





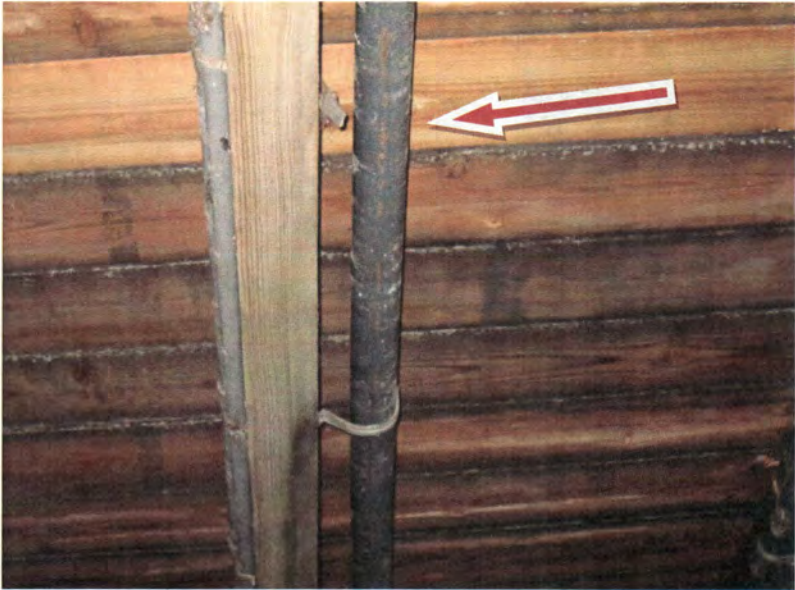

Pier Substructure

Photo	Descriptions/Comments
	<p><u>Issue:</u> Pier # 12. The stress caused by the movement of the main power supply conduit is beyond the working strength of these thin plastic pipe straps. Note the conduit has dropped away from its strapping alongside the stringer.</p> <p><u>Resolution:</u> Provide new plastic pipe straps with better working strength and durability (i.e. more material thickness/cross-section, mass, etc).</p>
	<p><u>Description:</u> Typical view of the substructure framing and the condition of the decking in the vicinity of Pier #12. Note the multiple replacement boards besides the old boards.</p>



Pier Substructure

Photo	Descriptions/Comments
	<p><u>Issue:</u> Pier #11 – Pier #12. The stress caused by the movement of the main power supply conduit is beyond the working strength of these thin plastic pipe straps.</p> <p><u>Resolution:</u> Provide new plastic pipe straps with better working strength and durability (i.e. more material thickness/cross-section, mass, etc).</p>
	<p><u>Description:</u> Typical view of the substructure framing and the condition of the decking in the vicinity of Pier #12. Note the multiple replacement boards besides the old boards.</p>


Pier Substructure

Photo	Descriptions/Comments
	<p><i>Issue:</i> Pier #11-Pier #12. The stress caused by the movement of the main power supply conduit is beyond the working strength of these thin plastic pipe straps.</p> <p><i>Resolution:</i> Provide new plastic pipe straps with better working strength and durability (i.e. more material thickness/cross-section, mass, etc).</p>
	<p><i>Issue:</i> Pier #11 – Pier #12. The stress caused by the movement of the main power supply conduit is beyond the working strength of these thin plastic pipe straps.</p> <p><i>Resolution:</i> Provide new plastic pipe straps with better working strength and durability (i.e. more material thickness/cross-section, mass, etc).</p>

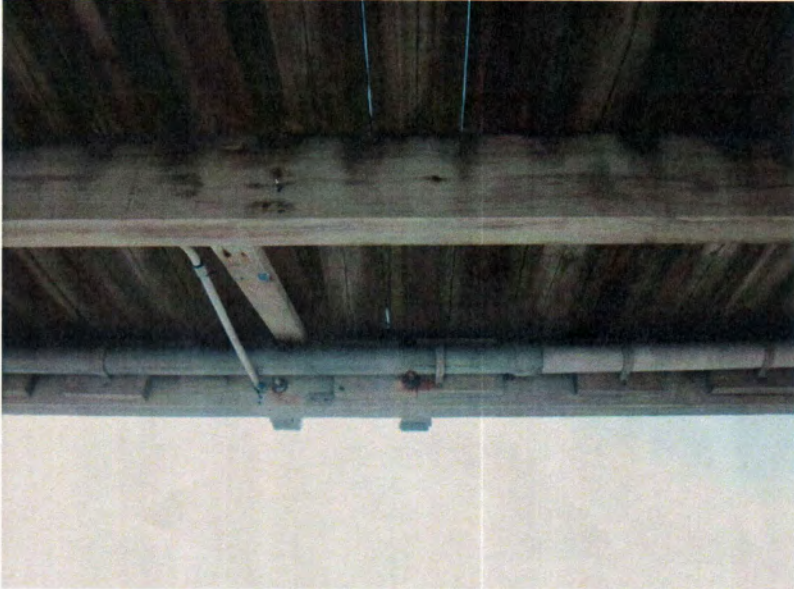

Pier Substructure

Photo	Descriptions/Comments
	<p><i>Issue:</i> The stress caused by the movement of the main power supply conduit is beyond the working strength of these thin plastic pipe straps.</p> <p><i>Resolution:</i> Provide new plastic pipe straps with better working strength and durability (i.e. more material thickness/cross-section, mass, etc).</p>
	<p><i>Issue:</i> The stress caused by the movement of the main power supply conduit is beyond the working strength of these thin plastic pipe straps.</p> <p><i>Resolution:</i> Provide new plastic pipe straps with better working strength and durability (i.e. more material thickness/cross-section, mass, etc).</p>


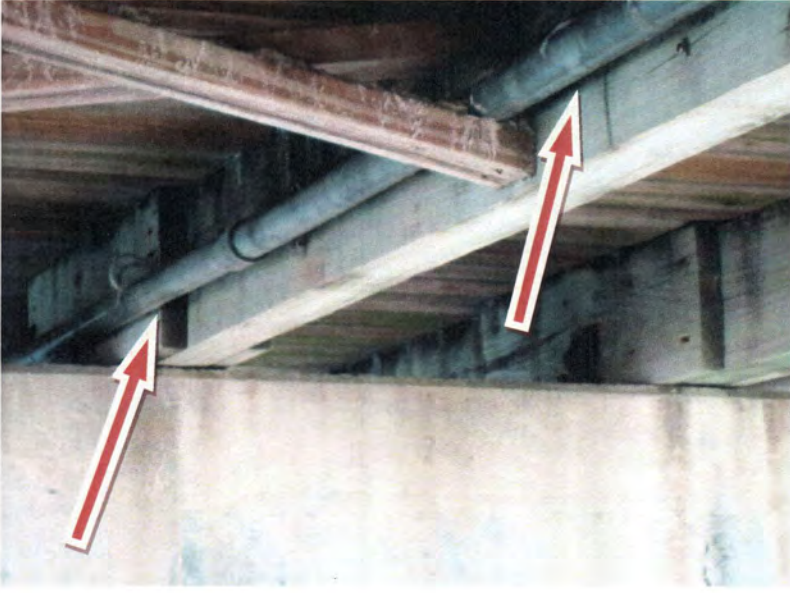
Pier Substructure

Photo	Descriptions/Comments
	<p>Description: Typical view of the substructure framing and the condition of the decking underside in the vicinity of Pier #11.</p>
	<p>Issue: The stress caused by the movement of the main power supply conduit is beyond the working strength of these thin plastic pipe straps. Note the conduit has dropped away from its strapping alongside the stringer.</p> <p>Resolution: Provide new plastic pipe straps with better working strength and durability (i.e. more material thickness/cross-section, mass, etc).</p>



Pier Substructure

Photo	Descriptions/Comments
	<p>Description: Typical view of the substructure framing and the condition of the decking underside between Pier #9 and Pier#10.</p>
	<p>Description: Typical view of the substructure framing and the condition of the decking underside between Pier #10 and Pier#11.</p>



