Lee County
Southwest Florida

June 2025

Lee County
Bridge Inspection Report

CDM Smith

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June 10, 2025

Ms. Susan Drotleff
Toll Facilities Operations Manager
Lee County Department of Transportation
1500 Monroe Street
Fort Myers, Florida 33901

Subject: Lee County General Inspection of Transportation Facilities – 2025 Report

Dear Ms. Drotleff:

CDM Smith is pleased to submit results from the recently conducted general inspection of Lee County transportation facilities. On December 3rd through December 5th, 2024, CDM Smith conducted a general condition review of Lee County's toll facilities, including buildings, adjacent roadways, sign structures, and six toll bridges. 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 of the Composite Transportation Facilities Revenue Bond Resolution No. 86-4-12. CDM Smith, as consulting engineer to Lee County, has provided this biennial inspection report to document our opinion of the conditions of the infrastructure. As a result of the catastrophic damage the Fort Myers area took from Hurricane Ian (September 2022), the last biennial inspection in 2022 was not performed.

Lee County Toll Facilities

This report documents the conditions of the following County-owned facilities:

Bridges

- Cape Coral Bridge (College Pkwy.) – Westbound – Bridge No. 124044
- Cape Coral Bridge (College Pkwy.) – Eastbound – Bridge No. 124065
- Midpoint Memorial Bridge (CR 884 Veterans Pkwy.) – Bridge No. 124096
- Sanibel Causeway Structure A (CR 867 over San Carlos Bay) – Bridge No. 124116
- Sanibel Causeway Structure B (CR 867 over San Carlos Bay) – Bridge No. 124115
- Sanibel Causeway Structure C (CR 867 over San Carlos Bay) – Bridge No. 124114

Buildings

- Cape Coral Toll Facility – 10100 College Parkway, Ft. Myers
- Midpoint Toll Facility – 1930 SE 23rd Terrace, Cape Coral
- Sanibel Toll Facility – 18700 McGregor Blvd., Ft. Myers
- LeeWay Service Center – 1366 Colonial Blvd., Ft. Myers

Sign Structures

- Cape Coral Bridges – 3 overhead span structures, 2 cantilever structures (all westbound)
- Midpoint Bridge – 2 overhead span structures, 5 cantilever structures (all westbound)
- Sanibel Bridges – 3 overhead cantilever structures, 1 traffic signal pole (all westbound)

Lighting & Drainage

- Various light standards and fixtures at each bridge and toll building
- Catch basins/scuppers at each bridge and toll building

Inspection Process

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 December 4th, 2024, Mr. Cory Hill, PE, and Mr. Robert Hallaren, EI, (herein referred to as "inspectors") performed general walk-through inspections of the Cape Coral eastbound and westbound bridges, Midpoint Memorial Bridge, and Sanibel Causeway Bridges A, B, and C for above-deck portions of each structure.

On December 5th, 2024, the inspectors completed a general inspection of each bridge structure from below deck utilizing Lee County Department of Transportation's (DOT) work boat. They were accompanied at each site by two members of Lee County DOT bridge maintenance staff (Rhett Tillman and Keith Miller).

Inspection of the bridges was supplemented by a review of the most recent Florida Department of Transportation (FDOT) biennial bridge inspection reports. Review of the August 2023 (Cape Coral), November 2023 (Sanibel), and January 2024 (Midpoint) reports was completed in December 2024 during site visits and discussed with Mr. Avelino Cancel, PE, Senior Engineer with Lee County DOT, on December 9th, 2024, via a virtual Teams call.

Site visits for the roadway and sign structure condition inspections were conducted at the Cape Coral, Midpoint, and Sanibel approaches by the inspectors on December 4th, 2024.

Site visits to the bridge toll facility buildings and the LeeWay Service Center were conducted by the inspectors on December 3rd, 2024. They were accompanied at the bridge toll facility buildings by Ms. Susan Drotleff (Midpoint), Ms. Lisa Lauture (Cape Coral), and Ms. Vicki Poleski (Sanibel). At the LeeWay Service Center, they were accompanied by Ms. Drotleff.

Bridge Condition Review Process

The Operations Division of Lee County DOT provided bridge record plans and current biennial FDOT bridge inspection reports to CDM Smith for review. Discussions with Lee County DOT Senior Engineer, Mr. Cancel, provided further information on past, current, and planned maintenance programs.

The inspectors 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 the FDOT within the past two years through its biennial bridge inspection program. Inspections were performed by the consultant firm of TranSystems Corporation. Underwater inspections of bridge piers and piles were performed in conjunction with the structure inspections by Volkert, Inc. The level of effort by these consultants was compliant to federal National Bridge Inspection standards, and included visual inspection of the deck, expansion joints, approaches, beams, bearings, abutments, piers, piles, fender systems, seawalls, slope protection, bridge railing, channel, and navigational equipment in all spans. Inspectors accessed the structures by foot and by using under bridge inspection unit vehicles, an inspection boat (piers), and underwater dive equipment (piles). In addition, Lee County DOT routinely reviews the conditions of toll bridge structures with maintenance personnel.

Toll Facility Condition Review Process

Inspections of each facility building were visual only and no detailed measurements were taken. No testing of materials or mechanical systems was performed. The inspectors toured the LeeWay 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. In addition, on-site staff at each location were interviewed during the inspection of each facility.

Site visits at each bridge toll facility building were conducted in a similar manner as the service center review, where the inspectors, accompanied by on-site County staff, reviewed the building layout and condition. During the review, the inspectors discussed past, current, and planned maintenance and capital projects with the toll facility personnel. The frequency of equipment testing (e.g., standby generators and fire protection systems) and recently completed projects were also discussed. Maintenance logs of equipment were available at each location. These logs, as well as the date of manufacture, are routinely updated.

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. Along parts of the corridor deemed safe enough to access, drainage, roadway, and lighting conditions were observed up close and photographed for conditions.

A detailed condition review of each sign structure was conducted by visual methods at each sign location. All sign structure inspections were performed from ground level as well as aerial via a piloted drone. No special access equipment or lane closures were implemented to facilitate sign structure review.

Cape Coral Bridges and Toll Facility

The beginning of the Cape Coral Bridge and its toll facilities are located approximately seven miles (drive distance) 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 tenth of a mile east of the river.

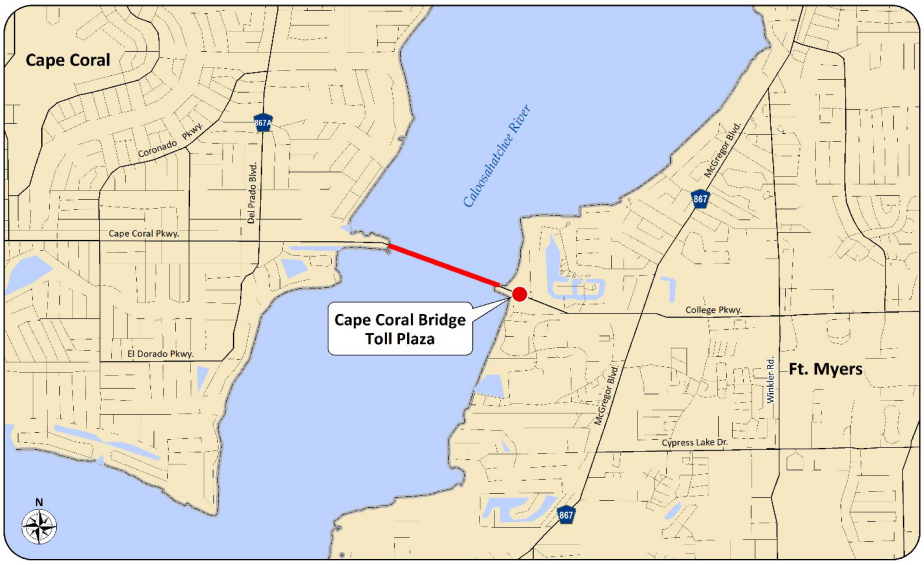

Figure 1: Cape Coral Bridge Toll Plaza Location Map

Cape Coral Bridge Toll Plaza

At the main toll plaza, in the westbound travel direction, there are six total lanes; lanes one and two are tolled lanes under the canopy structure along the frontage road on-ramp, lanes three and four reside in a closed off gore area inaccessible to the public via traffic delineators, and the southern-most lanes five and six are tolled lanes under the gantry structure, separated from the canopy covered lanes by a concrete barrier wall. At the main toll plaza, in the eastbound travel direction, there are two non-tolled lanes. The administration building resides along the north side of College Parkway at the toll plaza. All tolled lanes are Open Road Tolling (ORT) lanes. The two eastbound non-toll lanes are free-flowing, with no barrier or overhead structure.

Figure 2: Cape Coral Toll Plaza – Looking West

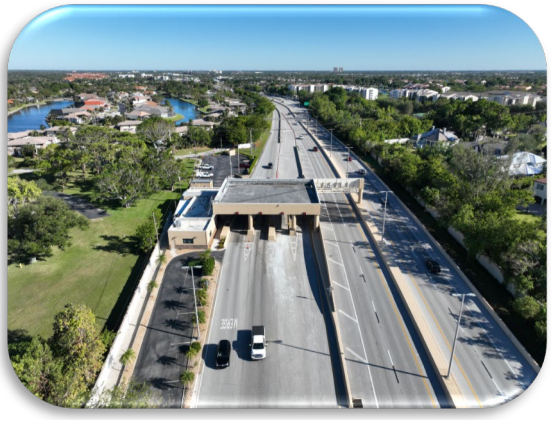

Figure 3: Cape Coral Toll Plaza – Looking East

In the westbound travel direction, lane one is 14-feet-wide to accommodate wide loads, lanes two thru four are 11-feet-wide, and lanes five and six are 12-feet-wide. Lanes one thru four are covered by a canopy structure, comprised of reinforced concrete columns and support beams with a precast prestressed concrete double tee beam supported roof, and separated by 6-foot-wide concrete barrier islands which also serve as collision protection for the columns. Lanes five and six maintain a 12-foot-wide outside shoulder (right) and a 6-foot-wide inside shoulder (left) and run below the toll gantry structure.

In March 2020, Lee County suspended all cash collection and all westbound lane tolls are collected by either electronic tolling or video billing. A new camera VES (Violation Enforcement System) was installed in December 2024. In February 2025 a new Manual Image Review system was implemented. The Toll System Lane and HOST replacement is scheduled to go to the Board of County Commissioners in March 2025. Once approval is acquired, it may be up to a year for installation. Additionally, the signage for the plaza was replaced in 2023.

Figure 4: Open Road Tolling Equipment Gantry Structure Above Westbound Lanes Five and Six

Figure 5: Concrete Median Barrier Between Eastbound and Westbound Travel Lanes

The current administration building was constructed and opened in 1989 and has undergone various expansions and reconfigurations since that time. Miscellaneous repairs and material upgrades have also been made at various times. 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 added that connects the administration building to the canopy covered island between lanes two and three, eliminating the need for toll attendants to cross previous electronic tolling lanes when attended lanes still existed at this toll facility, which has since been a removed practice. The LED Traffic Lights installed in 2016 at previously attended lanes have been removed.

The insulated and air-conditioned storage building added in 2012 at the northeast corner of the administration building no longer serves the dual purpose of also being a technician's workshop. The facility's trash corral, located at the southeast corner of the employee parking area, has received new doors as the previous ones were damaged during Hurricane Ian. These new metal doors are scheduled to be painted. New special unreproducible keys were created and implemented for increased facility security in 2023.

At the rear (north) side of the administration building, there is a screened enclosure with a concrete floor and metal roof attached to the building that acts as an employee break area.

Figure 6: Storage Building

Figure 7: Trash Corral

Lee County plans to remove the Cape Coral administration building from the toll plaza site along with the canopy structure over the westbound traffic by 2027 with the reconstruction of the Cape Coral Bridge project. Employees stationed in this building will be relocated and the existing gantry structure will be assessed, modified, or replaced to accommodate the canopy housed toll equipment which currently serves westbound traffic lanes one thru four.

Architectural Condition

Overall, the interior of the building appears to be in very good condition. Several interior improvements were made in the administration building in 2013 and 2014. These include new flooring in the lobby, hallway, break room, and offices; repainted walls; refinished interior doors; and a new drop ceiling in the hallway. The employee lockers in the break room were repainted and rearranged to increase usable floor space. These improvements still appear to be fresh and well-maintained. In 2024 the walls were once again repainted. In 2020 air purifiers were added to the facility in an employee health initiative during the global pandemic.

Figure 8: Previously Installed Flooring and Drop Ceiling in Hallway - Looking West

Figure 9: Previously Installed Flooring and Drop Ceiling in Hallway - Looking East

In October 2021 the previous count room located at the west end of the administration building was converted into a meeting room. As a result of the water damage from Hurricane Ian, there is damage to and behind the rubber baseboard at the west end emergency exit of the administrative building, which is scheduled with maintenance to be repaired.

Figure 10: New Meeting Room at West End of Administration Building

Figure 11: Damaged Baseboard at West End Administration Building Exit

The latex membrane roof of the administrative building appears to be in good condition overall. There are signs of low areas that pond water near the central portion of the roof below the communications wire conduits. However, there were no signs of leakage on the interior of the building associated with these areas. The stagnant water traps debris and promotes algae growth, which can create a slippery walking surface. The portion of the roof above the conference room was resealed in 2015 and is still in good condition.

Figure 12: Administration Building Roof - Signs of Ponding

Figure 13: Resealed Roof Over Conference Room

The exterior of the building appears to be in excellent condition due to improvements made in 2013 and 2014, which replaced the tile facade with stucco and stone. The stucco makes for a more durable surface that is easier to maintain and matches the facade of the toll canopy structure. All windows on the south side of the building, including the vestibule entry door are hurricane impact resistant windows.

Figure 14: Exterior Facade and Hurricane Impact Resistant Windows - Front Door

Figure 15: Exterior Facade - Building West End

The toll canopy has a rolled asphalt roof covering that appears to be in good condition, though there are several locations where the material has lifted at the seams and is beginning to split. This can create an opening for water intrusion. Additionally, there are areas of the rooftop which exhibit blistering. The roof surface slopes towards the east side of the canopy, where it drains through an interior downspout. The rooftop drains are collecting dirt, debris, and vegetation, and are scheduled to be cleared and unclogged.

