the Veteran's Memorial Parkway Extension, consisting of Veteran's Memorial Parkway between Santa Barbara Boulevard and Surfside Boulevard, and Surfside Boulevard to approximately 800 feet north of Pine Island Road, including the intersection of Veteran's and Pine Island Road, will commence in Calendar Year 2001. The COUNTY will use all reasonable efforts to complete construction in Calendar Year 2002.

6. In the event any one or more of the provisions contained in this Agreement shall, for any reason, be held to be invalid, illegal or unenforceable in any respect, such invalidity or illegality or unenforceability shall not affect any other provision hereof, and this Agreement shall be constructed as if such invalid, illegal or unenforceable provision had never been contained herein.

7. This Agreement shall remain in full force and effect through the Calendar Year 2020, and will be evaluated by the Parties hereto in Calendar Year 2010, except that the Net Surplus Toll Revenue sharing formula as set forth herein shall remain in full force and effect as long as either or both the Cape Coral or Midpoint Bridges shall remain toll facilities. This Agreement shall be construed in accordance with the laws of the State of Florida.

8. This Agreement may be executed in counterparts, with each Agreement becoming a fully effective and binding document upon the Parties once both Parties have each executed this Interlocal Agreement by their duly authorized representatives.

IN WITNESS WHEREOF, the Parties have hereunto set their hands and seals the date and year first above written.

ATTEST:

By: _____
Bonnie Mazurkiewicz
City Clerk

CITY OF CAPE CORAL

By: _____
Arnold Kempe, Mayor

APPROVED AS TO FORM:

By: _____
City Attorney

ATTEST: CHARLIE GREEN
CLERK OF COURTS

By: _____
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

By: _____
Vice-Chairman

APPROVED AS TO FORM:

By: _____
Office of the County Attorney

Appendix B
Settlement Agreement – City of Sanibel

IN THE CIRCUIT COURT OF THE TWENTIETH JUDICIAL CIRCUIT
IN AND FOR LEE COUNTY, FLORIDA
CIVIL DIVISION

CITY OF SANIBEL, a municipal corporation,	)	
	)	
Plaintiff,	)	
	)	
vs.	)	**CASE NO.: 04-134-CA-H**
	)	
LEE COUNTY, a political subdivision of the State of Florida, and THE BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, its governing body,	)	
	)	
Defendant.	)	

SETTLEMENT AGREEMENT AND RELEASE OF CLAIMS
BY AND BETWEEN THE CITY OF SANIBEL AND LEE COUNTY

This Settlement Agreement and Release of Claims (the "Agreement") is entered into this the 1st day of March, 2005 by and between the City of Sanibel ("City") and Lee County, Florida ("County"), who stipulate as follows:

RECITALS

A. WHEREAS, the City and County are parties to an action in the Circuit Court in and for Lee County, Florida, Case No. 04-134-CA-H, the style of which is set forth above (the "Litigation") arising out of or relating to the Sanibel Island Bridge and Causeway (the "Causeway"); and

B. WHEREAS, the parties have determined that settlement of the Litigation is in the best interests of the residents and businesses of the City and the County and will serve to improve the working relationship between the City and County in general, and specifically with regard to the reduction of the current Sanibel Discount Program Fees and Tolls; and

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03-01-05

C. WHEREAS, the City and the County have determined to settle all the claims existing between them in the Litigation in accordance with the terms of this Settlement Agreement; and.

D. WHEREAS, the City and County have been parties to an interlocal agreement pertaining to the Causeway for several decades, the most recent of which is entitled the "Amended and Restated Interlocal Agreement," dated June 11, 2002 (the "Interlocal Agreement"), a copy of which is appended hereto as Exhibit A; and

E. WHEREAS, rights and liabilities of the Parties hereto arising under interlocal agreements other than the Interlocal Agreement as defined hereinabove are not affected nor addressed in any way by this Agreement; and

F. WHEREAS, under Section 6 of the Interlocal Agreement, the parties agreed that the County shall remit to the City twenty-one percent (21%) of the Net Revenues, as that term is defined therein, derived from operation of the Causeway; and

G. WHEREAS, as the result of incurring construction and other costs associated with construction of a new Causeway, the County has increased the Tolls and Sanibel Discount Program Fees associated with use of the Causeway (the "Causeway Tolls," as more fully defined below); and

H. WHEREAS, as the result of incurring construction and other costs associated with the construction of the new Causeway, the County has prepared a "Transportation Facilities Financing Model – Sanibel Interlocal Agreement Rebate" ("Financing Model"), a copy of which is appended hereto as Exhibit B; and

I. WHEREAS, the County intends to issue permanent financing for the replacement of the Sanibel Bridges and Causeway in parity with the County's Series 2001A Transportation Facilities Refunding Bonds, as defined in the Interlocal Agreement, with the estimated debt service payments (acknowledged by the parties to be only estimated as of the date of this Agreement, and subject to change) reflected in the "Bonded Debt Service" column of Exhibit "B".

NOW, THEREFORE, in consideration of the covenants by and between the City and the County, as set forth herein, and the sufficiency of each such sum and covenant being hereby acknowledged by the parties, it is agreed:

TERMS AND CONDITIONS OF AGREEMENT

1. The parties acknowledge that the recitals set forth hereinabove are material, are true and correct, and are incorporated herein by reference.

2. Definitions

a. Causeway Tolls – The term "Causeway Tolls" includes the fee charged the motoring public for the vehicular use of the Sanibel Causeway, and for purposes of this Agreement, the term "Causeway Tolls" shall include the following defined terms:

(i) "Sanibel Discount Program Fees", which shall include the cost of all Program Fees as described in Lee County Resolution No. 04-08-60, at Section One, Paragraph c., i, ii, iii and iv, and Paragraph e., i, ii, iii and iv, attached hereto as Exhibit C., on an annual, semi-annual or other basis as part of the Sanibel Discount Program, and the per trip charge applicable to such Sanibel Discount Program.

(ii) "Toll" shall mean the cash fee paid by motorists other than those paying Sanibel Discount Program Fees.

b. Junior Lien or General Loan Fund – The term "Junior Lien or General Loan Fund" means County debt obligation(s) other than bonded debt, and is reflected in the fourth column, "Other Debt Service," on Exhibit B. The County currently anticipates that this Junior Lien or General Loan Fund will be substantially retired in 2010 and completely retired by 2012.

c Surplus Toll Revenues – For the purposes of this Agreement only, "Surplus Toll Revenues" shall mean the "Gross Revenues" less the principal "Causeway Debt Service Requirement", "Additional Obligations", "Operating Expenses", "Renewal and Replacement Costs", and "Subordinated Indebtedness" for the 2001A Transportation Refunding Revenue Bonds, as all such terms are defined in the Interlocal Agreement, except that the term "Transportation Facility" shall mean the Causeway as defined hereinabove.