Pier Substructure

Photo	Descriptions/Comments
 A close-up photograph showing a metal rail post connected to a wooden structure. The hardware, including a hex nut and washer, is heavily corroded and has been cleared from the end of the rail post. The surrounding metal and wood show signs of rust and wear.	<p><u>Issue:</u> Pier #9. See preceding issue. Note the two hex-nuts and a washer have corroded away and cleared from the end of the rail post thru-bolts causing potential faulty structural connections.</p> <p><u>Resolution:</u> Require immediate close inspection and repair/replacement.</p>
 A photograph showing a main power supply conduit supported by thin plastic pipe straps. Two red arrows point to the straps, highlighting their condition. The straps appear to be under stress and may not be suitable for supporting the weight of the conduit.	<p><u>Issue:</u> The stress caused by the movement of the main power supply conduit is beyond the working strength of these thin plastic pipe straps.</p> <p><u>Resolution:</u> Provide new plastic pipe straps with better working strength and durability (i.e. more material thickness/cross-section, mass, etc).</p>



Pier Substructure

Photo	Descriptions/Comments
	<p><u>Issue:</u> See preceding issue.</p> <p><u>Resolution:</u> See preceding resolution.</p>
	<p><u>Issue:</u> See preceding issue.</p> <p><u>Resolution:</u> See preceding resolution.</p>



Pier Substructure

Photo	Descriptions/Comments
	<p><u>Issue:</u> Pier #8. See preceding issue.</p> <p><u>Resolution:</u> See preceding resolution.</p>
	<p><u>Issue:</u> See preceding issue. Note hex-nuts and washers have corroded away and cleared from the end of the rail post thru-bolts causing potential faulty structural connections.</p> <p><u>Resolution:</u> Require immediate close inspection and repair/replacement.</p>



Pier Substructure

Photo	Descriptions/Comments
	<p><u>Issue:</u> See preceding issue.</p> <p><u>Resolution:</u> See preceding resolution.</p>
	<p><u>Issue:</u> See preceding issue.</p> <p><u>Resolution:</u> See preceding resolution.</p>



Pier Substructure

Photo	Descriptions/Comments
	<p><i>Issue:</i> The movement of the deck under wind gust can pull pipe/conduit out of its joint and/or rip a pipe segment out of its strapping.</p> <p><i>Resolution:</i> Repair or replace all broken and loose pipe/conduit fitting and wiring when the deck boards are due for removal and replacement. Provide proper and durable pipe/conduit straps and hangers to ensure firm attachment and support against periodic dynamic loads.</p>
	<p><i>Issue:</i> See preceding issue for metal hardware from Pier # 7 and beyond.</p> <p><i>Resolution:</i> See preceding resolution.</p>



Pier Substructure

Photo	Descriptions/Comments
	<p><i>Issue:</i> The stress caused by the movement of the main power supply conduit is beyond the working strength of these thin plastic pipe straps.</p> <p><i>Resolution:</i> Provide new plastic pipe straps with better working strength and durability (i.e. more material thickness/cross-section, mass, etc).</p>
	<p><i>Description:</i> Typical view of the substructure framing and the condition of the decking underside in the vicinity of Pier # 7.</p>



Pier Substructure

Photo	Descriptions/Comments
	<p>Description: View over Pier #19.</p>
	<p>Description: Typical view of the substructure framing and the condition of the decking underside from Pier #16. Note the fiber split in the middle board despite its fresh appearance. The start of algae growth within the split indicates that moisture is migrating through the split from top to bottom. This is where wood decay is naturally taking root.</p>



Pier Substructure

Photo	Descriptions/Comments
	<p>Description: View over Pier #20. As the pier begins to go over water seaward, the impact of the sea environment is increasingly harsh on wood and metal hardware. Note the sign of decay on the board immediately to the left of the post. Note a decaying board on the left.</p>
	<p>Issue: The connection assembly on the pier is the most vulnerable to sea spray that brings split and decay on wood, and promotes accelerated corrosion of metal hardware.</p> <p>Resolution: Perform regular inspection and replace severely corroded washers and hex-nuts. In some case the galvanized clip angle may need replacement as well.</p>



Pier Substructure

Photo	Descriptions/Comments
	<p>Description: View over Pier #21.</p>
	<p>Issue: In stormy day and high waves the deck is being washed in sea spray for the duration. Note the boards are soggy from such weather event.</p> <p>Resolution: Perform periodic inspection of the utility piping below deck. Repair/replace/remove broken piping. Provide new plastic pipe straps with better working strength and durability (i.e. more material thickness/cross-section, mass, etc).</p>



Pier Substructure

Photo	Descriptions/Comments
 A photograph showing a view over Pier #22. The image displays several wooden planks. One plank on the left side is significantly decayed and discolored. A small metal plate with the number '22' is visible on one of the planks.	<p>Description: View over Pier #22. Note a decaying board to the left.</p>
 A close-up photograph of a metal connection assembly on the pier. The assembly consists of a metal plate, a bolt, a washer, and a hex-nut. The metal hardware shows significant corrosion and rust. The surrounding wood is also weathered and shows signs of decay.	<p>Issue: The connection assembly on the pier is the most vulnerable to sea spray that brings split and decay on wood, and promotes accelerated corrosion of metal hardware.</p> <p>Resolution: Perform regular inspection and replace severely corroded washers and hex-nuts. In some case the galvanized clip angle may need replacement as well.</p>



Pier Substructure

Photo	Descriptions/Comments
	<p><u>Issue:</u> The connection assembly on the pier is the most vulnerable to sea spray that brings split and decay on wood, and promotes accelerated corrosion of metal hardware. Split/cracks in wood at the connection not only weaken the structural components but make it possible for sea spray to infiltrate connector holes, and subsequently corrodes the metal hardware from inside out.</p> <p><u>Resolution:</u> Perform regular inspection and replace severely corroded washers and hex-nuts. In some case the galvanized clip angle may need replacement as well.</p>
	<p><u>Issue:</u> It's obvious that there's no connections strength left at the base of this one rail post. Also it appears that the anchor bolt/clip angle assembly can no longer be relied upon to hold down the stringer to the pile cap during wind uplift.</p> <p><u>Resolution:</u> Immediately inspect/remove/replace all deteriorated metal hardware.</p>



Pier Substructure

Photo	Descriptions/Comments
	<p>Description: View over Pier #23.</p>
	<p>Issue: Sea spray took a heavy toll on metal hardware on the pile cap. The structural integrity and safety of the guardrail system on this part of the pier is questionable, not to mention the structural strength at the connection of the stringers to the pile cap to guard against wind uplift in future storm events.</p> <p>Resolution: Immediately inspect/remove/replace all deteriorated metal hardware.</p>



Pier Substructure

Photo	Descriptions/Comments
	<p>Description: View over Pier #24.</p>
	<p>Issue: Similar pattern of rail post and thru-bolt connection issue.</p> <p>Resolution: See preceding resolution.</p>



Pier Substructure

Photo	Descriptions/Comments
	<p><u>Issue:</u> Similar pattern of rail post and thru-bolt connection issue. Note the middle thru-bolt connecting the rail post to the top part of the stringer is missing. The base has a wide split fiber from top bolt to bottom end.</p> <p><u>Resolution:</u> See preceding resolution.</p>
	<p><u>Issue:</u> See preceding issue. This pair is only for mounting pedestrian lighting.</p> <p><u>Resolution:</u> See preceding resolution.</p>

Pier Substructure

Photo	Descriptions/Comments
 A photograph showing a view over a wooden pier structure. The image captures several horizontal wooden planks and a vertical post. A metal plate with the number '25' is attached to the vertical post. The background shows a body of water and a cloudy sky.	<p>Description: View over Pier #25.</p>
 A close-up photograph of the anchor bolt/clip angle assembly connecting the stringer to the pile cap. The image shows a vertical wooden post, a horizontal wooden stringer, and a metal clip angle. A hex-head lag screw is visible, fastening the clip angle to the deck board.	<p>Description: Close-up view of the anchor bolt/clip angle assembly connecting the stringer to the pile cap. Note the hex-head lag screws fastening the rail post clip angle to the deck board.</p>



