

Project Location



Rehabilitation of Bridge No. 00571A // State Project No. 126-176



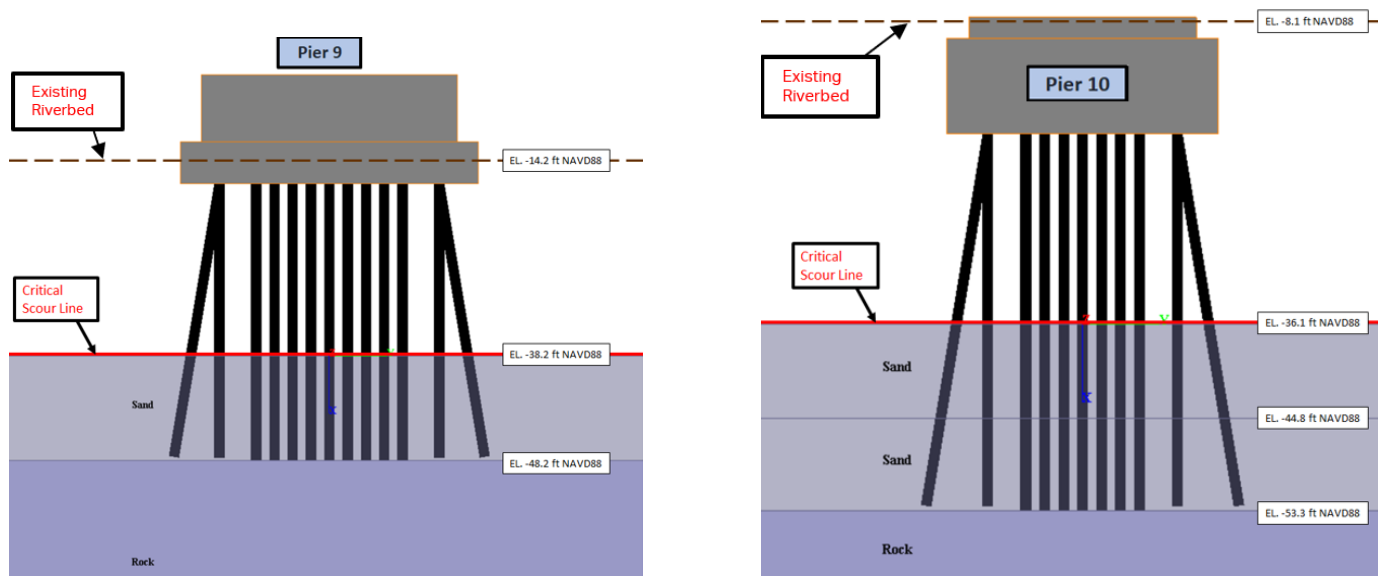
Existing Bridge / Purpose & Need

- Bridge constructed in 1951 and widened in 1990
- 3 main truss spans over river – Piers 9 and 10 within River
- Reinforced concrete piers on steel piles
- Project 126-170 – Steel Repairs, Painting, Install Scour Monitoring System
- Underwater Inspection Report Findings
 - 2020 Scour Rating = 5 Fair
 - Pier 9 Upstream Exposed Piles
 - 2021 analysis suggests scour rating should be reduced to 3 until countermeasures are installed



Pier Stability Analysis

- Analysis per FHWA guidelines predicts scour to bedrock.
- Critical scour elevations were determined. This is the elevation at which the piers would become unstable.
- Therefore, scour countermeasures are required.