3. The Parties to this Agreement hereby expressly covenant and agree, for themselves and all who might make claim by and through them, to discontinue and dismiss with prejudice all actions, claims, counterclaims, suits and proceedings, including the Litigation, which are now pending by and between them with respect to the Causeway and/or the Interlocal Agreement, upon full payment of the sum set forth in paragraph No. 4 below, and do further expressly covenant and agree not to institute, reinstate or prosecute any action, cause of action, claim, cross-claim, counterclaim, proceeding or suit among or between them, whether sounding in tort, in contract, or otherwise for any loss or damage suffered by them and all who might make claim through them on account of the Causeway and/or the Interlocal Agreement or any matters related thereto. Each Party shall utilize its best efforts to seek the approval of the Circuit Court for a Joint Stipulated Motion for Dismissal With Prejudice and "Order," which is appended

hereto as Exhibit D. Each Party shall bear its own attorney's and expert fees, costs, and other expenses.

4. Lee County shall release to the City, the Surplus Toll Revenues which were otherwise due and payable to the City on November 1, 2004, in the sum of Two Hundred Two Thousand Seven Hundred Ninety-Four and 85/100 Dollars ($202,794.85) within ten (10) business days after the final execution of this Agreement. The City agrees to use same solely for reducing the Sanibel Discount Program Fees consistent with the terms of Paragraph no. 5.a. below.

5. Effective for all Surplus Toll Revenues collected and otherwise available as of October 1, 2004, the City and the County agree to contribute One Hundred Percent (100%) of their respective shares of the Surplus Toll Revenues for the following purposes:

a. The City shall contribute its 21% pro rata share of the Surplus Toll Revenues to which it is entitled under the terms of the Interlocal Agreement for the sole purpose of reducing the Sanibel Discount Program Fees for the Causeway so long as the County contributes its 79% pro rata share as described in Paragraph 5.b below. Notwithstanding the foregoing, and to the extent that the Surplus Toll Revenues must be utilized to retire the Junior Lien Debt or General Fund Loan in order to reduce the Sanibel Discount Program Fees, then to such extent the City contributes the same percentage of its pro rata share as is contributed by the County, with the remainder of its share pledged to the reduction of the Sanibel Discount Program Fees as described above.

b. The County shall contribute the entirety of its 79% pro rata share of the Sanibel Surplus Toll Revenues to which it is entitled under the terms of the Interlocal Agreement for the sole purpose of reducing the Sanibel Bridges Replacement and Toll Facility Project with

associated Sanibel Discount Program Fees and Causeway Tolls, until such time as the Junior Lien Debt or General Fund Loan is paid in full.

6. With respect to the issuance of the County's permanent bonded financing for the Project, the Parties recognize and acknowledge that the market conditions existing at the time of the bond sale, including but not limited to the prime interest rate, the bond ratings established by independent agencies, the relative strength or weakness of the bond market, and other financial variables are all conditions which are beyond the control of the County and make it impossible for the County to definitively agree upon a specific amount of decrease in the Sanibel Discount Program Fees. Nevertheless, it is the County's intention to utilize its best efforts to reduce such fees by at least thirty percent (30%) if market conditions existing at the time of the bond sale can sustain such percentage. The timing of the reduction shall be predicated on the timing of the sale of the County's bonds.

7. The County agrees to utilize its best efforts to establish amounts and schedules which shall result in the substantial retirement of the Junior Lien Debt or General Loan Fund in 2010, with final retirement of the same in 2012. After initial establishment of the amount of the Junior Lien or General Loan Fund, no additional sums shall be added to this class of debt service.

8. Upon the full retirement of the Junior Lien Debt or General Loan Fund, the County shall employ at its expense a Traffic and Revenue consultant to review the toll structure to ensure there are sufficient revenues to comply with the existing bond covenants. Said consultant shall exercise due diligence in reviewing and certifying its review. Within one year of the completion of the consultant's review and certification, the County shall consider possible additional reductions in the toll structure and shall perform an assessment of the Surplus Toll

Revenues for each Party. Under no circumstances shall the Surplus Toll Revenues be disbursed to only one of the Parties to this Agreement. Upon any such distribution, the Surplus Toll Revenues shall be used by the Parties for any lawful transportation purpose, as may be authorized by then existing law. In 2009, the Parties shall meet and negotiate in good faith, certain amendments to the "Interlocal Agreement" as defined herein, in conjunction with revisions to that certain Sanibel/Lee County Local Option Gas Tax distribution Interlocal Agreement as entered into by the Parties on May 31, 1989.

9. Subject to applicable laws relating to public hearings and other requirements of the laws of the State of Florida, the Parties will utilize their best efforts to amend and restate the Interlocal Agreement to reflect the above terms and conditions, effectuating the purposes of the Interlocal Agreement to the extent they are not inconsistent herewith.

10. Unless this Agreement is materially breached by the County, the City agrees that it will not bring any action or cause of action against the County or any other entity, nor will it take any action, formal or informal, which would be intended to adversely affect the County's ability to obtain permanent financing, in the form of the issuance of bonds or otherwise, for the Sanibel Bridges Replacement and Toll Facility Project.

11. The Parties acknowledge and agree that dates, assumptions and estimated costs set forth hereinabove and in Exhibit B are expressly contingent upon the Causeway not being subjected to an intervening Act of God or other natural disaster which render the projected performance of either Party as set forth herein or in Exhibit B, commercially impracticable.

12. The City hereby releases and forever discharges the County and its employees, officers, commissioners, agents, attorneys, and successors of and from all claims, demands, and causes of action of any kind and nature, whether known or unknown, in law or in equity, arising

out of or related to the Interlocal Agreement, including but not limited to the claims asserted in the Litigation and any and all such additional claims as could have been asserted in the Litigation.

13. The County hereby releases and forever discharges the City and its employees, officers, councilmen and councilwomen, agents, attorneys, and successors of and from all claims, demands, and causes of action of any kind and nature, whether known or unknown, in law or in equity, arising out of or related to the Interlocal Agreement, including but not limited to the claims asserted in the Litigation and any and all such additional claims as could have been asserted in the Litigation.