Pier Substructure

Photo	Descriptions/Comments
	<p><u>Issue:</u> Similar pattern of rail post and thru-bolt connection issue.</p> <p>Note corrosion of the exposed adjustable-slot may preclude the provision that allows for stringer's lateral movement and adjustment.</p> <p><u>Resolution:</u> See preceding resolution.</p>
	<p><u>Description:</u> View over Pier #26.</p>



Pier Substructure

Photo	Descriptions/Comments
	<p><u>Issue:</u> Similar pattern of rail post and thru-bolt connection issue.</p> <p>Even horizontal connection hardware is not spared by corrosion from sea spray at this post.</p> <p><u>Resolution:</u> See preceding resolution.</p>
	<p><u>Description:</u> View over Pier #27.</p>



Pier Substructure

Photo	Descriptions/Comments
	<p><u>Issue:</u> Similar pattern of rail post and thru-bolt connection issue.</p> <p><u>Resolution:</u> See preceding resolution.</p>
	<p><u>Description:</u> View over Pier #28.</p>


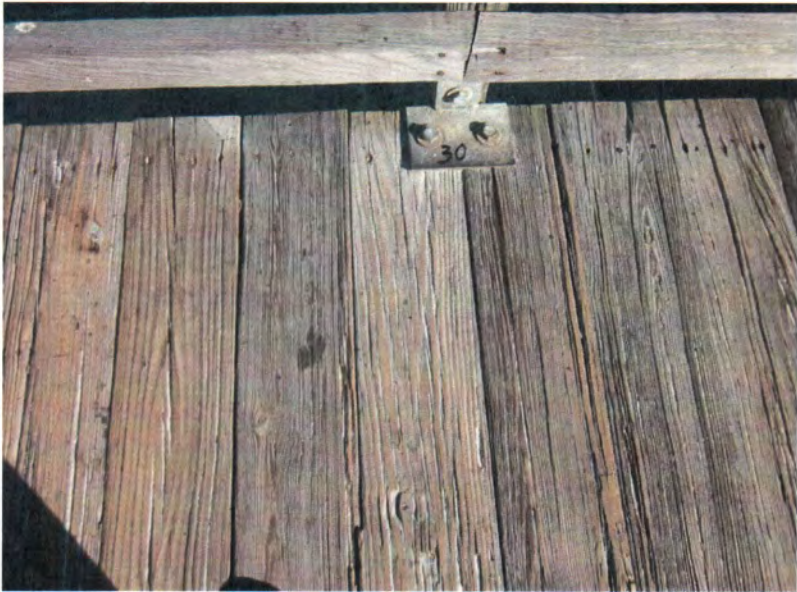
Pier Substructure

Photo	Descriptions/Comments
	<p><u>Issue:</u> Similar pattern of rail post and thru-bolt connection issue.</p> <p>Even horizontal connection hardware is not spared by corrosion from sea spray at this post.</p> <p><u>Resolution:</u> See preceding resolution.</p>
	<p><u>Description:</u> Gaps between rail post and rail may look like an ideal spot to temporarily hold and/or hide a still-lit cigarette butt. Here is one of such location which accidentally caught on fire (possibly unnoticed burn) leaving a charred hollow as evidence on the post.</p> <p>Prohibiting smoking on the pier may be the ideal policy to safeguard against fire hazard by still-lit cigarette butts lodged in the wood cracks and crevices.</p>



Pier Substructure

Photo	Descriptions/Comments
	<p><u>Issue:</u> Similar pattern of rail post and thru-bolt connection issue.</p> <p><u>Resolution:</u> See preceding resolution.</p>
	<p><u>Description:</u> View over Pier #29.</p>

Pier Substructure

Photo	Descriptions/Comments
	<p><u>Issue:</u> Similar pattern of rail post and thru-bolt connection issue.</p> <p><u>Resolution:</u> See preceding resolution.</p>
	<p><u>Description:</u> View over Pier #30.</p>

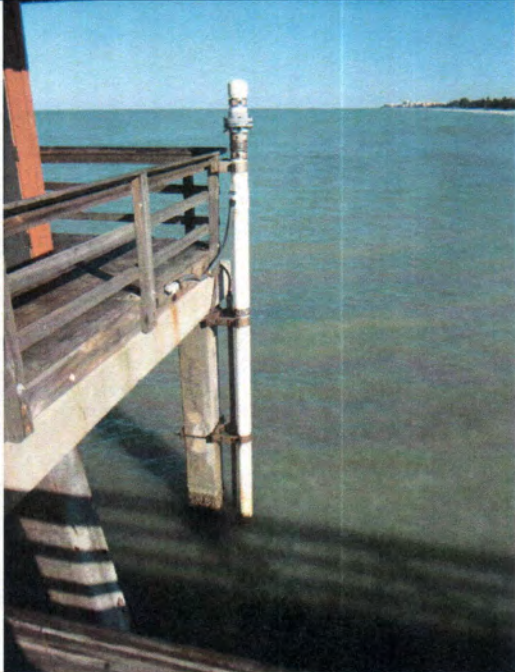

Pier Substructure

Photo	Descriptions/Comments
	<p><u>Issue:</u> Similar pattern of rail post and thru-bolt connection issue.</p> <p>Note corrosion of the exposed adjustable-slot may preclude the provision that allows for stringer's lateral movement and adjustment.</p> <p><u>Resolution:</u> See preceding resolution.</p>
	<p><u>Issue:</u> See preceding issue. This pair is only for mounting pedestrian lighting.</p> <p><u>Resolution:</u> See preceding resolution.</p>

Pier Substructure

Photo	Descriptions/Comments
	<p><u>Issue:</u> Similar pattern of rail post and thru-bolt connection issue.</p> <p><u>Resolution:</u> See preceding resolution.</p>
	<p><u>Description:</u> View over Pier #31.</p>



Pier Substructure

Photo	Descriptions/Comments
	<p>Description: View of, possibly, a tide gauge component of a weather monitoring station at the Northeast corner of the food concession pier.</p>
	<p>Issue: Similar pattern of rail post and thru-bolt connection issue.</p> <p>Resolution: See preceding resolution.</p>



Pier Substructure

Photo	Descriptions/Comments
	<p><u>Issue:</u> Similar pattern of rail post and thru-bolt connection issue.</p> <p>Note corrosion of the exposed adjustable-slot may preclude the provision that allows for stringer's lateral movement and adjustment.</p> <p><u>Resolution:</u> See preceding resolution.</p>
	<p><u>Description:</u> Typical view of the substructure framing and the condition of the decking underside in the vicinity of Pier #32. Note the fiber split in the deck boards despite their fresh appearance. Pipe/conduit strapping is satisfactory.</p>


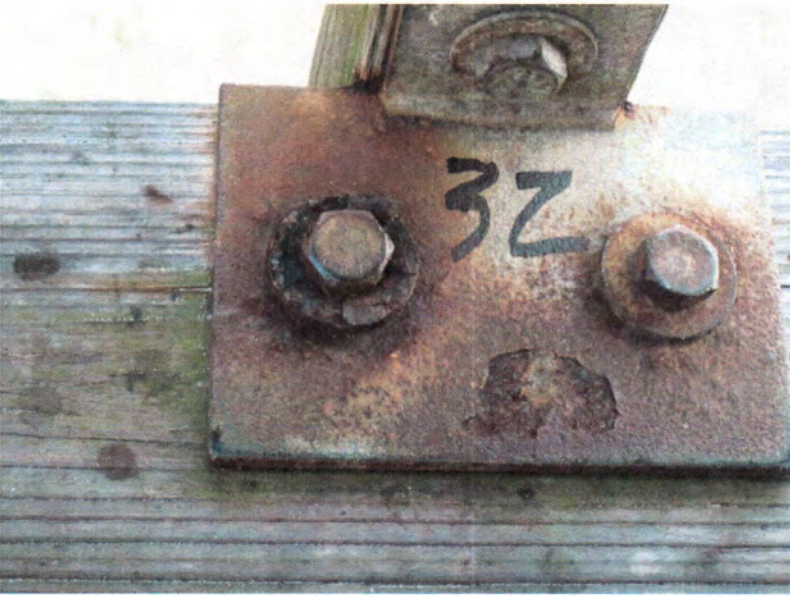
Pier Substructure

Photo	Descriptions/Comments
	<p><u>Issue:</u> Similar pattern of rail post and thru-bolt connection issue.</p> <p><u>Resolution:</u> See preceding resolution.</p>
	<p><u>Description:</u> Typical view of the substructure framing and the condition of the decking underside in the vicinity of Pier #32. Note the fiber split in the deck board despite its fresh appearance. Close up on the part of the stringer indicates some level of wood surface decay is taking place.</p>