Figure 16: General Toll Canopy Roof Covering (2021)

Figure 17: Toll Canopy Roof Blister

Figure 18: Toll Canopy Roof Covering Lifted at Seams

Figure 19: Toll Canopy Roof Drain

Structural Condition

The administration building appears to be in very good structural condition, with no indications of structural distress observed. The concrete toll canopy frame and columns, and the highway-speed toll gantry are in good condition. Minor to moderate surface corrosion exists sporadically throughout the steel toll gantry structure.

There are moderate cracks at the ends of the concrete traffic barrier islands separating the westbound lanes. The toll canopy precast prestressed canopy double tee beams exhibit longitudinal top flange cracks toward beam ends, observable from underneath the structure, with no sign of efflorescence or rust staining.

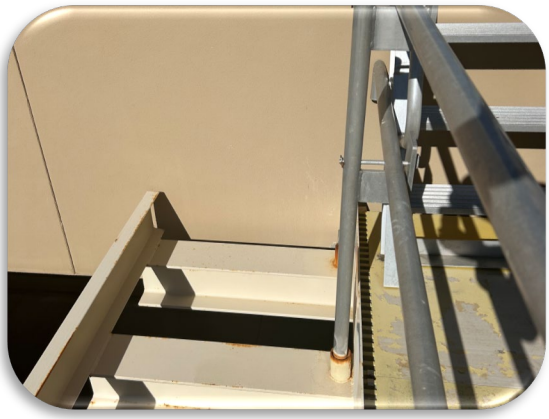

Figure 20: Moderate Surface Corrosion at Toll Gantry Handrail Base

Figure 21: Moderate Cracks in Westbound Traffic Barrier Island

Figure 22: Toll Canopy Beam Top Flange Longitudinal Cracks

Figure 23: Impact Attenuator

Previously installed modifications to the building exterior were checked for change in condition through inspection cycles. The pan roof that covers the screened employee break area was extended to cover the air conditioning units located at the rear of the building. An awning was previously installed directly above the front entrance that connects the toll canopy to the roof of the administration building. The awning protects the entrance to the building from rain infiltration between the canopy and building. The roof is accessed through a recently installed staircase with a locked entryway at the rear (north side) of the building. All previously installed items are in like new condition.

Figure 24: Toll Canopy and Gantry Facade

Figure 25: Previously Installed and Secured Roof Staircase Entry

Mechanical, Electrical and Communications Condition

No deficiencies were noted in the plumbing fixtures of the bathrooms, break room, and janitor's closet. The bathrooms and data room are 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 A/C/heating unit that serves the conference room also appeared to be working properly. A ceiling mounted A/C unit is located in the expanded data/controller room due to the excessive heat generated by the data equipment. All A/C units which serviced the toll booths have been removed along with the removal of attended toll booths (2022).

The standby generator for this facility was replaced in 2017. It is tested under load automatically on a weekly basis and is serviced monthly to ensure it is always in working condition. The automatic transfer switch was replaced in 2014 with a Cummins model to correct a problem with the outdated, unsupported switch. The 1,000-gallon capacity above ground diesel fuel tank for the generator appears to be in good condition and was repainted in 2024. Some of the miscellaneous hardware supporting the fuel tank exhibits light surface corrosion.

Figure 26: Standby Generator

Figure 27: Recently Painted Diesel Fuel Tank

The ground-mounted, primary electrical service cabinet was previously replaced by the utility company. The cabinet is located behind the generator fuel tank at the northeast corner of the building. Several new interior emergency lights were replaced throughout the facility in 2017.

The security camera and monitoring system was in good condition and operating in appropriate areas of the administration building and toll plaza. Previously, ten Closed Circuit Television (CCTV) cameras were upgraded throughout the facility to new digital cameras, including cameras inside the toll booths which have since been removed. The lane monitoring cameras are in like new condition. On the roof of the administration building and toll canopy, lightning rod systems are installed and appear to be functioning properly. Isolated areas of the lightning protection system

have become unmounted from their installation locations, but this does not appear to inhibit performance.

Figure 28: Canopy Tolling Equipment

Figure 29: Toll Canopy Roof Lightning Rod System

Figure 30: Toll Gantry Tolling Equipment

Figure 31: Proximity Reader

The interior and exterior door locks maintain functional proximity readers, allowing employees to open locked doors by placing a card in front of the reader instead of the previous keycard swipe. The fire alarm and security systems appeared to be functioning properly. These systems were converted in July of 2024 and operate on a cellular network in lieu of the previous direct phone line connection. There are no sprinklers in the administration building.

Fiber optic communications are in place between the LeeWay Service Center and the Cape Coral facility; this connection has a 10GB capacity. All three toll facilities are connected to the LeeWay Service Center and the main Lee County DOT offices in downtown Fort Myers. There is a fiber optic cable running along the Cape Coral Bridge, serving as a backup ring for the Cape Coral and Sanibel facilities. The uninterruptable power supply (UPS) was replaced in 2023 for the Cape Coral toll facility.

Site/Civil Condition

The asphalt concrete employee parking area pavement appears to be in good condition overall. A total of 23 parking spaces plus two handicap-only spaces are available in the employee lot. The concrete parking curbs exhibit spalling.

Figure 32: Employee Parking Area East of Administration Building

Figure 33: Roadside Landscaping East of Administration Building

Figure 34: Cape Coral Bridge Sign and Landscaping Wall

Figure 35: Landscaping and Public Parking Area West of Administration Building

The concrete sidewalks in the parking area and in front of the administration building are in like new condition. The sidewalks at the side and rear of the building were also in good condition. Sidewalks and curbs exhibit general shrinkage cracks which are isolated and not widespread. The landscaped Cape Coral Bridge sign wall at the southeastern corner of the building was previously resurfaced with the same stone used along the base of the building and new lettering installed.

The plantings and landscaping installed around the administration building and along the public parking area at the west side of the building appear to be in an acceptable condition. Landscaping material consists of rock to reduce long-term maintenance cost.

Figure 36: Safety Fence at the Back of the Administration Building

Figure 37: Utility Strip with Rock Landscaping Between Sound Wall and Administration Building

The 5' high wall at the back of the facility was replaced with white safety fencing in 2018. White rock landscaping material has been installed between this wall and the building foundation and serves as a utility strip, housing the above ground electric poles. The sound barrier walls along the east approach and behind the administration building appear to be in good condition.

Roadway Condition

The asphalt concrete pavement near the toll plaza approaches appears to be in good condition and provides an excellent ride quality. The pavement extending east to the McGregor Boulevard Overpass Bridge, and west to the deck of the Cape Coral Bridges was replaced as part of the toll plaza reconfiguration in 2011/2012. Paving and striping rehabilitation to College Parkway and McGregor Overpass have been performed. Street lighting along the Cape Coral corridor has been upgraded to LED lighting. All signage, striping, and traffic control devices within the toll canopy area are in good condition.

The roadway shoulders near the toll plaza, on the bridges and their approaches 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. A complete repainting of the Cape Coral Bridge barriers was completed in July 2019.

The drainage system in the employee parking area appeared to be functioning adequately. At the west side customer turn out area, the catch basin was clear with no standing water. There were no signs of frequent backup or ponding near either of the basins. The catch basins are cleaned out on an annual basis.

Figure 38: Toll Plaza East Approach Roadway

The roadway lighting appears to be in like new condition 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 plaza. No deterioration or malfunction was noted.

Cape Coral Sign Structures

Each sign structure on the bridge approaches that has bridge-related signs was inspected. There are a total of five sign structures associated with the Cape Coral Bridges. All signs are located at the east side of the bridge for westbound traffic. Four of the signs are on the westbound approach lanes, the fifth is just north of the McGregor Boulevard overpass on the service road connecting McGregor Boulevard to the westbound lanes of College Parkway. Sign panels were damaged during Hurricane Ian and subsequently replaced in 2023 with new signs that represent current toll collection methods. Lighting on the sign structures has also been removed as the new sign panels meet retroreflective visibility standards and requirements. Conclusions of sign structure inspections are documented below, starting with the structure furthest from the toll plaza:

- 1.25-miles; dual-chord overhead span sign structure
- 1-mile; box truss overhead span sign structure
- 0.60-miles (service road); box truss overhead cantilever sign structure
- 0.25-miles; tri-chord overhead cantilever sign structure
- 100-yards; tri-chord overhead span sign structure

The first miscellaneous structure is a dual-chord overhead span sign structure located approximately 1¼ miles east of the toll plaza. There are areas with minor loss of the galvanizing coating on the uprights, truss chords, and splice connections, as well as moderate to severe corrosion on the electrical conduits and their mounting hardware. The baseplates exhibit minor corrosion at isolated locations. In several locations scratches and small areas of missing coating have been retouched with spray galvanizing paint. Overall, this structure appears to be in good condition.

Figure 39: Cape Coral - WB OSS 1-1/4 Miles from Plaza – Full Structure

Figure 40: Cape Coral -WB OSS 1-1/4 Miles from Plaza - Loss of Galvanization on Upright

Figure 41: Cape Coral - WB OSS 1-1/4 Miles from Plaza – Baseplate Corrosion

Figure 42: Cape Coral -WB OSS 1-1/4 Miles from Plaza – Electrical Conduit Corrosion

The second miscellaneous structure is a box truss overhead span sign structure located approximately 1 mile east of the toll plaza. There are areas with minor loss of the galvanizing coating on the uprights and truss chords, as well as moderate to severe corrosion on the electrical conduits and their panel boxes. There is corrosion on the upright anchor bolts/nuts and truss chord splice connection bolts/nuts. In several locations scratches and small areas of missing coating have been retouched with spray galvanizing paint. Overall, this structure appears to be in good condition.

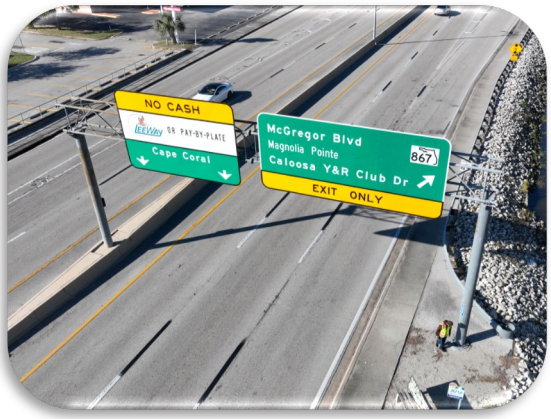

Figure 43: Cape Coral - WB OSS 1 Mile from Plaza – Full Structure

Figure 44: Cape Coral -WB OSS 1 Mile from Plaza - Loss of Galvanization on Upright and Truss Chords

Figure 45: Cape Coral - WB OSS 1 Mile from Plaza – Electrical Panel Box Corrosion

Figure 46: Cape Coral -WB OSS 1 Mile from Plaza – Upright Anchor Bolt Corrosion

The third miscellaneous structure is a box truss overhead cantilever sign structure located approximately 0.60-miles east of the toll plaza along the service road, parallel to the westbound approach lanes. There are areas with minor loss of the galvanizing coating on the upright and truss chords, as well as light to moderate corrosion on the electrical conduits and their mounting hardware. There is light corrosion on the upright anchor bolts/nuts, top of upright connection bolts, and truss chord splice connection bolts/nuts. At the base of the upright there are scrapes, possibly due to vehicular impact, which appears to be non-structural. Overall, this structure appears to be in good condition.

Figure 47: Cape Coral - WB OSS 0.6 Miles from Plaza – Full Structure

Figure 48: Cape Coral -WB OSS 0.6 Miles from Plaza - Loss of Galvanization on Upright

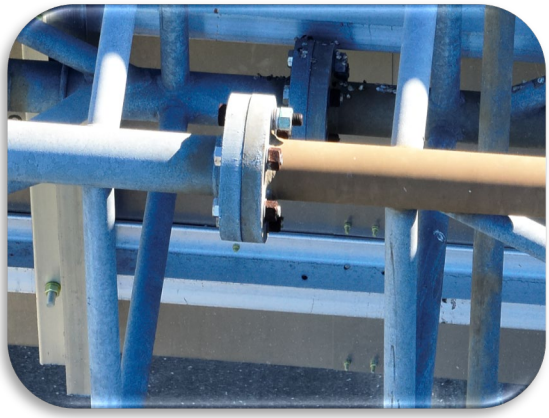

Figure 49: Cape Coral - WB OSS 0.6 Miles from Plaza – Chord Splice Connection Corrosion

Figure 50: Cape Coral -WB OSS 0.6 Miles from Plaza – Impact Scrapes

As part of the toll plaza reconfiguration in 2011 and 2012, the sign structure closest, 100-yards east of the toll plaza, was replaced with a tri-chord overhead span structure and a tri-chord overhead cantilever sign structure was added near the merge point of the Caloosa Yacht & Racquet Club access road, approximately 0.25-miles east of the toll plaza. In several locations scratches and small areas of missing coating have been retouched with spray galvanizing paint. Both sign structures remain in like new condition outside of the isolated areas of light corrosion on electrical conduits and their mounting hardware, upright anchor bolts, and upright anchor bolt bearing plates. The overhead sign structure closest to the toll plaza has vegetation growing against the right upright pole.

Figure 51: Cape Coral - WB OSS 1/4 Miles from Plaza – Full Structure

Figure 52: Cape Coral -WB OSS 1/4 Miles from Plaza – Galvanizing Paint Maintenance on Upright

Figure 53: Cape Coral - WB OSS 100 Yards from Plaza – Chord Splice Connection Corrosion

Figure 54: Cape Coral -WB OSS 100 Yards from Plaza – Vegetation Adjacent to Right Upright

Cape Coral Bridge – Westbound

A general walk-through inspection of the above deck components for the Westbound Cape Coral Bridge (Bridge No. 124044) was completed on December 4th, 2024. The below deck components and non-submerged substructure were inspected from a County work boat on December 5th, 2024. The most recent biennial inspection report issued by FDOT (8/23/2023) was reviewed and all the current and recently completed repair work was discussed with the owner's bridge engineer.