14. It is understood and agreed that the making and execution of this Agreement by the Parties hereto and the exchange of consideration reflected herein is not intended to be and shall not be construed as an admission of liability on the part of anyone or any entity, but is made and exchanged in settlement of disputed claims for the reasons set forth in the recitals and to avoid the expense of continuing litigation by the governmental bodies herein.

15. Each Party represents that the individual whose signature appears below on its behalf has full power and authority to execute this Agreement on its behalf, and that such authority is derived by virtue of that individual's office.

16. The Parties represent that they have not sold, assigned, granted or transferred to any person, corporate or natural, any claim, action, demand or cause of action which is released by this Agreement.

17. This Agreement is the result of negotiations among and between the City and the County, and each has had the opportunity to modify the drafting of this Agreement. Each Party

acknowledges that neither it nor anyone acting on its behalf is relying upon any statement, representation or promise (other than those set forth herein) made by or on behalf of any other Party but that, in agreeing to the settlement and in executing this Agreement, it is relying solely upon the results of its own investigation and knowledge and those of its own attorneys, agents, and employees and in reliance upon legal advice of counsel of its own selection, and not upon the legal advice of any other Party or that Party's attorneys.

18. The Parties agree that this Agreement shall be interpreted and construed in accordance with Florida law.

19. The Parties acknowledge and agree that this Agreement may be executed in counterparts, and that it shall be binding in all respects upon and inure to the benefit of the Parties, their legal representatives, successors, and duly approved assigns.

20. In the event that an action is commenced to enforce or interpret this Agreement, the Court may award attorneys' fees, costs and litigation expenses to the prevailing Party.

21. This Agreement must be signed and the Joint Stipulated Motion for Dismissal With Prejudice and Order appended hereto as Exhibit D must be executed and filed on or before the close of business on March 1, 2005; otherwise this Agreement shall be void and of no force and effect.

[BALANCE OF PAGE LEFT INTENTIONALLY BLANK][

LEE COUNTY, FLORIDA

By: _____
DOUGLAS R. ST. CERNY
CHAIRMAN, BOARD OF COUNTY
COMMISSIONERS OF LEE COUNTY

Attest: Charlie Green
Clerk of the Circuit Court
Lee County, Florida

By: Michele S. Cooper
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS SEAL LEE COUNTY, FLORIDA

_____
APPROVED AS TO FORM
DAVID OWEN
COUNTY ATTORNEY

CITY OF SANIBEL, FLORIDA

By: _____
MARTY HARRITY
MAYOR

CITY SEAL

Attest: City Clerk
City of Sanibel

By: _____

_____
APPROVED AS TO FORM
KENNETH CUYLER
CITY ATTORNEY

EXHIBIT "A"

AMENDED AND RESTATED

INTERLOCAL AGREEMENT

between

LEE COUNTY, FLORIDA

and

CITY OF SANIBEL, FLORIDA

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AMENDED AND RESTATED
INTERLOCAL AGREEMENT

THIS AMENDED AND RESTATED INTERLOCAL AGREEMENT is made and entered into on this 11th day of June, 2002, by and between Lee County, a political subdivision and charter county of the State of Florida (the "County"), and the City of Sanibel, a municipal corporation of the State of Florida (the "City"), collectively the "Parties" hereto.

WITNESSETH:

WHEREAS, the County currently owns and operates the Sanibel Bridge and Causeway; and,

WHEREAS, the County has heretofore enacted Lee County Ordinance No. 86-11 providing for the imposition of tolls on certain transportation facilities, including the Sanibel Bridge and Causeway, and authorizing the issuance of transportation facilities revenue bonds payable from the aggregate net revenues of such transportation facilities; and,

WHEREAS, the County has, pursuant to Ordinance No. 86-11, adopted Resolution No. 86-4-12, authorizing the issuance of Transportation Facilities Revenue Bonds, Series 1987, for the purpose of refunding the County's Sanibel Bridge Improvement Bonds dated June 1, 1979, and financing the construction of certain other Transportation Facilities; and,

WHEREAS, in connection with the County's issuance of the Sanibel Bridge Improvement Bonds dated June 1, 1979, the City and the County entered into an Interlocal

Agreement dated as of November 10, 1987; and,

WHEREAS, the Parties hereto have determined that it is in the best interests of the citizens of both the City and the County to amend and restate the prior 1987 Interlocal Agreement and to enter into this Interlocal Agreement in connection with the County's issuance of its Transportation Facilities Revenue Bonds pursuant to Ordinance No. 86-11, and Resolution No. 86-4-12 as it has been further amended.

NOW THEREFORE, in consideration of the mutual benefits to be derived from this Agreement, the Parties hereto covenant and agree as follows:

Section 1. Definitions.

When used in this Agreement, the following terms shall have the following meanings, unless the context clearly otherwise requires:

"Additional Obligations" shall mean indebtedness payable on a parity with the Series 1987 Bonds as they have been subsequently refunded, whether such indebtedness is initially issued on a parity basis or achieves parity status by accession as set forth in the applicable Resolution.

"Agreement" shall mean this Amended and Restated Interlocal Agreement.

"Bonds" shall mean the Series 1987 Bonds as they have been subsequently refunded, and any Additional Parity Obligations.

"Causeway" shall mean the Sanibel Bridge and Causeway extending McGregor Boulevard in Punta Rassa and Causeway Road on Sanibel Island.

"Causeway Debt Service Requirement" shall mean the sum of (a) the product of the Debt Service Requirement for the Series 1987 Bonds multiplied by the ratio derived by

dividing the sum of (i) the amount of proceeds of the Series 1987 Bonds required to refund the Series 1987 Bonds used to finance improvements, modifications or extensions to the Causeway and any capitalized interest in connection therewith by the total proceeds of the Series 1987 Bonds less the sum of (i) any accrued interest, (ii) all issuance costs including any bond insurance premium or other credit enhancement fees, and (iii) any deposit to the Reserve Subaccount established pursuant to the Resolution, and (b) the product of the Debt Service Requirement for any outstanding Additional Obligations and Subordinated Indebtedness multiplied by the ratio derived by dividing the amount of proceeds of any such Additional Obligations and Subordinated Indebtedness used to finance improvements, modifications or extensions to the Causeway and any capitalized interest in connection therewith by the total proceeds of such Additional Obligations and Subordinated Indebtedness less the sum of (i) any accrued interest, and (ii) all issuance costs including any bond insurance premium or other credit enhancement fees and (iii) any deposit to the Reserve Subaccount established pursuant to the Resolution or to any reserve account for Subordinated Indebtedness. The above shall apply to the 1987 Bonds as subsequently refunded by the Series 2001A Transportation Facilities Refunding Revenue Bonds.