Pier Substructure

Photo	Descriptions/Comments
	<p><u>Issue:</u> Similar pattern of rail post and thru-bolt connection issue.</p> <p><u>Resolution:</u> See preceding resolution.</p>
	<p><u>Issue:</u> View of the post-to-deck clip angle lag screw connection undergoing early corrosion beginning with washers.</p> <p><u>Resolution:</u> See preceding resolution.</p>



Pier Substructure

Photo	Descriptions/Comments
	<p><u>Issue:</u> Similar pattern of rail post and thru-bolt connection issue.</p> <p><u>Resolution:</u> See preceding resolution.</p>
	<p><u>Description:</u> View over Pier #32. Note horizontal connection hardware corrosion beginning with washers.</p>

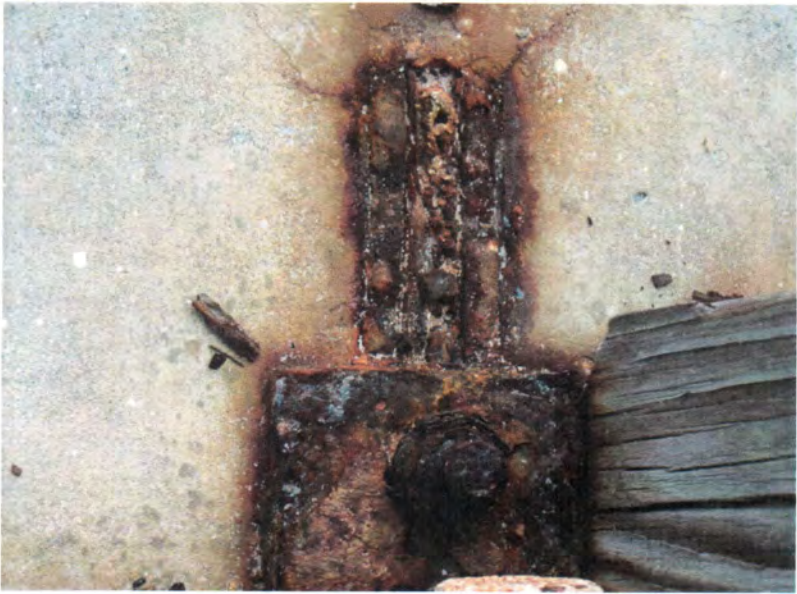
Pier Substructure

Photo	Descriptions/Comments
	<p><u>Issue:</u> Similar pattern of rail post and thru-bolt connection issue.</p> <p><u>Resolution:</u> See preceding resolution.</p>
	<p><u>Issue:</u> Similar pattern of rail post and thru-bolt connection issue.</p> <p><u>Resolution:</u> See preceding resolution.</p>


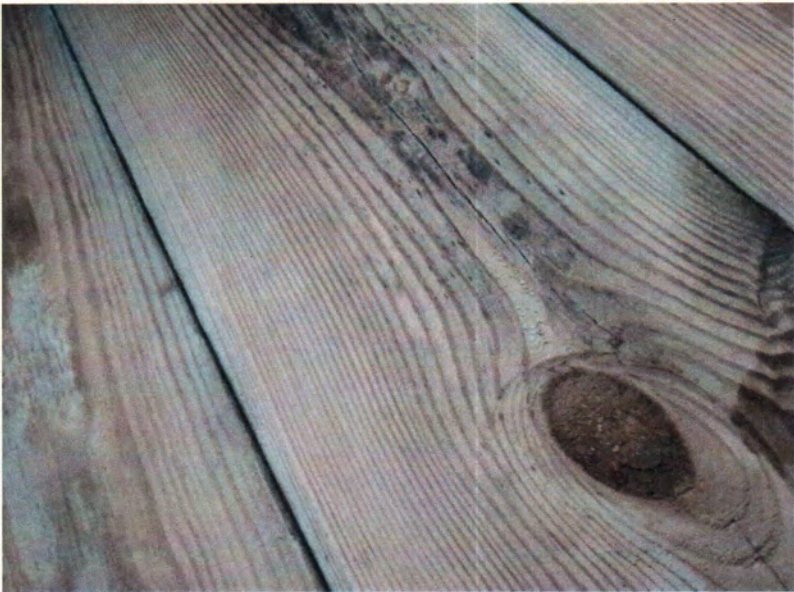
Pier Substructure

Photo	Descriptions/Comments
	<p><u>Issue:</u> Similar pattern of rail post and thru-bolt connection issue.</p> <p><u>Resolution:</u> See preceding resolution.</p>
	<p><u>Issue:</u> View of the post-to-deck clip angle lag screw connection undergoing early corrosion beginning with washers.</p> <p><u>Resolution:</u> See preceding resolution.</p>



Pier Substructure

Photo	Descriptions/Comments
 A close-up photograph showing a vertical wooden beam with a hole. A metal fastener is visible through the hole, and the wood around it appears to be damaged or charred. The background shows a concrete surface and some water.	<p><u>Issue:</u> Similar pattern of rail post and thru-bolt connection issue.</p> <p><u>Resolution:</u> See preceding resolution.</p>
 A close-up photograph showing a vertical wooden beam with a hole. A metal fastener is visible through the hole, and the wood around it appears to be damaged or charred. The background shows a concrete surface and some water.	<p><u>Issue:</u> Similar pattern of rail post and thru-bolt connection issue.</p> <p>Note corrosion of the exposed adjustable-slot may preclude the provision that allows for stringer's lateral movement and adjustment.</p> <p><u>Resolution:</u> See preceding resolution.</p>



Pier Substructure

Photo	Descriptions/Comments
	<p><u>Issue:</u> Similar pattern of rail post and thru-bolt connection issue.</p> <p>Note corrosion of the exposed adjustable-slot may preclude the provision that allows for stringer's lateral movement and adjustment.</p> <p><u>Resolution:</u> See preceding resolution.</p>
	<p><u>Description:</u> Typical view of the substructure framing and the condition of the decking underside in the vicinity of Pier #31.</p>



Pier Substructure

Photo	Descriptions/Comments
	<p>Description: Typical view of the substructure framing and the condition of the decking underside between Pier #31 and Pier #32.</p>
	<p>Issue: Similar pattern of rail post and thru-bolt connection issue.</p> <p>Resolution: See preceding resolution.</p>



Pier Substructure

Photo	Descriptions/Comments
	<p>Description: View over Pier #37. Metal hardware from here onward appears to generally fare much better than the previous stations possibly due to recent repair/replacement.</p>
	<p>Description: View over Pier #38.</p>



Pier Substructure

Photo	Descriptions/Comments
 A close-up photograph of a weathered wooden pier post. The post is secured with several metal bolts and nuts. A metal plate is attached to the side of the post. The wood shows signs of aging and wear.	<p>Description: Metal hardware from here onward appears to generally fare much better than the previous stations possibly due to recent repair/replacement.</p>
 A photograph showing a view over Pier #39. The image displays several horizontal wooden beams and a vertical post. A metal plate with the number '39' is visible on the wood. The structure appears to be part of a larger pier or substructure.	<p>Description: View over Pier #39.</p>



Pier Substructure

Photo	Descriptions/Comments
	<p>Description: View of the underside at Pier #39. Note the rail post thru-bolt connectors display only mild corrosion.</p>
	<p>Description: View of the underside at Pier #39. Note the electrical junction box with missing cover.</p>



Pier Substructure

Photo	Descriptions/Comments
	<p>Description: View over Pier #40.</p>
	<p>Description: Metal hardware from here onward appears to generally fare much better than the previous stations possibly due to recent repair/replacement.</p>



