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Cultural Resources Monitoring: Archaeological Montioring Of Hand Excavated Trenches San Antonio, Bexar County, Texas

David M. Yelacic

Cultural Resources Monitoring: Archaeological Montioring Of Hand Excavated Trenches San Antonio, Bexar County, Texas

Cultural Resources Survey

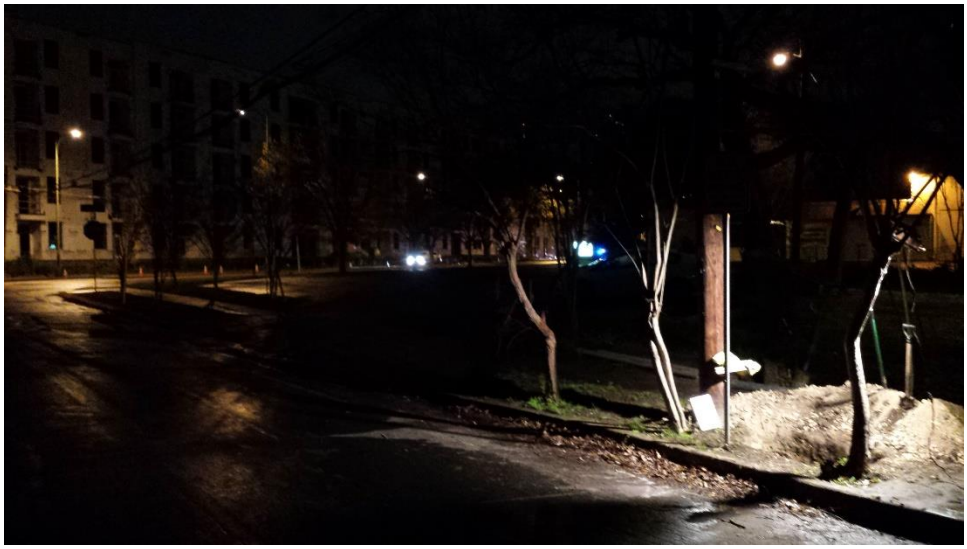
CULTURAL RESOURCES MONITORING: ARCHAEOLOGICAL MONTIORING OF HAND EXCAVATED TRENCHES SAN ANTONIO, BEXAR COUNTY, TEXAS

May 17, 2016

Terracon Project No. 90157078

Antiquities Permit No. 7203

David M. Yelacic, RPA, Principal Investigator



Prepared for:
Texstar Enterprises, Inc.
Selma, Texas

Prepared by:
Terracon Consultants, Inc.
San Antonio, Texas

May 17, 2016

Terracon

Mr. Mark Wolfe
State Historic Preservation Officer
Texas Historical Commission
108 West 16th Street
Austin, Texas 78701

Attention: Mark Denton, Program Coordinator
Telephone: 512-463-5711

RE: **Cultural Resources Services**
East Cesar Chavez Archaeological Monitoring
East Cesar Chavez Boulevard at Presa and Pancoast Street
San Antonio, Bexar County, Texas
Terracon Project Number 90157078

Dear Mr. Wolfe:

Terracon is pleased to submit this report of findings from archaeological monitoring of hand-excavated trenches in downtown San Antonio, Bexar County, Texas.

No significant cultural materials or features associated with archaeological site 41BX303 were identified in either of two small trenches, and most, if not all, excavated sediment had previously been disturbed. Pending approval of this short report of findings, no further coordination with municipal or state agencies is recommended to be necessary for the currently designed project. Please contact David Yelacic (dmyelacic@terracon.com) or Jeremy Hanzlik (jhanzlik@terracon.com) at the number below if you should have any questions, comments, and/or concerns.

Sincerely,
Terracon Consultants, Inc.

David Yelacic
Principal Investigator Archaeologist

Jeremy Hanzlik, P.E.
Natural/Cultural Resources Manager

Attachments

ABSTRACT

To assist and support the installation of fiber-optic cable in the particularly sensitive and historic Downtown San Antonio, Texas, Terracon carried out archaeological monitoring of two small, hand-excavated trenches in City of San Antonio sidewalk easements. The undertaking is subject to compliance with the Antiquities Code of Texas and oversight from the Texas Historical Commission. Archaeological monitoring was carried out by David Yelacic, Principal Investigator, under Texas Antiquities Permit Number 7203.

Through the course of monitored excavation, very few cultural materials were encountered, and these materials (i.e., clear glass fragment, brown bottle glass fragment, wood, and rusted metal) were not associated with features or historic-age sites. Additionally, profile exposures showed extensive disturbance in both trenches. Given our overall negative findings through monitoring, Terracon did not delay installation of the cables. It is our opinion that no historic properties or significant cultural resources were affected by the undertaking.

