

Wilmington Riverwalk



RIVERWALK SOUTH HANDRAILS

Project Description

This project involved the repair of the aluminum handrails along the Riverwalk from Dock Street to the southern end. The existing railing system included individual collars to attach each railing to the timber posts and was maintenance-intensive, requiring frequent checking and tightening of set screws to keep the railings in place. This project replaced the individual collars with aluminum plates to secure the railings to the posts and eliminate the potential for loss of railings.

Community Benefit

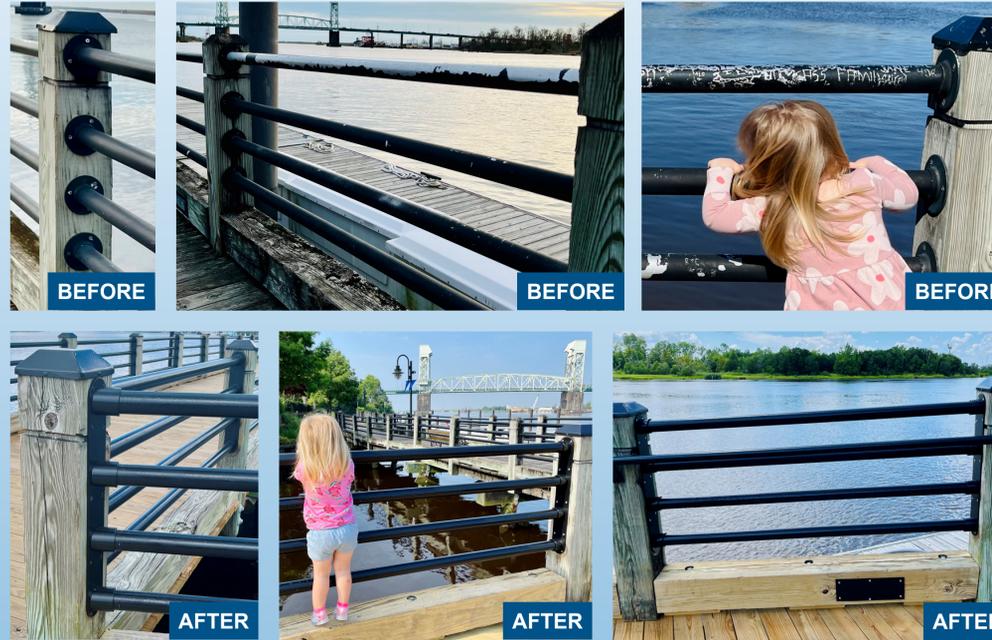
Improved public safety and improved visual appearance

Beautification

Bids for the project came in low, freeing up funds to add a much-needed railing recoating to the Contractor's scope of work. The railings were recoated with a high-performance paint product, applied in three coats. The type of coating used for the Riverwalk railings is heat-resistant and cures to create a hard, durable finish that can help prevent corrosion.

Challenges

Despite the use of cones and warning tape, it was challenging to keep Riverwalk users from touching and leaning on recently recoated railings.



OTHER PROJECTS YOU MAY HAVE NOTICED...

Riverwalk Decking Replacement

The Riverwalk decking is being replaced in sections as part of an annual needs contract awarded by City Council in January 2025. This on-going effort is funded through the Riverwalk Maintenance Program established to ensure the Riverwalk is a safe, functional, and aesthetically pleasing public amenity.

Holiday Lighting

The downtown holiday lighting initiative is a collaborative effort led by Wilmington Downtown Inc. (WDI) and includes lighting of the Riverwalk. The City's Design and Construction Department coordinates the maintenance of electrical outlets and the addition of new outlets as needed to facilitate this effort.



WATER STREET PARK BULKHEAD REPAIR

Project Description

The existing bulkhead between Princess Street and Chestnut Street was in need of repairs. To improve the safety and structural integrity of the bulkhead, this project included corrosion removal, penetration repairs, and repair of land erosion. A major part of this project was patching holes in the bulkhead which allowed material to leak out, compromising the stability of the bulkhead below the water's surface.

Community Benefit

Improved structural integrity of the bulkhead, which improves safety for Riverwalk users

Challenges

Additional locations in need of patching were found during this project, and the scope was expanded to include these areas. Much of the work was completed underwater as the bulkhead extends below the water's surface.



RIVERWALK SOUTH PILING AND GIRDER REPLACEMENT

Project Description

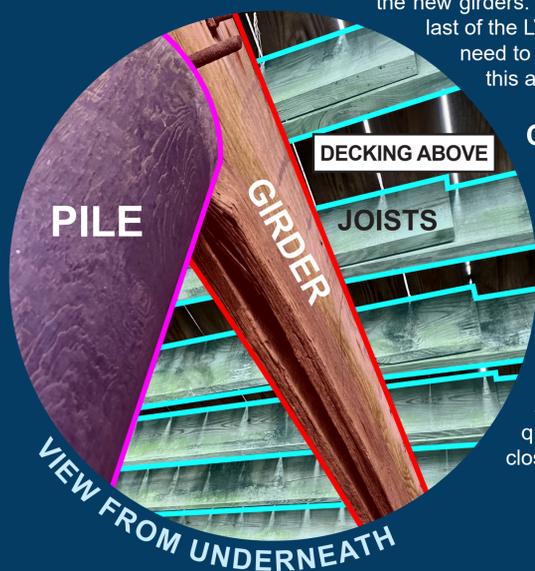
To maintain the structural integrity of the Riverwalk, aging laminated veneer lumber (LVL) girders have been and are continuing to be replaced. The LVL girders come apart over time and are being replaced with solid timber girders. This particular project includes the replacement of six LVL girders near Elijah's. Additionally, the existing piles must be modified to accept the new girders. These are the last of the LVL girders that need to be replaced in this area.

Community Benefit

Improved structural integrity of the Riverwalk, which improves safety for Riverwalk users, and reduced maintenance as a result of using longer-lasting materials

Challenges

Tide conditions often impact Riverwalk project schedules. Once started, work must be completed quickly to avoid delays and prevent extended Riverwalk closures.



RIVERWALK NORTH FOAM INJECTIONS

Project Description

A section of the concrete Riverwalk near Port City Marina had gradually settled over time. A geotechnical and structural review found that the bulkhead is stable, but the soil between the bulkhead and the Pier 33 development settled more than expected. This caused parts of the Riverwalk to sink, creating trip hazards and areas where water could collect. To fix the issue, expanding foam was injected to fill gaps, stabilize the soil, and raise the walkway back to its proper level. The foam injection method is unique as it allows us to repair the Riverwalk without removing the existing surface.

Community Benefit

Reduced trip hazards, reduced maintenance, and improved drainage, resulting in a safer and more visually appealing Riverwalk

Challenges

Some sections of the Riverwalk had to be removed to install helical piers where the foam injections were not successful, and to allow for rerouting of existing utilities.