Pier Substructure

Photo	Descriptions/Comments
	<p>Description: View over Pier #41.</p>
	<p>Issue: In stormy day and high waves the deck is being washed in sea spray for the duration. Note the boards are soggy from such weather event. Note the small pipe/conduit appears to have been broken off.</p> <p>Resolution: Perform periodic inspection of the utility piping below deck. Repair/replace/remove broken piping. Provide new plastic pipe straps with better working strength and durability (i.e. more material thickness/cross-section, mass, etc).</p>



Pier Substructure

Photo	Descriptions/Comments
 A photograph showing a view over a wooden pier structure. The foreground consists of weathered wooden planks. A metal plate with the number '42' is visible on the planks. In the background, there are several horizontal wooden beams and a vertical post, with a body of water visible beyond.	<p>Description: View over Pier #42.</p>
 A close-up photograph of the wooden structure's hardware. It shows a wooden beam joined to a metal plate with several bolts. The metal hardware appears to be in good condition.	<p>Description: Metal hardware from here onward appears to generally fare much better than the previous stations possibly due to recent repair/replacement.</p>



Pier Substructure

Photo	Descriptions/Comments
 A close-up photograph showing a corner joint of a wooden pier. The wood is weathered and greyish. A metal plate is bolted to the wood, and a large metal nut and washer are visible at the bottom of the joint. The ground below is concrete.	<p>Description: Metal hardware from here onward appears to generally fare much better than the previous stations possibly due to recent repair/replacement.</p>
 A photograph showing a wooden pier structure. A metal plate with the number '44' is bolted to the wood. The wood is weathered and greyish. The plate has two circular holes. The pier is supported by a concrete base.	<p>Description: View over Pier #44.</p>



Pier Substructure

Photo	Descriptions/Comments
	<p>Description: View of the underside at Pier #44. Note the stringer anchor bolt/clip angle displays only mild corrosion.</p>
	<p>Description: Metal hardware from here onward appears to generally fare much better than the previous stations possibly due to recent repair/replacement.</p>

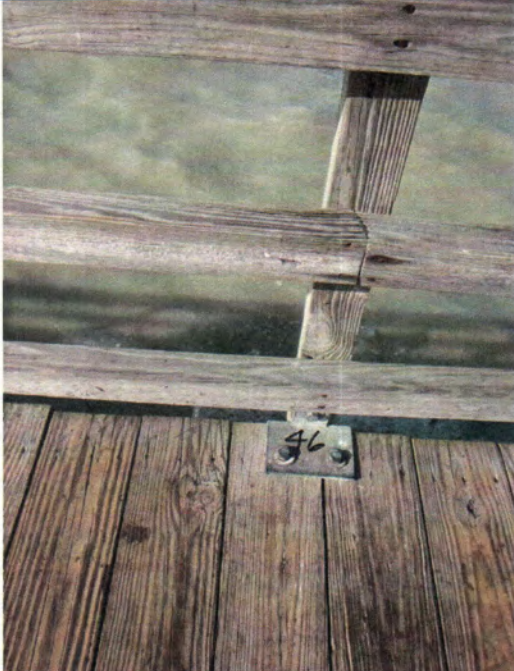

Pier Substructure

Photo	Descriptions/Comments
	<p>Description: View of the underside at Pier #44. Note the rail post thru-bolt connectors display only mild corrosion.</p>
	<p>Description: View of the underside at Pier #44. Note the rail post thru-bolt connectors display only mild corrosion.</p>


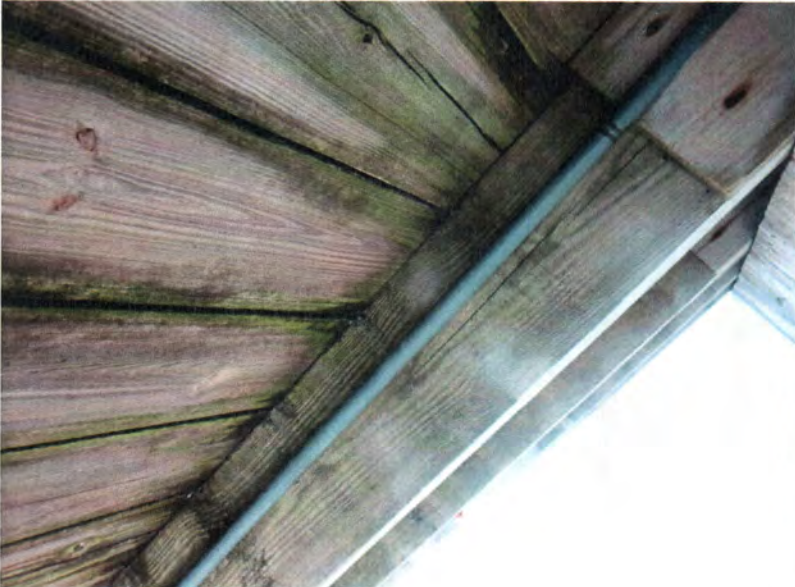
Pier Substructure

Photo	Descriptions/Comments
 A photograph showing a view over a wooden pier structure. The pier is made of weathered wooden planks and beams. A metal fastener with the number '45' is visible on the deck. The background shows a body of water and a distant shoreline.	<p><i>Description:</i> View over Pier #45.</p>
 A close-up photograph of the wooden substructure of a pier. It shows a vertical wooden post connected to horizontal beams using metal hardware, including bolts and washers. The wood is weathered and shows signs of use.	<p><i>Description:</i> Metal hardware from here onward appears to generally fare much better than the previous stations possibly due to recent repair/replacement.</p>



Pier Substructure

Photo	Descriptions/Comments
	<p>Description: View over Pier #46.</p>
	<p>Issue: In stormy day and high waves the deck is being washed in sea spray for the duration. Note the boards are soggy from such weather event.</p> <p>Resolution: Perform periodic inspection of the utility piping below deck. Repair/replace/remove broken piping. Provide new plastic pipe straps with better working strength and durability (i.e. more material thickness/cross-section, mass, etc).</p>



Pier Substructure

Photo	Descriptions/Comments
 A photograph showing a view over a wooden pier structure. The pier is made of weathered wooden planks and beams. A metal fastener with the number '47' is visible on one of the planks. The background shows a body of water and a cloudy sky.	<p>Description: View over Pier #47.</p>
 A close-up photograph of the wooden deck and utility piping. The wooden planks are weathered and show signs of damage, including a split fiber on the right. A blue utility pipe is visible, secured with a metal strap.	<p>Issue: In stormy day and high waves the deck is being washed in sea spray for the duration. Note the boards are soggy from such weather event. Note board with split fiber to the right.</p> <p>Resolution: Perform periodic inspection of the utility piping below deck. Repair/replace/remove broken piping. Provide new plastic pipe straps with better working strength and durability (i.e. more material thickness/cross-section, mass, etc).</p>



Pier Substructure

Photo	Descriptions/Comments
 A photograph showing a wooden deck with a metal plate labeled '48' in the center. The deck is made of weathered wooden planks. In the background, there are several horizontal wooden beams and a vertical post. To the right, a concrete structure with a pebbled texture is visible.	<p>Description: View over Pier #48.</p>
 A close-up photograph of the wooden deck. The planks are dark and show signs of weathering, including a prominent vertical crack in the center of one plank. A blue utility pipe is visible running along the edge of the deck.	<p>Issue: In stormy day and high waves the deck is being washed in sea spray for the duration. Note the boards are soggy from such weather event. Note board with split fiber in the center.</p> <p>Resolution: Perform periodic inspection of the utility piping below deck. Repair/replace/remove broken piping. Provide new plastic pipe straps with better working strength and durability (i.e. more material thickness/cross-section, mass, etc).</p>



Pier Substructure

Photo	Descriptions/Comments
	<p><u>Description:</u> View over Pier #49.</p>
	<p><u>Description:</u> View over Pier #50.</p>


