



**US Army Corps  
of Engineers** ®  
Fort Worth District

# Public Notice

Subject: Section 408 Permission for the San Pedro Creek  
Improvements Project

Date: November 7, 2016

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## **Purpose**

The purpose of this public notice is to inform you of a proposed project in which you might be interested. It is also to solicit your comments and information to better enable us to make a reasonable decision on factors affecting the public interest.

## **Section 408**

Under Section 14 of the Rivers and Harbors Act of 1899, the U.S. Army Corps of Engineers (USACE) has the authority to grant permission to alter federally authorized civil works projects if the proposed action would not be injurious to the public interest and would not impair the usefulness of the project. This is codified in Title 33 United States Code (USC) Section 408 (Section 408). A Section 408 permission is a federal action and subject to the National Environmental Policy Act (NEPA) and other environmental laws, executive orders, regulations, and policies.

## **Section 106**

Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires federal agencies to take into account the effects of their undertakings on historic properties. The federal agency, together with the State Historic Preservation Office (SHPO), assesses whether there would be an adverse effect on historic properties. The federal agency consults to resolve adverse effects with the SHPO, Indian Tribes, permit applicants, local governments, and the public to avoid, minimize, or mitigate the adverse effects.

## **Contact**

For environmental questions, please contact Jason Story, Environmental Resources Specialist, USACE Fort Worth District, at 817-886-1852. Please submit all public comments to [jason.e.story@usace.army.mil](mailto:jason.e.story@usace.army.mil)

For cultural resources questions, please contact Joseph Murphey, Historic Architect, USACE Fort Worth District, at 817-886-1722. Please submit all public comments to [joseph.s.murphey@usace.army.mil](mailto:joseph.s.murphey@usace.army.mil)

## PUBLIC NOTICE

### U.S. ARMY CORPS OF ENGINEERS, FORT WORTH DISTRICT

**SUBJECT:** Request for Section 408 permission to alter a U.S. Army Corps of Engineers (USACE) federally authorized civil works project by means of the San Pedro Creek Improvements Project (SPCIP), which is to be located on approximately 14 acres of land in the City of San Antonio, Bexar County, Texas.

**APPLICANT/REQUESTER:**

San Antonio River Authority  
100 E. Guenther Street  
San Antonio, Texas 78204

**APPLICATION NUMBER:** SWF-2015-00281

**DATE ISSUED:** November 7, 2016

**LOCATION:** The Proposed Action, located in Bexar County, Texas, within the USACE Fort Worth District, involves alterations to San Pedro Creek, which is part of the San Antonio River Channel Improvement Project a USACE federally authorized civil works project that requires 33 USC Section 408 (Section 408) compliance. San Pedro Creek is west of the downtown area of the City of San Antonio in Bexar County, Texas (see Figure 1). The Proposed Action area is a 1.4-mile segment of the San Pedro Creek from the San Pedro tunnel inlet (at the Interstate Highway [IH] -35/IH-10 interchange between Camaron and North Santa Rosa streets) south to Camp Street, approximately 1,400 feet upstream from the confluence with Alazan Creek.

**OTHER AGENCY AUTHORIZATIONS:** This project also may require a permit under Section 404 of the Clean Water Act, which requires a separate authorization. For questions concerning Section 404 of the Clean Water Act or any other Regulatory Program permits please contact the Fort Worth District Regulatory Division at (817) 886-1731 or visit their website at <http://www.swf.usace.army.mil/Missions/Regulatory/>

**Project Purpose:** Creation of a linear park below the current grade to facilitate the construction of mostly uninterrupted lower trails (paseos) parallel to the creek underneath the bridges, and upper trails and park features to connect the surrounding community to the linear park and improve the pedestrian and vehicular crossings.

**Project Need:** A deficiency of linear pedestrian access and perpendicular vehicular crossings that impede the parallel flow of people walking along a 1.4-mile section of San Pedro Creek.

**Project Benefits:** Increased channel capacity for flood control within the excavated linear park, ecosystem restoration, and economic development.

**PROJECT DESCRIPTION:** The Proposed Action would implement the SPCIP on a 1.4-mile stretch of San Pedro Creek to create a linear park with greater public access and use of the area around the creek, and to modify the creek channel to increase its capacity to operate

effectively for flood control (see Figure 2). The SPCIP would require acquisition of some form of real-estate instrument on 59 publicly and privately owned parcels within the Proposed Action area. The type of property rights transfer would vary and could include fee simple, deed without warranty, public joint use agreements, and several types of easements. The method of acquisition would be handled on a case-by-case basis.

### Linear Park

The linear park would include approximately 3.6 miles of bi-level (high and low) pedestrian walkways or paseos as well as connecting ramps and sidewalks. Approximately 4.4 acres would be vegetated with native plant species, native trees and shrubs would be planted, which would provide approximately 8 acres of new shade canopy (at maturity) and stabilize the creek banks.

Components of the linear park include: stage area and amphitheater seating on both sides of the creek immediately downstream of West Houston Street and adjacent to the Alameda Theater; informal entertainment venues for performance and assembly at the Commerce Street Sunken Garden and “The Lawn” between Dolorosa and West Nueva streets; public restrooms at the amphitheater seating and stage area; water features at the inlet structure, the west bank wall between West Travis and West Houston street bridges, the amphitheater seating and stage area, and the Sunken Garden; and other amenities including pocket parks, plazas, terraced seating, and pet waste disposal stations along the high bank paseo.

The following actions would be taken for bridges crossing San Pedro Creek: seven new City of San Antonio vehicular/pedestrian bridges would be constructed, five existing vehicular/pedestrian bridges would be rehabilitated, and six new pedestrian bridges would be built.

Utilities, such as water, sewer, storm drains, electricity, natural gas, and telecommunications, would need to be relocated. Some of these utilities extend outside of the limits of the Proposed Action area and would be reinstalled on City San Antonio and Bexar County-owned property or other right-of-way. The utility relocations would occur in previously disturbed areas such as roads, parking lots, and other rights-of-way; therefore, few resource impacts are anticipated. As often as it is feasible from a safety and practicality point, multiple utility lines would be installed into the same trench or boring location to reduce the impact of these activities within the project limits.

### Flood Control Modifications

The primary proposed channel modifications include widening and deepening 1.4 miles of the San Pedro Creek channel to increase the creek’s drainage capacity, which would remove approximately 24 acres of the City of San Antonio (including the majority of adjacent structures) from the corrected floodplain (recalculation of Federal Emergency Management Agency [FEMA] 100-year floodplain based on correct data) (see Figure 3). A net total of 3 acres would become new impervious surface as a result of converting current maintained non-native grasses (i.e., low quality vegetation) and bare ground into Proposed Action components such as paseos, additional channel width and walls, and other improvements.

The project design would enhance existing flow conditions of San Pedro Creek within the Proposed Action area while maintaining flows downstream. The channel surface would

increase by approximately 1.4 acres, allowing more of the historic flows that currently are diverted into the San Pedro tunnel system to flow down San Pedro Creek. The Proposed Action would provide flow on a continual basis through the use of pumps to recirculate water between the tunnel inlet and outlet. To ensure the planned flow rate a supplemental supply of recycled water would be provided by the City of San Antonio via a pipeline from the San Antonio Water System Brackenridge Park facility.

Channel widening and deepening would occur through excavation and removal of soil from the creek banks and bottom and installation of crest gates. Excavation of the creek banks and bottom would remove approximately 173,820 cubic yards (roughly 225,965 tons) of soil that would be hauled off-site to an approved landfill. Two crest gates would be installed to increase the surface area and water depth in the creek channel. In addition to flood control benefits, the new crest gates would provide additional aquatic habitat due to the increased surface area. Approximately 0.8 acres of existing box culverts would be opened up to expose the creek between West Cesar Chavez Boulevard and El Paso Street and north of Camp Street. The overall creek corridor (i.e., banks) would be widened by an average of approximately 50 feet to allow for plantings for both aesthetic and water quality (temperature) purposes.

#### Hydrologic and Hydraulic Changes

The construction of the proposed SPCIP from the tunnel inlet to Camp Street would result in the following hydrologic and hydraulic changes:

- There would be no impacts on the hydraulic capacity of the tunnel. With the increased drainage conveyance capacity, the Proposed Action would lower the tailwater elevation at the tunnel outlet, allowing the tunnel to convey additional flow.
- Hydrologic flows would be increased through the reach of San Pedro Creek within the Proposed Action area in high and low flow events due to improvement of the conveyance capacity from the tunnel inlet to Camp Street.
- There would be minor (+/- 0.5 feet per second) fluctuations to channel velocities downstream of Camp Street (which is outside the bounds of the Proposed Action area) as a result of the increased volume of flow, the increase or decrease would occur within the existing stable and vegetated portion of the San Pedro Creek channel.
- Water surface elevations would be decreased from the tunnel inlet to the tunnel outlet and flows would be completely contained in the Proposed Action area upstream of West Cesar Chavez Boulevard.
- Due to the increase in flows caused by the conveyance improvements, stormwater flows would not be completely contained in the channel downstream of the tunnel outlet (the Proposed action would remove 24 of the 30 acres currently in the corrected floodplain), but would not cause significant changes to the floodplain. Water surface elevations from Guadalupe to Camp streets would be lower than the existing conditions models, but not fully contained in the proposed channel.
- The changes in flow noted above are related to the 100-year ultimate flow conditions, whereas lower water surfaces would occur during a 100-year existing conditions hydrologic event for the Proposed Action conditions.