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CULTURAL RESOURCES MONITORING: ARCHAEOLOGICAL MONTIORING OF MACHINE EXCAVATED TRENCHES IN DOWNTOWN SAN ANTONIO, BEXAR COUNTY, TEXAS

Terracon Project No. 90157078
Texas Antiquities Permit Number 7203
May 17, 2016

1.0 INTRODUCTION

This report describes the results of archaeological monitoring of two hand-excavated trenches associated with the installation of fiber-optic lines and boxes along Convent Street in San Antonio, Texas on behalf of Texstar Enterprises, Inc. Because of the project's location within a City of San Antonio (COSA) river improvement overlay (RIO) district, its impact to COSA-owned property, and numerous historical properties in the vicinity, the ground disturbances were subject to oversight and regulation by the COSA Office of Historic Preservation (OHP) and the Texas Historical Commission (THC). Development within RIO districts of San Antonio trigger COSA OHP consultation and review afforded by the Unified Development Code. Ultimately, however, it is the THC that has jurisdiction over the currently reported project; impacts to public property, such as this, enact cultural resource protection statutes and are required to minimize adverse effects on such resources in consultation with the THC under the Antiquities Code of Texas.

Archaeological monitoring of fieldwork was carried out overnight in early March of 2015. Few cultural materials of mixed age, middle to late twentieth century, were observed in a clearly mixed/disturbed context associated with existing utility lines. No significant materials or features were encountered and work proceeded quickly and smoothly. Following a definition of the project area, brief discussions of the environmental and cultural contexts and methods precede results of the monitoring. The report concludes with a summary and recommendations, and all maps and field photos are attached at the end of the document.

1.1 Area of Potential Effect

The area of potential effect (APE) for the project consisted of two small trenches situated between existing sidewalks containing utility boxes and perimeter walls of buildings. Trench 1 was located on Presa Street north of its intersection with E. Cesar Chavez Street and along the Marriott Plaza San Antonio building. This trench measured approximately three meters in length by 40 centimeters wide, and it varied in depth from 65 centimeters deep at the sidewalk to 50 centimeters deep at the opposite wall. The second trench was located along Pancoast Street near the Texas Lodge building. Trench 2 measured approximately 1.75 meters long by 30 centimeters wide, and it varied in depth from 80 centimeters deep at the sidewalk to 40 centimeters deep at the utility box. These excavations composed the APE for direct impacts. No other effects were perceived.

2.0 ENVIRONMENTAL SETTING

Environments are composed of such interconnected elements as underlying bedrock geology, soil, biology (i.e., plants and animals), and climate. Environmental conditions are also connected to the initial patterning and subsequent preservation of materials left behind by humans, the culmination of which is referred to as site formation processes. Understanding site formation processes aids in assessing the presence and preservation of cultural resources. It is therefore important to consider environmental conditions of the past and present when assessing cultural resources of all ages. Cultural factors also play a role in the patterning of cultural resources, and these factors may be most apparent with historic sites. These factors may include but are certainly not limited to distances from transportation corridors and/or trade nodes, as well as suitability of land to economic/sustenance strategy.

In general terms, the project site is located at the transition between two large-scale biotic provinces or biomes, the Edwards Plateau and the Blackland Prairie/Gulf Coastal Plains (Griffith et al. 2004). Each of these biomes is characterized by a distinct set of physical and biological properties, and the transitional zone is known to have endemic plant and animal communities as well (Blair 1950). These transitional zones are known as ecotones, and they typically support relatively increased biological richness and diversity (Crumley 1994). Locally, the APEs are situated along a stretch of the San Antonio River that flows through its modified, yet original, channel approximately three kilometers downstream from its spring-fed headwaters.

2.1 Geology

A factor that greatly contributes to the site setting is its location within the Balcones Fault Zone, which is a southwest to northeast aligned group of normal faults situated at the contact between the Edwards Plateau and the Gulf Coastal Plains. The fault system was most active during the Miocene as the Gulf subsided and pulled the Gulf Coastal Plain from the adjacent Edwards Plateau, and the normal fault created a physiographic feature known as the Balcones Escarpment (Spearing 1991; Swanson 1995). In this area, the Balcones Escarpment marks the boundary between the adjacent biomes, it affects weather patterns on either side, and its local topography creates ecological refuges for flora and fauna.

Bedrock geology of the project site is mapped as Quaternary Fluviatile terrace deposits (Qt), which is gravel, limestone, dolomite, and chert in abandoned floodplains (Barnes 1974). Alluvial settings may be erosional or depositional, depending upon specific location, and the water that erodes or deposits sediment also attracts human inhabitants. Cultural resources located in depositional settings typically have the greatest capacity for preservation, whereas erosional surfaces adversely affect cultural deposits. The cherty inclusions of the limestone bedrock are another attractive resource for such stone tool-making human inhabitants as those who lived in central Texas.

2.2 Soils

Soil formation is a function of local climate, biology, parent material, topography, and time, and so it is clearly tied to environment as defined above. Accordingly, soil can serve as a proxy for environmental conditions of the present and past. Defining soils as they are relevant to investigations of cultural resources, however, is useful because of how they are characterized and mapped by the Natural Resources Conservation Service, formerly Soil Conservation Service. Though agricultural in nature, county soil surveys provide a description of soil characteristics, including depth, color, inclusions, etc., which can be used to elucidate site formation processes.