"City" shall mean the City of Sanibel, a municipal corporation of the State of Florida.

"County" shall mean Lee County, a political subdivision and charter county of the State of Florida.

"Debt Service Requirement" for any semi-annual period shall mean the aggregate

amount of (a) interest paid or to be paid on account of the Bonds or any Subordinated Indebtedness during such semi-annual period, except to the extent that such interest is paid from the proceeds of such Bonds or Subordinated Indebtedness, (b) principal of outstanding Bonds or Subordinated Indebtedness paid or to be paid during such period whether such payment is due to maturity or mandatory redemption, (c) any deposits to the Reserve Subaccount required by the Resolution, or to any reserve account for Subordinated Indebtedness, during such period, and (d) disbursements for the expenses, liabilities and compensation of any paying agent, registrar, credit bank or depository related to the Bonds or Subordinated Indebtedness during such period.

"Gross Revenues" shall mean all income and monies received by the County from the rates, fees, tolls and other charges to be made and collected by the County from the operation and ownership of a Transportation Facility, or otherwise received by the County or accruing to the County in the ownership and operation of such Transportation Facility, calculated in accordance with generally accepted accounting principles employed in the operation of facilities similar to such Transportation Facility. "Gross Revenues" do not include the proceeds of any governmental grants received in connection with any Transportation Facility.

"Operating Expenses" shall mean the County's reasonable and necessary expenses for current operation, maintenance and repair with respect to a Transportation Facility and shall include, without limiting the generality of the foregoing, administration expenses, insurance and surety bond premiums, legal and engineering expenses, ordinary and current rentals of equipment or other property, refunds of monies lawfully due to

others, payments to pension, retirement, health and hospitalization funds, repayments of operating subsidies received by the County on account of such Transportation Facility, and any other expenses required to be paid for or with respect to proper operation, maintenance or repair of such Transportation Facility, all to the extent properly attributable to such Transportation Facility in accordance with generally accepted accounting principles employed in the operation of facilities similar to the Transportation Facility. "Operating Expenses" do not include any provision for interest, depreciation, amortization or similar charges.

"Ordinance" shall mean Lee County Ordinance No. 86-11, as the same may from time to time hereafter be amended and/or supplemented.

"Prior Agreement" shall mean the Interlocal Agreement dated as of November 10, 1987, entered into by the City and the County in connection with the County's Issuance of its Series 1987 Bonds.

"Renewal and Replacement Costs" shall mean an amount equal to five percent (5%) of the Gross Revenues.

"Resolution" shall mean Resolution No. 86-4-12 of the County, including any amendments thereto, heretofore, or hereafter adopted by the County.

"Series 1979 Bonds" shall mean the County's Sanibel Bridge Improvement Bonds dated June 1, 1979.

"Series 1987 Bonds" shall mean the Transportation Facilities Revenue Bonds, Series 1987, issued by the County pursuant to the Resolution, for the purpose of refunding the Series 1979 Bonds, and to finance the construction of certain other Transportation

Facilities.

"Series 2001A Transportation Facilities Refunding Revenue Bonds" shall mean the Transportation Facilities Revenue Bonds issued by the County, pursuant to the Resolution for the purpose of refunding the Series 1987 Bonds among other related Transportation Bond Issues.

"Subordinated Indebtedness" shall mean indebtedness secured by Gross Revenues on a basis junior and subordinate to the Bonds.

"Transportation Facility" shall mean the Causeway or any other bridge or bridges, causeway or expressway which is acquired, constructed or improved with the proceeds of any series of Bonds.

The terms "herein", "hereunder", "hereby", "hereto", "hereof", and any similar terms, shall refer to this Agreement; the term "heretofore" shall mean before the date of execution of this Agreement; and the term "hereafter" shall mean after the date of execution of this Agreement.

Words importing the masculine gender include every other gender.

Words importing the singular number include the plural number, and vice versa.

Section 2. Term of Agreement.

This Agreement shall become effective upon its execution by the Parties hereto, and shall remain in effect for as long as any Parity Bonds remain outstanding under the Resolution.

Section 3. Maintenance of Causeway.

The County agrees that it will, at all times, maintain the Causeway in good repair

and in sound operating condition and will make all necessary repairs, renewals and replacements. To facilitate the foregoing, the County will have the Causeway inspected by an engineering firm on a biennial basis. The engineering firm will be required to submit a report setting forth its findings whether the Causeway has been maintained in good repair, working order and condition. The inspection and report on the Causeway's condition may be combined with other transportation facilities of the County.

Section 4. Imposition of Causeway Tolls.

The Parties recognize that the County is empowered to establish and impose tolls for use of the Causeway. Subject to the provisions of the Resolution, the County agrees that all such tolls shall be reasonable in amount and shall be classified in a reasonable way to cover all traffic, so that such tolls are uniform in application to all traffic falling within any reasonable classes.

Section 5. Causeway Improvements.

The Parties recognize that the County is presently proceeding to permit, design and construct certain improvements to the Transportation Facility for its entire length, which, if constructed, will develop the Transportation Facility as a two-lane roadway for traffic; one traffic lane for each direction, with two, associated, marked emergency breakdown lanes, one breakdown lane for each direction. The County will proceed in good faith to permit, design and construct the improved two-lane Transportation Facility with the two emergency breakdown lanes as described, retaining the existing Causeway islands. The description for the two, associated, marked emergency breakdown lanes will not apply to Span A (the bascule bridge) of the Project.

The Parties agree that the County will proceed to seek all necessary and required permits for the proposed Transportation Facility pursuant to the terms and conditions of its Preliminary Design and Engineering ("PD&E") Report dated June 26, 2001, and that the City will not object to, nor interfere with, the County's pursuit of the said permits pursuant to the PD&E Study so long as the current Causeway configuration is maintained.

