

Engineering and Construction Division Expertise/Experience

Navigation

Locks and Dams

- Lock and Dam Design and Rehabilitation
- Guidewall Design
- Tainter Gate Design
- Tainter Gate Machinery Design
- Miter Gate Design
- Miter Gate Machinery Design
- Lift Gate Design
- Lift Gate Machinery Design
- Culvert Valve Machinery Design
- Pile Analysis
- Cofferdam Design
- Welded Structures Fatigue Analysis
- Innovative Structural Design Concepts for Locks and Dams
- Reliability Analysis
- Administration/Maintenance Facilities
- Plumbing Design
- Communications Systems Design
- Computer and PLC Control Systems Design
- Closed Circuit Television Design
- Power and Distribution Systems Design
- Lighting Systems Design
- Lightning Protection Systems Design
- Water Control
- Bridge Design

River Regulation

- Dikes and Revetments
- Bendway Weirs

Hydropower

- Power Plant Designs
- Supervisory Control and Data Acquisition (SCADA)
- Re-regulation Dam Design

Environmental Restoration

- Habitat Restoration
 - Fish and Aquatic Life Enhancement
 - Waterfowl Enhancement

Flood Control

Levees and Floodwalls

- Floodwall Design
- Closure Structures
- Levee Design
- Pumping Stations
- Relief Wells
- Seepage Berms

Drainage Channels

- Channel Design
- Detention Reservoirs

Lakes and Reservoirs

- Concrete Dams
- Spillways
- Earth Dams
- Administration/Maintenance Facilities
- Bridge Design
- Water Control

Flood Plain Management

Recreation

Recreational Facilities Design

- Boat Ramps
- Campgrounds
- Wastewater Land Treatment Systems

Visitor Centers

Hazardous, Toxic, and Radioactive Waste

- Underground Storage Tank Removals
- Archaeological Curation Facility Design
- Unexploded Ordnance, Formerly Utilized Defense Sites

Data Collection

- Technical Center of Expertise (TCS) - Photogrammetric Mapping Geodesy and Cartography
- Technical Center of Expertise (TCS) - Automated Performance Monitoring of Dams
- Water Control