As described by Taylor et al. (1991), the soil units found in the project site are Tinn and Frio (Tf) and Branyon Clay (HtB). Tinn and Frio soils are deep and cover flood plains, whereas Branyon clays are relatively shallower and situated atop terrace treads.

2.3 Vegetation and Wildlife

Flora and fauna of the ecotone include species that are representative of both the Edwards Plateau and the South Texas Plains as well as endemic species (Blair 1950). Major game species of the region include whitetail deer, javelina, and several species of bird, and antelope and bison were periodically present further back in history. The region's natural vegetation is typically a grassland-woodland-forest mosaic (Ellis et al. 1995).

2.4 Current and Past Climates

The project site in San Antonio has a climate classified as Humid subtropical (Cfa), but it is found near the current transition from Subtropical Subhumid to Subtropical Steppe, with diminishing precipitation from east to west (Rubel and Kottek 2010). The location typically has long hot summers and mild winters, and precipitation is bimodal with peaks in the late spring and early fall.

Because most cultural resources originate in the period of time between the Last Glacial Maximum and the colonization of the western hemisphere by emigrants of the European continent, it is necessary to consider past climates, too. Since past climatic conditions cannot be observed (i.e., measurements did not begin in this region until the late 19th century), we rely on proxy data to reconstruct past conditions. Proxy data do not directly reflect past environments, but they can be used to infer conditions under which they form (Ellis et al. 1995).

Based on fossil pollens (Bousman 1998), phytoliths (Joines 2005), microfaunal remains (Toomey 1993), soil chemistry (Nordt et al. 2002), and speleothems (Musgrove et al. 2001), it is pretty clear that climatic conditions of the past approximately 20,000 years have steadily become warmer and increasingly arid with several punctuated episodes. Transition from the Pleistocene to the Holocene at approximately 11,700 years ago was a marked increase in warmth and aridity. In addition to increased warmth and aridity, the Holocene is characterized by increasing seasonal variation of temperatures and precipitation. Peak warmth and aridity occurred during the mid- to

late-Holocene Altithermal. Following the Altithermal, conditions similar to the early-Holocene returned, but warmth and aridity increase to the present.

3.0 CULTURAL HISTORY

Generally, the cultural chronology of Central Texas can be divided into two periods, Prehistoric and Historic. The boundary between the two periods is marked by the introduction of Europeans into the Western Hemisphere. The following description of Central Texas' cultural history is a gross compilation of a vast suite of data and interpretations (cf. Collins 1995, 2004).

3.1 Prehistoric

The Prehistoric people of Central Texas were primarily hunter-gatherers. Through the last 75-plus years of archaeological research in the region, identifiable and repeated patterns in artifact assemblages have indicated major shifts in subsistence strategies and technology through time. As a result, the Prehistoric period now has three subdivisions: Paleoindian, Archaic, and Late Prehistoric.

The Paleoindian period (ca. 12,500-8800 years ago) includes the earliest human occupation of North America, which extends back into the late Pleistocene. During this period of time, people hunted large game, but they generally had a broad diet and consumed much of what they could. This included small game and aquatic creatures all the way up to mega fauna that went extinct with the close of the Pleistocene (i.e., mammoth, mastodon, bison, horse, camel, etc.). Technological traditions further subdivide the Paleoindian period into Early and Late.

The Archaic period (ca. 8800-1250 years ago) of Central Texas was the longest period in prehistory, and it is generally marked by the introduction of hot rock cooking in addition to the proliferation of a wide variety of diagnostic projectile points. Cooking with fire-heated rocks developed with increased reliance on plant foods, which may have been a response to diminishing game resources and ultimately climatic change/variation. This is not to say that human agency, and ultimately culture, did not play an important role in the shift of economic and subsistence strategies. The Archaic period is subdivided into Early-, Middle-, and Late-Archaic periods, each with a slight variation in response to cultural shifts and ambient conditions.

The Late Prehistoric (ca. 1250-250 years ago) was a relatively brief period, but it was marked by a shift in weapon technology: the introduction of the bow-and-arrow. Like the Archaic, the Late Prehistoric people utilized hot rock cooking to process plants to edible forms. There also appeared to be increasing contact among groups, which resulted in increased trade of materials and evident competition over resources.

3.2 Historic

Sometimes referred to as Protohistoric, Spanish Entradas, or expeditions, mark the onset of western influence in the New World. These explorations effectively scouted the new land and resulted in the settlement and establishment of missions spread throughout what has become northern Mexico and Texas. Through the Historic period, European populations and influence steadily increased as native populations steadily diminished.

San Antonio's history is rich and includes significant contributions from indigenous native people, European colonists, and immigrants from other regions of North America (Fehrenbach 2010). Spanish missions were the first European settlements in the area, and they provided infrastructure for the growing city throughout the eighteenth and into the nineteenth centuries. The city's population grew rapidly through the nineteenth century as Mexicans, Germans, and American colonists were drawn to the location and as an age of industry and modernization was ushered by railroads. Downtown San Antonio, the center of the city and the project location, has an especially rich record of history (and prehistory), and details as they pertain to the current APEs will be discussed below.