### Construction Phasing

Construction of the Proposed Action would start in 2017 and end in approximately 2021. Construction would be phased so that work activities would occur in the portions of the Proposed Action area from the San Pedro tunnel inlet to West Cesar Chavez Boulevard and from Guadalupe to Camp streets from 2017 to 2019. Construction on the West Cesar Chavez Boulevard to Guadalupe Street segment would likely start after 2020 and continue for 1.5 years.

### Resource Conservation Measures

The following resource conservation measures would be implemented as part of the Proposed Action to avoid or minimize potential effects on environmental resources.

1. Before the start of construction, the Proposed Action area (i.e., limit of construction) would be clearly marked with flagging, fencing, stakes, or lath.
2. The contractor would survey for all pre-existing utilities in the Proposed Action area to avoid or minimize temporary interruption of utility services.
3. All disturbed soils would be immediately stabilized following the completion of work and replanted with native grass and shrub species based on the landscaping plan that is part of the proposed design. Before approval of the final design, the contractor would obtain City of San Antonio approval of a soil layering plan, seed mixes, planting/seeding, and monitoring methods proposed for use in revegetation. Noxious weeds would be controlled by hand weeding or herbicide application.
4. The contractor would implement measures to avoid, minimize, and mitigate for impacts on jurisdictional waters of the United States.
5. The contractor would implement measures identified in the Spill Prevention, Control, and Countermeasure (SPCC) Plan and Stormwater Pollution Prevention Plan (SWPPP) for the Proposed Action.
6. Hazardous wastes would be handled in accordance with applicable federal, state, and local regulations as well as the procedures identified in the Soil and Groundwater Management Plan for the Proposed Action. If an unknown or unidentified waste is encountered during construction, the City of San Antonio personnel would be notified and all construction in the area would stop until the hazardous situation is remedied. A Contingency Action Plan to handle spills of hazardous materials and petroleum products would be prepared before implementing the Proposed Action. The City of San Antonio would finalize the Contingency Action Plan upon final design approval of the proposed improvements, and all hazardous material control measures would be field adjusted for site conditions.
7. Erosion and sedimentation controls would be monitored and maintained during construction and for 12 months thereafter to ensure site stabilization. An Erosion and Sediment Control Plan would be prepared and implemented that would include best management practices (BMPs). The contractor would be required to use silt fences throughout the construction area wherever there is the potential for erosion. The City of San Antonio would finalize the Erosion and Sediment Control Plan upon final design

approval of the proposed improvements, and all erosion and sediment control measures would be field adjusted for site conditions.

8. Fugitive dust controls would be monitored and maintained during construction. A Fugitive Dust Control Plan would be prepared and implemented. The Fugitive Dust Control Plan would include BMPs that could include watering exposed soils, soil stockpiling, and soil stabilization. The City of San Antonio would finalize the Fugitive Dust Control Plan in concert with the Erosion and Sediment Control Plan upon final design approval of the proposed improvements, and all dust control measures would be field adjusted for site conditions.
9. The Proposed Action would comply with Section 4(b) of the Noise Control Act of 1972 (42 USC §§ 4901-4918), which directs federal agencies to comply with applicable federal, state, and local noise requirements with respect to the control and abatement of environmental noise.
10. Construction activities would comply with the City of San Antonio noise ordinance (i.e., San Antonio City Code: Section 21-52), which limits activities to between the hours of 6:00 a.m. and 10:00 p.m. on weekdays, except in the case of urgent necessity in the interest of public safety. For the Proposed Action, contractor activities would be limited to 6:30 a.m. to 8:00 p.m. during summer months (March 12–September 30); and 7:30 a.m. to 6:30 p.m. during winter months (October 1–March 11). Using the best available noise-control techniques (i.e., improved mufflers, equipment redesign, intake silencers, ducts, and engine enclosures and noise-attenuating shields or shrouds on all equipment and trucks) could mitigate noise impacts.
11. The contractor would implement the provisions contained in the Traffic Control Plan, to be prepared as part of the Proposed Action, in accordance with City of San Antonio requirements. Contractors would be responsible for providing and maintaining all barricades, warning signs, flashing lights and traffic control devices in conformance with Part VI of the Texas Manual on Uniform Traffic Control Devices. Once construction is complete, the contractor shall restore all items not specifically included in street reconstruction that are disturbed during installation of temporary traffic control to original or better condition.
12. Closure of traffic lanes and sidewalks along any public roadway would be restricted to the hours of 8:30 a.m. to 6:00 p.m. workdays to minimize the impact on traffic flows, unless approved otherwise by the City of San Antonio.

### Connected Actions

The Council on Environmental Quality regulations (40 CFR 1508.25) defines connected actions as those that are closely related and should therefore be discussed in the same impact assessment. The action connected to the Proposed Action assessed in this document are the four underground borings to be done to place telecommunications conduits. The borings would be placed beneath West Houston Street (+/- 34-inch diameter), West Commerce Street (+/- 27-inch), Dolorosa Street (+/- 27-inch diameter), and West Nueva Street (+/- 27-inch diameter). No bore casing material would be used, but any void space in the bore would be grouted following placement of the conduits. Borings would be at a depth of approximately 10 feet beneath the channel bottom as each one passes beneath San Pedro Creek, which would keep them

approximately 100 feet above the existing tunnel. These borings have been evaluated and approved by the Texas Historical Commission, which issued Antiquities Permit No. 7795 on September 23, 2016, for the Proposed Action.

**EXISTING CONDITIONS:** The topography of the area is nearly level to gently sloping. Much of San Pedro Creek evaluated within the Proposed Action area has been channelized with a concrete-lined bed and banks as one component of several integrated flood control improvements. There is no natural baseflow in the reach between the San Pedro Creek tunnel inlet near North Santa Rosa and Columbus streets and the San Pedro Creek tunnel outlet structure immediately north of Guadalupe Street because all upstream flows, including from the San Pedro springs and other urban runoff (e.g., sprinklers and condensate), are diverted into the flood control tunnel inlet at the upstream end of the Proposed Action area. Existing land use surrounding the Proposed Action area involves urban development patterned along a grid system of streets that spread out from the historic city center along regular blocks. Development is characteristic of an urban commercial district in transition with storefronts, hotels, parking lots, multi-family residential housing, tourist destinations, and undeveloped properties. The vegetation in the area contains native and non-native species, and includes fields, lawns, and other maintained and re-growth vegetation.

Currently, the reach of San Pedro Creek from the tunnel inlet to the tunnel outlet only flows as a result of artificial pumping of water stored in the tunnel, or in response to a stormwater runoff event from the local watershed downstream of the tunnel inlet. All flows from the upstream watershed are diverted into the tunnel, including baseflow and storm flows up to approximately a 100-year event. The existing flow conditions in the reach between the tunnel inlet and outlet, due to pumping, is about 7–10 cubic feet per second of water. Although the San Pedro springs upstream of the Proposed Action area once provided perennial flows, these springs often cease to flow due to pumping demands on the Edwards Aquifer.

From the tunnel inlet to about 20 feet downstream of North Santa Rosa Street, the existing concrete channel is about 15 feet wide with concrete walls about 2 feet high. From about 20 feet downstream of North Santa Rosa Street to about 270 feet upstream of West Martin Street, the existing channel is about 15 feet wide and composed primarily of fine sediment on the bottom with a masonry rock wall about 2 feet high on the left bank and soil on the right bank. From about 270 feet upstream of West Martin Street to about 130 feet upstream of West Travis Street, the existing channel is about 20 feet wide and has a concrete bottom with vertical masonry rock walls about 10 feet high. From about 130 feet upstream of West Travis Street to about 50 feet upstream of West Cesar Chavez Boulevard the upstream face of the West Nueva Street bridge, the existing channel is about 20 feet wide and has a concrete bottom with vertical masonry rock walls about 8–10 feet high. Between West Cesar Chavez Boulevard and El Paso Street the creek is confined with covered box culverts. From the upstream face of Guadalupe Street bridge to the downstream face of the Camp Street bridge, the existing channel is about 30 feet wide has a concrete bottom with vertical concrete walls about 12–15 feet high (see Figure 4).

**ALTERNATIVES:** The alternatives analyzed in the Environmental Assessment (EA) include the Proposed Action and No Action Alternative. The Proposed Action was described in the Project Description section. Under the No Action Alternative, the SPCIP would not be implemented and no proposed modifications or improvements would be made to San Pedro Creek. The risk of flooding along San Pedro Creek, especially in areas within the larger corrected 100-year

floodplain, would remain unchanged. Existing infrastructure, such as bridges, would be maintained as necessary to ensure continued operation and safety. A linear park and other recreation and public access features would not be constructed, and no aesthetic or vegetation improvements would be installed. The No Action Alternative would not meet the purpose of and need for the Proposed Action. The No Action Alternative serves as a baseline against which to evaluate the impacts of the Proposed Action.