The structure carrying College Parkway westbound over the Caloosahatchee River was constructed in 1963. The bridge is currently tolled for all users, carries two lanes of traffic from Fort Myers to Cape Coral, is 3,417-feet long, and consists of 49 precast concrete multi-girder approach spans with three steel multi-girder main spans. Its most recent health index is 94.27 and its sufficiency rating is 71.1, on a rating scale of 0-100, with federal condition ratings of:

- Deck/Superstructure: 7 (good)
- Substructure: 6 (satisfactory), due to spalling noted throughout the prestressed concrete piles and the spalling and cracking throughout the footers with corrosion bleedout and exposed rebar
- Channel: 6 (bank slumping), lowered from 7 to 6 due to scour as a result of storm surge due to Hurricanes Ian and Idalia causing up to 6.5-feet of degradation

Figure 55: Cape Coral Bridge Westbound – Looking West

Figure 56: Cape Coral Bridge Westbound – Looking East

Within the biennial inspection report superstructure deficiencies include isolated areas of concrete spalls, delaminations, cracking, and surface map cracking on the top surface and underside of the deck; aluminum bridge railing and approach curb impact damage; approach slab cracks; precast concrete beam cracks, spalls, and delaminations; minor paint loss and surface corrosion on the steel girders in the main channel span (17, 18, and 19) continuous steel girders with pack rust noted along the bottom flanges at splice locations; and end diaphragm spalling with exposed corroded strands.

Substructure deficiencies include abutment backwall cracks; elastomeric, movable rocker, and fixed bearing assembly corrosion and pad splitting; pier column and strut cracks, spalls, and honeycombing; pile and pile cap cracks, spalls, scaling, delamination, and voids.

Superstructure																	
Deck			Joints			Approach Slab			Girder/Beam				Barrier			Brg	
C	S	D	Di	Co	Def	C	S	D	C	Co	S	D	Co	Ga	Im	Co	Sp
●	●	●	●			●	●		●	●	●	●	●		●	●	●

Substructure																	
Abutment						Pier											
Cap			Backwall			Cap			Columns			Footings			Piles		
C	S	D	C	S	D	C	S	D	C	S	D	C	S	D	C	S	D
			●			●	●	●	●	●	●	●	●	●	●	●	

Notes
- For defect details see respectively FDOT Bridge Inspection Report.
- Defect severity is based on engineering judgement and representative of the worst case deterioration.

Severity Legend
- ● Minor
- ● Moderate
- ● Severe

Abbreviations

Brg	Bearing	Def	Deformation
C	Crack	Di	Dirt & Debris
Co	Corrosion	Ga	Loss of Galvanization
D	Delamination	Im	Impact Damage
Deg	Degredation	S	Spall
		Sp	Splitting

Miscellaneous deficiencies include moderate seawall concrete bulkhead cracks, spalls, and delaminations; cathodic pile jacket missing conduits and anodes; channel degradation; general widespread fender system storm damage, including pile fractures, delaminations, and spalls, missing and decayed timber wales and spacer blocks, and missing navigational clearance gauges; broken navigational light housing; minor to severe corrosion on the main span (at piers 18 and 19) access ladder system; missing safety fall protection cables; and missing traffic barrier reflectors.

None of these deficiencies have a significant effect on the traffic volume or load capacity of the bridge. Lee County DOT proactively repairs most deficiencies noted in the FDOT inspection report at the time the report becomes available. 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.

Figure 57: Cape Coral Bridge Westbound – Main Span Steel Girder Corrosion

Figure 58: Cape Coral Bridge Westbound – Fender System Alignment and General Deterioration

Figure 59: Cape Coral Bridge Westbound – Fender System Access Ladder Corrosion

Figure 60: Cape Coral Bridge Westbound – General Substructure Geometry at Main Span

Lee County DOT 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 National Pollutant Discharge Elimination System (NPDES) storm water management obligations for removal of the sediment. Joints are cleaned on a yearly basis along with periodic repainting of vehicular impact marks on the concrete barriers. The County also performs quarterly checks on roadway and fender lights and maintains the roadway striping.

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 continues to perform well and is in good condition. In 2014 the Lee County DOT installed quad guard attenuators on the median barrier at the approaches to the westbound Cape Coral Bridge. In 2017 repairs were made to the fender system to address deficiencies due to vessel impact. In June of 2019 Lee County DOT completed the repainting of the Cape Coral Bridges. Lee County hired a contractor to repair the concrete spalling on the pier columns, exposed footings, and piles in November 2019. Additionally, concrete diaphragm spalls were repaired by a contractor in 2021.

Considering the age of the westbound Cape Coral bridge and its functionally obsolete status, this bridge is scheduled to be replaced and is currently within the 60% design phase, with construction expected to begin in 2027. With an imminent bridge replacement, deficiencies which do not impact the safety of the public or performance of the structure will not be repaired. Fender system repairs are currently being performed by in-house bridge maintenance personnel.

Cape Coral Bridge – Eastbound

A general walk-through inspection of the above deck components for the Eastbound Cape Coral Bridge (Bridge No. 124065) was completed on December 4th, 2024. The below deck components and non-submerged substructure were inspected from a County work boat on December 5th, 2024. The most recent biennial inspection report issued by FDOT (8/14/2023) was reviewed and all recently completed repair work was discussed with the owner's bridge engineer.

The structure carrying College Parkway eastbound over the Caloosahatchee River was constructed in 1989. The bridge is not tolled for all users as this structure serves eastbound traffic. 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 health index is 99.28 and its sufficiency rating is 97.1, on a rating scale 0-100, with federal condition ratings of:

- Deck/Superstructure/Substructure: 7 (good)
- Channel: 6 (bank slumping), lowered from 7 to 6 due to scour as a result of storm surge due to Hurricanes Ian and Idalia causing up to 6.1-feet of degradation

Figure 61: Cape Coral Bridge Eastbound – Looking West

Figure 62: Cape Coral Bridge Eastbound – Looking East

Within the biennial inspection report superstructure deficiencies include isolated areas of concrete spalls and cracks in the deck surface on the top and bottom sides of the deck; concrete bridge railing spalls, delaminations, scuff marks, and missing junction box covers; deck joint seal punctures, holes, and tears; epoxy joint header delaminations; and precast concrete beam cracks and spalls.

Substructure deficiencies include abutment cracks; pier cap and column strut cracks, pier footing cracks, spalls, delaminations, and voids; and footing pile cracks and spalls.

Superstructure																	
Deck			Joints			Approach Slab			Girder/Beam			Barrier			Brg	
C	S	D	Di	Co	Def	C	S	D	C	S	D	C	Im	S	Co	Def
●	●		●		●				●	●				●		●

Substructure																	
Abutment						Pier											
Cap			Backwall			Cap			Columns			Footings			Piles		
C	S	D	C	S	D	C	S	D	C	S	D	C	S	D	C	S	D
●						●		●	●			●	●		●	●	

Notes
- For defect details see respectively FDOT Bridge Inspection Report.
- Defect severity is based on engineering judgement and representative of the worst case deterioration.

Severity Legend
- ● Minor
- ● Moderate
- ● Severe

Abbreviations

Brg	Bearing	Def	Deformation
C	Crack	Di	Dirt & Debris
D	Delamination	Im	Impact Damage
Deg	Degredation	S	Spall

Miscellaneous deficiencies include moderate seawall concrete bulkhead cracks; minor approach guardrail impact damage; channel degradation; missing barrier reflectors; and missing or fallen traffic signs.

None of these deficiencies have a significant effect on the traffic volume or load capacity of the bridge. Lee County DOT proactively repairs most deficiencies noted in the FDOT inspection report at the time the report becomes available. 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.

Figure 63: Cape Coral Bridge Eastbound – Typical Diaphragms and Pier Cap Cracking

Figure 64: Cape Coral Bridge Eastbound – General Fender System Deterioration

Figure 65: Cape Coral Bridge Eastbound – Painted over Graffiti on Pier Caps

Figure 66: Cape Coral Bridge Eastbound – General Substructure Geometry at Main Span

Lee County DOT 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. Joints are cleaned on a yearly basis along with periodic repainting of vehicular impact marks on the concrete barriers. The County also performs quarterly checks on roadway and fender lights and maintains the roadway striping.

In 2014 the Lee County DOT installed quad guard attenuators on the median barrier at the approaches to the eastbound Cape Coral Bridge. A contractor completed repairs to the underside of the concrete fascia overhang and beam ends in 2014. In 2017 repairs were made to the fender system shared with the westbound structure to address deficiencies due to vessel impact. In June of 2019 Lee County DOT completed the repainting of the Cape Coral Bridges. Lee County hired a contractor to repair the concrete spalling and delaminations on the piles and pile caps in November 2019. Additionally, concrete diaphragm spalls were repaired by a contractor in 2021.

While the existing eastbound Cape Coral Bridge is not functionally obsolete or structurally deficient and is in good overall condition, it will be replaced along with the westbound Cape Coral Bridge construction, which will widen the structure and improve pedestrian accessibility. The bridge replacement is currently within the 60% design phase, with construction expected to begin in 2027. With an imminent bridge replacement, deficiencies which do not impact the safety of the public or performance of the structure will not be repaired. Fender system repairs are currently being performed by in-house bridge maintenance personnel.

Midpoint Memorial Bridge and Toll Facility

The Midpoint Memorial Bridge is located approximately seven miles (drive distance) south of downtown Fort Myers on Colonial Boulevard at its junction with the Caloosahatchee River. The toll facility is located on Veterans Memorial Parkway. The toll plaza and administration building are located approximately 1¼ miles west of the river.

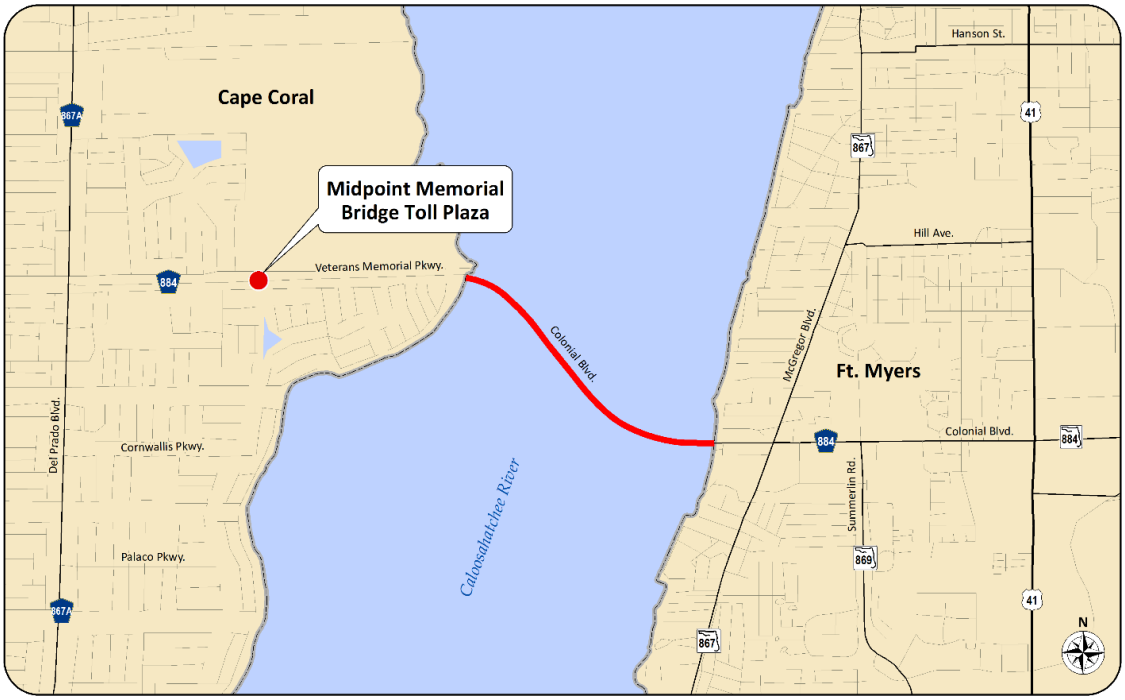

Figure 67: Midpoint Memorial Bridge Toll Plaza Location Map

Midpoint Memorial Bridge Toll Plaza

At the main toll plaza, in the westbound travel direction, there are six total lanes; lane one is a tolled lane under the canopy structure, lanes two thru four reside under the canopy structure within a closed off gore area inaccessible to the public via traffic delineators, and the southern-most lanes five and six are tolled free-flowing lanes under the gantry structure, separated from the canopy covered lanes by a concrete barrier wall. At the main toll plaza, in the eastbound travel direction, there are two non-tolled lanes. The administration building resides along the north side of the Veterans Parkway. All tolled lanes are ORT lanes. The two eastbound non-toll lanes are free-flowing, separated from the westbound traffic by a continuous concrete barrier on both approaches. The current six lane toll canopy layout was constructed in 2011.

Figure 68: Midpoint Toll Plaza – Looking West

Figure 69: Midpoint Toll Plaza – Looking East

Lane one of the toll plaza (on the north side) is 14-feet-wide to accommodate wide loads, while all other lanes are 11-feet-wide. Adjacent to lane one is a delineated bicycle lane. Lanes one thru four are covered by a canopy structure, comprised of reinforced concrete columns and support beams with a precast prestressed concrete double tee beam supported roof, and separated by 6-foot-wide concrete barrier islands which also serve as collision protection for the columns. Lanes five and six maintain a 12-foot-wide outside shoulder (right) and a 6-foot-wide inside shoulder (left) and run under the toll gantry structure.

In March 2020, Lee County suspended all cash collection and all westbound lane tolls are collected by either electronic tolling or video billing. A new camera VES (Violation Enforcement System) was installed in December 2024. In February 2025 a new Manual Image Review system was implemented. The Toll System Lane and HOST replacement is scheduled to go to the Board of County Commissioners in March 2025. Once approval is acquired, it may be up to a year for installation. Additionally, the signage for the plaza was replaced in 2023.