3.3 Previous Investigations and Nearby Sites and Properties

A review of the Texas Archeological Sites Atlas database indicates that each proposed trench is situated in a National Register of Historic Places-listed historic district: the proposed location on Pancoast Street is at the northern extent of the King William Historic District, and the proposed location on South Presa is at the western extent of the La Villita Historic District. Addtionally, the proposed trench on South Presa Street is situated along the edge of the recorded archaeological site, 41BX303. Site 41BX303 was recorded as a historic site composed of standing structures, foundations, and subterranean features, including cistern, latrine, and trash pit. The site was investigated and cleared under Antiquities Permit (No. 101) prior to the construction of the hotel that currently occupies the location.

4.0 METHODS

Methods described below were employed to identify and characterize cultural resources present within the project site to the extent practicable utilizing current field methods.

4.1 Archaeological Monitoring

Review of the Atlas was performed to search for known cultural resources in proximity to the project site. Historical maps and aerial images that include the project site were reviewed for any evidence that the location contained buildings that may be considered historic (greater than 50 years old).

At the request of COSA OHP, a Terracon archaeologist oversaw all ground disturbing activities conducted for the installation of two fiber-optic lines and boxes. If significant features or cultural materials were encountered through the course of excavation, then the Terracon archaeologist was prepared to stop work to alert the appropriate authorities. As the ground disturbing activities took place in the nighttime hours to avoid causing disturbances to pedestrian and vehicular traffic, the COSA Assistant City Archaeologist, Matthew Elverson, was on-site for much of the work.

Select samples of excavated sediment were passed through ¼-inch hardware mesh, and the remaining sediment was troweled through for evidence of cultural materials. The excavations were documented by field notes/forms and photographs.

5.0 RESULTS

5.1 Archaeological Monitoring

Archaeological monitoring of the small hand-excavated trenches clearly showed that all of the sediment had previously been disturbed by construction and utility line installation. Trench 1, exposed a sediment profile of a thin and disturbed topsoil on top of chalky, gravelly fill from top to bottom, as deep as approximately 65 centimeters below surface. On the sidewalk side of the small pit, an irrigation line was encountered approximately 25 centimeters below the surface; a small hand-dug horizontal bore beneath the sidewalk was excavated to run the utility line. Sediment characteristics across the trench were consistently mixed. A small piece of wood was encountered in the course of excavation, but its age and association are likely near-modern and disturbed. Given the amount of relatively large trees in the vicinity, the wood may have belonged to a former root. No cultural materials were observed.

To the west down Cesar E. Chavez Boulevard, the small hand-excavated trench on the east side of Pancoast at the base of an existing utility pole, Trench 2, revealed a similar sediment profile: thin topsoil atop mixed chalky, gravelly clay sediment to depth. This small excavation was situated between a utility pole, a street sign, as well as an ornamental tree planted along the street. A small piece of colorless glass, a small brown bottle glass fragment, and a small piece of unidentifiable rusted metal. While these artifacts could be historic-age, they could also be modern and were recovered from a disturbed context.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Under guidance and jurisdiction of the COSA Office of Historic Preservation and Assistant City Archaeologist, as well as the THC, archaeological monitoring of two hand-excavated trenches was carried out in Downtown San Antonio. The general location and specific APE are relatively rich in history, but development of the Downtown area has impacted the trench locations.

Trench 1 showed clearly mixed sediment stratigraphy, and similarly, Trench 2 yielded few cultural materials in sediment that was clearly mixed. As a result, no new sites were identified and no existing sites were modified. The project proceeded as planned without having affects on recorded or previously unrecorded historic properties or cultural resources, and fiber-optic lines were installed without delay.

