

Case Study

BG-FILCOTEN[®] TRENCH DRAINS

GEORGIA BRANCH OFFICE CHOOSES PROVEN PERFORMANCE OF NDS BG-FILCOTEN[®] DRAINS FOR NEW PARKING STRUCTURE

The state of Georgia recently built an elaborate new complex for one of its executive branch offices to serve as a flagship location. Part of the project's design included the construction of a large parking garage that would not only house the department's staff vehicles but also be used by other office complexes and businesses within the general vicinity.

The city of Atlanta reached out to NDS to help specify a channel drain system capable of supporting extra heavy loads, a DIN load class D rating for the parking structure. Since the garage was mostly concrete, the design team had to deal with a large amount of runoff that would generate extensive sheet flow.

CONCRETE DRAIN MORE DURABLE THAN COMPETITIVE POLYMER PRODUCTS

The NDS Design Worx[®] team recommended its high-performance concrete channel drain called BG-FILCOTEN. Easier to design with than area drains, these trench drains are more durable than products made from polymer concrete and can handle the traffic of thousands of vehicles per week. They are engineered to capture large amounts of rainwater when needed, making them extremely effective at handling sheet flow.

NDS also evaluated the team's plans for the most ideal outcome and helped in preparation of submittal drawings. The design team hadn't previously worked with NDS so they really appreciated the design support and product recommendation.

JUST-IN-TIME DELIVERY HELPS WITH STAGING

The construction team anticipated an issue with material staging due to limited space onsite and the need for multiple pallets, but NDS had the drains readily available locally and offered just-in-time delivery.



This helped the contractor more efficiently manage the amount of product onsite since pallets were sent in phases as needed.

The project team also worked directly with NDS on the exact layout of the channels, number of outlets needed, and length of run, and a DSM was onsite throughout the installation process to provide guidance and answer questions.

The overall project required the installation of more than 158 linear ft. of BG-FILCOTEN 12 in. channel drains with heavy ductile iron bolt-down grates. They were placed in front of both the parking structure and lot.

The structure now serves multiple offices and is capable of holding 200 vehicles at a time. The drains and grates – which are both load D rated – are successfully handling the rigors of both daily traffic and sheet flow from stormwater.

PROJECT SUMMARY

PROJECT TYPE
Capture & Convey

PROPERTY
Parking Garage

NDS PRODUCTS USED
158 linear ft. of 12 in. BG-FILCOTEN 300
with ductile iron grates

Design Worx Services Utilized

1. Submittal drawings
2. Product specification
3. Drainage calculation
4. CAD file creation
5. Installation instructions