An analysis of the alternatives, which assesses the impacts of the Proposed Action on 12 resource areas, has been completed by the applicant. The focused analysis of the EA evaluated the following resource areas: land use; aesthetics and visual resources; geology, topography, and soils; water resources; biological resources; cultural resources; air quality; hazardous and toxic materials; noise; environmental justice and socioeconomic issues; public safety; and transportation. The analysis found the Proposed Action to have no significant, direct and indirect impacts on the resources considered, and cumulative impacts would be less than significant.

**MITIGATION:** The Proposed Action includes implementation of the resource conservation measures previously identified; as a result, the Proposed Action would not result in significant environmental impacts.

**PUBLIC INTEREST REVIEW FACTORS:** This Section 408 request will be reviewed in accordance with 33 Code of Federal Regulations (CFR) 320-332; the Regulatory Program of the USACE; and other pertinent laws, regulations, and executive orders. Our evaluation will also follow the guidelines in Engineer Circular (EC) 1165-2-216 (Policy and Procedures Guidance for Processing Requests to Alter U.S. Army Corps of Engineers Civil Works Projects, Pursuant to 33 USC 408). The decision whether to issue permission will be based on an evaluation of the probable impact, including cumulative impact, of the proposed activity on the public interest. That decision will reflect the national concerns for both protection and utilization of important resources. The benefits that reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors that may be relevant to the proposal will be considered, including its cumulative effects. Among the factors addressed are conservation, economics, aesthetics, general environmental concerns, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, recreation, water quality, safety, considerations of property ownership, and, in general, the needs and welfare of the people.

The USACE is soliciting comments from the public; federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the USACE in determining whether to issue, issue with modifications or conditions, or deny permission for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors previously listed. Comments will be considered for the Final EA and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

**ENDANGERED, THREATENED, AND RARE SPECIES:** The USACE has reviewed the U.S. Fish and Wildlife Service's (USFWS) most recent published version of endangered and threatened species to determine if any may occur in the Proposed Action area. The Proposed



Action would be located in Bexar County, where there are 12 Endangered Species Act-listed threatened or endangered species (Grey Wolf, Red Wolf, San Marcos Salamander, Texas Blind Salamander, Black-capped Vireo, Golden-cheeked Warbler, Least Tern, Red Knot, Whooping Crane, Peck's Cave Amphipod, Fountain Darter, and Texas Wild-rice) and four candidate species (Golden Orb, Texas Fatmucket, Texas Pimpleback, and Bracted Twistflower) that have the potential to occur in the Proposed Action area . There are nine state-listed species and several more rare species with the potential to occur in Bexar County, Texas. The majority of these species listed by the USFWS and Texas Parks and Wildlife Department are not found in the Proposed Action area due to lack of habitat, resulting from narrowly defined habitat requirements, or their status as migratory in the area. San Antonio is on the extreme western edge of the whooping crane's (*Grus americana*) migration corridor, and the species is considered a rare migrant to Bexar County. The peregrine falcon (*Falco peregrinus*) and zone-tailed hawk (*Buteo albonotatus*) are the only state-listed species that have been observed in the broader Westside Creeks area.

No sightings of federally listed threatened or endangered species, or species of special concern have occurred or were recorded within the limits of the Proposed Action area during field reconnaissance. Many are endemic to the karstic topography and spring formations found in north and northwestern Bexar County. A considerable proportion of the San Pedro Creek watershed land surface is impervious within the Proposed Action area near San Antonio's downtown; thus, limiting the availability of suitable habitat for the listed species.

**SECTION 106 OF THE NATIONAL HISTORIC PRESERVATION ACT:** The USACE has jurisdiction over the channel of San Pedro Creek, Bexar County, Texas under Section 408. SARA is seeking permission from the USACE to initiate improvements related to flood control measures on San Pedro Creek. The USACE issuance of a Section 408 permission letter will result in implementation of SARA's improvements and constitutes an undertaking under Section 106 of the National Historic Preservation Act. SARA plans improvements to reconstruct and restore portions of San Pedro Creek between the tunnel inlet at Columbus Street and North Santa Rosa Street and its southern terminus at Camp Street. As result of the improvements, the bed of San Pedro Creek will be widened and deepened in some areas, portions of the banks will be modified, and the channel itself will be realigned to restore the creek to a more natural condition.

A letter report prepared under the direction of SARA regarding identification and evaluation of impacts resulting from the proposed improvements on cultural resources is Attachment 1 of this document. The USACE has determined the undertaking will have an Adverse Effect on the historic properties identified in the letter report. The Texas Historical Commission and other potential consulting parties have been notified and are beginning to consult on ways to avoid, minimize or mitigate the adverse effects of this undertaking. The back and forth communication to find ways to resolve adverse effects is known as the Section 106 review process.

The public has an important role in the Section 106 review process. The Advisory Council on Historic Preservation publishes a booklet, "A Citizen's Guide to Section 106 Review," available at: [www.achp.gov/docs/CitizenGuide.pdf](http://www.achp.gov/docs/CitizenGuide.pdf). The booklet explains the Section 106 process in detail and the role of input from the public.

The USACE invites the public to review the letter report (see Attachment 1) and provide comment within 30 days of this notice on ways to avoid, minimize or mitigate adverse effects of the undertaking. The USACE will share all public comments with the consulting parties to

consider in the consultation to resolve the adverse effects. The consultation will result in a Memorandum of Agreement that will stipulate the measures taken to avoid, minimize or mitigate the adverse effects.

**NATIONAL REGISTER OF HISTORIC PLACES:** The Area of Potential Effects (APE) for the Proposed Action consists of a 1.4-mile segment of the San Pedro Creek west of downtown San Antonio. The APE, which extends from the San Pedro tunnel inlet near North Santa Rosa Street at the north end of the Proposed Action area to its southern terminus at Camp Street, is 300 feet wide (150 feet from the centerline of the creek) to accommodate both direct and indirect effects that may result from visual impacts and temporary effects such as construction noise and vibration and the re-routing of traffic. It also includes any parcels for which acquisition of some form of real estate instrument may be required.

Forty historic resources within the APE are either already listed in the National Register of Historic Places (NRHP) or are potentially eligible for listing in the NRHP. Eight of the 14 bridges that span San Pedro Creek are also potentially eligible for listing in the NRHP. This includes the West Houston, West Nueva, Graham, and West Salinas Street bridges, as well as all of the remaining smaller "footbridges" that adjoin businesses on the banks of the creek. In addition, large segments of the retaining walls of the creek also are potentially eligible for listing in the NRHP. No known traditional cultural properties or American Indian sacred sites are known to occur within or near the Proposed Action area.

**SOLICITATION OF COMMENTS:** This public notice is being distributed to all known interested persons in order to assist in developing facts upon which a decision by the USACE may be based. For accuracy and completeness of the record, all data in support of or in opposition to the proposed work should be submitted in writing setting forth sufficient detail to furnish a clear understanding of the reasons for support or opposition.

**CLOSE OF COMMENT PERIOD:** All comments related to this public notice must reach this office on or before December 8, 2016 which is the close of the comment period. Comments and requests for additional information should be submitted to: Jason Story (environmental questions) (817) 886-1852, or email [jason.e.story@usace.army.mil](mailto:jason.e.story@usace.army.mil); or Joseph Murphey (cultural resources) 817-886-1722, or email [joseph.s.murphey@usace.army.mil](mailto:joseph.s.murphey@usace.army.mil).

Comments can be mailed to:

