

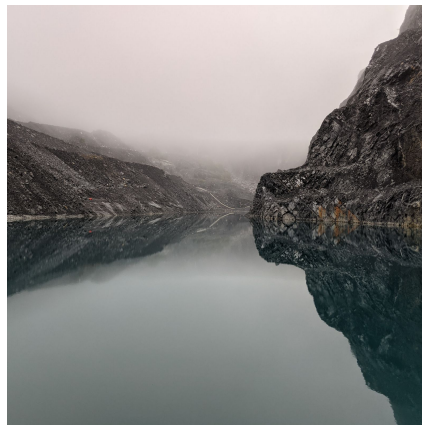
OWSP Quarry Intake

Winchester, VA



PROJECT OVERVIEW AND CHALLENGES

The Opequon Water Supply Project in Fredrick County, VA was construction to provide 8.5 MGD of raw water to Frederick Water's Henry F. Sliwinski Water Treatment Facility. The raw water intake was build in the bottom a quarry, where mining operations had been completed and would be converted into a water reservoir. Bradshaw constructed a 312' of 10' horseshoe tunnel through 20,000 psi limestone for the underground intake, using Drill & Blast excavation methods, to connect the quarry to three shaft casings that would house pumps to lift water 300' to the surface transmission main. The tunnel was supported with rock bolt, welded wire fabric and a final lining of 4" of synthetic fiber reinforced shotcrete.



PROJECT INFORMATION - 619

OWNER:

Frederick Water
Construction Supervisor
Charlie Miller
571-223-9904
charlie.miller@frederickwater.com

ENGINEER:

Schnabel Engineering
Stephen Miller
703-779-0773
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CONTRACTOR:

Orders Construction

COMPLETION DATE:

12/15/2021

GEOLOGY:

Limestone

EXCAVATION METHOD:

Drill & blast

MINING DIMENSIONS:

10' x 10' horseshoe

FINAL LINING:

Synthetic fiber shotcrete

FOR MORE INFORMATION:

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Refer to Project 619