The Parties further acknowledge said planned Transportation Facility improvement process is an uncertain one as to end result and/or timing, although the County presently anticipates said road and bridge construction may commence approximately in Year 2004. The Parties recognize that the County and the City have been working and consulting together regarding the design of the projected improvements for a substantial period of time and in conjunction with a Study Group established by the City and the County for input on the design. Should the County be unable to reasonably obtain the permits for the projected improvements to the Transportation Facility and/or should circumstances arise beyond the lawful and reasonable control of the County in the permitting, design, or construction of the two-lane road with the two marked emergency breakdown lanes which would make such roadway improvements unfeasible, then this paragraph will be deemed null, void and of no further effect, and can be so declared by the County. The County will provide the City with ninety (90) days prior written notice of the County's proposed declaration of the nullification of this section and the basis for its decision. Then, in such event, the County will consult with the City concerning any alternative designs and applications for the construction of the improvements; such consultation to be non-binding in nature for both Parties.

Section 6. Payments to the City.

On October 30th and April 30th, the County shall remit to the City twenty-one percent (21%) of the Net Revenues derived from operation of the Causeway during the semiannual period ending thirty (30) days prior to each payment date. For purposes of this Agreement, Net Revenues shall maan Gross Revenues of the Causeway less (i) Operating Expenses of the Causeway, (ii) the Causeway Debt Service Requirement, and (iii) the Renewal and Replacement Costs of the Causeway. Commencing with the first full fiscal year following completion of the proposed improvements described in Section 5. hereof, the payment due April 30 of each year shall be adjusted, if necessary and if adequate funds are then on deposit in the Surplus Account, such that the total payment to the City in each fiscal year shall not be less than $200,000.00. Funds paid to the City pursuant to this Agreement may be used for any lawful purpose of the City.

It is expressly understood and agreed by the City that the obligation of the County to make payments to the City required by this Agreement is in all respects subject to the Resolution and that such payments shall be made only from the Surplus Account established pursuant to the Resolution and are junior and subordinate to all payments required by the Resolution.

Section 7. Tolls for Other Transportation Facilities.

The County agrees to impose on the Transportation Facilities other than the Causeway, tolls that produce Gross Revenues at least sufficient in the aggregate to pay (i) the Debt Service Requirement less the Causeway Debt Service Requirement, (ii) the Operating Expenses of Transportation Facilities other than the Causeway, and (iii) the

Renewal and Replacement Costs of Transportation Facilities other than the Causeway.

Notwithstanding the foregoing, during the period in which interest allocable to the amount of Series 1987 Bond proceeds used to finance the acquisition and construction of a parallel span to the Cape Coral Bridge has been funded from proceeds of the Series 1987 Bonds, the County may, at its sole option, elect to fund the Operating Expenses and renewal and replacement costs of the Cape Coral Bridge from lawfully available funds of the County other than Gross Revenues of the Causeway, in lieu of imposing any toll thereon.

Section 8. **Series 1979 Renewal and Replacement Fund.**

Upon defeasance of the Series 1979 Bonds, the County shall remit to the City a sum equal to sixteen percent (16%) of the amount then on deposit in the renewal and replacement fund established in connection with issuance of the Series 1979 Bonds.

Section 9. **Books and Records.**

The County agrees to maintain books, records and accounts sufficient to determine compliance with Section 6. and Section 7. of this Agreement. The City shall have the right at all reasonable times to inspect such books, records and accounts.

Section 10. **Prior Agreement Amended.**

Upon the execution of this Agreement by the Parties hereto, the 1987 Agreement shall be duly amended by the terms of this Agreement.

Section 11. **Parties in Interest.**

This Agreement is made solely for the benefit of the County and the City and no other party or person shall acquire or have any right hereunder or by virtue hereof.

Section 12. Counterparts.

This Agreement may be executed in several counterparts, each of which shall be regarded as the original and all of which shall constitute one and the same Agreement.

Section 13. Severability.

If any one or more of the covenants, agreements or provisions of this Agreement shall be held contrary to any express provision of law or contrary to the policy of express law, though not expressly prohibited, or against public policy, or shall for any reason whatsoever be held invalid or unenforceable, then such covenants, agreements or provisions be null and void and shall be deemed separable from the remaining covenents, agreements or provisions of this Agreement and shall in no way affect the validity or enforceability of any of the other covenants, agreements or provisions hereof.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed this 11th day of June, 2002, for the purposes herein expressed.

ATTEST: CHARLIE GREEN
CLERK OF COURTS

By: _____
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

By: _____
Chairman

BOARD OF COUNTY COMMISSIONERS LEE COUNTY, FLORIDA SEAL

APPROVED AS TO FORM:

By: _____
Office of the County Attorney

ATTEST:

By: _____
City Clerk

CITY OF SANIBEL, FLORIDA

By: _____
Mayor

APPROVED AS TO FORM:

By: _____
City Attorney

EXHIBIT "B"

Lee County, Florida
Transportation Facilities Financing Model

DRAFT

Sanibel Interlocal Agreement Rebate

Year	Net Revenues	Less Bonded Debt Service	Other Debt Service	R&R Fund Deposit	Sanibel Net * Revenues	21% Rebate	Residual Net Revenues
1998	4,930,659	847,029	0	180,450	3,903,180	798,036	3 105,144
1999	5,136,449	847,053	0	83,615	4,205,780	845,491	3 360,289
2000	5,012,248	847,372	0	13,601	4,151,275	856,223	3 295,052
2001	4,969,224	613,750	0	293,819	4,061,654	844,791	3 216,863
2002	4,706,714	773,048	0	10,363	3,923,304	839,496	3 383,808
2003	4,146,884	790,136	0	807,939	2,548,810	641,485	1 907,325
2004	4,492,364	790,290	0	651,056	3,051,018	632,824	2 418,194
2005	11,000,000	790,303	443,335	806,352	8,960,012	(202,795)	9 162,807
2006	10,400,000	2,733,106	10,885,225	409,441	(3,627,772)	0	(3 627,772)
2007	11,700,000	5,239,676	6,155,075	25,000	280,249	0	280,249
2008	12,400,000	5,242,898	6,846,775	80,000	230,327	0	230,327
2009	12,300,000	4,629,379	7,329,925	90,000	250,696	0	250,696
2010	12,400,000	4,629,529	1,000,000	50,000	6,720,471	1,411,299	5 309,172
2011	11,200,000	4,629,296	300,000	60,000	6,210,704	1,304,248	4 906,456
2012	11,000,000	5,144,468	300,000	0	5,555,532	1,166,662	4 388,870
2013	11,100,000	5,139,339	0	40,000	5,920,661	1,243,339	4 677,322
2014	11,200,000	5,446,887	0	60,000	5,693,113	1,195,554	4 497,559
2015	11,100,000	5,439,177	0	210,000	5,450,823	1,144,673	4 306,150
2016	11,200,000	5,442,584	0	200,000	5,557,416	1,167,057	4 390,358
2017	11,300,000	5,441,722	0	210,000	5,648,278	1,186,138	4 462,140
2018	11,400,000	4,652,835	0	210,000	6,537,165	1,372,805	5 164,360
2019	11,300,000	5,634,959	0	210,000	5,455,041	1,145,559	4 309,482
2020	11,300,000	5,633,619	0	200,000	5,466,381	1,147,940	4 318,441
2021	11,400,000	5,635,022	0	205,000	5,559,978	1,167,595	4 392,383
2022	11,300,000	5,637,578	0	210,000	5,452,422	1,145,009	4 307,413
2023	11,400,000	5,636,008	0	200,000	5,563,992	1,168,438	4 395,554
2024	11,500,000	5,634,600	0	210,000	5,655,401	1,187,634	4 467,766
2025	11,400,000	5,637,294	0	210,000	5,552,706	1,166,068	4 386,638
2026	11,500,000	5,633,838	0	200,000	5,666,162	1,189,894	4 476,268
2027	11,500,000	5,637,528	0	210,000	5,652,472	1,187,019	4 465,453
2028	11,300,000	5,632,825	0	210,000	5,457,175	1,146,007	4 311,168
2029	11,300,000	5,634,195	0	200,000	5,465,806	1,147,819	4 317,986
2030	11,300,000	5,636,275	0	210,000	5,453,726	1,145,282	4 308,443
2031	11,300,000	5,633,794	0	210,000	5,456,207	1,145,803	4 310,403
2032	11,100,000	5,636,088	0	210,000	5,253,913	1,103,322	4 150,591
2033	11,000,000	5,636,871	0	200,000	5,163,130	1,084,257	4 078,872