Figure 70: Open Road Tolling Equipment Gantry Structure Above Eastbound Lanes Five and Six

Figure 71: Concrete Median Barrier Between Eastbound and Westbound Travel Lanes

The current administration building and toll plaza were originally constructed in 1997. There have been no major expansions of the building since that time. However, the toll canopy and access tunnel were reconfigured in 2011 as part of the transition to ORT and single direction tolling. The 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 ft^2 and 240 ft^2, respectively, to the available storage area. A 360 ft^2 screened exterior employee break room is attached to the larger storage building.

Attended toll booths in lanes two and three were removed in 2022, while the toll both in lane four remains. The LED Traffic Lights installed in 2016 at all previous attended lanes (lanes two thru four) have been removed. New special unreproducible keys were created and implemented for increased facility security in 2023.

Figure 72: Previous Attended Toll Booth Layout – March 2021

Figure 73: Current Toll Booth Layout – December 2024

Architectural Condition

Overall, the interior of the building appears to be in good condition, with no significant maintenance items noted. The office flooring, paint, fixtures, and doors were typically in good condition, with minor signs of wear, and are being well maintained on a regular basis. Employee offices and the interior break room were well kept, with minimal excess material storage. In 2015 several renovations to the interior of the facility were completed including the replacement of the kitchen and count room cabinets were replaced; replacement of the vinyl composition tile flooring in various offices; and repainting of the interior of the facility. While imaging personnel were relocated from this facility in August 2020, the building still houses IT and admin staff. Employee lockers were removed in August 2020 as well. In 2020 air purifiers were added to the facility in an employee health initiative during the global pandemic.

The interior and exterior door locks maintain functional proximity readers, allowing employees to open locked doors by placing a card in front of the reader instead of the previous keycard swipe. The sole and decommissioned toll booth has a proximity reader for increased security.

The exterior of the building appears to be in good condition overall. As part of normal maintenance, the building is pressure washed every 6 months. No deficiencies were noted in the brick facade or windows. The previously installed hurricane impact resistant windows on the south facade of the building were checked for condition and appear like new. Concrete repairs recently performed at the entrance to the administration building appears to be in great condition.

Figure 74: Hurricane Impact Resistance Windows

Figure 75: Kitchen Cabinets

Figure 76: Outside Break Area Security Camera

Figure 77: Outside Break Area

The roof system on the administration building and the toll canopy is comprised of an asphalt-based rolled roofing material with liquid asphalt/tar sealant. The roof is drained via fascia scuppers and downspouts. All scuppers and downspouts were clear and functioning properly during the inspection, with no signs of ponding water. Roofing material on both roof levels is in good condition. The lightning ground system installed on the roof is in good condition, with isolated segments of the hardware now unattached from its parapet mounting. The stainless-steel roof access ladder installed in 2013 is in like new condition, as is the access ladder connecting the

administration building roof to the toll canopy roof. The northwest corner of the administration building roof is collecting fallen leaves from the adjacent trees.

Figure 78: General Toll Facility Administration Building Roof

Figure 79: Typical Toll Canopy Roof Lightning Protection System Dismounted

Figure 80: Toll Canopy Roof Access Ladder

Figure 81: Administration Building Roof Vegetation

The access tunnel between the administration building and the previous toll booths provides access to both the attended booths under the toll canopy structure and the median island area between the free-flowing westbound and eastbound travel lanes, which supports the stairs to the toll gantry structure.

The toll collection controller cabinets are maintained along the east wall of the tunnel. A continuous trench drain runs along the tunnel floor. The trench drain has isolated locations with minor concrete spalling and moderate corrosion. A new air conditioning unit for the tunnel was installed in 2018. The metal conduit chases between each lane controller box are generally in good condition, with areas of moderate corrosion. There are sporadic minor cracks in the concrete ceiling, some with efflorescence.

Figure 82: Access Tunnel with Lane Controller Cabinets

Figure 83: Concrete Spalling at Trench Drain Edge

Figure 84: Metal Conduit Chase Corrosion

Figure 85: Concrete Ceiling Crack

Structural Condition

The administration building, tunnel, concrete canopy facade, canopy columns, toll booth, concrete islands and vehicle impact attenuators all appear to be in very good structural condition. No indications of structural distress were observed outside of the tunnel cracking and sporadic concrete island cracking. The tunnel and toll canopy were reconstructed as part of the toll plaza reconfiguration and are both in very good condition. Mild to moderate surface corrosion was noted on the steel girders on the east side of the toll gantry. The west side of the gantry structure has missing and loose flashing at the coping. The loose handrail noted during the last inspection has since been corrected. The metal toll gantry access stairs have moderate corrosion and there is concrete spalling at the lightning protection anchorage near the stairs.

Figure 86: Toll Gantry – West Side

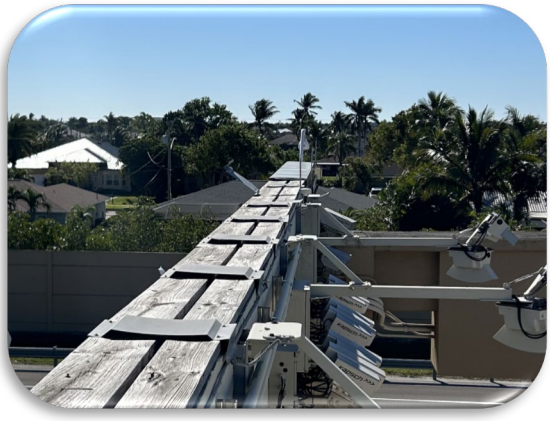

Figure 87: Toll Gantry – West Side Missing and Loose Flashing at Coping

Figure 88: Toll Gantry – East Side

Figure 89: Toll Gantry Stairs Corrosion

Figure 90: Toll Gantry – East Side Member Corrosion

Figure 91: Toll Gantry – East Side Lightning Protection Anchorage Spalling

The outdoor break room and both small storage buildings behind the main administration building were found to be in good condition. A new, enclosed outside break area was added in 2016, and appears to be in like new condition.

Information Technology (IT) & Toll Collection Equipment

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 Memorial Bridge facility houses the main data servers that monitor transactions at all three toll facilities and communicates the information with the LeeWay Service Center and the Lee County DOT downtown offices.

All IT equipment, camera equipment, and systems on site were found to be in like new condition, well organized, and properly maintained. The IT room appears to be properly cooled, as the A/C units were functioning properly during inspection. The data room floor was replaced in 2022.

Figure 92: IT Room Cable Management, Identification System, and Wall A/C Units

Figure 93: Secured Administration Building Roof Access Ladder

Mechanical, Electrical and HVAC Condition

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 replaced in 2024 and were operating properly at the time of inspection. The units are inspected monthly by Lee County Facilities personnel. At the north side of the building, two standalone supplemental A/C systems for the shift supervisor's office and the count room were working properly. There are two wall A/C units within the sever room as it runs hot.

The standby generator for this facility is in good condition and is tested automatically for 30 minutes under load on a weekly basis. In October 2023 an online monitoring service was implemented for the standby generator. A replacement generator has been ordered. Midpoint's generator and transfer switch are scheduled for replacement in 2025. The above ground fuel storage tank is also in good condition. The white vinyl fence enclosure previously encompassing the fuel storage tank was damaged during Hurricane Ian and is scheduled for repair.

The security camera and monitor systems appear to be operating properly throughout the administration building and toll plaza. Select security cameras have been removed since the facility no longer supports cash collection methods. Interior and exterior door locks were functional in all parts of the building. The fire alarm and security systems appeared to be functioning properly. These systems were converted in July of 2024 and operate on a cellular network in lieu of the previous direct phone line connection. There are no sprinklers in the administration building.

The 30 kW UPS in the padlocked equipment area of the tunnel was recently replaced and an additional UPS (50 kW) was installed in 2023. Both appear to be functioning properly. The elevator was in good working condition during the inspection and its door was replaced in 2024.

Lee County owns a bucket truck that is used to store tools and materials necessary for servicing the three toll facility buildings. The truck is kept at the Midpoint Memorial Bridge facility.

Figure 94: New Air Handler

Figure 95: A/C Compressor

Figure 96: Standby Transfer Switch

Figure 97: Standby Power Generator

Figure 98: Fuel Storage Tank

Figure 99: Typical Fuel Storage Tank Enclosure Damage

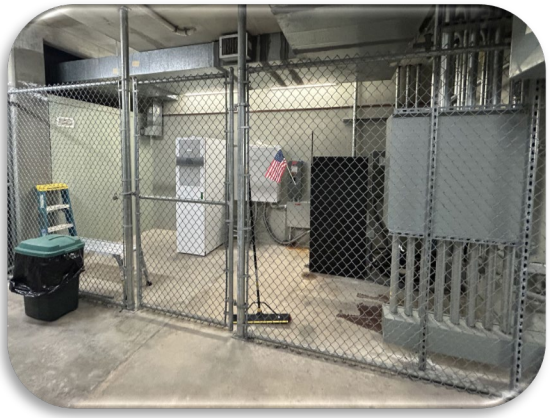

Figure 100: UPS within Secured Area of Tunnel

Figure 101: Fire Alarm System

Site/Civil Condition

The asphalt concrete employee parking area was resealed in 2017 and appears to be in a reasonable condition, with signs of wear. Striping for the parking spaces is also showing signs of degradation but considered to be in an acceptable retroreflective condition, with 27 regular and 2 handicap-only spaces delineated. Additional street lighting was added to the parking lot in 2018.

Figure 102: Employee Parking Lot Pavement and Striping Condition

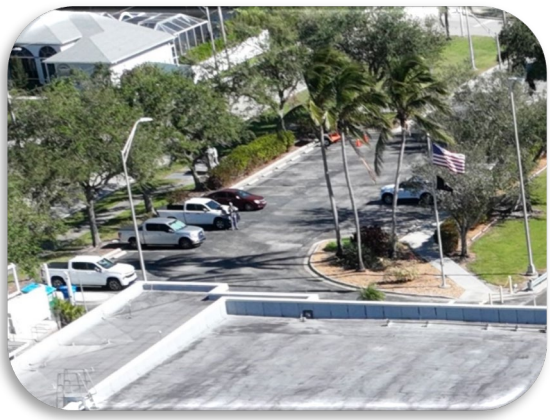

Figure 103: Overall Employee Parking

The concrete sidewalk from the employee parking lot to the front entrance is in good condition. The concrete sidewalks in the parking area and at the rear of the building were typically in fair condition, with minor isolated cracks, but no spalling or other serious deterioration. Sidewalk areas adjacent to structural spread footings (e.g., fuel tank) exhibit cracking at reentrant corners. There is minor erosion-based undermining of the west-most concrete sidewalk. Concrete-filled steel bollard posts adjacent to the exterior A/C units were in good condition.

Figure 104: Typical Concrete Sidewalk Cracks

Figure 105: Typical Concrete Sidewalk Cracks at Reentrant Corners

Overall, the landscaping at the site is cared for and properly maintained. The vinyl fencing installed along the north perimeter of the administration building and forming an enclosure around the generator's fuel storage tank and trash dumpsters was damaged during Hurricane Ian and is scheduled to be repaired. The landscaping was updated in 2017, and the mulch was completely replaced with pea gravel around the facility in 2019.

Figure 106: Northwest Vinyl Fencing Hurricane Damage

Figure 107: Dumpster within Damaged Vinyl Enclosure

Roadway Condition

The asphalt pavement at both sides of the toll plaza appears to be in very good condition with a smooth ride quality. Asphalt for the toll lanes and the corridor was repaved in 2024. The lane striping is in good condition.

Away from the toll plaza, on the east and west approaches to the bridge, the striping is in good condition. Maintenance vehicle turn-outs and gates appear to be in good condition along the west approach. Concrete barriers on the roadway approach, through the toll plaza, and on the bridge were repainted in 2019. Guide railing and median barrier typically consists of corrugated beam steel along the right and left shoulders, with F-shape concrete barrier in the median. Both are 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. The light standards between the eastbound and westbound lanes and near the toll plaza appear to be in good condition and were functioning at the time of inspection.

Figure 108: Lane Configuration and Noise Wall Looking West

Figure 109: Lane Configuration and Noise Wall Looking East

The noise barrier wall on the west approach to the bridge consists of steel H-piles with precast concrete panels. This wall was repainted in 2014 and appears to be in good condition, with only a few small locations of light efflorescence leakage. The architectural soldier pile noise wall at the northwest corner of the toll plaza has storm damage and is scheduled to be replaced in the future.

Figure 110: Northwest Solider Pile Noise Wall Damage

Figure 111: Administration Building West End Service Entrance

Sign Structure Condition

Each sign structure on the bridge approaches that has bridge-related signs was inspected. There is a total of seven sign structures associated with the Midpoint Bridge. All signs are located at the east side of the bridge for westbound traffic. Sign panels were damaged during Hurricane Ian and subsequently replaced in 2023 with new signs that represent current toll collection methods. Lighting on the sign structures has been removed as the new sign panels meet retroreflective visibility standards and requirements. Conclusions of sign structure inspections are documented below, starting with the structure furthest from the toll plaza.

- 3.25-miles; tri-chord overhead span sign structure
- 3.125-miles; tri-chord overhead cantilever sign structure
- 3-miles; tri-chord overhead span sign structure
- 1-mile; tri-chord overhead cantilever sign structure
- 0.5-miles; tri-chord overhead cantilever sign structure
- 0.25-miles; tri-chord overhead cantilever sign structure
- 0.125-miles; tri-chord overhead cantilever sign structure

The first miscellaneous structure is a tri-chord overhead span sign structure located approximately 3¼ miles east of the toll plaza, on the west bridge approach, and on the east side of the Caloosahatchee River. There are areas of loss of galvanizing coating and minor corrosion on the truss chord members and upright connection plates. The upright baseplates have isolated areas of delaminative corrosion around their perimeter. In several locations scratches and small areas of missing coating have been retouched with spray galvanizing paint on the uprights and truss. Overall, this structure appears to be in good condition.

