

NATIONAL REGISTER TESTING FOR HISTORIC RAILWAY STATION SITE

PROJECT OVERVIEW

[Southwest Houston](#)

ESE conducted intensive mechanically augmented National Register of Historic Places testing for a 7.4-acre historic railway station site in Texas in advance of planned public infrastructure improvements. The objective was to determine eligibility, evaluate intact cultural deposits, and provide a clear recommendation regarding project impacts while ensuring full compliance with the Antiquities Code of Texas and applicable federal and state standards.

CHALLENGES

The site had been previously identified as containing significant historic deposits associated with early railway development, plantation-era activity, and later institutional land use. Historic records and earlier investigations suggested intact subsurface features may be present, but eligibility status remained undetermined. The project area had also experienced substantial land modification over time, requiring a methodical approach to distinguish meaningful cultural deposits from later disturbances while maintaining schedule certainty for a publicly funded capital improvement project.

ESE'S APPROACH

ESE designed a comprehensive testing program under Texas Antiquities Committee permit that exceeded minimum state standards and was tailored to address unanswered research questions from prior investigations. The team conducted mechanically assisted excavation combined with controlled hand excavation, metal detecting, and anomaly verification to systematically evaluate the site. Eight backhoe trenches, eight scrapes, fifteen anomaly tests, and three one-meter by one-meter units were excavated with full spatial control, stratigraphic documentation, artifact screening, and detailed mapping. Testing focused on an elevated landform historically associated with the railway station footprint while also evaluating surrounding areas to confirm site boundaries and assess integrity. All diagnostic artifacts were cataloged and analyzed to establish temporal context and determine whether intact deposits representing early occupation phases remained within the area of potential effect.

RESULTS

Field investigations confirmed the presence of historic archeological components concentrated on the elevated landform, including structural remnants, brick features, artifact concentrations, and temporally diagnostic materials spanning multiple historic periods. Earlier occupational deposits were identified beneath later layers, demonstrating intact stratigraphy and research potential within portions of the site. However, significant cultural deposits were determined to be confined to specific areas outside of the proposed construction footprint. Based on excavation results, stratigraphic analysis, and artifact assemblages, ESE concluded that planned improvements would not adversely impact NRHP-eligible portions of the site provided identified areas were avoided.

PROJECT SNAPSHOT

- Service: Mechanically Augmented NRHP Testing
- Regulatory Framework: Antiquities Code of Texas and NRHP Evaluation
- Excavations: 15 anomaly tests, 8 trenches, 8 scrapes, 3 controlled units
- Site Area: 7.4 acres
- Outcome: Eligible portions identified and avoided; project cleared to proceed

PROJECT IMPACT

Historic sites with layered land use require more than confirmation of presence; they require careful evaluation of integrity, context, and research potential. Through targeted excavation and detailed documentation, ESE provided a defensible eligibility assessment and clear construction guidance, allowing public infrastructure improvements to move forward while preserving significant cultural resources. This project reflects ESE's Texas First approach by pairing technical rigor with practical solutions that balance preservation obligations and project delivery.