



## Eastside Gold Line Extension Project

The Eastside Gold Line Extension is a six mile project bringing the Gold Line subway into East Los Angeles. Paleontological and archaeological monitoring was required by project conditions. The regulatory environment was NHPA section 106 and NEPA. This work was performed partially as a subcontractor to Ultra Systems Environmental and partially through a direct sole source contract to Metropolitan Transportation Authority.

**Services Provided:** Cultural Resources Sensitivity Training, Cultural Resources Mitigation Monitoring Plan, Paleontological and Archaeological Monitoring, Testing, Recovery of Historic Burials, Human Bone Identification and Analysis, Historic Artifact Identification and Analysis, Public Presentations, Artifact Displays and Final Technical Report.

**Challenges:** (1) Unanticipated human bone was found by our monitor on the first day of excavation for a left-hand turn lane at 1<sup>st</sup> and Lorena, (2) Necessary delays due to required planning and approval of treatment plan, (3) Time pressure due to construction contracts which contained significant penalties for delays in the construction schedule, (4) Explaining the project to the public including time necessary for careful analysis and thoughtful writing.

**Solutions:** (1) The day of the discovery immediate research established that there was a historic indigent cemetery at 1<sup>st</sup> and Lorena. In-house expertise allowed us to determine that the initial bone discoveries were medical waste consisting of amputated limbs. Based on that, slow excavation was permitted until a potential coffin was discovered the second day.



(2) All sediments excavated on the first two days were hand sifted for bone fragments while an excavation plan was developed and approved. No feasible alternatives were available to permit redesign.

(3) We developed a plan to utilize heavy machinery and labor provided by Metro to assist teams of Cogstone archaeologists so that the work could be done and construction resumed before penalties were incurred. Field work was accomplished in nine weeks including ground penetrating radar and archaeological data recovery of about 200 graves. Cogstone personnel worked 10 hrs days six days a week to accomplish this task. The crew was as large as 25 people during the final push. No penalties were incurred.

(4) Laboratory work and analysis revealed both Chinese and American artifacts. Continuing research found that 19<sup>th</sup> Century Chinese were not permitted to purchase land or grave plots, thus they buried their dead in a portion of the indigent cemetery. We have provided multiple public presentations on the archaeology and research, multiple displays of the artifacts, hosted a visit of Metro's advisory committee to our offices, and turned in the draft final report only 9 months from the day we finished the field work. The technical report approaches 650 pages thus a 175 page public version was also prepared and is available on Metro's website

[http://www.metro.net/images/hlac\\_report\\_exec.pdf](http://www.metro.net/images/hlac_report_exec.pdf)