Figure 112: Midpoint – WB OSS 3 ¼ Miles from Plaza – Full Structure

Figure 113: Midpoint – WB OSS 3 ¼ Miles from Plaza - Upright Baseplate Corrosion

Figure 114: Midpoint - WB OSS 3 ¼ Miles from Plaza – Typical Galvanizing Spray Rehab

Figure 115: Midpoint - WB OSS 3 ¼ Miles from Plaza – Typical Truss Chord Loss of Galv. and Corrosion

The second miscellaneous structure is a tri-chord overhead cantilever sign structure located approximately 3.125 miles east of the toll plaza, on the west bridge approach, and on the east side of the Caloosahatchee River. There are areas of loss of galvanizing coating on the truss chord members and upright connection plates. At the base of the pole there is a distorted vertical stiffener. There is a large palm tree partially obstructing the sign and upright but does not appear to be obfuscating any of the sign text. In several locations scratches and small areas of missing coating have been retouched with spray galvanizing paint on the upright and truss. Overall, this structure appears to be in good condition.

Figure 116: Midpoint – WB OSS 3.125 Miles from Plaza – Full Structure

Figure 117: Midpoint – WB OSS 3.125 Miles from Plaza - Upright Baseplate Corrosion

Figure 118: Midpoint - WB OSS 3.125 Miles from Plaza – Typical Galvanizing Spray Rehab

Figure 119: Midpoint - WB OSS 3.125 Miles from Plaza – Distorted Baseplate Vertical Stiffener

The third miscellaneous structure is a tri-chord overhead span sign structure located approximately 3-miles east of the toll plaza, on the west bridge approach, and on the east side of the Caloosahatchee River. There are areas of loss of galvanizing coating on the uprights, truss chord members, chord splices, and upright connection plates. Several diagonal angles within the truss and the upright connection plates have light surface corrosion. A nearby tree in the median is encroaching on the left upright and equipment cabinets. Similarly, a palm tree is encroaching on the right upright. In several locations scratches and small areas of missing coating have been retouched with spray galvanizing paint on the uprights and truss. Overall, this structure appears to be in good condition.

Figure 120: Midpoint – WB OSS 3 Miles from Plaza – Full Structure

Figure 121: Midpoint – WB OSS 3 Miles from Plaza – Surface Corrosion on Truss Angles

Figure 122: Midpoint - WB OSS 3 Miles from Plaza – Typical Galvanizing Spray Rehab

Figure 123: Midpoint - WB OSS 3 Miles from Plaza – Surface Corrosion on Upright Connection Plates

The fourth miscellaneous structure is a tri-chord overhead cantilever sign structure located approximately 1-mile east of the toll plaza, on the west side of the Caloosahatchee River. There are areas of loss of galvanizing coating and minor surface corrosion throughout the entire structure. Abandoned lighting conduits and their mounting hardware have moderate corrosion. The baseplate structural grout pad is compromised and permits standing water to contact the anchor bolts. This should be repaired as soon as possible to prevent deterioration of the anchor bolts. In several locations scratches and small areas of missing coating have been retouched with spray galvanizing paint on the upright and truss. Overall, this structure appears to be in good condition.

Figure 124: Midpoint – WB OSS 1 Mile from Plaza – Full Structure

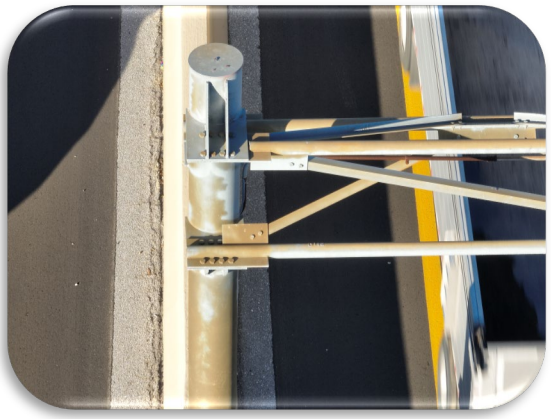

Figure 125: Midpoint – WB OSS 1 Mile from Plaza – Surface Corrosion on Upright and Truss Members

Figure 126: Midpoint - WB OSS 1 Mile from Plaza – Typical Lighting Conduit Corrosion

Figure 127: Midpoint - WB OSS 1 Mile from Plaza – Compromised Structural Grout Pad

The fifth miscellaneous structure is a tri-chord overhead cantilever sign structure located approximately ½ mile east of the toll plaza, on the west side of the Caloosahatchee River. There are areas of loss of galvanizing coating, minor surface corrosion throughout the entire structure, and isolated areas of moderate corrosion. Abandoned lighting conduits and their mounting hardware have moderate corrosion. The baseplate structural grout pad is compromised and permits standing water to contact the anchor bolts. This should be repaired as soon as possible to prevent deterioration of the anchor bolts. In several locations scratches and small areas of missing coating have been retouched with spray galvanizing paint on the upright and truss. Overall, this structure appears to be in good condition.

Figure 128: Midpoint – WB OSS ½ Mile from Plaza – Full Structure

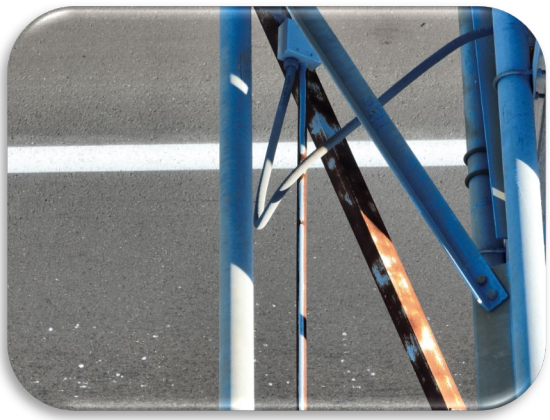

Figure 129: Midpoint – WB OSS ½ Mile from Plaza – Moderate Corrosion on Truss Diagonal Angle

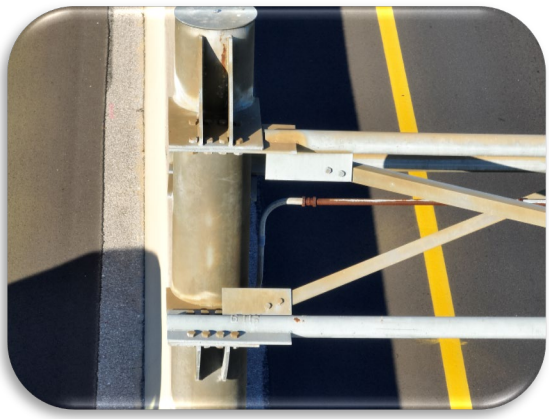

Figure 130: Midpoint - WB OSS ½ Mile from Plaza – Upright Surface Corrosion and Lighting Conduit Corrosion

Figure 131: Midpoint - WB OSS ½ Mile from Plaza – Compromised Structural Grout Pad

The sixth and seventh miscellaneous structures are tri-chord overhead cantilever sign structures located approximately ¼ mile and 1/8 mile east of the toll plaza, on the west side of the Caloosahatchee River. These structures were installed as part of the ORT reconfiguration in 2011/2012. The sixth sign structure has minor scratches on the upright, minor corrosion on the attached security camera mounting equipment, and compromised baseplate structural grout pad which permits standing water to contact the anchor bolts. This grout pad deterioration should be repaired as soon as possible to prevent deterioration of the anchor bolts. The seventh sign structure exhibits minor surface corrosion on its baseplate. Overall, these structures appear to be in very good condition.

Figure 132: Midpoint – WB OSS ¼ Mile from Plaza – Full Structure

Figure 133: Midpoint – WB OSS ¼ Mile from Plaza – Compromised Structural Grout Pad

Figure 134: Midpoint - WB OSS 1/8 Mile from Plaza – Full Structure

Figure 135: Midpoint - WB OSS 1/8 Mile from Plaza – Baseplate Corrosion

Midpoint Memorial Bridge

A general walk-through inspection of the above deck components for this facility (Bridge No. 124096) was completed on December 4th, 2024. The below deck components and non-submerged substructure were inspected from a County work boat on December 5th, 2024. The most recent biennial inspection report issued by FDOT (1/29/2024) was reviewed and all recently completed repair work was discussed with the owner's bridge engineer.

The Midpoint Memorial Bridge, which carries CR 884 (Veterans Parkway) over the Caloosahatchee River, was constructed in 1997. The bridge is currently tolled for all users traveling westbound and carries two lanes of traffic in each direction between Cape Coral and Fort Myers. The structure is 7,172-feet long and consists of 63 precast concrete multi-girder spans. Its most recent health index is 99.53 and its sufficiency rating is 85.0, on a rating scale of 0-100, with federal condition ratings of:

- Deck/Superstructure/Substructure: 7 (good)
- Channel: 7 (minor damage)

Figure 136: Midpoint Bridge – Looking West

Figure 137: Midpoint Bridge – Looking East

Within the biennial inspection report superstructure deficiencies include isolated areas of concrete spalls, delaminations, cracking, and surface map cracking on the top surface and underside of the deck, some spalls with exposed reinforcement; concrete bridge railing cracks, spalls, delaminations, and surface scrapes; surface corrosion in the strip seal steel headers, isolated full penetration joint tears, and debris buildup at certain expansion joints; approach slab cracks; and precast concrete beam cracks and spalls.

Substructure deficiencies include seawall bulkhead and abutment cracks, spalls, and delaminations; pier caps and columns intermittent cracks and spalls; and footing cracks, spalls, delaminations, and voids, some with exposed rebar and section loss.

Superstructure																
Deck			Joints			Approach Slab			Girder/Beam			Barrier			Brg	
C	S	D	Di	Co	Def	C	S	D	C	S	D	C	Im	S	Co	Def
●	●	●	●	●	●	●		●	●	●	●	●		●		

Substructure																	
Abutment						Pier											
Cap			Cheekwall			Cap			Columns			Footings			Piles		
C	S	D	C	S	D	C	S	D	C	S	D	C	S	D	C	S	D
●			●			●	●		●	●		●	●	●			

Notes
- For defect details see respectively FDOT Bridge Inspection Report.
- Defect severity is based on engineering judgement and representative of the worst case deterioration.

Severity Legend
- ● Minor
- ● Moderate
- ● Severe

Abbreviations

Brg	Bearing	Def	Deformation
C	Crack	Di	Dirt & Debris
D	Delamination	Im	Impact Damage
Deg	Degredation	S	Spall

Miscellaneous deficiencies include isolated debris filled shoulder drainage inlets; abutment slope protection moderate cracks and undermining; MSE wall panel offset and spalls; general widespread fender system storm damage, including pile spalls and delaminations, missing and decayed timber members, and navigational clearance gauge section loss, disconnected fender light electrical system; missing/broken navigational lighting equipment; missing median barrier reflectors and raised pavement markers; and substructure graffiti.

None of these deficiencies have a significant effect on the traffic volume or load capacity of the bridge. Lee County DOT proactively repairs most deficiencies noted in the FDOT inspection report at the time the report becomes available. 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.

Figure 138: Midpoint Bridge – Pier Cap Cracking and Painted Graffiti

Figure 139: Midpoint Bridge – Fender System Alignment

Figure 140: Midpoint Bridge – Fender System Access Ladder Missing Grate

Figure 141: Midpoint Bridge– General Substructure Geometry at Main Span

Lee County DOT 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. Joints are cleaned on a yearly basis along with periodic repainting of vehicle impact marks on the concrete barriers. The County also performs quarterly checks on roadway and fender lights and maintains the roadway striping.

Previous maintenance work at the Midpoint Memorial Bridge includes repainting the noise wall along the east approach, milling, and paving the approach lanes in both directions on the west side of the bridge, and epoxy injection of the pier cap cracks. Lee County DOT maintenance personnel made repairs to the fender system such as new rope railing, although corrosion was noted on the fender system hardware and exposed steel on the fender piling. Lee County DOT completed painting of the bridge in June 2019. Lee County replaced the corroded fender system pile cluster wraps in 2021.

In the near future County maintenance will be replacing any fender system timber members that are missing. Lee County DOT also has a contract out for bid for the rehabilitation of approach MSE wall defects, which will also include bridge related defects (i.e., spalls/cracking).

Sanibel Causeway and Toll Facility

The Sanibel Causeway Bridges and toll facility are located approximately 17-miles (drive distance) south of downtown Fort Myers on CR 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. 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.

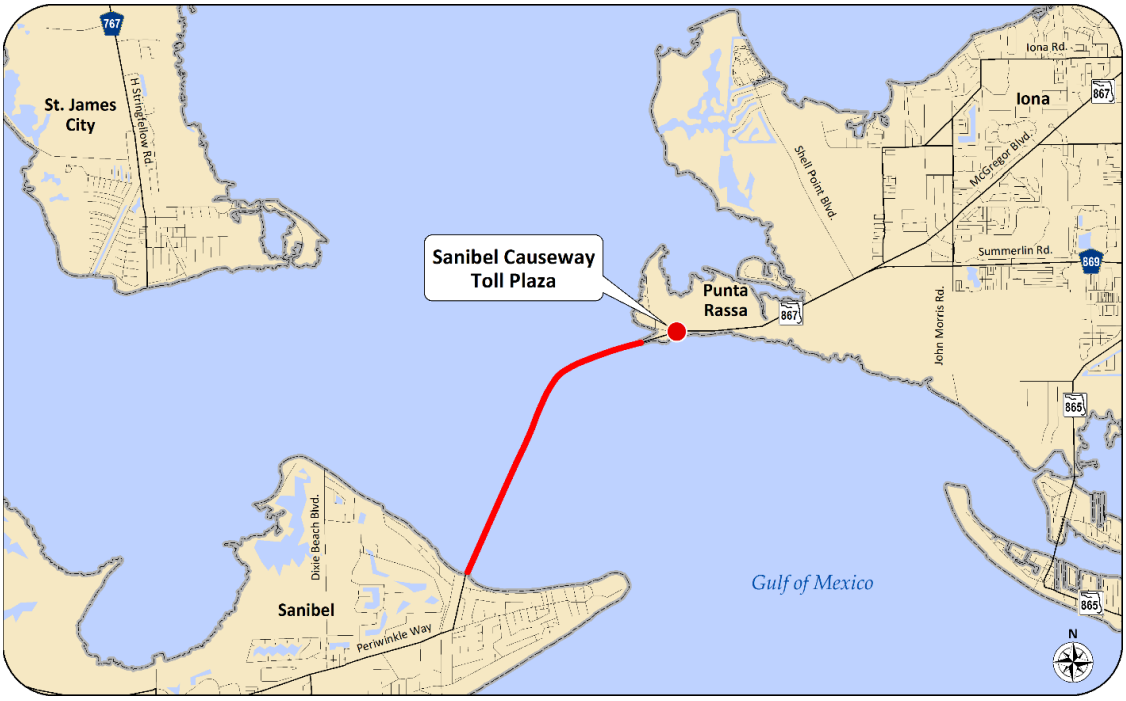

Figure 142: Sanibel Causeway Toll Plaza Location Map

Sanibel Causeway Toll Plaza

At the main toll plaza, typically, there are three tolled lanes in the westbound travel direction and one double-wide non-tolled lane in the eastbound travel direction, with all lanes situated below the toll canopy and administration building. Following the aftermath of Hurricane Ian, there is on-going construction at the bridge approach adjacent to the tolling facility, which has a modified maintenance of traffic configuration of lanes one and two serving the tolled westbound traffic and lane three serving the non-tolled eastbound traffic. All tolled lanes are ORT lanes and the non-tolled eastbound lane through the plaza area is wide enough to accommodate two lanes of traffic in case of an emergency (e.g., hurricane evacuation).