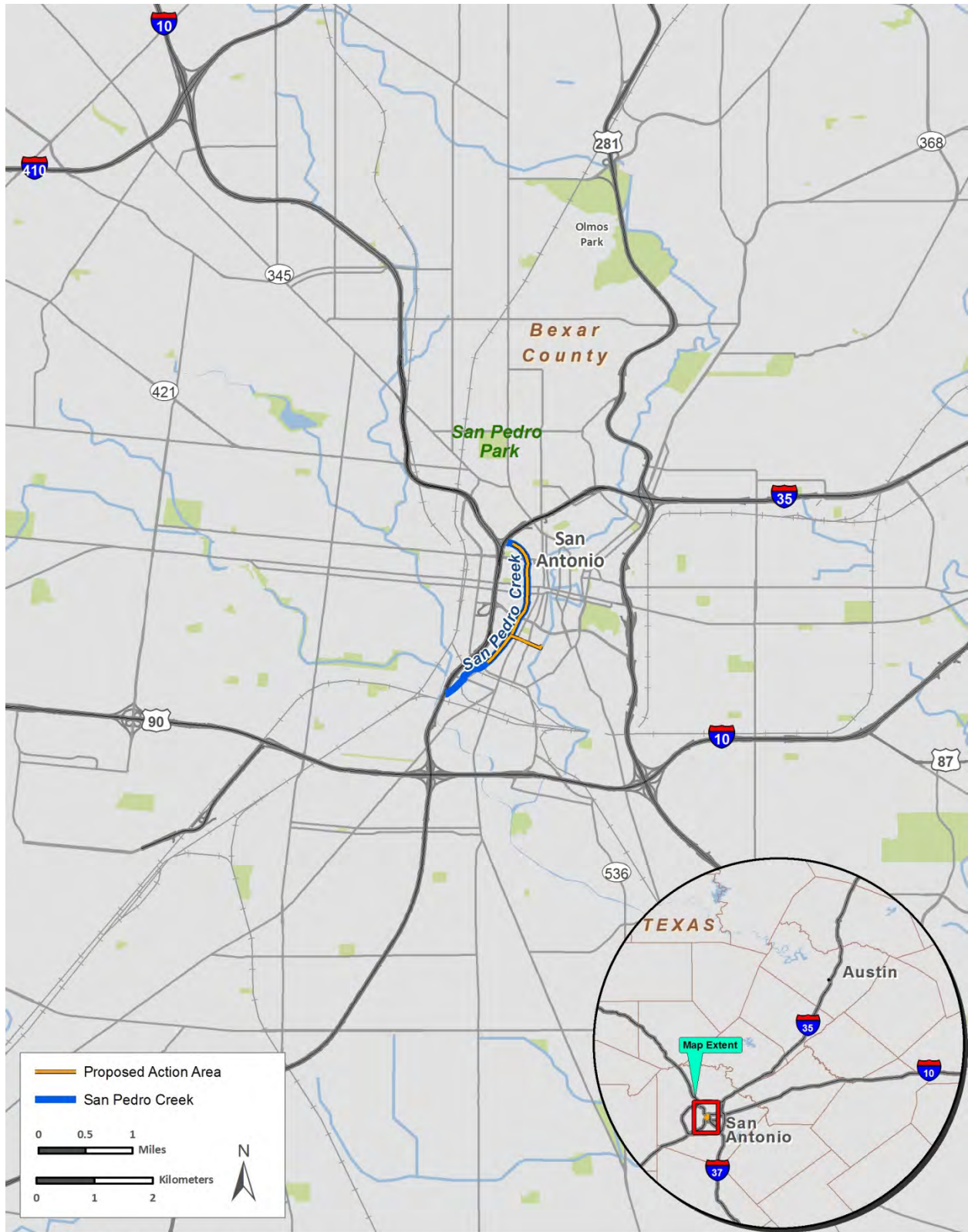
U.S. Army Corps of Engineers  
RPEC Environmental Compliance Branch  
Attention: San Pedro Creek Section 408 comments  
PO Box 17300  
Room 3A12  
Fort Worth, TX  
76102-0300

**FIGURES**

1. Regional Map of San Antonio
2. Proposed Action Area
3. FEMA and Corrected 100-Year Floodplains within the Proposed Action Area
4. Representative Views of San Pedro Creek within the Proposed Action Area

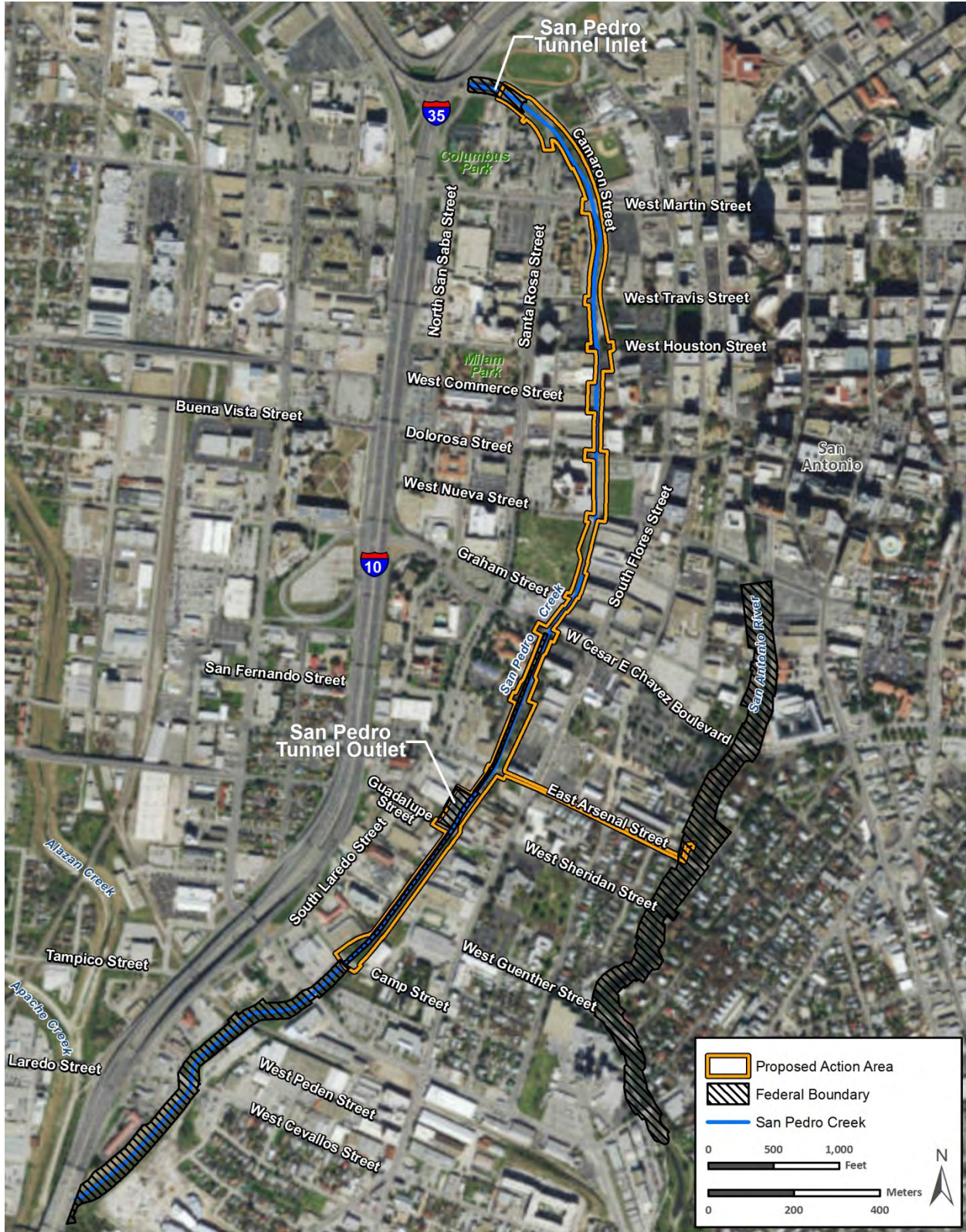
**ATTACHMENT**

1. Section 106 Letter Report



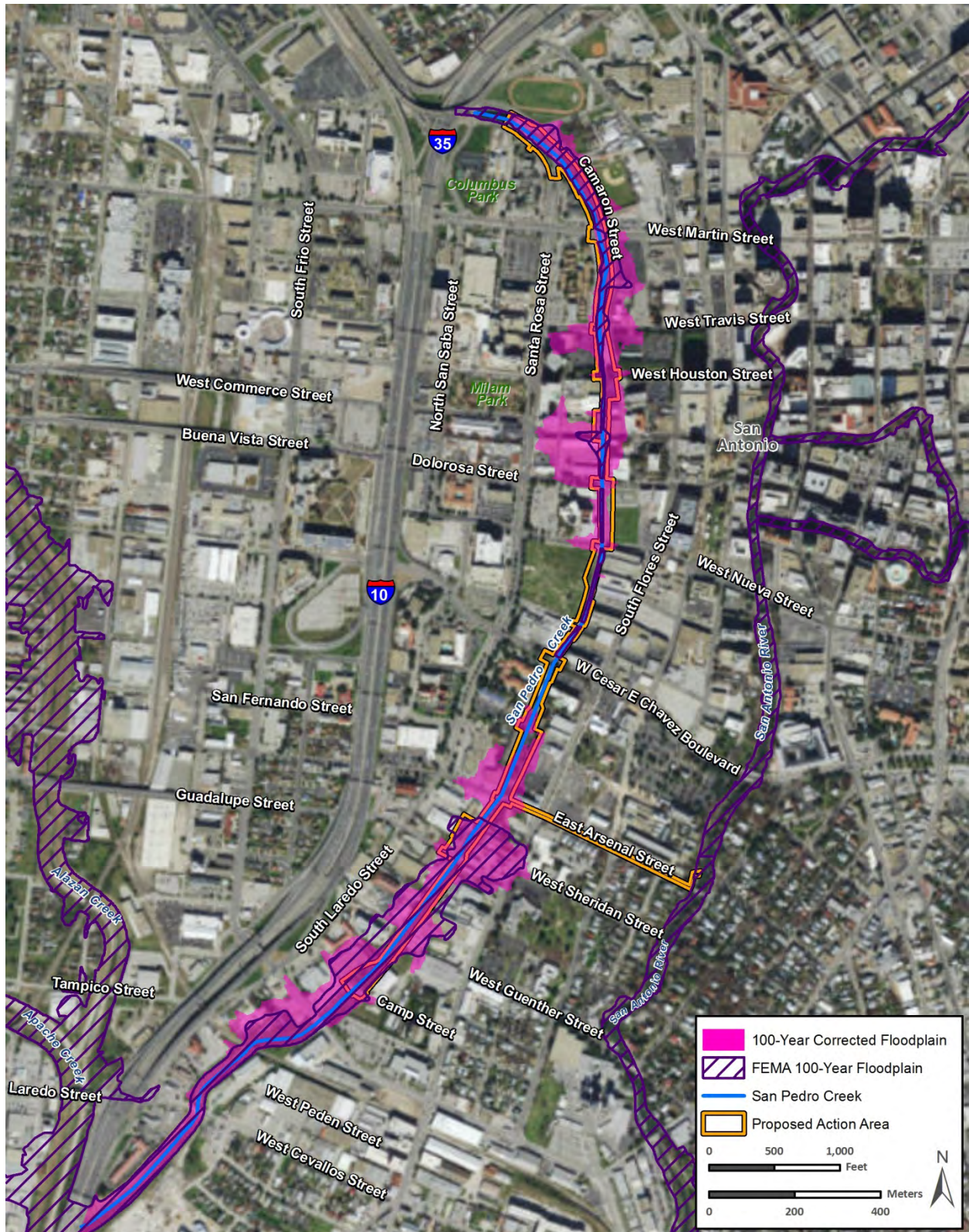
Sources: Basemap - ESRI and Proposed Action Area - HDR (2016).