* by Florida case law, this amount should be positive and thus not subsidized by CC/MP Revenues.

Information in this draft Financial Model is being provided solely as a convenience to the Public. It is not to be relied upon as a final expression of facts or calculations with respect to the Model. The information and calculations in this Model have been obtained from sources believed to be timely and reliable but are not guaranteed. Lee County undertakes no obligation to update any information included in this draft Model. The information, calculations and any expressions of opinion herein are subject to change without notice.

This Model constitutes statements of mathematical prediction(s) based on the most current information available at the time the Model was prepared, which was believed to be accurate. This Model is subject to specific criteria which may cause results to differ materially from those set forth herein in subsequent Models, if run under differing criteria.

Lee County disclaims any and all liability or responsibility for use of this draft Financial Model by others for purposes either consistent or inconsistent with its intended purpose, which is as an example of financial results obtained under certain, specific criteria as established by the County.

EXHIBIT "C"

LEE COUNTY RESOLUTION NO. 04-08-60

A RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA; AMENDING LEE COUNTY RESOLUTION NOS. 90-09-26, 90-09-27, 94-08-05, 96-12-105, 97-09-53, AND 01-06-58, RELATING TO THE CAPE CORAL, MIDPOINT MEMORIAL AND SANIBEL TOLL FACILITIES; MODIFY TOLL STRUCTURE; IMPOSING TOLLS ON THE SANIBEL BRIDGE; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, on April 16, 1986, the Board of County Commissioners of Lee County, Florida (the "Board"), enacted Lee County Ordinance No. 86-11, providing for the imposition of tolls on certain bridges and causeways and for the issuance of revenue bonds payable therefrom; and,

WHEREAS, the Board has previously adopted Lee County Resolution Nos. 90-09-26, 90-09-27, 94-08-05, and 01-06-58, which established the toll rates and commuter discount programs for the Sanibel Bridges, Midpoint Memorial Bridge and the Cape Coral Bridge collectively, "The Bridges"; and,

WHEREAS, the Board, on December 18, 1996, adopted Lee County Resolution No. 96-12-105 which sets forth reduced rates for each one-way trip on the Cape Coral Bridge and the Midpoint Memorial Bridge during off-peak hours when using the Automatic Vehicle Identification System (AVI System) for the duration of the congestion pricing program; and,

WHEREAS, the existing Cape Coral Bridge and the new Midpoint Memorial Bridge were established to function in concert to serve a common transportation corridor between the east and west banks of the Caloosahatchee River (collectively, the "Corridor"); and,

COPY

WHEREAS, on September 23, 1997, the Board adopted Lee County Resolution No. 97-09-53 extending the term for the use of decals for the discount program; and,

WHEREAS, the Board finds and determines that vehicle class, frequency of use and time-of-day of use are a reasonable ~~bases~~ basis for the classification of its tolls; and,

WHEREAS, the Board now finds it appropriate to further amend the Toll Facilities' Resolutions to better serve the public.

NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA, that:

SECTION ONE:

Lee County Resolution Nos. 90-09-26, 90-09-27, 94-08-05, 96-12-105, 97-09-53 and 01-06-58 are hereby amended with language being added indicated by underlining and language being deleted indicated by ~~strike-through~~, as indicated below.

Imposition of Tolls. Commencing on November 1, ~~1997~~ 2004, the following tolls shall be imposed for use of The Bridges.

a. Except as otherwise provided herein, a toll for each one-way trip on the Cape Coral and Midpoint Memorial Bridges shall be paid in accordance with the schedule set forth below:

Vehicle Class	Toll
Motorcycles	$ .50
2 axles, 4 tires	1.00
2 axles, 6 tires	1.00
3 axles	2.00
4 axles	3.00
5 axles	4.00
6 or more axles	1.00 per axle

S:\GS\RESOLUTION\04-03-60 AMENDING RESOLUTION - TOLL STRUCTURE.wpd

b. The following commuter discount programs utilizing an AVI device will be available for 2-axle, 4-tire vehicles or 2-axle, 6-tire vehicles only:

i. An annual discount program utilizing an AVI device may be purchased at a cost of $40.00 per vehicle or $20.00 for the second, fourth, sixth, etc., non-commercial vehicle registered to or leased by the same natural person, which when properly installed will entitle such vehicle to use the Cape Coral and Midpoint Memorial Bridges for a period of twelve months commencing on November 1, upon payment of a $0.50 toll to be deducted from a prepaid debit account for each one-way trip across the Bridges.

ii. A semi-annual discount program utilizing an AVI device may be purchased at a cost of $24.00 per vehicle or $12.00 for the second, fourth, sixth, etc., non-commercial vehicle registered to or leased by the same natural person, which when properly installed will entitle such vehicle to use the Cape Coral and Midpoint Memorial Bridges for a period of six months commencing on November 1, or May 1, upon payment of a $0.50 toll to be deducted from a prepaid debit account for each one-way trip across the Bridges.