Figure 143: Sanibel Toll Plaza – Looking West

Figure 144: Sanibel Toll Plaza – Looking East

Lane one of the toll plaza (on the north side) 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 above. 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.

The toll plaza, administration building, and causeway bridges were constructed in 2007. The total square footage of the building is approximately 5,650 ft^2. Attended toll booths in lanes one and two were removed in 2022. New special unreproducible keys were created and implemented for increased facility security in 2023.

In March 2020, Lee County suspended all cash collection and all westbound lane tolls are collected by either electronic tolling or video billing. A new camera VES (Violation Enforcement System) was installed in December 2024. In February 2025 a new Manual Image Review system was implemented. The Toll System Lane and HOST replacement is scheduled to go to the Board of County Commissioners in March 2025. Once approval is acquired, it may be up to a year for installation. Additionally, the signage for the plaza was replaced in 2023.

Figure 145: Previous Attended Toll Booth Layout – March 2022

Figure 146: Current No Toll Booth Layout

Due to the significant damage from Hurricane Ian, there is on-going FDOT restoration efforts around the Sanibel toll plaza. Please refer to the individual condition sections below for recent maintenance and upgrades.

Architectural Condition

The interior and exterior of the building appear to be in very good condition. No significant deterioration or items requiring maintenance were observed.

While the exterior of the facility was repainted in 2012, it is aging and on Lee County's maintenance list to be repainted. The inside of the facility was repainted following Hurricane Ian and is in like new condition. The vast majority of the ceiling tiles were replaced in 2024. The building and hand railings are power washed on a semi-annual basis as part of routine maintenance operations.

There is ample space for the staff offices, toll equipment and electronics, count room, training room, employee break room, screened porch area and storage rooms within the administrative level of the structure. In 2020 air purifiers were added to the facility in an employee health initiative during the global pandemic. In December 2023 the carpet in the Image Review Room was replaced.

Figure 147: Administration Building – Looking South

Figure 148: Underside of Toll Canopy

Following Hurricane Ian, select resealing has been performed where necessary on the facilities roof, stairways, and landings. In March 2024 the entry gate to the stairway near the parking lot was replaced.

Structural Condition

The administration building, concrete canopy, concrete islands and vehicle impact attenuators all appear to be in very good structural condition. Barriers exhibit surface level scrapes and canopy columns show map cracking which is painted to protect from the elements. The yellow bollards within the toll plaza have moderate corrosion. No indications of structural distress were observed.

Figure 149: Typical Traffic Island Barrier Scape

Figure 150: Toll Canopy Column Painted Cracks

The previous reports noted concrete cracks at each landing in the stair section of the south side exterior stairwell. The cracks were generally hairline to 1/16-inch width present since the 2013 inspection. While these cracks were noted as sealed during the last inspection cycle, the stairwell was damaged during Hurricane Ian and exhibits instability, with differential settlement and rotation. It is deemed unsafe and was only viewed from a distance during inspection. This stairwell is roped off to ensure the safety of the County staff. CEI services are under contract and the construction contractor selection process is underway for the rehabilitation of these stairs, which is expected in 2025.

Figure 151: South Stairwell Restricted Access

Figure 152: South Stairwell Instability

Additionally, camera brackets on the underside of the toll plaza roof, which were previously noted to exhibit corrosion and paint flaking, have since been replaced.

Mechanical, Electrical 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 are 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. All A/C units have been replaced between 2022 and 2024, including the two wall-mounted single room units within the data room, and appears to be in like new condition. At the north side of the facility, the steel rack system that supports two small A/C units serving the elevator area below the generator fuel tank platform had minor surface corrosion. Lee County plans to replace this rack system with a stainless-steel system in the future.

Figure 153: Typical New A/C Condensing Unit

Figure 154: Typical New A/C Handling Unit

A wall mounted; single room A/C unit is in place 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. This unit was in good working condition at the time of the inspection.

The standby generator for this facility appears to be in good condition and is tested automatically on a weekly basis to ensure it is in working condition at all times. The 1,000-gallon fuel storage tank is located on the second level of the stair tower within a fenced area adjacent to the generator room. Its mounting hardware is experiencing moderate corrosion.

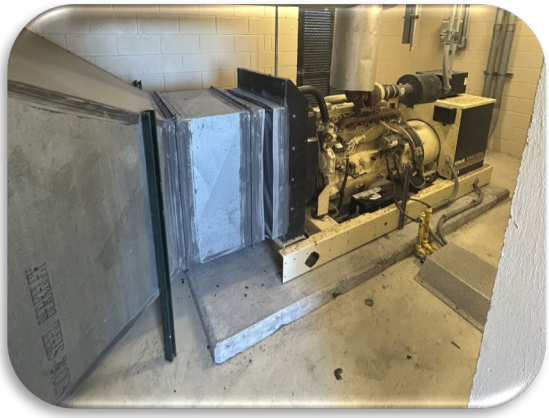

Figure 155: Standby Generator

Figure 156: Fire Pump

Figure 157: Fuel Storage Tank

Figure 158: Fuel Storage Tank Support Hardware

The 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. The joints and connectors have previously been upgraded to provide additional pressure. The fire alarm and security systems appeared to be functioning properly. These systems were converted in July of 2024 and operate on a cellular network in lieu of the previous direct phone line connection.

An extensive security camera system monitors nearly every room and entry point to the building. Older cameras have been replaced with digital CCTV cameras, with a CCTV server. In 2024 one of the CCTV DVR units was replaced. The system and its monitors were all in like new condition. The interior and exterior door locks maintain functional proximity readers, allowing employees to open locked doors by placing a card in front of the reader instead of the previous keycard swipe. Four new intercom devices were installed within the facility in November 2024.

The facility elevator received a complete refurbishment in January 2024.

During inspection the installed wind meter appears to be malfunctioning, with potentially inaccurate wind speed readings displayed on a gauge located inside the administration building. Lee County is aware of this concern and has the repair on their maintenance list, to be fixed in the near future.

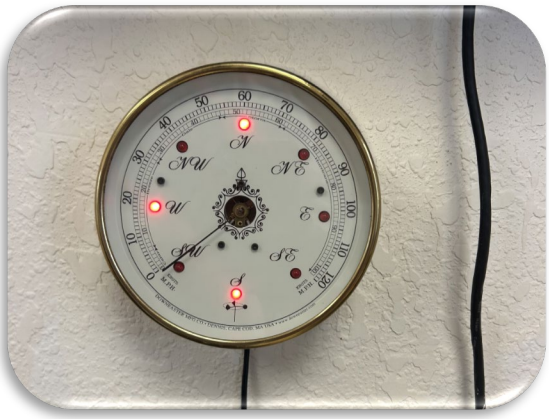

Figure 159: Wind Gauge Readings

Figure 160: Wind Meter Equipment

Site/Civil Condition

The concrete employee parking area is in a temporary condition as it is adjacent to a material storage site and impacted by FDOT's on-going construction efforts. There is a longitudinal crack within the concrete pavement. There is one handicapped space marked and the toll facility parking striping is diminishing. Sidewalks and curbs appear to be in good working condition with any pertinent restoration to occur following the Department's construction efforts.

Figure 161: Adjacent Construction Storage Site

Figure 162: Concrete Pavement Crack

Figure 163: Overall Parking Layout

Figure 164: Replaced Exterior Employee Break Area

Similarly, the landscaping at the site has been impacted by Hurricane Ian and the Department's on-going construction. Landscaping renovations will be performed following the conclusion of FDOT's bridge approach related construction efforts.

The exterior employee break area below the generator room, consisting of a vinyl fence, picnic table, and landscaping pavers, was destroyed during Hurricane Ian and has since been replaced in-kind and is in a like new condition.

The screened-in employee break area above the toll canopy at the south end of the administration building is well kept and in good working condition.

Figure 165: Upstairs Employee Break Area

Figure 166: Concrete Storage Pad Adjacent to Downstairs Break Area

Roadway Condition

Generally, the asphalt concrete pavement and striping on the approaches to the toll plaza and between each of the causeway bridges appear to be in good condition overall, with some areas of fatigue cracking and degradation. The bridge approaches are under construction to restore and rehabilitate from Hurricane Ian's damage. This includes various phases of striping and lane configurations for maintenance of traffic needs to facilitate construction.

The striping in the immediate vicinity of the toll area is in decent condition. The concrete apron and steel impact attenuators within the westbound toll lanes were in like new condition.

Figure 167: Typical MOT During FDOT Construction – East Side Approach to Toll Plaza

Figure 168: Eastbound Travel Lane Closed and Shifted During FDOT Construction

Figure 169: Representative Pavement Distress and Cracking Near Toll Plaza – August 2024

Figure 170: Active Seawall and Rubble Riprap Construction West of Toll Plaza

The roadway drainage system consists of catch basins within the shoulder area at the ends of each causeway bridge. The drainage system has been repaired during FDOT's restoration efforts and is in good 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 toll booths and parking area flows to a dry swale and outlet structure at the southwest quadrant of the building grounds. The swale and outlet structure are in good condition.

Lighting within the toll plaza area is facilitated by temporary lighting during the on-going construction efforts. Permanent lighting will be reestablished and/or installed after FDOT construction efforts are completed.

Sanibel Sign Structures

Each sign structure on the bridge approaches that has bridge-related signs was inspected. There are a total of three sign structures and one signalized traffic intersection associated with the Sanibel Bridges. These overhead sign structures were replaced by Lee County in 2019. All signs are located at the east side of the bridge for westbound traffic. All sign panels were damaged during Hurricane Ian and subsequently replaced in 2023 with new signs that represent current toll collection methods. Lighting on the sign structures has been removed as the new sign panels meet retroreflective visibility standards and requirements. Conclusions of sign and signalization structure inspections are documented below, starting with the structure furthest from the toll plaza.

- 1.5-miles; tri-chord overhead cantilever sign structure
- 1.0-miles; tri-chord overhead cantilever sign structure
- 0.5-miles; tri-chord overhead cantilever sign structure
- 100-yards; mast arm signalization structure

The first miscellaneous structure is a tri-chord overhead cantilever sign structure located approximately 1½ miles east of the toll plaza on the westbound bridge approach. The upright has isolated areas of scrapes with minor corrosion. The structural grout pad exhibits sectional cracking. In several locations, scratches and small areas of missing coating have been retouched with spray galvanizing paint on the upright. Overall, this structure appears to be in good condition.

Figure 171: Sanibel – WB OSS 1 ½ Miles from Plaza – Full Structure - Front

Figure 172: Sanibel – WB OSS 1 ½ Miles from Plaza – Structural Grout Pad Cracking

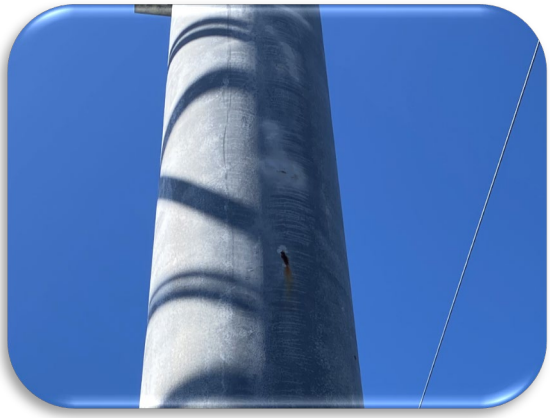

Figure 173: Sanibel - WB OSS 1 ½ Miles from Plaza – Typical Galvanizing Spray Rehab & Spot Corrosion

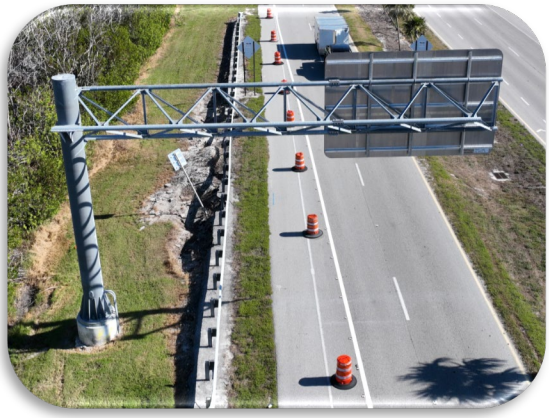

Figure 174: Sanibel - WB OSS 1 ½ Miles from Plaza – Full Structure – Back

The second miscellaneous structure is a tri-chord overhead cantilever sign structure located approximately 1 mile east of the toll plaza on the westbound bridge approach. The structural grout pad exhibits cracking with efflorescence. In several locations scratches and small areas of missing coating have been retouched with spray galvanizing paint on the upright. Overall, this structure appears to be in good condition.