**Figure 1. Regional Map of San Antonio**



Sources: Imagery - Texas Orthoimagery Program (2015) and Proposed Action Area - HDR (2016).  
 SPO\_1.2\_Proposed Action Area Figure\_00000\_00.mxd

**Figure 2. Proposed Action Area**



Sources: Imagery - Texas Orthoimagery Program (2015); Proposed Action Area - HDR (2016); 100-Year Corrected Floodplain - HDR (2013); 100-Year Floodplain - FEMA.

**Figure 3. FEMA and Corrected 100-Year Floodplains within the Proposed Action Area**



**Figure 4. Representative Views of San Pedro Creek within the Proposed Action Area**

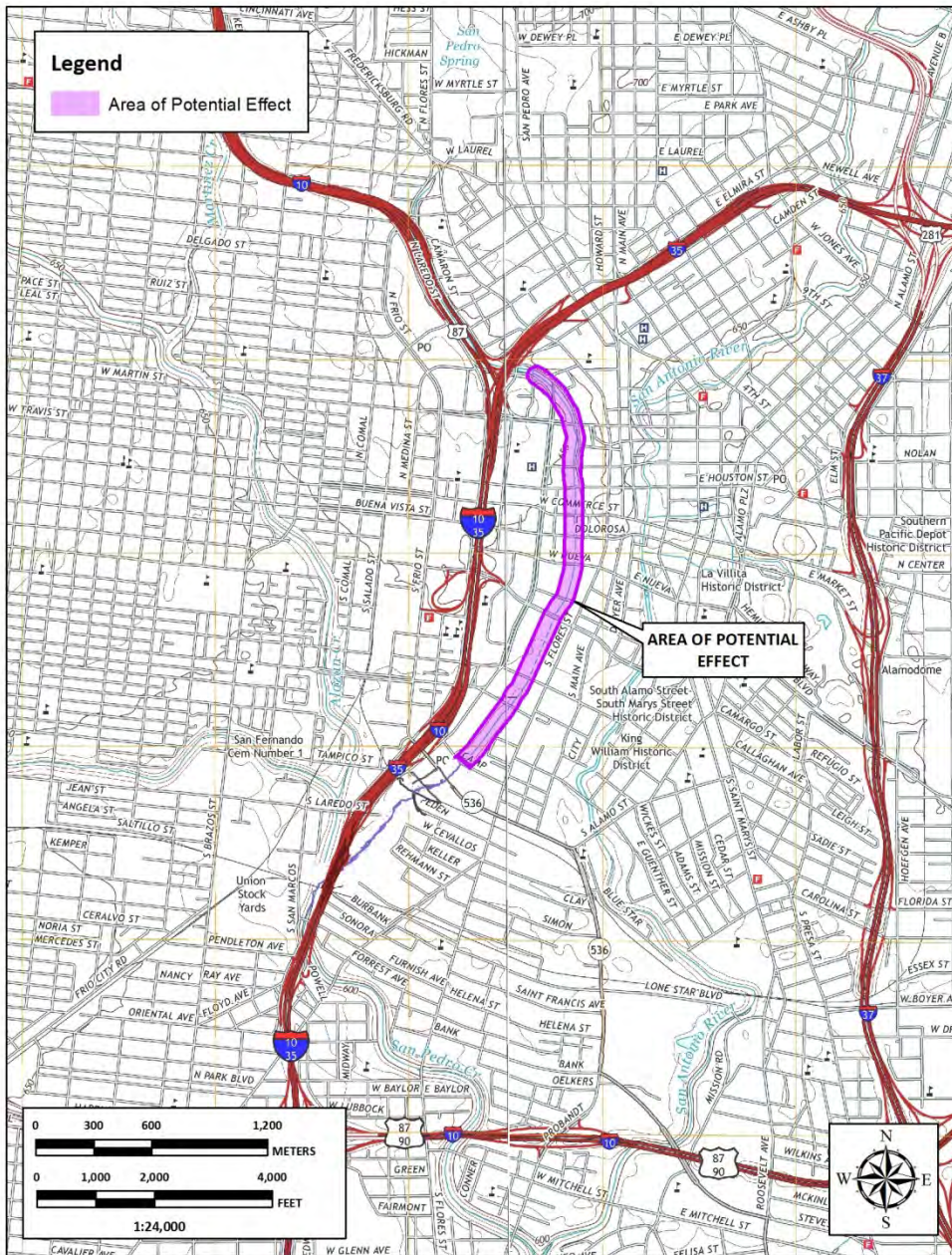
**Attachment 1: Section 106 Letter Report**



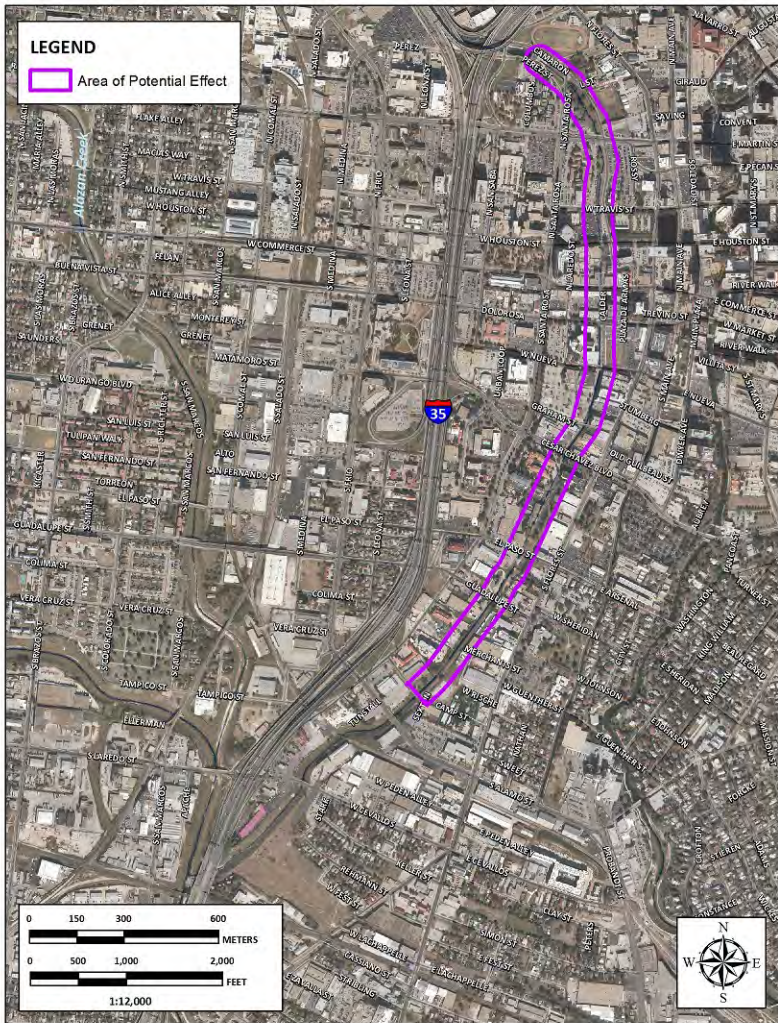
# Summary of Impacts to the Built Environment Section 408 San Pedro Creek Improvements Project October 7, 2016

## I. The Area of Potential Effect

The San Pedro Creek Improvements Project consists of the revitalization of a two-mile segment of the creek through downtown San Antonio. The project's limits run from the flood tunnel inlet near Santa Rosa Street at the north end of the project to its southern terminus at Camp Street (Figure 1 and 2).