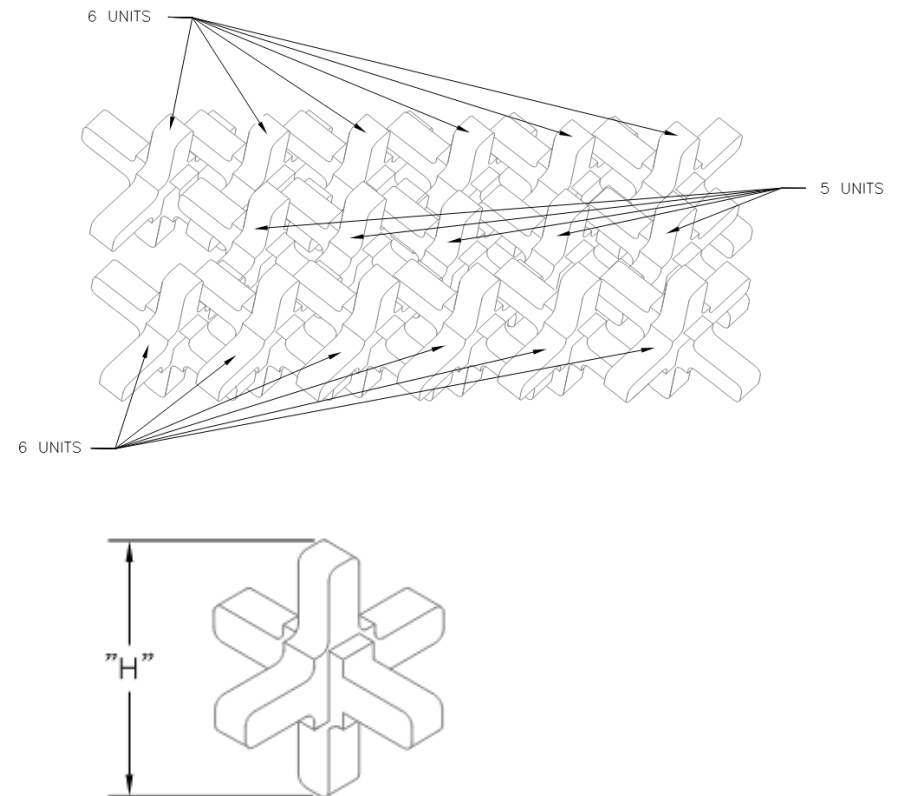
Preferred Alternative: Precast Concrete Armor Units

What are they?

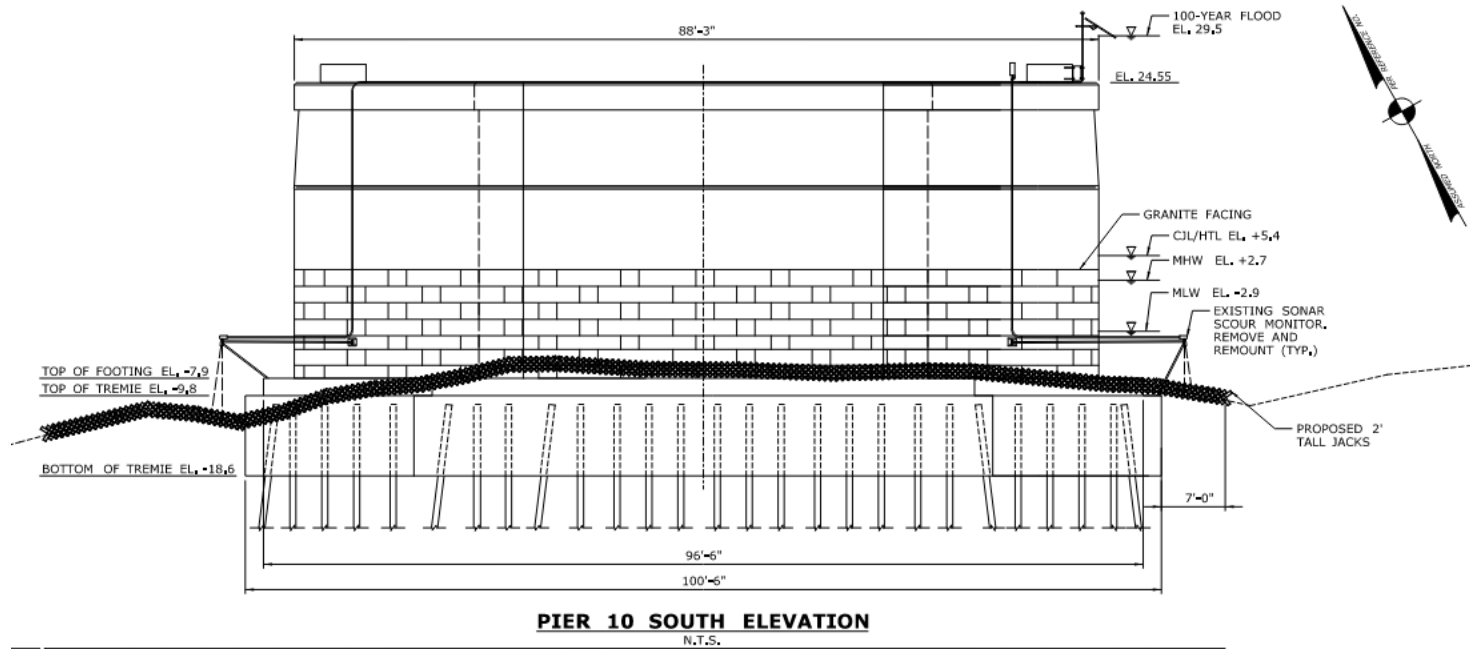
- 6-legged precast concrete jacks
- Installed as 6 x 5 x 6 unit bundles
- Interlocking pattern prevents movement and protects riverbed

