

Case Study

NDS Dura Slope® Channel Drains

DURA SLOPE® CHANNEL DRAINS AND GRATES WEATHER STORM REGULATIONS FOR POPULAR HISTORIC DISTRICT IN NEW ORLEANS'S FRENCH QUARTER

A renovation project in a popular New Orleans district near the historic French Quarter and along the Mississippi river set out to create a more welcoming space for the residents and tourists. As part of the initiative, the architect needed a drainage system capable of moving a high volume of water away from the area to allow for foot traffic in the case of a large rainstorm. It was also important to prevent water from pooling so the city's streetcars could continue to pass without disruption.

The NDS Design Worx® team identified two key challenges they needed to overcome when designing flow specifications. The first was meeting the requirements for managing a 100-year rain event, as New Orleans has very high regulatory criteria that requires drainage systems to handle almost 10 in. per hour for much of the city. The second was ensuring the final solution could be installed to match the onsite aesthetics. Since the area is part of a historic district, the grates chosen for the channel drain system needed to duplicate the architectural heritage of the site, which was originally built in the 1800s.

PRODUCT SOLUTION EXCEEDS STORMWATER REQUIREMENTS BY 25%

The project team went to great lengths to provide a solution that would allow for busy pedestrian traffic and streetcar activity while meeting the high flow requirements set by the city. NDS Dura Slope® channel drains were ultimately selected since the system was able to exceed drainage requirements by nearly 25%.

Approximately 150 ft. of channel drains were placed between two large concrete stairways in an area that receives water from both the upper river platform and the connecting plaza to manage a large volume of sheet flow. This allowed for ongoing foot and streetcar traffic during and after rain events by preventing water ponding.

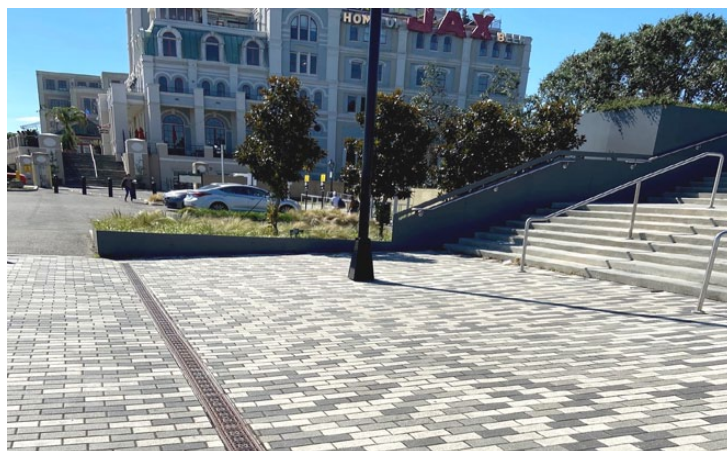
PROJECT SUMMARY

PROJECT TYPE
Capture & Convey

PROPERTY
Municipality

NDS PRODUCTS USED

150 linear ft. of Dura Slope® channel drains and iron grates with decorative tile design



GRATES MEET LOAD CLASS RATINGS WHILE MATCHING STRINGENT DESIGN CRITERIA

Since the project is located in a sensitive historic district, the design firm appreciated that Dura Slope channel drains came with multiple grate options, ranging from heavy-duty cast iron and stainless steel to galvanized steel and plastic grates in different colors and decorative styles. This provided designers and specifiers more flexibility and versatility when choosing the final product.

The project team was particularly focused on the ADA/heel-proof capabilities of the grates while searching for a decorative style that would match perfectly. Their final choice was raw, ductile iron grates for a rustic look. In addition to meeting NDS load class C, these grates are capable of being driven on by vehicles in emergency situations, making them the ideal choice.