

SHRP-2 R06G - Tunnel Showcase Event



SHRP-2 Nondestructive Testing for Tunnel Linings (R06G) Showcase Event in Pittsburgh, PA

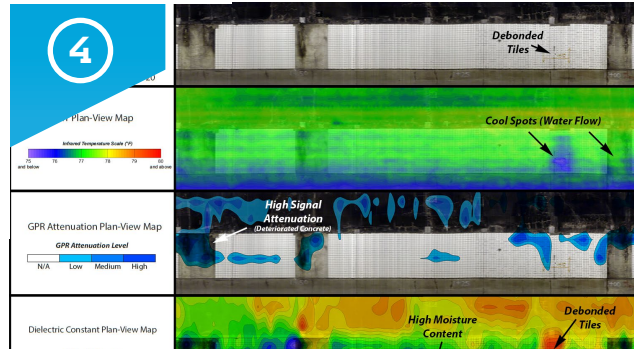
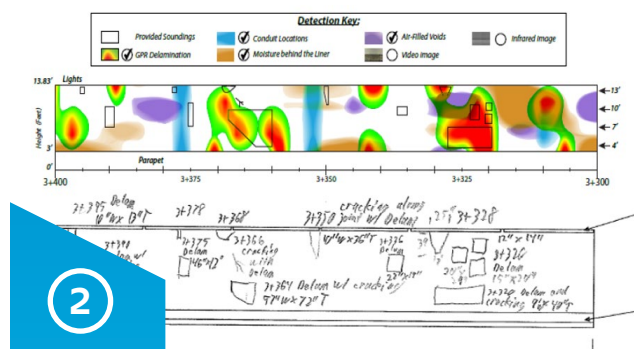
Penetradar participated in the SHRP-2 Nondestructive Testing (NDT) for Tunnel Linings (R06G) Showcase sponsored by PennDOT. Anthony Alongi, President of Penetradar, presented the NDT results of tunnel linings, which was then followed by a live demonstration of ground penetrating radar (GPR) technology in the Liberty Tunnel. DOT's and Tunnel owners from across the USA were present for the showcase to learn about state-of-the-art NDT methods for tunnel evaluation, which in addition to GPR also included High Resolution Imaging (HRI) and Infrared Thermography (IRT).



PENETRADAR

(pictured above):

Penetradar being interviewed by local news outside the Liberty Tunnel discussing NDT for tunnel linings.



PRESENTATION

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Our results consisted of high-res imaging, infrared thermal images, GPR measurement of attenuation and dielectric constants, and identification of areas of deteriorated liner, voids and moisture intrusion. Core samples, soundings and petrographic analysis showed results consistent with the GPR analysis. Comparing GPR delamination results with ground truth measurements, GPR detected 75% of the known delamination locations and 90% of the sound areas of concrete.

DEMONSTRATION

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