Figure 175: Sanibel – WB OSS 1 Mile from Plaza – Full Structure - Front

Figure 176: Sanibel – WB OSS 1 Mile from Plaza – Structural Grout Pad Cracking

Figure 177: Sanibel - WB OSS 1 Mile from Plaza – Typical Galvanizing Spray Rehab

Figure 178: Sanibel - WB OSS 1 Mile from Plaza – Full Structure – Back

The third miscellaneous structure is a tri-chord overhead cantilever sign structure located approximately ½ mile east of the toll plaza, on the westbound bridge approach. The structural grout pad exhibits cracking with section loss. There are isolated spots of minor corrosion on the baseplate, baseplate stiffeners, and upright. In several locations scratches and small areas of missing coating have been retouched with spray galvanizing paint on the upright. Overall, this structure appears to be in good condition.

Figure 179: Sanibel – WB OSS ½ Mile from Plaza – Full Structure - Front

Figure 180: Sanibel – WB OSS ½ Mile from Plaza – Structural Grout Pad Cracking and Section Loss

Figure 181: Sanibel - WB OSS ½ Mile from Plaza – Typical Galvanizing Spray Rehab

Figure 182: Sanibel - WB OSS ½ Mile from Plaza – Full Structure – Back

The fourth miscellaneous structure is a single arm mast arm signalization structure which serves the intersection of CR 867 (McGregor Boulevard) and Punta Rassa Road located approximately 100-yards east of the toll plaza on the westbound bridge approach. The mast arm has five 3-head traffic signals, three servicing SR 867 and two servicing Punta Rassa Road. While the signalization is still operational and working, the mast arm upright has been damaged by vehicular impact sometime between July 2022 and August 2024. The structure has been stabilized by guy wires driven into the soil on the opposite side of the damage. The mast arm handhole is missing its handhole cover and the upright mounted McGregor Boulevard luminated street sign is currently uninstalled and sitting at the base of the structure. The arm mounted Punta Rassa Road illuminated street sign shows signs of wear. Foundation anchor bolts have missing or damaged caps. The contractor performing the FDOT rehabilitation has installed a temporary single-wire span wire with driven timber strain poles to facilitate phase construction. During inspection, the temporary traffic signals were found to be covered with black plastic bags to ensure they are not providing conflicting information with the mast arm traffic signals.

Figure 183: Sanibel – Signalization Structure 100-yards from Plaza – Full Structure - Front

Figure 184: Sanibel – Signalization Structure 100-yards from Plaza –Vehicular Impact Damage

Figure 185: Sanibel - Signalization Structure 100-yards from Plaza – Missing Handhole Cover

Figure 186: Sanibel - Signalization Structure 100-yards from Plaza – Guy Wire Foundation Connection

Figure 187: Sanibel - Signalization Structure 100-yards from Plaza – Temporary Signalization

Figure 188: Sanibel - Signalization Structure 100-yards from Plaza – Full Structure – Back

Sanibel Causeway

The Sanibel Causeway consists of three separate structures, Structures A, B, and C, linking Fort Myers to Sanibel Island over the San Carlos Bay. It carries CR 867 (McGregor Boulevard) and was constructed in 2007. The bridge is currently tolled for all users traveling westbound and carries two lanes of traffic, one in each direction. The overall condition of each structure is documented in subsequent sections.

Overall, all three structures have a history of diagonal cracks in the beam webs near the ends of the prestressed concrete beams. In June 2012 Lee 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 the cracking appeared to be induced by large internal prestress forces in the beam ends. The CDM Smith report recommended Lee 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 Lee County retained T.Y. Lin International (T.Y. Lin) to implement a crack monitoring program as recommended by CDM Smith. T.Y. Lin inspected the beams and documented the length and size of the cracks in all three causeway bridges in January 2013. T.Y. Lin returned in July 2013 to reinspect the beam ends and to review and document any changes in the crack quantities and sizes. T.Y. Lin recommended Lee County continue to monitor the cracks in the beams for any increase in severity by performing follow up inspections. Repair recommendations included applying a protective coating over the smaller cracks; injecting epoxy into the larger cracks; and repairing concrete delaminations.

After the crack reports and recommendations were completed in July 2013, T.Y. Lin prepared a set of plans detailing the epoxy injection crack repairs. In August 2014 a contractor was on site and completed repairs to all three structures. The beam ends were reinspected in May 2015 to verify the repair conditions and document any changes to the cracks. FDOT has conducted biennial inspections of the causeway bridges since the repairs were completed.

CDM Smith reviewed T.Y. Lin's report as well as construction inspection reports that were provided by Lee County to supplement this inspection. Lee County hired T.Y. Lin to perform a follow up inspection of the beams and bridge deck during the summer of 2019. As a result of these inspections, Lee County instructed T.Y. Lin to prepare a set of construction documents to hire a contractor to perform the necessary repairs.

Figure 189: Sanibel Bridge – Typical Crack Width Monitor Gauge

Figure 190: Sanibel Bridge – Typical Beam End Cracking

Figure 191: Sanibel Bridge – Typical Beam End Painting

Figure 192: Sanibel Bridge – Continuity Diaphragm Repair Plans

Additionally, these structures exhibit continuity end diaphragm cracking, delaminations, and spalling. Under an FDOT contract, T.Y. Lin has prepared rehabilitation plans and technical specifications to address the cracking of these diaphragms. These repairs will be performed by Lee County maintenance in accordance with the rehabilitation plans once FDOT's Causeway rehabilitation project is completed.

Figure 193: Sanibel Bridge – Typical End Diaphragm Spalling at Exterior Beam

Figure 194: Sanibel Bridge – Typical Closure Pour Failure at Continuity Diaphragm

Hurricane Ian, which struck the west coast of Florida in September 2022, had a significant impact on Sanibel Island and its causeway. The hurricane exceeded the design storm event and brought a 12-foot storm surge and 8-foot wave action that caused extensive damage to the island's infrastructure and natural environment. The damage was largely at the connecting islands and bridge approaches, with the bridges themselves remaining relatively unscathed. On October 5, 2022, the FDOT contractors mobilized to complete emergency repairs to the Sanibel Causeway. After only six days, the project team was able to expedite repairs and lead a convoy of utility restoration teams and equipment across the Sanibel Causeway. On October 19, 2022, just three weeks after Hurricane Ian washed away the land and roadway connecting the mainland to Sanibel and Captiva Islands, and a week ahead of schedule, FDOT opened the bridge to first responders, utility crews, contractors and residents.

Figure 195: Sanibel Bridge – Hurricane Ian Damage

Figure 196: Sanibel Bridge – Hurricane Ian Damage

Figure 197: Sanibel Bridge – Hurricane Ian Damage

Figure 198: Sanibel Bridge – Hurricane Ian Damage

FDOTs rehabilitation efforts entail building the roadway to standards and specifications, constructing permanent bridge approaches, and restoring drainage, lighting, pavement markings, as well as providing access for utility service along the causeway islands. Support will be given to protect the natural environment from corroding shorelines while meeting the community's needs such as safe recreational areas for residents and visitors to enjoy the beaches.

Resiliency design considerations include:

- Causeway Roadway: Buried sheet pile walls at shoulders, raised roadway by approximately 2-feet, and erosion protection with gabion baskets and/or riprap.
- Bridge Approaches: Replace MSE wall with deep foundation wall, buried toe protection for upland walls, and installation of larger and heavier protection at exposed areas between seawall and bridge abutments.
- Seawall: Raised seawall elevation, provide deep steel sheet pile walls, reinforced seawall toe, installation of heavy riprap protection along seawall, oversize riprap protection along channel walls.

For additional information, refer to FDOT's project details.

Sanibel Causeway – Structure A

A general walk-through inspection of the above deck components for this facility (Bridge No. 124116) was completed on December 4th, 2024. The below deck components and non-submerged substructure were inspected from a County work boat on December 5th, 2024. The most recent biennial inspection report issued by FDOT (11/28/2023) was reviewed and all recently completed repair work was discussed with the owner's bridge engineer.

Sanibel Structure A, which carries CR 867 (McGregor Boulevard) over the Intracoastal Waterway, was constructed in 2007 and is the tallest and northernmost structure of the causeway, with a high span to accommodate boat traffic. The bridge is currently tolled for all users traveling westbound, 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 health index is 94.67 and its sufficiency rating is 77.0 on a rating scale of 0-100, with federal condition ratings of:

- Deck: 8 (very good)
- Superstructure/Substructure: 7 (good)
- Channel: 7 (minor damage)

Figure 199: Sanibel Bridge, Structure A – Looking West

Figure 200: Sanibel Bridge, Structure A – Looking East

Within the biennial inspection report superstructure deficiencies include isolated cracking in the deck top, soffits, and curbs; metal bridge railing impact scrapes and light corrosion; and superstructure beam end cracking and diaphragm spalls and delaminations.

Substructure deficiencies include pier cap shrinkage cracks; pier column cracking and isolated spalling/delaminations; abutment cheek wall delaminations; pier footing form cracks and spalls; and pile spalls.

Superstructure																
Deck			Joints			Approach Slab			Girder/Beam			Barrier			Brg
C	S	D	Di	Co	Def	C	S	D	C	S	D	Co	Ga	Im	
●			●						●	●	●	●		●	

Substructure																	
Abutment						Pier											
Cap			Cheekwall			Cap			Columns			Footings			Piles		
C	S	D	C	S	D	C	S	D	C	S	D	C	S	D	C	S	D
					●	●			●	●	●					●	

Notes
- For defect details see respectively FDOT Bridge Inspection Report.
- Defect severity is based on engineering judgement and representative of the worst case deterioration.

Severity Legend
- ● Minor
- ● Moderate
- ● Severe

Abbreviations

Brg	Bearing	Def	Deformation
C	Crack	Di	Dirt & Debris
Co	Corrosion	Ga	Loss of Galvanization
D	Delamination	Im	Impact Damage
		S	Spall

Miscellaneous deficiencies include missing sections of aluminum hand railing, access walkway, timber planks, clearance gauges/posts, navigational lights, and deflection of decking for the fender system; missing, unsecured or disconnected navigational equipment; and missing and/or compromised junction boxes at abutments.

As it relates to the beam end cracking, the biennial report notes that the beams have hairline diagonal web cracks up to 12ft. x 0.005in. long at the bearing areas, extending up and away from the supports. Some of these cracks extend into the top and bottom flanges. The cracks in Beams 14-4, 16-4, and 17-4 have been marked and dated for tracking the general condition. Additionally, there are longitudinal cracks up to 2ft. x 0.003in. long, which are common throughout the outboard beam bottom flanges. The majority of the cracked beam ends were repaired in 2014. It was noted that Lee County DOT and FDOT inspectors should continue to monitor the repaired cracks, as recommended by T.Y. Lin, to determine if they are continuing to grow.

Figure 201: Sanibel Bridge, Structure A – General Fender System Layout

Figure 202: Sanibel Bridge, Structure A – Column Spalls with Exposed Reinforcement

Figure 203: Sanibel Bridge, Structure A – Bridge Railing Impact Damage

Figure 204: Sanibel Bridge, Structure A – Abutment Adjacent Junction Box Defects

In July 2022 the County performed seawall embankment rehabilitation and installed articulating concrete block matting, which included soil injections for undermining which existed at the beginning of bridge U-turn.

Figure 205: Sanibel Bridge, Structure A – Seawall Embankment Repairs

Figure 206: Sanibel Bridge, Structure A – Articulating Concrete Block Matting Installation

As a result of the Hurricane Ian damage, FDOT has been performing active construction along the bridge approaches and sea walls, including during inspection. These rehabilitation efforts have previously been summarized.

Figure 207: Sanibel Bridge, Structure A – Westbound Approach Active Construction

Figure 208: Sanibel Bridge, Structure A – Eastbound Approach Active Construction

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. 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 December 4th, 2024. The below deck components and non-submerged substructure were inspected from a County work boat on December 5th, 2024. The most recent biennial inspection report issued by FDOT (11/28/2023) was reviewed and all recently completed repair work was discussed with the owner's bridge engineer.

Sanibel Structure B, which carries CR 867 (McGregor Boulevard) over the Intracoastal Waterway, was constructed in 2007 and is the smallest and central most of the three causeway structures. The bridge is currently tolled for all users traveling westbound, 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 health index is 96.94 and its sufficiency rating is 79.0 on a rating scale of 0-100, with federal condition ratings of:

- Deck/Superstructure/Substructure: 7 (good)
- Channel: 7 (minor damage)

Figure 209: Sanibel Bridge, Structure B – Looking West

Figure 210: Sanibel Bridge – Island Between Structures A and B

As a result of the Hurricane Ian damage, FDOT has been performing active construction along the bridge approaches and sea walls, including during inspection. These rehabilitation efforts have previously been summarized.

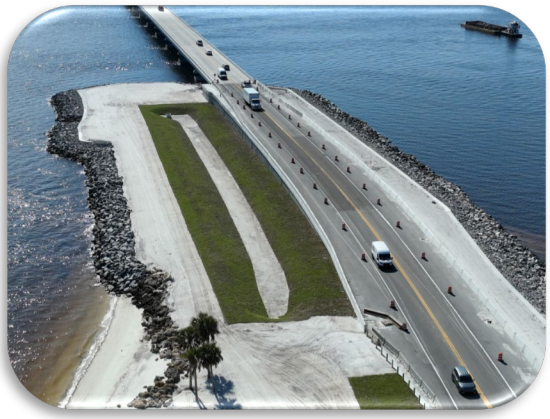

Figure 211: Sanibel Bridge, Structure B – Westbound Approach Active Construction

Figure 212: Sanibel Bridge, Structure B – Eastbound Approach Active Construction and MOT

Within the biennial inspection report superstructure deficiencies include cracks in the deck surface on the top and bottom sides of the deck; metal bridge railing scrapes, light corrosion, and bent brackets; and superstructure beam end cracking.

Substructure deficiencies include abutment and cheekwall cracking; and pier footing cracks, spalls, and delaminations.

