CUSTOMER CASE STUDY

Maine Medical Center St. John Street Employee Parking Garage

Portland, ME

FERGUSON WATERWORKS

PROJECT OVERVIEW

CUSTOMER:
Maine Medical Center
St. John Street Employee
Parking Garage

PRODUCTS:
R-Tank^{HD} Subsurface
Detention System, R-Tank^{HD}
Treatment Row Modules,
Harco PVC Access Structures

LOCATION:
Portland, ME

CHALLENGE:

Provide a unique layout alternative for a subsurface stormwater storage system while also avoiding costly delays for construction vehicle traffic.

SOLUTION:

The design engineer created an efficient and customized R-Tank module layout design to free up usable space for vehicle traffic while also allowing other construction activities to continue.

PRODUCT ADVANTAGES:

- 95% void space provided the most efficient storage and minimized the system's footprint
- Module Strength—easily supports traffic loads
- Versatile system layout
- Pre-assembled modules for fast installation
- Inspection/maintenance row for system accessibility, inspection and maintenance

"The R-Tank system was flexible to design with, allowing the contractor to easily sequence other portions of the project, saving the client time and money." – Craig Sweet, P.E., Design Engineer

BACKGROUND

Maine Medical Center's main campus, the largest medical facility in the state, is in the heart of Portland and serves Maine and northern New England. The main campus is located in Maine's most densely populated neighborhood and provides medical resources to people from all walks of life. This multi-campus teaching hospital is considered one of the top hospitals in the U.S. and is home to the Barbara Bush Children's Hospital (also considered one of the top children's hospital in the country).

PROJECT SCOPE

The hospital has seen significant growth over the years. Finding space in Portland's urban environment and the fast-growing housing market has proven to be a challenge for the hospital's expansion. Finding a large enough space for staff and visitor parking has been one of the hospital's main challenges during this period of growth. The hospital acquired nearby property to redevelop and construct a large-scale parking garage for staff and visitors. The parking garage required a subsurface stormwater detention system to maximize on-site space and to efficiently use this highly-valuable property.

THE SOLUTION: FERGUSON WATERWORKS

The design engineer utilized the R-Tank^{HD} Subsurface Detention System to create a subsurface layout designed to minimize the impact of construction activities. This layout provided enough space for construction vehicle traffic to continue without any slowdowns; other layouts would have forced construction vehicles to go around, slowing down the overall progress of the project. The R-Tank^{HD} Subsurface Detention System is a simple way to accommodate site-specific constraints and a viable solution for stormwater design challenges. Even in the field when unexpected conflicts arise, the R-tank system layout can be modified while still adhering to the required storage volume of the design. In some instances where conflicting utilities posed a challenge, the R-Tank modules were relocated (not removed) to provide the same storage volume for the entire system.

WHY FERGUSON WATERWORKS?

The engineering team at Ferguson quickly provided an R-Tank system design to keep the project on schedule. Ferguson gave support throughout the construction process, assisting the contractor with answers to installation questions. Our detailed knowledge goes beyond materials and products. We understand the challenges and costs associated with projects that go over the scheduled time, and we were, therefore, able to help this project stay on schedule.

For more information, contact a Ferguson Waterworks associate at 1-800-448-3636.

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