iii. An annual discount program utilizing an AVI device may be purchased at a cost of $330.00 per vehicle or $165.00 for the second, fourth, sixth, etc., non-commercial vehicle registered to or leased by the same natural person, which when properly installed will entitle such vehicle to use the Cape Coral and Midpoint Memorial Bridges for a period of twelve months commencing on November 1, without further payment. Prorated annual commuter programs will be sold per the following schedule:

Validity Period	Price	Half-Price
December 1 - October 31	$309.00	$155.00
January 1 - October 31	288.00	144.00
February 1 - October 31	267.00	134.00
March 1 - October 31	246.00	123.00
April 1 - October 31	222.00	111.00

iv. A semi-annual discount program utilizing an AVI device may be purchased at a cost of $200.00 per vehicle or $100.00 for the second, fourth, sixth, etc. non-commercial vehicle registered to or leased by the same natural person, which when properly installed will entitle such vehicle to use the Cape Coral and Midpoint Memorial Bridges for a period of six months commencing on November 1, or May 1, without further payment. Prorated semi-annual commuter programs will be available per the following schedule:

Validity Period	Price	Half-Price
December 1 - April 30	$168.00	$84.00
January 1 - April 30	136.00	68.00
February 1 - April 30	104.00	52.00
March 1 - April 30	72.00	36.00
June 1 - October 31	$168.00	$84.00
July 1 - October 31	136.00	68.00
August 1 - October 31	104.00	52.00
September 1 - October 31	72.00	36.00

c. Combination commuter discount programs utilizing an AVI device for use on the Cape Coral, Midpoint Memorial and Sanibel Toll Facilities will be available for 2-axle, 4-wheel vehicles or 2-axle, 6 wheel vehicles only:

i. Annual combination discount programs utilizing an AVI device may be purchased at a cost of ~~$50.00~~ $140.00 per vehicle of ~~$25.00~~ $70.00 for the second, fourth, sixth, etc., non-commercial vehicles registered to or leased by the same natural person, which when properly installed will entitle such vehicle to use the Cape Coral, Midpoint Memorial and Sanibel

Toll facilities for a period of twelve months commencing on November 1, upon the payment of a $0.50 toll deducted from a prepaid debit account at the Cape Coral and Midpoint Memorial Bridges and a $3.00 toll deducted from a prepaid debit account at the Sanibel Toll Facilities.

ii. Semi-annual combination discount programs utilizing an AVI device may be purchased at a cost of ~~$30.00~~ $99.00 per vehicle or ~~$15.00~~ $49.50 for the second, fourth, sixth, etc., non-commercial vehicles registered to or leased by the same natural person, which when properly installed will entitle such vehicle to use the Cape Coral, Midpoint Memorial and Sanibel Toll Facilities for a period of six months commencing on November 1 or May 1 upon payment of a $0.50 toll deducted from a prepaid debit account at the Cape Coral and Midpoint Memorial Bridges and a $3.00 toll deducted from a prepaid debit account at the Sanibel Toll Facilities.

iii. Annual combination discount programs utilizing an AVI device may be purchased at a cost of ~~$380.00~~ $930.00 per vehicle or ~~$190.00~~ $465.00 for the second, fourth, sixth, etc. non-commercial vehicle registered to or leased by the same natural person, which when properly installed, will entitle such vehicle to use the Cape Coral, Midpoint Memorial and the Sanibel Toll Facilities for a period of twelve months commencing on November 1, without further payment. Prorated annual combination commuter programs will be sold per the following schedule:

Validity Period	Price		Half-Price	
December 1 - October 31	~~$355.00~~	$884.00	~~$178.00~~	$442.00
January 1 - October 31	~~330.00~~	838.00	~~165.00~~	419.00
February 1 - October 31	~~304.00~~	792.00	~~152.00~~	396.00
March 1 - October 31	~~279.00~~	746.00	~~140.00~~	373.00
April 1 - October 31	~~253.00~~	697.00	~~127.00~~	349.00

iv. Semi-annual combination discount programs may be purchased at a cost of ~~$250.00~~ $650.00 per vehicle or ~~$115.00~~ $325.00 for the second, fourth, sixth, etc., non-commercial vehicle registered to or leased by the same natural person, which when the AVI device is properly installed will entitle such vehicle to use the Cape Coral, Midpoint Memorial and Sanibel Toll Facilities for a period of six months commencing on November 1 and May 1, without further payment. Prorated semi-annual combination commuter programs will be sold per the following schedule:

Validity Period	Price		Half-Price	
December 1 - April 30	~~$194.00~~	$543.00	~~$97.00~~	$272.00
January 1 - April 30	~~156.00~~	436.00	~~79.00~~	218.00
February 1 - April 30	~~123.00~~	329.00	~~62.00~~	165.00
March 1 - April 30	~~87.00~~	222.00	~~44.00~~	111.00
June 1 - October 31	~~$194.00~~	$543.00	~~$94.00~~	$272.00
July 1 - October 31	~~159.00~~	436.00	~~79.00~~	218.00
August 1 - October 31	~~123.00~~	329.00	~~62.00~~	165.00
September 1 - October 31	~~87.00~~	222.00	~~44.00~~	111.00

d. Except as otherwise provided herein, a full paid toll for each Sanibel bound trip on the Causeway shall be paid in accordance with the schedule set forth below.

Vehicle Class	Toll	
Motorcycles	~~$1.00~~	$ 2.00
2 axles, 4 tires	~~3.00~~	6.00
2 axles, 6 tires	~~3.00~~	6.00
3 axles	~~4.50~~	9.00
4 axles	~~6.00~~	12.00
5 axles	~~7.50~~	15.00
6 or more axles	~~1.50~~ per axle	3.00

No toll shall be charged for a mainland-bound trip on the Sanibel Causeway.

e. The following commuter discount program will be available for 2-axle, 4-tire vehicles or 2-axle, 6-tire vehicles only:

i. An annual discount program utilizing an AVI device may be purchased at a cost of ~~$25.00~~ $100.00 per vehicle of ~~$12.50~~ $50.00 for the second, fourth, sixth, etc., additional non-commercial vehicle registered to or leased by the same natural person which when properly installed will entitle such vehicle to use the Sanibel Causeway for a period of twelve months commencing on November 1, upon payment of a ~~$0.50~~ $3.00 toll deducted from a prepaid debit account for each Sanibel-bound trip on the Sanibel Causeway.

