



UAA Professional Development Seminar Series

## The Life of an Infrastructure Project- Houston High School

Presented by: Amy Mestas, SE,  
Principal Structural Engineer for RESPEC



**ABSTRACT:** Every design project has a lifecycle. This presentation journeys through the lifecycle of a vertical construction project, specifically Houston High School. Houston Middle School suffered significant structural damage from the 2018 magnitude 7.1 earthquake that struck Southcentral Alaska. The RESPEC team inspected the school for damage to determine necessary repairs. Initially, the Mat-Su Borough hoped to salvage two thirds of the building structure and the telecom system. However, the integrity of the structure was severely compromised, the Mat-Su moved to condemn the building, and design of a new school facility was undertaken. To design this brand-new school, RESPEC provided a multidisciplinary team, working with BDS Architects. This presentation will show many of the damaged elements of the building as well as the design scheme of the new school currently operating as part of the Mat-Su School District.

**BIO:** Amy Mestas is the RESPEC Anchorage Region Facilities Group Manager, a Multidiscipline Project Manager, and a Principal Structural Engineer. She has a bachelor's and master's degree in civil engineering from Illinois Institute of Technology (Chicago) and she joined the RESPEC (formerly PDC Engineers) team in 2005. Amy's design expertise includes structural assessment and analysis of existing and new facilities, and she has been responsible for the design of schools, medical facilities, critical military assets, and post-earthquake inspection efforts across Alaska. In 2018, Amy was awarded both the ASPE and the ASCE Region 8 Engineer of the Year. Some of the recent projects she has completed include the Juneau International Airport Terminal Reconstruction, the Kelsey Dock Information and Interpretive Center in Valdez, Alaska, the Community Health Center for the Yakutat Tlingit Tribe in Yakutat, Alaska, and hundreds of post-earthquake assessments and repair designs like the new Houston High School.

Friday, October 27, 2023

11:45 am - 12:45 pm

EIB 211 or Online Via [YouTube Live](#)