**Figure 1.** The Area of Potential Effect (APE) on the combined San Antonio East and San Antonio West 7.5-minute USGS Quadrangle Maps. Note 300-foot wide APE boundary.



**Figure 2.** Aerial view of the Project Area showing 300-foot APE boundary.

The characters of the landscape surrounding the project area has changed over time. When San Antonio was established and for at least 100 years thereafter, the creek served as the boundary between the populated City and “Indian Territory” to the west. The lands between the San Antonio River and San Pedro Creek were used in agricultural production and animal husbandry throughout much of the 18<sup>th</sup> century. Beginning with the early 19<sup>th</sup> century, residential and industrial use of the area began to increase and today the region is an urban landscape dominated by commercial and residential use (Figures 3, 4, and 5).



**Figure 3.** Upper portion of San Pedro Creek and its vicinity. Note transition into commercial area south of W. Travis St.



**Figure 4.** Central portion of San Pedro Creek and its vicinity. Note the channel confined within retaining walls.



**Figure 5.** Southern portion of San Pedro Creek and its vicinity near its terminus at Camp Street.

Large multi-lane reinforced concrete bridges span the creek at each major cross-street (**Figure 6**) and smaller supply bridges reach across the narrow channel and abut business establishments allowing resupply of materials and goods (**Figure 7**).



**Figure 6.** Multi-lane vehicular and pedestrian bridge at W. Martin Street.



**Figure 7.** Small supply bridges in foreground near Dolorosa Street Bridge in background crossing San Pedro Creek.

Although there are no sidewalks along the project area, the banks of the creek can be accessed through the parking lots, and limited grass- and tree-lined areas along its nearly 2.0-mile long span. In addition, sidewalks lining the major bridges that span the creek do furnish opportunities to cross the creek at major cross-streets along the project limits (**Figure 6**). Nonetheless, currently no access to the creek bottom is available along the project area.

Viewing the creek from the surrounding area along the northern 1/3<sup>rd</sup> of its stretch from Santa Rosa Street to Houston Street does actually present a picture of a creek dominated-landscape with tree-lined grassy banks although the six- to eight-foot tall stone and concrete retaining walls are the first to be noted and immediately suggest a drainage feature rather than a naturally flowing creek (**Figure 8**). The drainage feature appearance is even more accentuated in the downtown section of the project area where the banks of the creek are lined with commercial establishments. Looking away from the creek channel toward the east and west, the northern 1/3<sup>rd</sup> of the project area is more open and commercial establishments are further removed from the immediate vicinity of the channel (**Figure 9**). Standing in the creek channel, however, one's view shed is limited by the six-foot tall retaining walls which run the entire length of the project area.



**Figure 8.** Upper reach of San Pedro Creek just north of Travis Street Bridge.



**Figure 9.** Channel of San Pedro Creek immediately behind the Spanish Governor’s Palace.

**II. The Identification of Historic Properties**

Between 2013 and the present, a standing structure survey and a pedestrian archaeological survey have been completed within the boundaries of the project. **Table 1** lists the technical reports that have been produced to complete the inventory of historic properties that may be impacted by the proposed undertaking.

**Table 1.** Listing of technical reports completed to date as part of the San Pedro Creek Improvements Project.

| Year of Publication | Report Title   | Author and Organization   |
|---------------------|--|---|
| 2013                | <i>A Cultural Resources Survey of the Proposed San Pedro Creek Restoration Project, San Antonio, Bexar County, Texas</i> | Clark, P., C. Murray, and S. Victor Raba Kistner Environmental Inc., San Antonio. |
| 2014                | <i>Standing Structure Survey of a Portion of San Pedro Creek, San Antonio, Bexar County, Texas.</i>                      | Tomka, S.A., A.L. Figueroa, L. Carbajal, E. Pople, and W. A.                      |



|      |   |  |
|------|---|--|
|      |   | Dupont<br>Technical Report, No. 51, Center<br>for Archaeological Research, The<br>University of Texas at San<br>Antonio. |
| 2014 | <i>Overview and Historic Context For Historic Resources<br/>Distributed Along The San Pedro Creek Improvements<br/>Project Corridor, San Antonio, Bexar County, Texas</i>                               | Tomka, S.A., K.Nichols, and Ch.<br>Murray; Raba Kistner<br>Environmental Inc., San Antonio.                              |
| 2016 | <i>Overview and Historic Context For Historic Resources<br/>Distributed Along The San Pedro Creek Improvements<br/>Project Corridor, San Antonio, Bexar County, Texas</i><br><br><i>Revised Version</i> | Tomka, S.A., K.Nichols, and Ch.<br>Murray; Raba Kistner<br>Environmental Inc., San Antonio.                              |

The goal of these projects was to complete inventories of prehistoric and historic cultural resources within the Area of Potential Effect (APE). In addition, the findings of these technical reports have been combined into a single Historic Context document that provided the broad historical background needed to properly evaluate the National Register of Historic Places eligibility of the potentially eligible properties for inclusion to the Register. This document was subsequently updated as a result of design changes to project parameters resulting from public comments and value engineering of design alternatives.

These technical reports and the Historic Context document have been submitted to the City of San Antonio’s Office of Historic Preservation for review under the City of San Antonio’s Preservation Ordinance (Article VI, Historic Preservation and Urban Design, City of San Antonio, Unified Development Code). They have also been submitted to the Texas Historical Commission’s Archaeology Division for review under the Antiquities Code of Texas and to the Historic Programs Section of the THC for review under Section 106 of the NHPA. The aforementioned offices have reviewed and concurred with the recommendations of each specific report.

As part of the planned undertaking, the San Antonio River Authority will retain a technical expert to monitor all construction activities associated with the planned project to ensure that hitherto undocumented cultural deposits are identified prior to impact and their eligibility for listing on the National Register is properly evaluated.

### III. Description of Affected Historic Properties

San Antonio was granted City status in 1811 (Arreola 2002). Over the next thirty-four years, the sovereignty of San Antonio changed three times. First, between 1820 and 1850 Texas sovereignty changed from Spain to the Republic of Mexico (1821-1836). In 1836 it changed again from Mexico to the Republic of Texas (1836-1845), and finally in 1845, Texas achieved statehood in the United States. Each of these changes and the social, political and economic climate that they ushered in had significant impacts on the population of San Antonio. These changes, in turn, significantly impacted the social, cultural, and physical landscape of San Antonio.

The chronological framework of the historic context is divided in such a way as to parallel these significant social and economic changes that impacted San Antonio, and the south Texas region as a whole, during the 19<sup>th</sup> and 20<sup>th</sup> centuries. Therefore, in considering the NRHP eligibility of historic properties within the APE, the following chronological framework is utilized: Spanish Colonial Period (1691-1793); Mexican Period (1793-1836; Motavina 1995); Texas Republic (1836-1845; Motavina 1995); Annexation and Incorporation (1845-1900; Motavina 1995; Montejano 1987; Arreola 2002); Reconstruction, Segregation, and Integration (1900-1960; Arreola 2002).

#### Standing Structures

The archaeological pedestrian surveys listed above documented no historic or prehistoric properties that are eligible or potentially eligible for listing to the National Register. The Standing Structure Survey did, however, document 40 historic resources that are either already listed on the National Register of Historic Places or are potentially eligible for listing on the Register. **Table 2** provides the list of these properties.

**Table 2.** Historic resources that are listed on or are potentially eligible for listing to the National Register.

| Property ID    | Year of Construction | Historic Use/Function       | NRHP Listed | In NRHP District* | NRHP Potential Eligible | Criterion of Significance |
|----------------|----------------------|-----------------------------|-------------|-------------------|-------------------------|---------------------------|
| 101354         | 1749                 | Spanish Governor's Palace   | X           | X                 |                         | A, C                      |
| 102552         | pre 1790             | de la Garza House           | X           | X                 |                         | A, B, C                   |
| 525048         | ca. 1795             | Casa Navarro                | X           |                   |                         | B, C                      |
| 552131         | 1861-62              | Menger Soap Works           | X           |                   |                         | A, C, D                   |
| 525051, 525052 | 1919, 1950           | Richter Bakery              |             |                   | X                       | C                         |
| 101437         | 1877-1885            | Female Boarding House       | X           | X                 |                         | C                         |
| 110123         | 1878                 | Ice Manufacturing Company   | X           | X                 |                         | A, C                      |
| 101355         | 1880                 | Vogel Belt Complex          | X           | X                 |                         | A, B, C                   |
| 102551         | 1880, 1920, 1935     | Arana Bldg.                 | X           | X                 |                         | B, C                      |
| 102550         | 1890                 | Arcade Hotel/La Clete Hotel |             | X                 | X                       | A, C                      |