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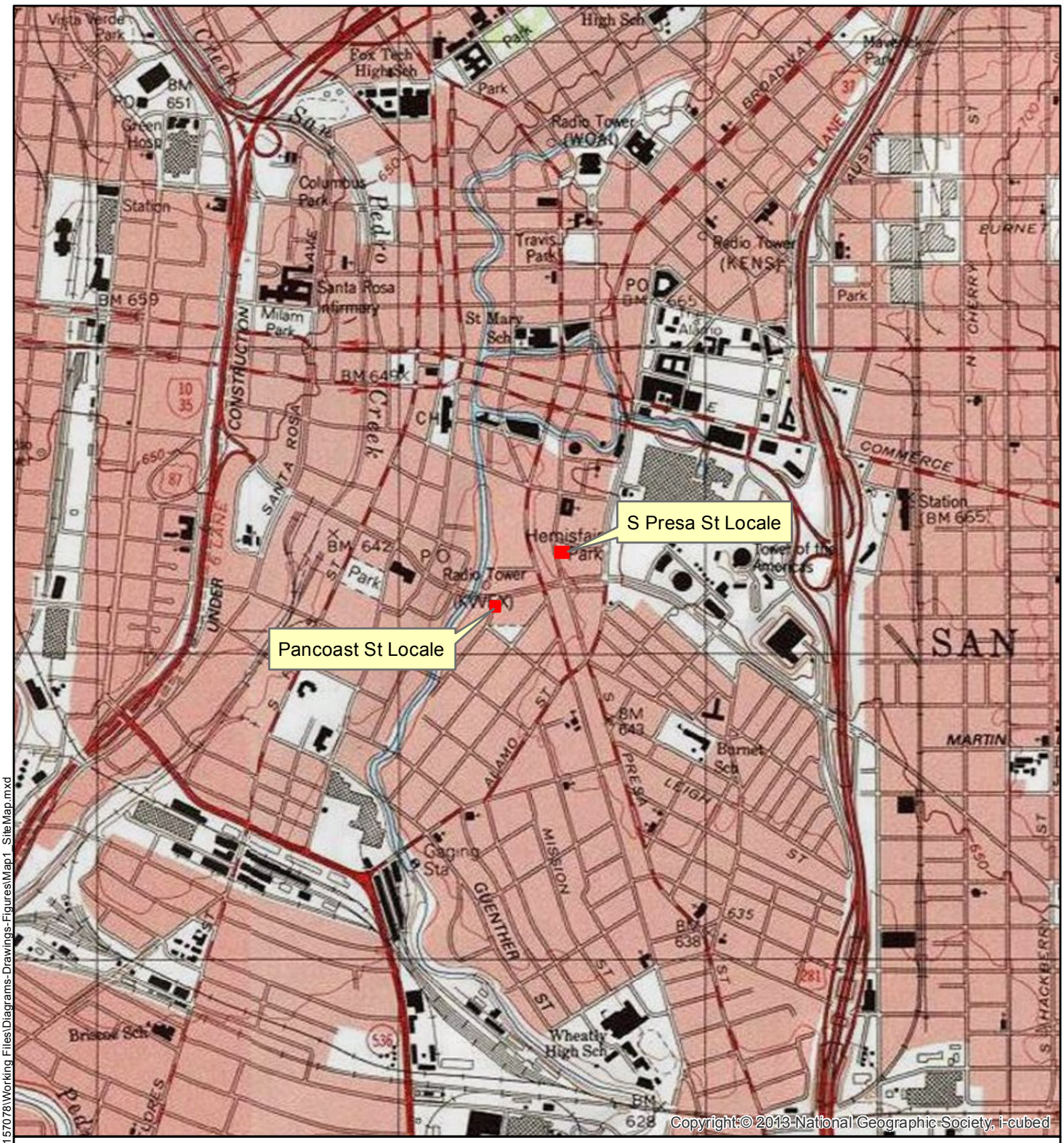

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Legend

- Area of Potential Effect

1,500 750 0 1,500 Feet

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Drawn By:	TMJ
Checked By:	DMY
Approved By:	DMY
Project No.	90157078
Scale:	1 in = 1,500 ft
TBPE Firm No.	F-3272
Date:	August 2015

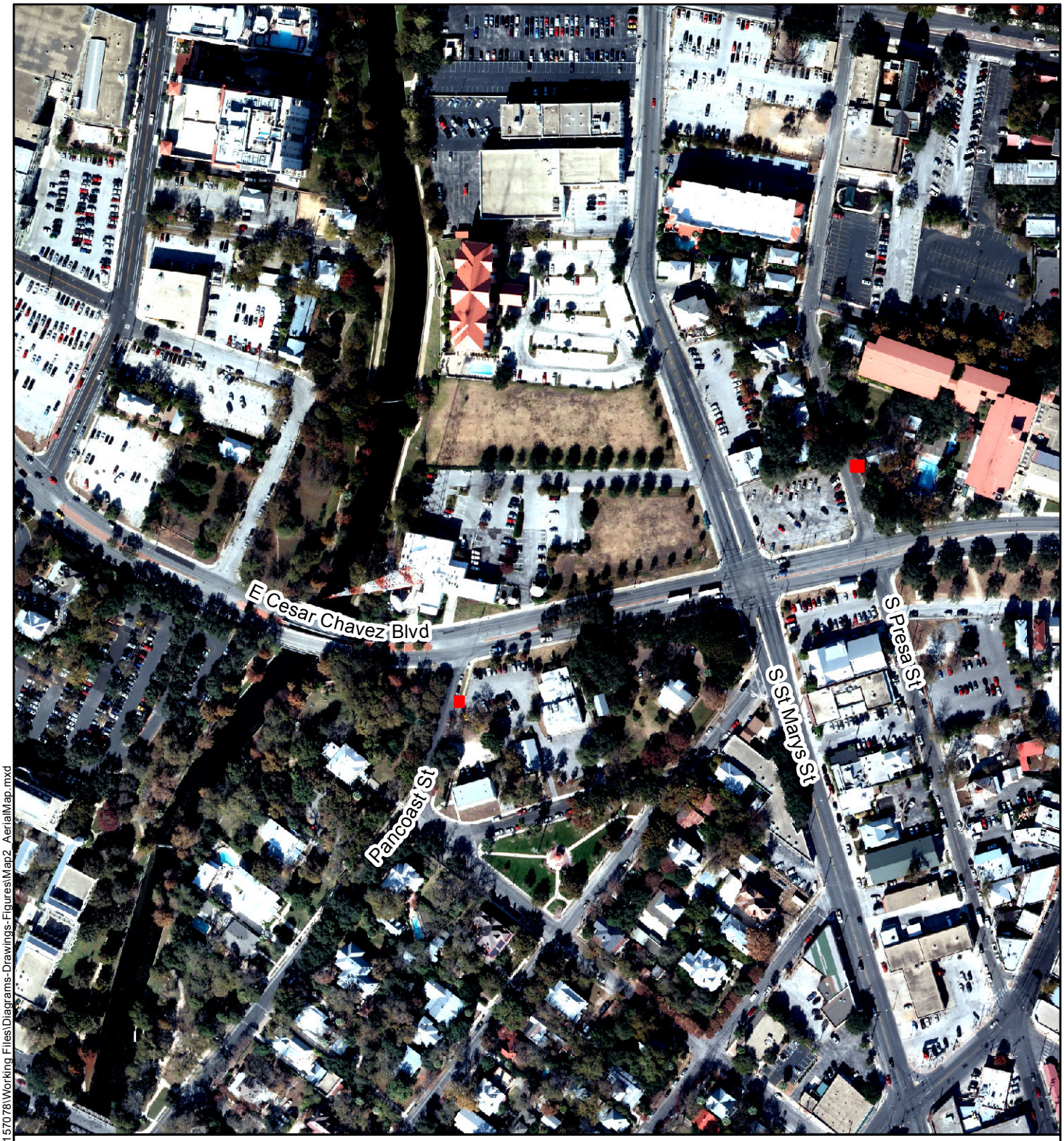
Terracon
Consulting Engineers & Scientists
6911 Blanco Road San Antonio, TX 78216
PH (210) 641-2112 Fax (210) 641-2124

