

Sheffield Tunnel Inspection and Evaluation of South Coast Conduit Components (2007-2-33)

Project Ranking

74%

Total Estimated Cost: \$400,000



Background

The Sheffield Tunnel is a concrete tunnel housing the 36" South Coast Conduit (SCC) that extends 6,100 feet through rising geology on the south side of Foothill Road. Within the tunnel, sections of concrete pipe are connected and joined with mortar joints and pipe supports to maintain the integrity of the pipe collar connections.

Need for Project

The USBR inspection report of the Sheffield Tunnel identified and recommended remediation of cracked pipe collars and adjoining deterioration of mortar joints and pipe supports. Deterioration potentially compromises the integrity of the tunnel and poses an operational risk. Heavy seepage appears to be a contributing factor to deterioration.

Description

Retain outside engineering to conduct an evaluation of the identified deterioration to determine the structural integrity and reliability of the connecting and support structure of Sheffield Tunnel. Engineering evaluation will include recommended repairs and determine how to eliminate areas of heavy seepage. It is possible the engineering evaluation could find a lower cost remedy to that recommended by USBR. Upon completion of the evaluation retain a qualified contractor to repair the deteriorated mortar joints and pipe supports at locations identified.

Phase I (Fiscal Year 18-19): Evaluation of Tunnel Deterioration

Phase II (Fiscal Year 19-20): Remediation Design (based on the evaluation)

Regulatory Compliance

This project has been identified by the USBR as a Category 2 recommendation.

Budget & Schedule

Internal Staff Estimate

Fiscal Year	Cost
2018-19	\$100,000
2019-20	\$300,000
Total	\$400,000