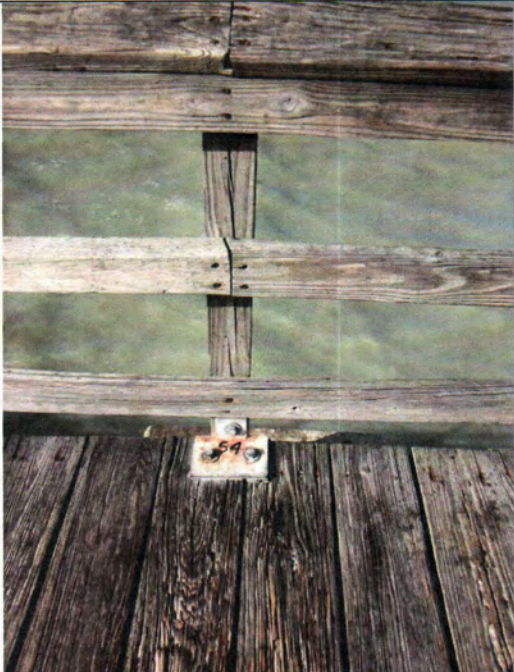
Pier Substructure

Photo	Descriptions/Comments
	<p>Description: View of the underside at Pier #50. Note the rail post thru-bolt connectors display only mild corrosion.</p>
	<p>Description: View over Pier #51.</p>



Pier Substructure

Photo	Descriptions/Comments
 A close-up photograph of a wooden pier structure. A metal plate with the number '52' is attached to a horizontal wooden beam. The wood shows signs of weathering and discoloration.	<p><u>Description:</u> View over Pier #52.</p>
 A photograph showing a view over a wooden pier structure. A metal plate with the number '53' is visible on a horizontal beam. The structure consists of several wooden beams and a vertical post, all showing weathering.	<p><u>Description:</u> View over Pier #53.</p>


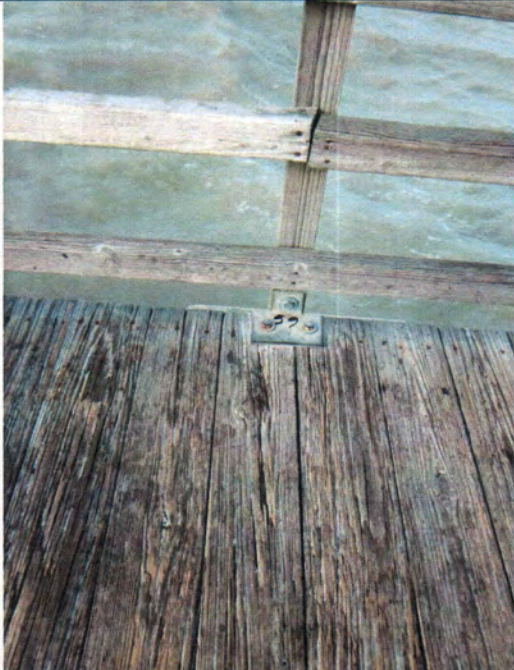
Pier Substructure

Photo	Descriptions/Comments
	<p>Description: View of the underside at Pier #53. Note the rail post thru-bolt connectors display only mild corrosion.</p>
	<p>Description: View over Pier #54.</p>


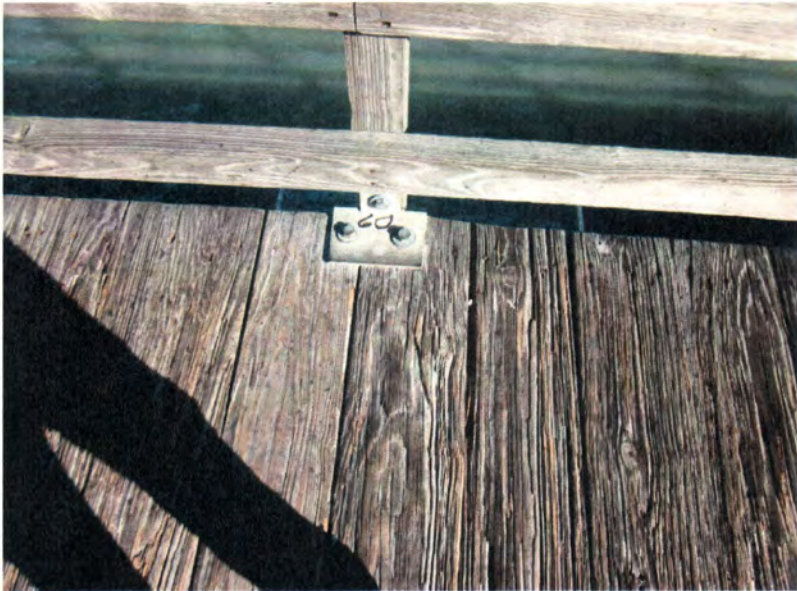
Pier Substructure

Photo	Descriptions/Comments
	<p><u>Description:</u> View over Pier #55.</p>
	<p><u>Description:</u> View over Pier #57. Note the decaying board beside new replacement boards.</p>


Pier Substructure

Photo	Descriptions/Comments
	<p><i><u>Description:</u></i> View over Pier #58.</p>
	<p><i><u>Description:</u></i> View over Pier #59.</p>

Pier Substructure

Photo	Descriptions/Comments
	<p>Description: Metal hardware from here onward appears to generally fare much better than the previous stations possibly due to recent repair/replacement.</p>
	<p>Description: View over Pier #60. Note the decking displays severe wear and tear.</p>

Pier Substructure

Photo	Descriptions/Comments
	<p>Description: View of the underside at Pier #60. Note the rail post thru-bolt connectors display only mild corrosion.</p>



Naples Pier - Pier Wood Structure/Deck Replacement Conceptual Estimate



2/28/2014

Item	Description	Total	Remarks
Div. 1 General Requirements			
		\$ -	
	See Summary bottom of Estimate	\$ -	
		\$ -	
		\$ -	
Div. 2 Demolition			
	Remove Plumbing and Elec Piping	\$ 11,200	
	Remove Decking	\$ 11,351	
	Remove Railings	\$ 4,200	
	Remove Stringers	\$ 30,270	
	Remove Plates-Bolts-Straps	\$ 2,000	
	Offsite Disposal	\$ 12,825	
		\$ -	
		\$ 71,846	



Naples Pier - Pier Wood Structure/Deck Replacement Conceptual Estimate



2/28/2014

Item	Description	Total	Remarks
Div. 2 Site Construction			
	See Report for Site related Costs	\$ -	
		\$ -	
		\$ -	
Div. 3 Concrete			
	Drill Epoxy Anchors into Pile Cap Beams	\$ 4,800	
		\$ -	
		\$ 4,800	
Div. 4 Masonry			
		\$ -	
	None	\$ -	
		\$ -	
Div. 5 Metals			
		\$ -	
	Stainless Connectors	\$ 5,000	
		\$ 5,000	



Naples Pier - Pier Wood Structure/Deck Replacement Conceptual Estimate



2/28/2014

Item	Description	Total	Remarks
Div. 6 Wood and Plastic			
	New PT 4 x 12 Stringers & Bridging	\$ 279,392	
	Fiber Force 2 x 8 Deck w/SS Fasteners CS	\$ 246,095	
	Railing - Wood posts-Midrail - Fiber Top	\$ 44,100	
	Cleaning Stations	\$ 5,700	
	Walkway Lighting Frames	\$ 7,200	
	Stair to Beach	\$ 1,860	
		\$ -	
		\$ -	
		\$ -	
		\$ 584,347	
Div. 7 Thermal and Moisture Protection			
	See Report for Building related Costs	\$ -	
		\$ -	
		\$ -	
Div. 8 Doors and Windows			
	See Report for Building related Costs	\$ -	
		\$ -	
		\$ -	



Naples Pier - Pier Wood Structure/Deck Replacement Conceptual Estimate



2/28/2014

Item	Description	Total	Remarks
Div. 9 Finishes			
	See Report for Building related Costs	\$ -	
		\$ -	
		\$ -	
Div. 10 Specialties			
	See Report for Building related Costs	\$ -	
		\$ -	
		\$ -	
Div. 11 Equipment			
	See Report for Building related Costs	\$ -	
		\$ -	
		\$ -	



Naples Pier - Pier Wood Structure/Deck Replacement Conceptual Estimate



2/28/2014

Item	Description	Total	Remarks
Div. 12 Furnishings			
	See Report for Building related Costs	\$ -	
		\$ -	
		\$ -	
Div. 13 Special Construction			
	None	\$ -	
		\$ -	
		\$ -	
Div. 14 Conveying Systems			
	None	\$ -	
		\$ -	
		\$ -	