APE on USGS Quadrangles

E. Cesar Chavez Archaeological Monitoring
E. Cesar Chavez at Presa and Pancoast St
San Antonio, Bexar County, Texas

Map

1



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- Area of Potential Effect

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Drawn By:	TMJ
Checked By:	DMY
Approved By:	DMY

Project No.	90157078
Scale:	1 in = 250 ft
TBPE Firm No.	F-3272
Date:	February 2016

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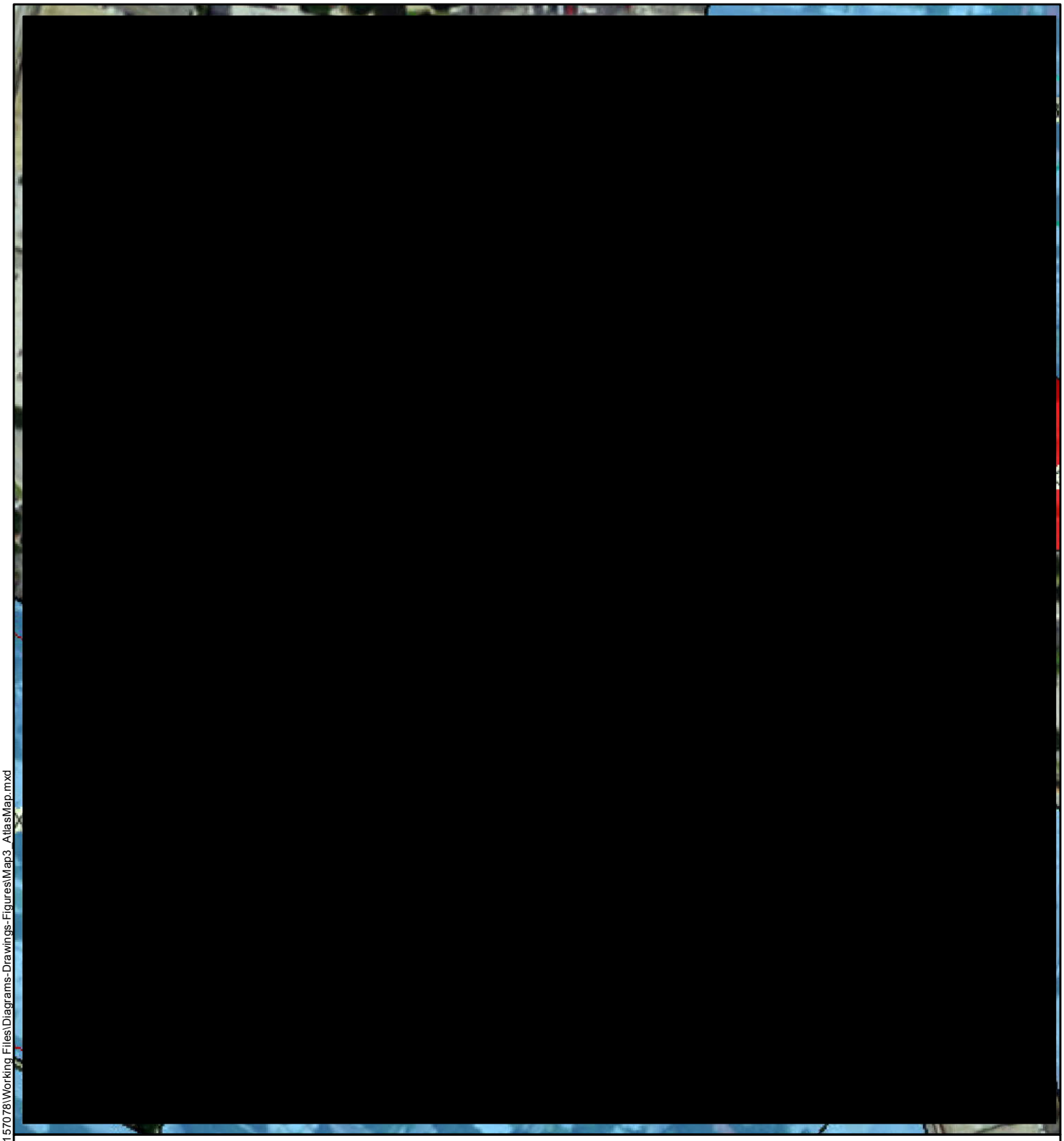
APE on Aerial Imagery