|                              |             |  |   |   |   |         |
|------------------------------|-------------|--|---|---|---|---------|
| 101748                       | 1890s       | Mateo Blas House                             |   |   | X | C       |
| 110990                       | 1892-93     | Richard Tommins House                        |   |   | X | C       |
| 101213                       | 1896        | Klines Bldg.                                 |   |   | X | C       |
| 101215                       | 1900        | Commercial Bldg.                             |   |   | X | C       |
| 101216                       | 1901        | Leeds Bldg.                                  |   |   | X | C       |
| 101750                       | 1907        | Sam Houston School                           |   |   | X | C       |
| 110988                       | 1907        | Nauwald Bldg.                                |   |   | X | C       |
| 101188                       | 1912        | Argo Bldg.                                   |   |   | X | C       |
| 1133591                      | 1918        | City Ice and Fuel Co.                        |   |   | X | C       |
| 110163                       | 1919, 1926, | Good Year Tire and Rubber Co.                |   |   | X | C       |
| 101426                       | 1920        | Commercial Bldg.                             | X | X |   | A, C    |
| 110988b                      | 1922        | Commercial Bldg.                             |   |   | X | C       |
| 1133591                      | 1922        | Industrial Storage Facility                  |   |   | X | C       |
| 101191                       | 1923        | Strauss-Frank Co., Wholesale Merchandise     |   |   | X | A, C    |
| 110152,<br>110153,<br>110154 | 1922-23     | A.I. Root Co., Bee Supplies                  |   |   | X | A, C    |
| 110161                       | 1925        | Heusinger Hardware Co.                       |   |   | X | C       |
| 110236                       | 1926        | Crown Macaroni Warehouse                     |   |   | X | C       |
| 110992                       | 1926        | Paint Factory                                |   |   | X | C       |
| 110997,<br>110998            | 1926        | Erler Manufacturing Co.<br>Wholesale Grocery |   |   | X | C       |
| 1057698-73                   | 1926        | Granari Bldg.,                               |   |   | X | C       |
| 110255                       | 1926        | Labatt Wholesale Grocery                     |   |   | X | C       |
| 110989                       | 1927        | Jacobs Distribution Co.                      |   |   | X | A, B, C |
| 101219                       | 1935-1950   | Alameda theatre                              |   |   | X | C       |
| 1057698b                     | 1940        | Bird-Thomas Bldg.                            |   |   | X | C       |
| 110160                       | 1940        | Commercial Bldg.                             |   |   | X | A, C    |
| 101217b                      | 1945-1949   | Alameda theatre                              |   |   | X | C       |
| 101217                       | 1945-1949   | Casa de Mexico Bldg.                         |   |   | X | A, C    |
| 101214                       | 1948        | F.W. Woolworth Co.                           |   |   | X | C       |
| 103281,<br>103284            | 1964        | Parking lots; 41BX1968**                     |   |   | X | D       |
| 1128478                      | 1948        | Jenner Manufacturing Co.                     |   |   | X | C       |

A-Event; B-Person; C-Design/Construction; D-Information Potential; \* "contributing structures to an NRHP District;

\*\*location tested in 2015, possible site of first location of Mission San Antonio de Valero.

## Bridges

As the population of San Antonio grew during the last half of the 19<sup>th</sup> century and occupation of the town's lands expanded west of San Pedro Creek, access to the area became a greater concern and the construction of bridges spanning the creek began to take place. Initially, these bridges served simply to

provide access from one bank of the creek to another for pedestrians, carts and wagons, and eventually vehicles, and even trains. As business establishments began to crowd along the banks of San Pedro Creek, many were built with foundations and walls tied into the retaining walls of the creek itself. This necessitated the construction of smaller bridges that spanned the banks of the creek and served as points of access to resupply the businesses they adjoined.

A total of eight of the 14 bridges that span San Pedro Creek also are potentially eligible for listing on the National Register. **Table 3** provides a listing of these historic properties. Of the currently existing bridges that span San Pedro Creek within the APE (**Table 3**), the Houston Street, Nueva Street, and Graham Street bridges are potentially eligible for listing on the National Register. The Salinas Street Bridge is one of the oldest surviving bridges that also is potentially eligible for listing although it no longer functions as a vehicular bridge. It is now only used for pedestrian access across the creek. All of the remaining smaller “footbridges” that adjoin businesses on the banks of the creek and even allow delivery vehicle access are potentially eligible for listing on the register.

**Table 3.** List of bridges by location and their potential eligibility for listing on the National Register.

| Bridge ID Nr. | Location         | Eligibility* | Year of Construction | Type                                     | Criterion |
|---------------|------------------|--------------|----------------------|--|-----------|
| 1             | W. Martin Str.   | NE           | 1924-1951            | multi-purpose                            |           |
| 2             | W. Salinas Str.  | PE           | 02/14/1925           | formerly vehicular; currently pedestrian | C         |
| 3             | W. Travis Str.   | NE           | 1926                 | multi-purpose                            |           |
| 4             | W. Houston Str., | PE           | 1908                 | multi-purpose                            | C         |
| 5             | W. Commerce Str. | NE           | 1926                 | multi-purpose                            |           |
| 6             | Dolorosa Str.    | NE           | 1926                 | multi-purpose                            |           |
| 7             | W. Nueva Str.    | PE           | 1926                 | multi-purpose                            | C         |
| 8             | Graham Ave.      | PE           | Post-1956            | multi-purpose                            | C         |
| 9             | C. Chavez Blvd.  | NE           | 1929                 | multi-purpose                            |           |
| 10            | Guadalupe Str.   | NE           | Post-1956            | multi-purpose                            |           |

|              |                   |    |            |               |   |
|--------------|-------------------|----|------------|---------------|---|
| Footbridge 1 | Houston-Commerce  | PE | 1945-1949  | multi-purpose | C |
| Footbridge 2 | Houston-Commerce  | PE | 1948       | multi-purpose | C |
| Footbridge 3 | Commerce-Dolorosa | PE | Post -1935 | multi-purpose | C |
| Footbridge 4 | Commerce-Dolorosa | PE | Post- 1935 | multi-purpose | C |

\*PE potentially eligible; NE not eligible

### Retaining Walls

Finally, in addition to the aforementioned historic properties, large segments of the retaining walls of the creek also are potentially eligible for listing on the National Register. **Table 4** provides a list of the retaining wall segments that are recommended as potentially eligible of listing on the National Register.

**Table 4.** List of wall segments by street intersection, creek bank, and construction material.

| Location                | W Bank Material   | Eligibility | E Bank Material          | Eligibility           |
|-------------------------|---|-------------|--------------------------|-----------------------|
| Santa Rosa -Martin      | rock  | PE          | rock                     | PE                    |
| Martin-Salinas          | rock  | PE          | concrete                 | NE                    |
| Salinas-Travis          | rock with concrete revetment; possible                                | NE          | rock                     | PE                    |
| Travis-Houston          | concrete  | NE          | mixture of concrete/rock | PE, selected portions |
| Houston-Commerce; N-end | possible concrete revetment on stone; short masonry segment in alley; | NE          | rock                     | PE                    |
| Houston-Commerce; S-end | rock, brick   | NE          | concrete; brick,         | NE                    |
| Commerce-Dolorosa       | rock & rock w. concrete revetment                                     | PE          | rock                     | PE                    |

|                   |  |    |                                       |    |
|-------------------|--|----|---------------------------------------|----|
| Dolorosa-Nueva    | rock   | PE | concrete north half; rock south half  | NE |
| Nueva-Graham      | rock   | PE | concrete north half; rock south half; | PE |
| Graham-C. Chavez  | Rock northern 2/3rds; concrete at inlet tunnel | PE | rock                                  | PE |
| El Paso-Guadalupe | concrete                                       | NE | concrete                              | NE |
| Guadalupe-Camp    | concrete                                       | NE | concrete                              | NE |

Calculations carried out by the San Pedro Creek Improvements Project design team indicate that a total of 19,845.5 linear feet of retaining walls line the banks of the creek from immediately south of its inlet point at Santa Rosa to the Camp Street bridge. Stone masonry walls represent 27 percent (5284.5-linear-feet combined) of this total (**Table 5**). The careful examination of the retaining walls within the APE indicates that they were built in short segments perhaps, at least in some instances, corresponding in length to the property owners that fronted the creek. Graffiti etched in the concrete mortar found capping the west bank retaining wall near the north end of the APE indicates that the construction of the limestone retaining walls may have begun as early as 1926.