Naples Pier - Pier Wood Structure/Deck Replacement Conceptual Estimate



2/28/2014

Item	Description	Total	Remarks
Div. 15 Plumbing			
	3 inch water piping	\$ 18,250	
	1 inch water piping	\$ 11,780	
	Valves & Fixtures	\$ 2,400	
		\$ -	
		\$ 32,430	
Div. 16/17 Electrical			
	Panels/Breakers	\$ 12,000	
	2 inch Conduit & Wiring under Pier	\$ 10,075	
	1-1/2 inch Conduit & Wiring under Pier	\$ 11,439	
	Walkway Lighting	\$ 8,000	
		\$ -	
		\$ 41,514	

Demolition	\$	71,846	
Site	\$	-	
Cost of Work	\$	668,091	
Contingency @ 10%	\$	73,994	
General Requirements	\$	34,967	
General Conditions/Supervision	\$	43,550	
Total Estimate =	\$	892,449	



Cost Impact Estimate

April 28, 2014
 Backup Material 7-e
 3/2/2014
 142 of 151

Naples Pier

The City of Naples

Site			
Issues	Immediate	Within two years	Within five years
No Issues			
Fixed Systems			
Issues	Immediate	Within two years	Within five years
Superstructure (Deck-Railings-Stairs)			
Replace 32 Walkway Boards immediately	\$ 700		
Repair damaged Rail Posts and connectors		See Substructure Estimate	
Replace Rail Post plates/fasteners with Stainless Steel plates/fasteners		See Substructure Estimate	
Replace All Deck Boards using Fiber Force plastic composite material		See Substructure Estimate	
Replace all Railing with new PT Lumber, SS fasteners and Fiber Board top plate		See Substructure Estimate	
Replace Stair structure to the beach level		See Substructure Estimate	
Substructure (Wood Framing System supporting the Deck)			
Replace complete wood substructure above the Concrete Pile Cap Beam surface **		\$ 892,449	
** see Detailed Estimate in this Report Section			
Restroom Facilities			
Remove & Replace Wood Shingle Roofing	\$ 5,967		
Trim Trees away from building contact	Maintenance		
Replace Rusted elec Meter Box Cover	\$ 400		
Restroom Deck Support			
Male Restroom Foundation Pier Repair	\$ 780		
Exterior Wall Patching at ground level	\$ 1,400		
Elec. Conduit and Wiring Repairs in crawspace	Maintenance		
Shower Deck and Structure repairs	\$ 5,625		
Restroom slab demolition/replacement	\$ 26,880		
Restroom plumbing underslab rough piping replacement	\$ 7,650		
Erosion control - landscaping at shower perimeter	\$ 600		
Concession Facilities			
Remove & Replace Wood Shingle Roofing	\$ 10,582		
Replace Water Fountain	\$ 1,310		
Install Elec Panel Deadfront	\$ 300		
Install missing bench deck fasteners	Maintenance		
Seaward Shelter			
Remove & Replace Wood Shingle Roofing	\$ 4,140		
Operating Systems			
Issues	Immediate	Within two years	Within five years
HVAC			
No Issues			
Plumbing			
Included in Substructure above			
Electrical			
Included in Substructure above			
Fire and Life Safety			
Included in Substructure above			
Cost Impact Totals	\$ 66,334	\$ 892,449	

**Agenda Item 6-b
Meeting of 3/19/14**

RESOLUTION 14-13429

A RESOLUTION AUTHORIZING THE CITY MANAGER TO SUBMIT FISCAL YEAR 2014-2015 COLLIER COUNTY TOURIST DEVELOPMENT COUNCIL CATEGORY "A" GRANT APPLICATIONS UNDER THE BEACH RENOURISHMENT AND PASS MAINTENANCE PROGRAM; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the Collier County Tourist Development Council (TDC) recently announced the availability of grant funding under its Category "A" program which supports beach renourishment and pass maintenance; and

WHEREAS, the City has identified needs for that grant funding to support activities related to Beach Maintenance in the amount of \$200,000, and to Naples Pier Deck Replacement and Structural Renovation in the amount of \$692,000; and

WHEREAS, City staff prepared two grant applications to capture funding for the activities in the amounts noted above; and

WHEREAS, the funding is in 100% dollars and requires no local matching funds; the applications for such funding will have no adverse impact on present or future operational needs;

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF NAPLES, FLORIDA:

Section 1. That the City Manager is hereby authorized to submit Fiscal Year 2014-15 Collier County Tourist Development Council Category "A" Grant Applications, together with any related documentation, to the Collier County Tourist Development Council to support annual beach maintenance in the amount of \$200,000 and Naples Pier Deck Replacement and Structural Renovations in the amount of \$692,000.

Section 2. This resolution shall take effect immediately upon adoption.

Resolution 14-13429

Page 2

**PASSED IN OPEN AND REGULAR SESSION OF THE CITY COUNCIL OF THE CITY OF
NAPLES, FLORIDA, THIS 19TH DAY OF MARCH 2014.**

Attest:

Patricia L. Rambosk, City Clerk

John F. Sorey III, Mayor

Approved as to form and legality:

Robert D. Pritt, City Attorney

M:\REF\COUNCIL\RES\2014\14-13429

Date filed with City Clerk: _____

COLLIER COUNTY TOURIST DEVELOPMENT COUNCIL

CATEGORY "A" GRANT APPLICATION

2015 Beach Renourishment and Pass Maintenance

Naples Beach Maintenance

(Project Title)

1. Name and Address of Project Sponsor Organization:

**City Of Naples
735 Eighth Street South
Naples, Florida 34102**

2. Contact Person, Title and Phone Number:

Name: **David M. Lykins, CSD Director**
Address: **280 Riverside Circle**
City: **Naples** State: **FL** ZIP: **34102**
Phone: **239/213-7110** FAX: **239/213-7130** Other: **dlykins@naplesgov.com**

3. Organization's Chief Elected Official and Title:

Hon. John F. Sorey III, Mayor

4. Details of Project- Description and Location:

Description: This is an annual TDC funded project essential for support of maintenance on local beaches. The City, in recent years, has taken over the upkeep and grooming of TDC eligible beaches from the County. Under this project, the City removes litter, accumulation of algae and rocks along public access beach portions of the Gulf within the City's jurisdictional limits. The Naples Pier receives over 1.0 million visitations annually resulting in a high level of maintenance needs. Funding is a benefit to both residents and tourist populations, and to the preservation of the beach, shoreline and overall appearance and investment in beachfront facilities. This year's request includes; 1) maintenance equipment operator and service worker salaries and benefits, 2) beach cart, and 3) equipment fuel and maintenance.

Location: Significant coordination of effort continues between the City and Collier County concerning beach maintenance. The project boundary location is from southernmost State-permitted beach cleaning area within the City's jurisdictional boundary to Clam Pass in Collier County.

5. Estimated project start date: **October 1, 2014**

6. Estimated project duration: **12 Months**

7. Total TDC Tax Funds Requested: **\$160,922**

8. If the full amount requested cannot be awarded, can the program/project be restructured to accommodate a smaller award?

Yes () No (X)

Naples Beach Maintenance
(Project Title)

PROJECT BUDGET

<u>PROGRAM ELEMENT</u>	<u>AMOUNT</u>
TDC Funds Requested	\$ <u>160,922</u>
City/Taxing District Share	\$ _____
State of Florida Share	\$ _____
Federal Share	\$ _____
TOTAL	\$ <u>160,922</u>
PROJECT EXPENSES: (Engineering, Mobilization, Contractor, Monitoring etc)	
<u>1 Equipment Operator/2 Service Workers</u>	\$ <u>141,922</u>
<u>Equipment Fuel and Maintenance</u>	\$ <u>7,000</u>
<u>Additional Beach Cart - Gas w/ Manual Bed Lift</u>	\$ <u>12,000</u>
_____	\$ _____
_____	\$ _____
TOTAL	\$ <u>160,922</u>

I have read the Tourist Development Category "A" Beach Funding Policy covering beach renourishment and pass maintenance and agree that my organization will comply with all guidelines and criteria.