Why are they preferred?

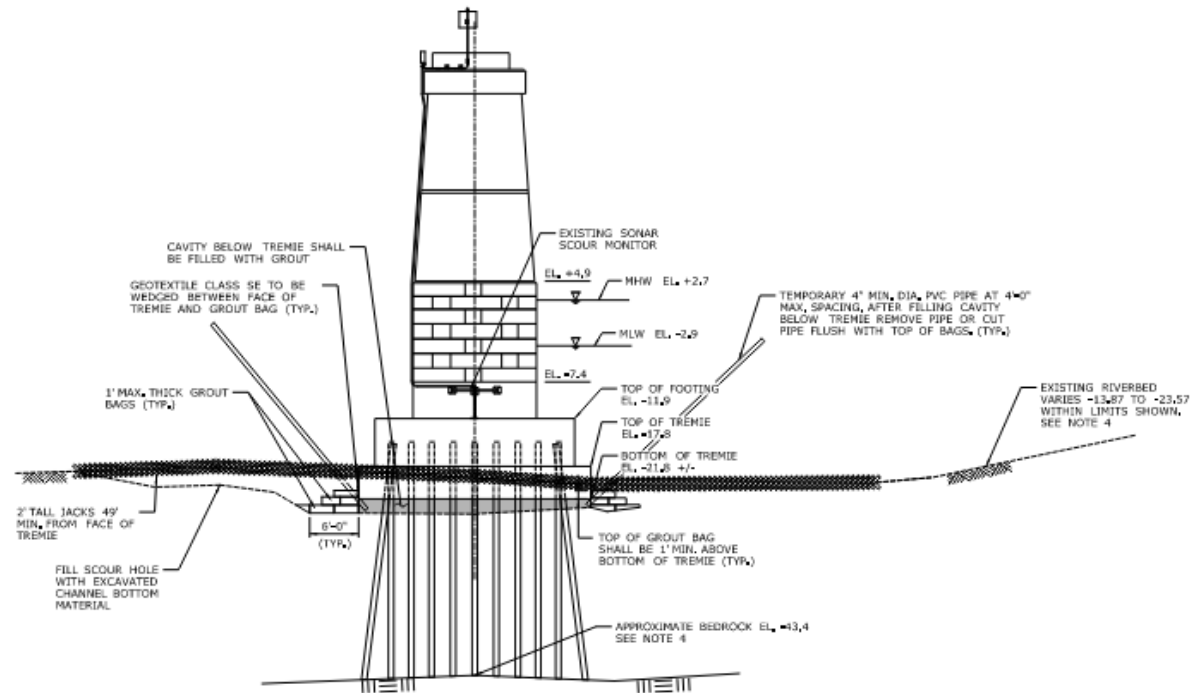
- Significantly lower construction cost than other alternatives
- One construction season
- Requires minimal excavation
- Low maintenance
- Protects riverbed and halts ongoing scour around piers



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A
17 **PIER 9 WEST VIEW**
N.T.S.

