

JUNE 10, 2020

Wednesday, June 10, 2020

5:00 PM (1.0 PDH)



PRESENTATION

5:00 PM (1.0 PDH)

Title : TxDOT - Ongoing Repairs to the I-10 Bridge over San Jacinto River Damage during Tropical Storm Imelda

Speakers : [Roger Lopez](#) w/ [TxDOT](#), and [Maria Aponte](#) w/ [TxDOT](#)

Roger Lopez, P.E. holds a master degree in civil engineering from the University of Texas in San Antonio, a bachelor s degree from the University of Houston downtown and attended La Molina University in Lima, Peru. Mr. Lopez started his career at TxDOT in 2001 as engineer assistant for the Beaumont district office. After two outstanding years working in construction projects, Roger joined the roadway design group at the Bexar Metro area office in San Antonio. His previous experience in the construction department, allowed him to succeed with the roadway engineering group where would later move him to his next challenge at the bridge structures section at the San Antonio office and Houston districts. During 18 years working for the department, Mr. Lopez acquired a broad range of experience in highway construction, roadway design, bridge structure design, hydraulic design, geotech and bridge maintenance related projects. He became design lead engineer at the Houston bridge section. He worked on the IH10/SH99 interchange project, US 290 project, US69/IH610 interchange project, IH45 reconstruction projects and the IH610/SH288 main lanes and interchange reconstruction project. As a

strong key player and respected professional, he was part of the district emergency response team, performing bridge assessment and emergency repair projects around the district. Currently Mr. Lopez is a member of the Strategic Projects office that is working on the North Houston Highway Improvement Project (NHHIP) and lives in Houston.

María Pilar Aponte, P.E. graduated in 2004 from the University of Puerto Rico at Mayaguez with a bachelor of science degree in civil engineering. She joined TxDOT in 2006 after graduating from Texas A & M University in College Station with a master of engineering degree in geotechnical engineering. Ms. Aponte started her career with TxDOT at the Houston District Lab, and later became a licensed professional engineer in 2009. In 2010, she transferred to the Southeast Harris Area Office providing support to construction and maintenance activities. Since 2013 and up to this date, María serves as the Southeast Harris Assistant Area Engineer. Ms. Aponte lives in Houston.

ABSTRACT : The night of September 19, 2019, after Tropical Storm Imelda deluged Houston, causing major flooding, several loose barges struck and damaged the IH 10 WB bridge at San Jacinto River. The eastbound and westbound bridges were immediately shut down as TxDOT swiftly assessed the damage. During this time, motorists traveling this major corridor were forced to take a 15-mile detour each way. In less than a week after the bridge strike, TxDOT placed two lanes of two-way traffic on the IH 10 EB bridge. On mid-October, an emergency contract was let to repair de damage at multiple locations on the I-10 westbound bridge. The work consisted on the replacement of several columns and repairs to the cap on Bent 26 and reconstruction of one column and cap repair on Bent 28. Thanks to an ingenious team of designers, a dedicated group of inspectors, and in great partnership with the contractor the IH 10 WB bridge over San Jacinto River was re-opened on January 19, 2020, only four (4) months after Imelda struck.