ii. A semi-annual discount program utilizing an AVI device may be purchased at a cost of ~~$15.00~~ $75.00 per vehicle or ~~$7.50~~ $37.50 for the second, fourth, sixth, etc., additional non-commercial vehicle registered to or leased by the same natural person which when properly installed will entitle such vehicle to use the Sanibel Causeway for a period of six months commencing on November 1, or May 1 upon payment of a ~~$0.50~~ $3.00 toll deducted from a prepaid debit account for each Sanibel-bound trip on the Sanibel Causeway.

iii. An annual discount program utilizing an AVI device may be purchased at a cost of ~~$150.00~~ $600.00 per vehicle or ~~$75.00~~ $300.00 for the second, fourth, sixth, etc., non-commercial vehicle registered to or leased by the same natural person, which when properly installed will entitle such vehicle to use the Sanibel Causeway for a period of twelve months commencing on November 1, without further payment. Prorated annual commuter programs will be sold per the following schedule:

Validity Period	Price		Half-Price	
December 1 - October 31	~~$140.00~~	$575.00	~~$70.00~~	$288.00
January 1 - October 31	~~130.00~~	$550.00	~~65.00~~	275.00
February 1 - October 31	~~120.00~~	$525.00	~~60.00~~	263.00
March 1 - October 31	~~110.00~~	500.00	~~55.00~~	250.00
April 1 - October 31	~~100.00~~	475.00	~~50.00~~	238.00

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iv. A semi-annual discount program utilizing an AVI device may be purchased at a cost of ~~$90.00~~ $450.00 per vehicle or ~~$45.00~~ $225.00 for the second, fourth, sixth, etc., non-commercial vehicle registered to or leased by the same natural person, which when properly installed will entitle such vehicle to use the Sanibel Causeway for a period of six months commencing on November 1 or May 1, without further payment. Prorated semi-annual commuter programs will be sold per the following schedule:

Validity Period	Price		Half-Price	
December 1 - April 30	~~$76.00~~	$375.00	~~$38.00~~	$188.00
January 1 - April 30	~~62.00~~	300.00	~~31.00~~	150.00
February 1 - April 30	~~48.00~~	225.00	~~24.00~~	113.00
March 1 - April 30	~~34.00~~	150.00	~~17.00~~	75.00
June 1 - October 31	~~$76.00~~	$375.00	~~$38.00~~	$188.00
July 1 - October 31	~~62.00~~	300.00	~~31.00~~	150.00
August 1 - October 31	~~48.00~~	225.00	~~24.00~~	113.00
September 1 - October 31	~~34.00~~	150.00	~~17.00~~	75.00

f. During the term of the variable pricihg program, a toll for each one-way trip on the Cape Coral and Midpoint Memorial Bridges during off-peak hours when using the automatic vehicle identification system shall be paid in accordance with the schedule set forth below:

Vehicle Class	Off-Peak Hour Toll Payment Without AVI Device*	Off-Peak Hour Toll Payment With AVI Device*
Motorcycles	$ .50	$ .25~~, upon availability~~
2 axles, 4 tires	$1.00	$ .50/.25 (applies to $.25 ~~coin drop~~ pre-paid)
2 axles, 6 tires	$1.00	$ .50/.25 (applies to $.25 ~~coin drop~~ pre-paid)
3 axles	$2.00	$1.00~~, upon availability~~
4 axles	$3.00	$1.50~~, upon availability~~
5 axles	$4.00	$2.00~~, upon availability~~
6 or more axles	$1.00 per axle	$ .50 per axle~~, upon availability~~

*As defined and authorized by Paragraphs 1.b.i., 1.b.ii., 1.c.i. and 1.c.ii., above.

The above rates for off-peak discounted toll travel shall only be available to toll facility travelers who have established a pre-paid account and obtained an *officially* authorized automatic vehicle identification device. Accommodations for consumers desiring a single payment, annual or semi-annual, discount program, utilizing an AVI device free of a per-trip toll for either the Cape/Midpoint Corridor or with a combination of the Cape/Midpoint Corridor and Sanibel Bridges, shall be continued at the current pricing, but without any additional discounting.

Off-peak hours are currently defined as that time between 6:30 a.m. to 7:00 a.m.; 9:00 a.m. to 11:00 a.m.; 2:00 p.m. to 4:00 p.m.; and 6:30 to 7:00 p.m. Monday through Friday, excluding Memorial Day, Fourth of July, Labor Day, Thanksgiving, Christmas and New Year's Days. The Lee County Director of Public Works shall have the ability to modify the off-peak hours if deemed necessary, upon posting at the facilities of the changes in hours in accordance with §338.01, Florida Statutes. In the event the Fourth of July, Christmas or New Year's Day falls on a Saturday or Sunday, the week-day customarily given as a day off to county employees will be excluded from the definition of off-peak hours and no additional discount in accordance with this schedule will be given.

~~g. From November 1, 1997 should the transponders (AVI devices) not be substantially distributed and operational, any semi-annual and annual decal purchased after April 30, 1997 and October 31, 1996, respectively, will be honored at the toll facilities in Lee County for the various commuter discount programs as outlined in this Resolution, until such time that the transponders (AVI devices) be substantially distributed and operational.~~

~~Upon completion of distributing transponders to all persons taking part in the commuter discount programs, Lee County Division of Transportation will post notice at the facilities that the stickers will no longer be honored at the facilities.~~

SECTION TWO:

This Resolution shall be implemented as of November 1, 2004, however, the effective date that the time-of-day variable tolls as specified in Section One (d) are put into effect at the Cape Coral and Midpoint Memorial Toll Facilities will be determined by the Lee County Division of Transportation, upon posting at the facilities of the change in accordance with Section 338.01, Florida Statutes.

The foregoing Resolution was offered by Commissioner Judah, who moved its adoption. The motion was seconded by Commissioner St. Cerny and, being put to a vote, the vote was as follows:

DOUGLAS ST. CERNY	AYE
BOB JANES	AYE
RAY JUDAH	AYE
ANDREW COY	AYE
JOHN E. ALBION	AYE

DULY PASSED AND ADOPTED this 10th day of August, 2004.

ATTEST:
CHARLIE GREEN, CLERK

By: _____
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS
OF LEE COUNTY, FLORIDA

By: _____
Chairman

APPROVED AS TO FORM:

By: _____
Office of County Attorney

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