

# Case Study

## Channel Drains

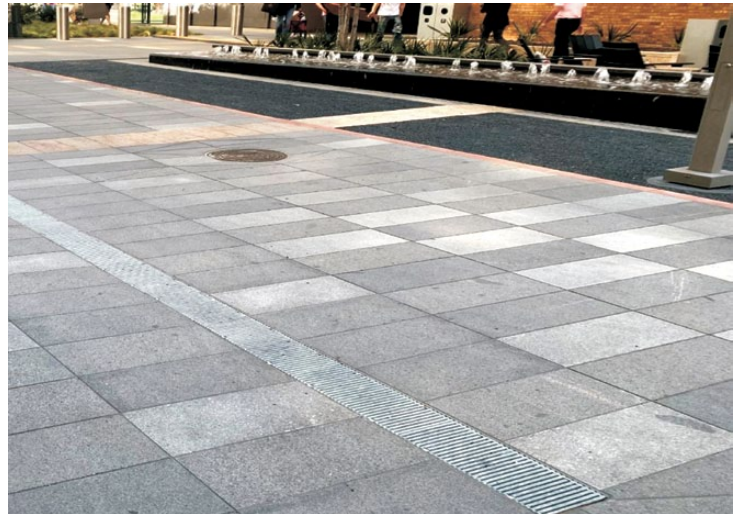
### FILCOTEN CHANNEL DRAINS MEET SPECIFIC DESIGN APPEAL AND 100-YEAR STORM PROTECTION FOR AT&T DISCOVERY DISTRICT

The AT&T Discovery District offers the community both a common area and pedestrian park that's connected to multiple businesses, restaurants and high-end apartments in the downtown area of Dallas. A new building located onsite was part of a larger project to relocate and link the company's vital infrastructure to the area – inclusive of high tech and sensitive computer equipment and a high-speed fiber optic cable line.

Since the site is very flat, AT&T was concerned water could seep into the buildings and damage equipment following a storm. The design firm Kimley Horn reached out to their NDS specification manager to help find the right product for managing water. At the same time, NDS needed to select a solution that would maintain the area's high-end aesthetics, which includes tall glass openings, sunshades and a large outdoor screen.

#### DESIGNWORX TEAM CALCULATES DRAINAGE, OFFERS SOLUTION WITH PREMIUM DESIGN ELEMENTS

The DesignWorx team reviewed the original layout and was able to improve the performance by analyzing total system capacity. Part of the task was ensuring the water management system could handle a 100-year storm event. By calculating the drainage required to handle this, the team determined traditional catch basins were not a feasible option since the project didn't have enough grade and water needed to be able to drain quickly. With this background knowledge, the design firm worked with their NDS spec manager who developed a comprehensive channel drain recommendation and supplied or sourced all product needed for the project.



#### FLEXIBILITY AND VERSATILITY OF FILCOTEN LINE EXCEEDS PROJECT REQUIREMENTS

Filcoten channel drains with 8" galvanized Kiaro grates were installed in high-flow areas such as along the interior of the walking spaces and the outermost edges of the downtown area. This approach ensured excess water would be captured before running into the public right of ways as well as provided load class E ratings. Additional stainless-steel slot drains were employed at the entrances and exits of the local buildings as extra protection and to keep water from entering the structures, meeting load class C ratings since they were installed in emergency access areas.

The specifier found the versatility of the NDS line attractive and appreciated that the Filcoten line met all stormwater needs while still offering the high-end finishes that AT&T wanted to match the surrounding architecture.

### PROJECT SUMMARY

#### PROJECT TYPE

Capture & Convey

#### PROPERTY

Multi-use Retail

#### STAKEHOLDERS

Kimley Horn

#### NDS PRODUCTS USED

250' of Filcoten Tec V 100 4" Channel Drains and Grates  
295' of Filcoten Pro V 200 8" Channel Drains and Kiaro  
200mm Custom Galvanized-Coated Grates

#### NDS DesignWorx Services Utilized:

1. Product specification
2. Drainage calculation
3. Plan evaluation
4. CAD file creation
5. Submittal drawing preparation