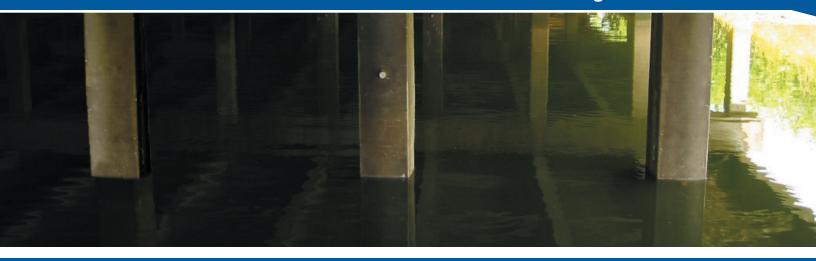


CASE STUDY

TEXAS DEPARTMENT OF TRANSPORTATION

Bridge Pile Protection







Project Data

Location	Houston, TX
Completion	2003
Project Type	Highway Bridge Pile Protection
Products Used	SeaShield™ Series 500
Contractor or Applied By	Orion Construction

Project Details

The Texas Department of Transportation (DOT) approved the SeaShield Series 500 Pile Encapsulation System to protect concrete bridge piles for a major highway in Houston, Texas. The bridge piles have been in service for over 25 years and the integrity of the piles were threatened due to small cracks and spalling concrete. The project involved the repair of 16-inch square concrete piles. First the piles were cleaned by water blasting to remove all existing marine growth. The translucent 1/8"-inch thick SeaShield Fiber-Forms (hand-laid fiberglass forms) were placed around the piles with a 3%"-inch annulus space. The SeaShield 550 Epoxy Grout was then pumped with a peristaltic pump from the bottom up through 1.25-inch port holes. Once the grout cured for seven days a Modified Elcometer Test was performed in which the SeaShield 550 Epoxy Grout exhibited up to 200% more bond strength to the concrete pile than the specified amount. The SeaShield 500 Pile Encapsulation System will add many more years to the life of the bridge structure. The contractor and Texas DOT were extremely satisfied as the project was completed on budget and ahead of schedule.

Benefits

- Excellent Bond Strength to Steel and Concrete
- Long Pot Life Which Allows Premixing to Assure Proper Ratio
- Can Be Pumped With a Peristaltic or Piston Pump (No Plural Pump Equipment Required)
- Easy Clean Up with Liquid Soap Solution (No Harmful Solvents Required)
- SeaShield 550 Epoxy Grout Can Be Pumped or Poured

Date Published: 02/14/2006