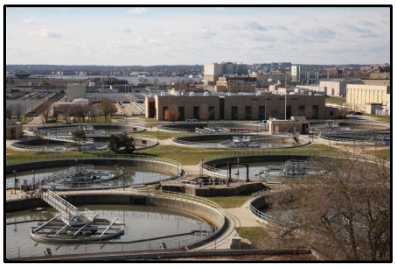
ENHANCED NITROGEN REMOVAL FACILITY

- Blue Plains, DC WATER



PROJECT DESCRIPTION…

The Enhanced Nutrient Removal Facilities (ENR) is part of the $3.2 billion ten-year Capital Improvement Program (CIP). This $166 million DC Water designed facility will reduce the amount of nitrogen in effluent to meet the new U.S. EPA and Chesapeake Bay Program goals of 4.7 million pounds per year or less in 2014.

The project includes more than 40 million gallons of additional new anoxic reactor capacity for nitrogen removal, new post-aeration facilities, and 890 mgd lift station, new channels and conveyance structures, demolition of existing buildings, addition of a protective sea wall and modifications to the existing facilities to enhance performance.

Slated for completion in 2014, The Enhanced Nutrient Removal Facility is the result of years of technology research performed at Blue Plains.

SCOPE OF WORK…

As part of the Construction Management team, The Robert B. Balter Company (Balter) is providing full-time Special Inspections (per DCRA and IBC requirements); QA Inspections and Field Testing; and Materials Laboratory Testing.

The scope of the project has required maintaining a full-time on-site inspection staff up to five inspectors, with intensive supervision by our NICET Level IV QA Manager, as well as regular review and oversight by our Professional Engineers. These services include shallow and deep foundations; steel reinforcement; cast-in-place structural concrete; earthwork with undercutting, stabilization, fill placement and compaction; application of geo-synthetic fabrics and membranes; pavements; temporary earth-support with soldier piles, lagging and tie-backs; jet grouting and soil-nailing; jack-and-bore tunneling; review of construction plans and documents; pre-construction and progress meeting participation; daily review and submittal of technician reports and laboratory testing forms; and issuance of Special Inspection certifications.

ADDED VALUE…

In addition to Special Inspections, QA Inspections and Field Testing, and Materials Laboratroy Testing, The Robert. B. Balter Company is providing Geotechnical and Materials Engineering Consulting on an as-needed basis.

The Blue Plains Advanced Wastewater Treatment Plant is the world's largest facility of its kind processing an average of 370 million gallons of wastewater per day.

dc water is life

THE ROBERT B. BALTER COMPANY.

Geotechnical Engineering, Subsurface Exploration
Construction Inspection and Materials Testing