Miscellaneous deficiencies include a missing junction box at Abutment 14.

Superstructure																
Deck			Joints			Approach Slab			Girder/Beam			Barrier			Brg
C	S	D	Di	Co	Def	C	S	D	C	S	D	Co	Ga	Im	
●			●						●			●	●		

Substructure																	
Abutment						Pier											
Cap			Cheekwall			Cap			Columns			Footings			Piles		
C	S	D	C	S	D	C	S	D	C	S	D	C	S	D	C	S	D
●			●	●								●	●	●		●	

Notes
- For defect details see respectively FDOT Bridge Inspection Report.
- Defect severity is based on engineering judgement and representative of the worst case deterioration.

Severity Legend
- ● Minor
- ● Moderate
- ● Severe

Abbreviations

Brg	Bearing	Def	Deformation
C	Crack	Di	Dirt & Debris
Co	Corrosion	Ga	Loss of Galvanization
D	Delamination	Im	Impact Damage
		S	Spall

Figure 213: Sanibel Bridge, Structure B – Bent Bridge Rail Bracket

Figure 214: Sanibel Bridge, Structure B – Delaminated and Spalled Patch in Top of Pier Footing

As it relates to the beam end cracking, the biennial report notes that the beams have multiple 0.004in. (previously hairline) diagonal cracks in the lower flange near the bearing areas, extending up and away from the supports, which have been painted over. These cracks vary in length, number of cracks, exact location, and are predominately in the exterior beams; some of the cracks extend into the bottom face of the top flange. These cracks have not increased in length. Additionally, the bottom flanges of the exterior beams typically have short hairline horizontal cracks up to 2ft. long x 0.004in. (previously 0.003in.) throughout the length. The majority of the cracked beam ends were repaired in 2014. It was noted that Lee County DOT and FDOT inspectors should continue to

monitor the repaired cracks, as recommended by T.Y. Lin, to determine if they are continuing to grow.

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. 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 December 4th, 2024. The below deck components and non-submerged substructure were inspected from a County work boat on December 5th, 2024. Prior to arrival at the site, the most recent biennial inspection report issued by FDOT (11/28/2023) was reviewed and all recently completed repair work was discussed with the owner's bridge engineer.

Sanibel Structure C, which carries CR 867 (McGregor Boulevard) over the Intracoastal Waterway, was constructed in 2007 and is the longest and southernmost of the three causeway structures. The bridge is currently tolled for all users traveling westbound, 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 health index is 96.75 and its sufficiency rating is 79.0 on a rating scale of 0-100, with federal condition ratings of:

- Deck/Superstructure/Substructure: 7 (good)
- Channel: 7 (minor damage)

Figure 215: Sanibel Bridge, Structure C – Looking West

Figure 216: Sanibel Bridge, Structure C – Looking East

As a result of the Hurricane Ian damage, FDOT has been performing active construction along the westbound bridge approach and sea walls, including during inspection. These rehabilitation efforts have previously been summarized.

Figure 217: Sanibel Bridge, Structure C – Westbound Approach Active Construction

Figure 218: Sanibel Bridge, Structure C – Eastbound Approach

Within the biennial inspection report superstructure deficiencies include cracks in the deck surface on the top and bottom sides of the deck and in the curbs; deck expansion joints filled with dirt and debris, have areas of active corrosion with pitting, the Pier 10 deck expansion joint strip seal has pulled free, and the Pier 23 deck expansion joint has a tear; approach slab cracks; impact scrapes and light corrosion on the metal bridge railing; and superstructure beam end cracking.

Substructure deficiencies include abutment and cheekwall cracking and delaminations; failed column repairs; and footing and pile cracks and spalls.

Superstructure																
Deck			Joints			Approach Slab			Girder/Beam			Barrier			Brg	
C	S	D	Di	Co	Def	C	S	D	C	S	D	Co	Ga	Im		
●			●	●	●	●			●			●	●			

Substructure																		
Abutment						Pier												
Cap			Cheekwall			Cap			Columns			Footings			Piles		
C	S	D	C	S	D	C	S	D	C	S	D	C	S	D	C	S	D	
●			●		●					●		●	●			●		

Notes

- For defect details see respectively FDOT Bridge Inspection Report.
- Defect severity is based on engineering judgement and representative of the worst case deterioration.

Severity Legend

- ● Minor
- ● Moderate
- ● Severe

Abbreviations

Brg	Bearing
C	Crack
Co	Corrosion
D	Delamination
Def	Deformation
Di	Dirt & Debris
Ga	Loss of Galvanization
Im	Impact Damage
S	Spall

Miscellaneous deficiencies include channel degradation; south channel bank erosion resulting in the collapse and wash out of the paved pedestrian walkway; missing fender planks, sections of aluminum hand railing, and clearance gauges, as well as decayed timber members with section loss; missing or broken fender system navigational lights with broken away electrical conduit; and light corrosion on access platforms and ladders.

Figure 219: Sanibel Bridge, Structure C – General Fender System Layout

Figure 220: Sanibel Bridge, Structure C – Typically Footing Corner Spall

Figure 221: Sanibel Bridge, Structure C – Loss of Eastbound Approach Pedestrian Walkway

Figure 222: Sanibel Bridge, Structure C – Joint Strip Seal Pulled Out of Armor

As it relates to the beam end cracking, the biennial report notes that the beams have multiple hairline diagonal cracks in the lower flange and webs, which have been painted over and are no longer visible; however, some are reoccurring, with a few extending into the top flange up to 15ft. long x 0.005in. wide near the bearing areas extending up and away from the supports. These cracks vary in length, number of cracks, exact location, and are predominately in the exterior beams. This has been noted to have decreased. Additionally. the outside faces of the exterior beams have numerous hairline horizontal cracks up to 30in. long x 0.003in. wide throughout the length of the structure. The majority of the cracked beam ends were repaired in 2014. Lee County DOT and FDOT inspectors should continue to monitor the repaired cracks as recommended by T.Y. Lin International to determine if they are continuing to grow.

None of the deficiencies noted in the biennial report influence the traffic volume or load capacity of the bridge. Overall, the structure was found to be in good repair, working order, and condition. The bridge routinely operates at its normal traffic capacity, with no vehicle weight restrictions.

LeeWay Service Center

The LeeWay Service Center is located approximately four miles (drive distance) south of downtown Fort Myers on Colonial Boulevard. The service center houses the main administrative offices for toll collection operations, customer service, toll enforcement, and transponder service.

Figure 223: 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 the 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.

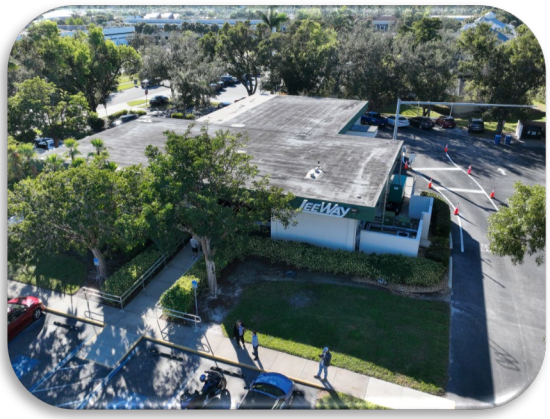

Figure 224: LeeWay Service Center – General Overview

Figure 225: LeeWay Service Center – Aerial View

The building typically houses between 30 and 35 permanent employees and no longer uses seasonal workers during the peak service renewal period. New special unreproducible keys were created and implemented for increased facility security in 2023. Also in 2023, customer credit card information was tokenized for increased security. In 2025 there will be a Toll System Lane and HOST replacement.

Architectural Condition

The interior of the building appears to be in very good condition overall with no significant maintenance items noted. Fixtures have been maintained on a regular basis. Storage capacity appears to be adequate and well organized for office supplies, files, transponders, and other equipment. To prevent moisture buildup and maintain an overall good working environment for employees, the interior walls have been replaced, floors have been treated, and new carpeting installed in 2016. A new lobby counter and glass partition as well as new blinds were installed in 2019. In 2020 air purifiers were added to the facility in an employee health initiative during the global pandemic. Bathroom walls were retiled in October 2022 and double doors were installed to replace the roll up door within the mail/storage room in June 2020. Additionally, in July 2024 a lock box was installed at the front of the building for independent fire rescue service access in the event of an emergency.

Figure 226: Emergency Service Lock Box

Figure 227: Mail/Storage Room Double Doors

Figure 228: Lobby Counter and Glass Partition

Figure 229: General Lobby Flooring

The exterior of the building appears to be in very good condition overall. The painted brick facade and hurricane glass windows installed in 2010 are in good condition. The previously installed stainless steel roof access ladder is in good condition. In 2016 the exterior of the building was repainted. As part of ongoing maintenance at the facility, the building's exterior is power washed every six months. The LeeWay illuminated signs were replaced with LED signs in 2016 and are in like new condition. A new camera was installed along the exterior wall of the facility in 2020. An exhaust pipe was extended from the generator to above the roof line to eliminate exhaust fume accumulation under the roof overhang in 2020. Following May 2020 areas of damaged flashing at the roof were repaired. In May 2020 the back entrance steps were converted into a ramp for ADA accessibility and compliance.

Figure 230: Typical Building Exterior with Security Camera

Figure 231: Hurricane Impact Resistant Windows and Brick Facade

Figure 232: LeeWay Illuminated Sign

Figure 233: Generator Exhaust Pipe Extension

The service center roof consists of asphalt and stone impregnated, rolled material with internal drains at various locations. Some of the downspout mounting hardware is corroding with areas of full section loss. The roof surface material is generally in fair condition throughout, and the drains are clear of dirt, debris, and vegetation.

Multiple areas have been patched and coated with sealant. These areas appear to correspond with areas noted in the 2013 inspection report for bubbled and discolored roofing material. Water tends to pond along the north and southeast side of the roof possibly due to improper or inadequate sloping of the roof towards the drains. The roof patches which were failing were repaired.

Figure 234: Typical Repaired Roof Patch Condition

Figure 235: Typical Clear Roof Drainage Inlet

Figure 236: Deteriorating Roof Patching in Need of Repair

Figure 237: General Rooftop Looking Southeast

Structural Condition

The administration building appears to be in very good structural condition. No indications of structural distress were observed.

Electrical and Communication Condition

There are fiber optic communications connections in place between the LeeWay Service Center and the toll plazas at Cape Coral and Sanibel. All equipment in the data room was well kept, orderly, and in good condition. In 2015, 10GB capacity fiber optic circuits were installed to increase communication speed between Public Works and the LeeWay Center. The CCTV system was upgraded to digital DVRs with more capacity. In addition, two more security cameras were added to the storage and mail area in 2017. Additional security cameras were added inside the facility in 2019. In 2024 an additional camera was installed at the outdoor break area.

Mechanical and HVAC Condition

No deficiencies were noted in the plumbing fixtures of the bathrooms. In the employee break room and in the utility closet next to the front restrooms, supplemental hot water heaters were determined to be in good condition.

The employee break room and janitor's closet are in good condition and the HVAC system was working properly at the time of inspection. In November of 2022 the northside building A/C was replaced.

Figure 238: Typical A/C Condenser

Figure 239: A/C Handling Units

The standby generator for this facility was replaced in 2017. It appears to be in excellent condition and is tested automatically on a weekly basis to ensure it is in working condition at all times. The generator is also enclosed in a fenced and locked paddock area next to the service center building. During the inspection County staff indicated that the generator is being actively worked on to resolve technical issues.

Figure 240: Standby Generator

Figure 241: Generator Transfer Switch

The fire alarm and security systems appeared to be functioning properly. These systems were converted in July of 2024 and operate on a cellular network in lieu of the previous direct phone line connection. There are no sprinklers in the building.

Figure 242: Fire Alarm System

Figure 243: Hot Water Heater

Site/Civil Condition

The asphalt concrete employee parking area was generally in fair condition, exhibiting cracking and degradation. The parking lot was resealed in 2017. The striping is also in fair condition. Parking lot LED security lights were added for employee safety in 2016.

Figure 244: Customer Parking Pavement

Figure 245: Pavement at Transponder Service Area

Figure 246: Typical Pavement Striping

Figure 247: Typical Pavement Distress Around Drainage Inlet

The concrete and tile sidewalks in the parking area and surrounding the building were typically in good condition, with isolated minor cracks, and discrete areas of spalling at handrail connections. No other serious deterioration was noted.

Figure 248: Concrete Sidewalk Spalling at Handrail

Figure 249: Typical Pavement Distress Around Drainage Inlet

The landscaping at the site is in good condition, with all plants and bushes trimmed. Lawn sprinklers appear to be functioning properly by inspection of the grass health during the inspection. A new irrigation pump was installed in 2017.

A LeeWay ETC transponder test lane exists 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 miscellaneous structure equipped with transponder reading equipment and a traffic signal. The miscellaneous structure appears to be in good condition.

Figure 250: Transponder Test Lane

Figure 251: Transponder Test Lane Traffic Signal

Figure 252: Miscellaneous Structure Arm & Transponder Equipment

Figure 253: Miscellaneous Structure Foundation Connection

There are no overhead miscellaneous sign structures associated with the service center. Directional guide signs for the service center on surrounding streets were typically in very good condition. At the service center customer parking area, the northwest and northeast driveway entrance signs appear to be in like new condition. The employee parking only signs throughout the parking lot exhibit wear with cracking of the laminate. Parking signposts have minor corrosion at their base.

Figure 254: Typical Customer Parking Signage

Figure 255: Typical Employee Parking Only Signage

Drainage for the employee and customer parking areas is accomplished through catch basins near the center of each. The catch basins within the employee parking area are clear and appear to be functioning properly. The catch basin in the customer parking area shows signs of silt buildup, but still appears to be functioning adequately. The trash corral at the southwest corner of the entrance driveway is in good condition. Its painted brick walls are solid and appear stable, with no severe cracking or damage. The concrete slab at the interface with the asphalt parking area was recently replaced and is in good condition.

Figure 256: Trash Corral

Figure 257: Typical Drainage Inlet Catch Basin

Please let us know if you have any questions or require further information.

Respectfully submitted,

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