E. Cesar Chavez Archaeological Monitoring
E. Cesar Chavez at Presa and Pancoast St
San Antonio, Bexar County, Texas

Map

2



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Area of Potential Effect

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Feet

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Checked By:	DMY
Approved By:	DMY
Project No.	90157078
Scale:	1 in = 250 ft
TBPE Firm No.	F-3272
Date:	February 2016

Terracon
Consulting Engineers & Scientists
6911 Blanco Road San Antonio, TX 78216
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APE with Archaeological Sites and Historic Properties

E. Cesar Chavez Archaeological Monitoring
E. Cesar Chavez at Presa and Pancoast St
San Antonio, Bexar County, Texas

Map

3

Project Name: Cesar Chavez Fiber-optic Installation Monitoring
Project No. 90157078
Photos Taken: March 2015

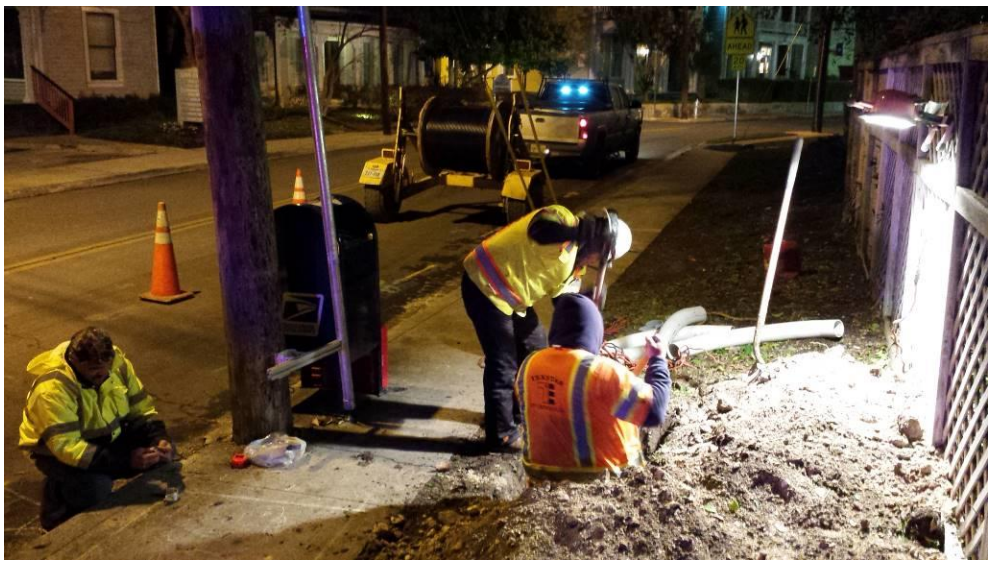

Photo #1: View north along South Presa with construction crew excavating Trench 1.

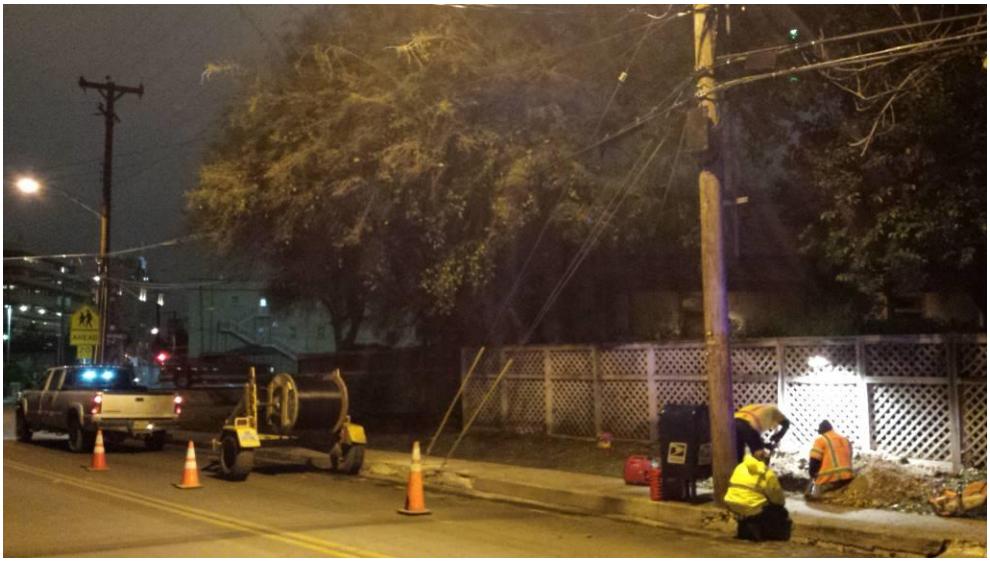

Photo #2: View northeast across South Presa towards Trench 1.