A. William Moss, City Manager

Date

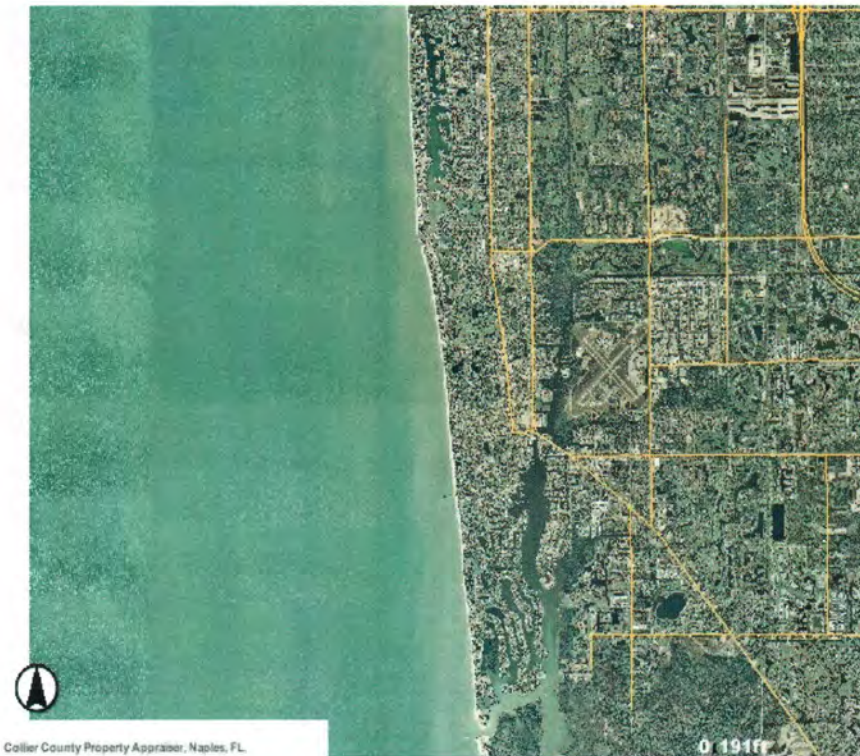
ADDITIONAL INFORMATION

ELIGIBILITY: Beach Maintenance activities will take place on beach area that are least 80% classified as eligible under the TDC guidelines. The project boundary location is from southernmost State-permitted beach cleaning area within the City's jurisdictional boundary to Clam Pass in Collier County.

ORGANIZATIONAL CAPACITY: The City of Naples will be the primary recipient and lead agency for controlling and completing all aspects and activities proposed in this grant application. The City will remain the lead agency for the duration of funding and will be the sole point of contact for all matters related to this proposal. The City has the managerial and financial capability to ensure proper planning, management, and completion of the project described in this application.

BUDGET ASSURANCES: Dual Compensation: If a City project staff member or consultant is involved simultaneously in two or more projects, the staff will not be compensated for more than 100% of their time for any such dual involvement.

PROJECT LOCATION MAP:



COLLIER COUNTY TOURIST DEVELOPMENT COUNCIL
CATEGORY "A" GRANT APPLICATION
Beach Renourishment and Pass Maintenance
Vegetation Repair/Exotic Removal County Wide

1. **Name and Address of Project Sponsor Organization:**
Coastal Zone Management
Collier County Government
2800 N. Horseshoe Drive
Naples, Florida 34104

2. **Contact Person, Title and Phone Number:**
Name: Gail Hambright, Accountant
Address: Collier County Government
2800 N. Horseshoe Drive
City Naples ST FL ZIP 34104
Phone: 252-2966 FAX: 252-2950

3. **Organization's Chief Official and Title:**
Tom Henning, Chairman
Board of County Commissioners

4. **Details of Project- Description and Location: Dune planting and exotic removal greatly contribute to a healthy beach environment. Each year the county sets aside \$75,000 to repair dune vegetation and remove exotics on all our county beaches. Approval is recommended.**

5. **Estimated project start date: October 1, 2014**

6. **Estimated project duration: 12 Months**

7. **Total TDC Tax Funds Requested: \$75,000.00**

8. **If the full amount requested cannot be awarded, can the program/project be restructured to accommodate a smaller award?**

Yes (X) No ()

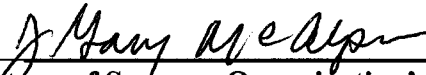
Collier County Tourist Development Council
Category "A" Grant Application Page 2

Vegetation Repair/Exotic Removal County Wide

PROJECT BUDGET

<u>PROGRAM ELEMENT</u>	<u>AMOUNT</u>
TDC Funds Requested	\$ <u>75,000.00</u>
City/Taxing District Share	\$ _____
State of Florida Share	\$ _____
Federal Share	\$ _____
TOTAL	\$ <u>75,000.00</u>
PROJECT EXPENSES: (Engineering, Mobilization, Contractor, Monitoring etc)	
<u>Planting/Removal</u>	\$ <u>75,000.00</u>
_____	\$ _____
_____	\$ _____
_____	\$ _____
_____	\$ _____
TOTAL	\$ <u>75,000.00</u>

I have read the Tourist Development Category "A" Beach Funding Policy covering beach renourishment and pass maintenance and agree that my organization will comply with all guidelines and criteria.

	<u>4/4/14</u>
_____ Signature of Sponsor Organization's Chief Official	_____ Date

COLLIER COUNTY TOURIST DEVELOPMENT COUNCIL
CATEGORY "A" GRANT APPLICATION
Beach Renourishment and Pass Maintenance
Fund 185 Administration

1. **Name and Address of Project Sponsor Organization:**

Coastal Zone Management
Collier County Government
2800 N. Horseshoe Drive
Naples, Florida 34104

2. **Contact Person, Title and Phone Number:**

Name: Gail Hambright, Accountant
Address: Collier County Government
2800 N. Horseshoe Drive

City Naples ST FL ZIP 34104

Phone: 252-2966 FAX: 252-2950

3. **Organization's Chief Official and Title:**

Tom Henning, Chairman
Board of County Commissioners

4. **Details of Project- Description and Location: This item funds County staff to manage the projects, maintain the beaches, administer the program and is broken down as follows: Staff includes the Manager; Clerical Support; a Field Supervisor/Project Manager; and two equipment operators to clean and maintain the County and Marco Beaches (\$525,000); Indirect Administrative Costs required for administrative functions like purchasing, information technology, motor pool and human resources (\$90,000); Current rent (\$10,000); Division Fiscal Support (\$60,000) and charges for the Tax Collector are also included (\$145,000). Approval is recommended.**

5. **Estimated project start date: October 1, 2014**

6. **Estimated project duration: 12 Months**

7. **Total TDC Tax Funds Requested: \$825,000**

8. **If the full amount requested cannot be awarded, can the program/project**
Collier County Tourist Development Council
Category "A" Grant Application Page 2

be restructured to accommodate a smaller award?

Yes (X) No ()

Fund 185 Administration

PROJECT BUDGET

<u>PROGRAM ELEMENT</u>	<u>AMOUNT</u>
TDC Funds Requested	\$ <u>825,000</u>
City/Taxing District Share	\$ _____
State of Florida Share	\$ _____
Federal Share	\$ _____
TOTAL	\$ <u>825,000</u>

PROJECT EXPENSES:
(Engineering, Mobilization, Contractor, Monitoring etc)

<u>Funding 185 Administration</u>	\$ <u>520,000</u>
<u>Indirect Administration Cost</u>	\$ <u>90,000</u>
<u>Department Rent</u>	\$ <u>10,000</u>
<u>Division Fiscal Support</u>	\$ <u>60,000</u>
<u>Tax Collector Fee</u>	\$ <u>145,000</u>
TOTAL	\$ <u>825,000</u>

I have read the Tourist Development Category "A" Beach Funding Policy covering beach renourishment and pass maintenance and agree that my organization will comply with all guidelines and criteria.

J. Gary McAlpin
Signature of Sponsor Organization's Chief Official

4/28/14
Date