Photo #3: East profile exposure in Trench 1.

Photo #4: Westerly hand-excavated bore beneath sidewalk and irrigation line.

Photo #5: Piece of wood recovered from Trench 1.

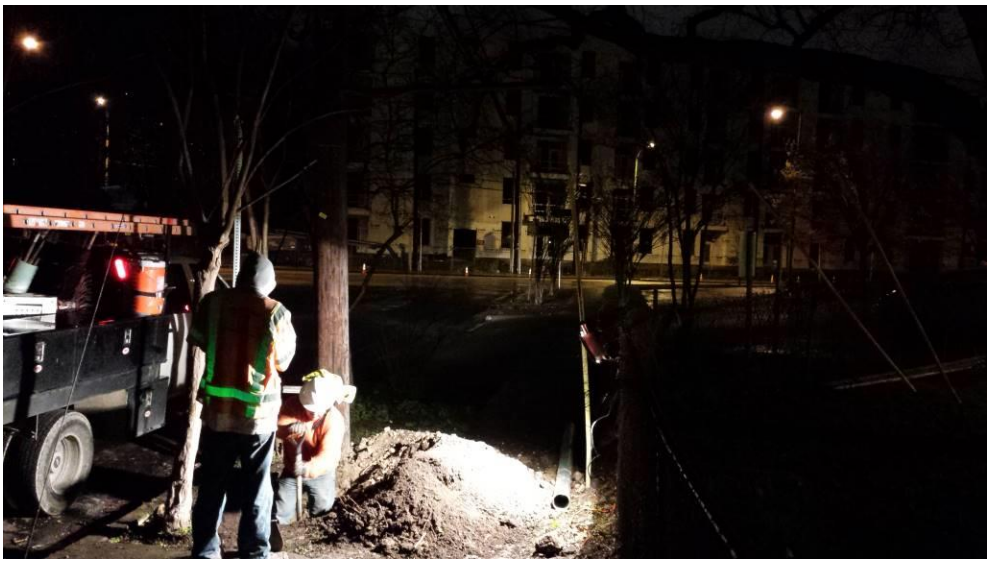

Photo #6: View north along Pancoast across excavation of Trench 2 towards Cesar Chavez Boulevard (lit area in background).

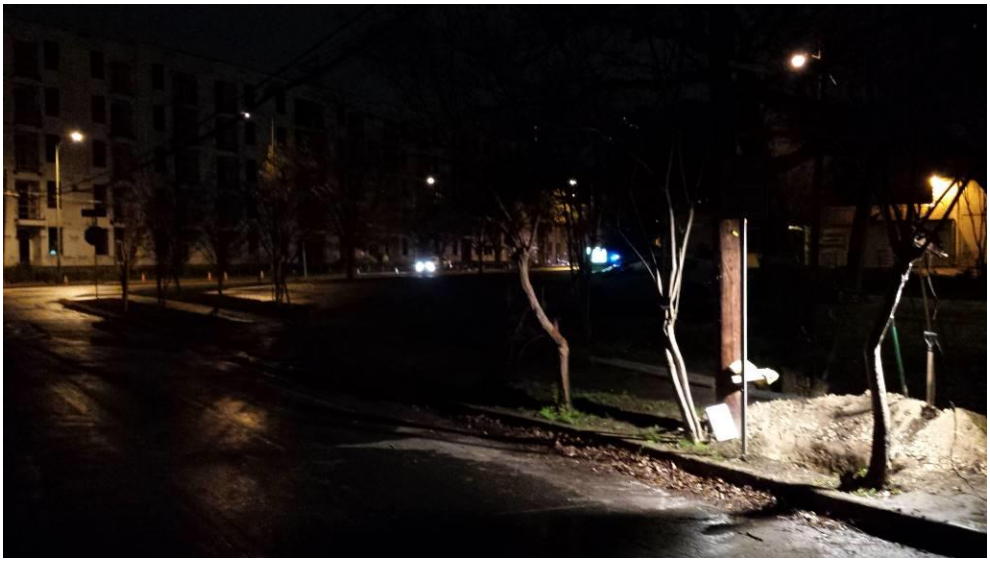

Photo #7: View northeast across Pancoast towards Trench 2 (foreground right) and Cesar Chavez Boulevard (background).

Photo #8: North and east profile exposures of Trench 2.

Photo #9: Southwest view of Trench 2 western and southern profile exposures.

Photo #10: Colorless glass, brown bottle glass, and metal fragment recovered from Trench 2.