**Table 5.** Characteristics of the retaining walls encompassed within project limits.

| <b><i>San Pedro Creek Retaining Walls and Construction Materials</i></b> | <b>Total (lf)</b> |
|--|-------------------|
| Existing Stone Masonry Wall with Concrete Revetment                      | 299.0             |
| Existing Stone Masonry Wall  | 4,911.5           |
| Existing Concrete Wall   | 6,264.0           |
| Existing Box Culvert Wall  | 8,125.0           |
| Existing Brick Masonry Wall  | 106.0             |
| Existing Brick Foundation Wall   | 66.0              |
| Existing Masonry/Concrete Revetment Foundation Wall                      | 74.0              |
| All Existing Walls   | 19,845.5          |

## IV. Impacts to Eligible and Potentially Eligible Historic Properties

### Standing Structures

Of the forty properties that are potentially eligible or are already listed on the National Register, only three resources remain from the Spanish Colonial Period (#103281, 103284; 102552; and 101354; **Table 6**). No resources representative of the Mexican or Texas Republic Period have survived or are present within the project boundaries. Only five are part of the sample of historic properties representative of the Annexation and Incorporation Period (#552131; 101437; 110123; 525048, and 101355). The majority of the other historic properties that are potentially eligible for listing on the Register or are already listed, are properties that represent examples of the commercial and industrial expansion of entrepreneurs into the area surrounding the upper San Pedro Creek drainage during the late 19<sup>th</sup> and early 20<sup>th</sup> century (the Reconstruction, Segregation and Integration Period [1900-1960]; i.e., nrs. 101214-F.W. Woolworth Co Building; 110152, 110153, 110154-A.I. Root Co., and Bee Supplies; 110163-Good Year Tire and Rubber Co.; and 101191- Strauss-Frank Co., Wholesale Merchandise). Only three of these resources (#110161, #110160, and #1133591) have been demolished to date. Their demolition was not prompted by the San Pedro Creek Improvements Project. The planned project will result in the demolition of one potentially eligible standing historic property, the F.W. Woolworth Co., Building (#101214) constructed in 1948.

**Table 6.** Proposed Impacts to historic resources that are listed on or are potentially eligible for listing to the National Register.

| Property ID       | Year of Construction | Historic Use/Function       | NRHP Listed | In NRHP District* | NRHP Potential Eligible | Proposed Action |
|-------------------|----------------------|-----------------------------|-------------|-------------------|-------------------------|-----------------|
| 101354            | 1749                 | Spanish Governor's Palace   | X           | X                 |                         | No Impact       |
| 102552            | pre 1790             | de la Garza House           | X           | X                 |                         | No Impact       |
| 525048            | ca. 1795             | Casa Navarro                | X           |                   |                         | No Impact       |
| 552131            | 1861-62              | Menger Soap Works           | X           |                   |                         | No Impact       |
| 525051,<br>525052 | 1919, 1950           | Richter Bakery              |             |                   | X                       | No Impact       |
| 101437            | 1877-1885            | Female Boarding House       | X           | X                 |                         | No Impact       |
| 110123            | 1878                 | Ice Manufacturing Company   | X           | X                 |                         | No Impact       |
| 101355            | 1880                 | Vogel Belt Complex          | X           | X                 |                         | No Impact       |
| 102551            | 1880, 1920,<br>1935  | Arana Bldg.                 | X           | X                 |                         | No Impact       |
| 102550            | 1890                 | Arcade Hotel/La Clete Hotel |             | X                 | X                       | No Impact       |
| 101748            | 1890s                | Mateo Blas House            |             |                   | X                       | No Impact       |
| 110990            | 1892-93              | Richard Tommins House       |             |                   | X                       | No Impact       |
| 101213            | 1896                 | Klines Bldg.                |             |                   | X                       | No Impact       |
| 101215            | 1900                 | Commercial Bldg.            |             |                   | X                       | No Impact       |
| 101216            | 1901                 | Leeds Bldg.                 |             |                   | X                       | No Impact       |
| 101750            | 1907                 | Sam Houston School          |             |                   | X                       | No Impact       |

|                              |             |  |   |   |   |                     |
|------------------------------|-------------|--|---|---|---|---------------------|
| 110988                       | 1907        | Nauwald Bldg.                                |   |   | X | No Impact           |
| 101188                       | 1912        | Argo Bldg.                                   |   |   | X | No Impact           |
| 1133591                      | 1918        | City Ice and Fuel Co.                        |   |   | X | <b>Demolished**</b> |
| 110163                       | 1919, 1926, | Good Year Tire and Rubber Co.                |   |   | X | No Impact           |
| 101426                       | 1920        | Commercial Bldg.                             | X | X |   | No Impact           |
| 110988b                      | 1922        | Commercial Bldg.                             |   |   | X | No Impact           |
| 1133591                      | 1922        | Industrial Storage Facility                  |   |   | X | No Impact           |
| 101191                       | 1923        | Strauss-Frank Co., Wholesale Merchandise     |   |   | X | No Impact           |
| 110152;<br>110153,<br>110154 | 1922-23     | A.I. Root Co., Bee Supplies                  |   |   | X | No Impact           |
| 110161                       | 1925        | Heusinger Hardware Co.                       |   |   | X | <b>Demolished**</b> |
| 110236                       | 1926        | Crown Macaroni Warehouse                     |   |   | X | No Impact           |
| 110992                       | 1926        | Paint Factory                                |   |   | X | No Impact           |
| 110997,<br>110998            | 1926        | Erler Manufacturing Co.<br>Wholesale Grocery |   |   | X | No Impact           |
| 1057698-73                   | 1926        | Granari Bldg.,                               |   |   | X | No Impact           |
| 110255                       | 1926        | Labatt Wholesale Grocery                     |   |   | X | No Impact           |
| 110989                       | 1927        | Jacobs Distribution Co.                      |   |   | X | No Impact           |
| 101219                       | 1935-1950   | Alameda theatre                              |   |   | X | No Impact           |
| 1057698b                     | 1940        | Bird-Thomas Bldg.                            |   |   | X | No Impact           |
| 110160                       | 1940        | Commercial Bldg.                             |   |   | X | <b>Demolished**</b> |
| 101217b                      | 1945-1949   | Alameda theatre                              |   |   | X | No Impact           |
| 101217                       | 1945-1949   | Casa de Mexico Bldg.                         |   |   | X | No Impact           |
| 101214                       | 1948        | F.W. Woolworth Co.                           |   |   | X | <b>Demolish***</b>  |
| 103281,<br>103284            | 1964        | Parking lots; 41BX1968                       |   |   | X | No Impact           |
| 1128478                      | 1948        | Jenner Manufacturing Co.                     |   |   | X | No Impact           |

A-Event; B-Person; C-Design/Construction; D-Information Potential; \* “contributing structures to an NRHP District; **\*\*the demolition of these historic properties was not prompted by the San Pedro Creek Improvements Project; \*\*\* only historic standing structure to be demolished as part of the SPCIP.**

## Bridges

Of the ten vehicular and pedestrian bridges that span San Pedro Creek, four are potentially eligible for listing on the National Register (**Table 7**). Each of these four properties will be demolished and will be replaced by a bridge that is capable of carrying a larger capacity of vehicles and pedestrians. The four multi-use supply bridges that abut businesses situated on the immediate bank of the creek also are potentially eligible for listing on the National Register. Due to the widening of the creek channel in the downtown segment of the SPCIP, all four are slated for demolition.



**Table 7.** List of bridges, their NRHP eligibility status and proposed impacts.

| Bridge ID Nr. | Location          | Eligibility* | Proposed Action      |
|---------------|-------------------|--------------|----------------------|
| 1             | W. Martin Str.    | NE           | None                 |
| 2             | W. Salinas Str.   | PE           | Demolish and Replace |
| 3             | W. Travis Str.    | NE           | None                 |
| 4             | W. Houston Str.,  | PE           | Demolish and Replace |
| 5             | W. Commerce Str.  | NE           | Replacement          |
| 6             | Dolorosa Str.     | NE           | Replacement          |
| 7             | W. Nueva Str.     | PE           | Demolish and Replace |
| 8             | Graham Ave.       | PE           | Demolish and Replace |
| 9             | C. Chavez Blvd.   | NE           | Replacement          |
| 10            | Guadalupe Str.    | NE           | Replacement          |
| Footbridge 1  | Houston-Commerce  | PE           | Demolition           |
| Footbridge 2  | Houston-Commerce  | PE           | Demolition           |
| Footbridge 3  | Commerce-Dolorosa | PE           | Demolition           |
| Footbridge 4  | Commerce-Dolorosa | PE           | Demolition           |

**Retaining Walls:**

Calculations carried out by the San Pedro Creek Improvements Project design team indicate that by length, 49.4 percent (2,427.5 linear feet) of the stone walls will be retained *in situ* without any negative impacts (**Table 8**). An additional 20.5 percent (1009.0 linear feet) will be left in situ but reduced in height. A 210-foot segment, located immediately behind the Spanish Governor’s Palace, will be demolished and re-interpreted (rebuilt and signage added) in a nearby location. In total, 50.6 percent of the stone masonry walls that are potentially eligible for listing on the National Register of Historic Places will be demolished or adversely impacted (i.e., shortened and/or demolished and reinterpreted).

None of the concrete and brick retaining walls are eligible for listing on the National Register. Approximately 47.9 percent of the concrete retaining walls will remain, while all of the brick walls will be demolished. Finally, nearly all (95.2%) of the box culverts and all existing foundation walls will be retained.

**Table 8.** Characteristics of the retaining walls and their planned disposition under the San Pedro Creek Improvements Project.

| Retaining Wall Construction                                  | Total (lf) | Demolished (lf)  | To Remain (lf)    | Left in Situ/<br>Reduced in Height<br>(lf) | Demolished &<br>Interpreted (lf) |
|--|------------|------------------|-------------------|--|----------------------------------|
| Existing Stone Masonry Wall with<br>Concrete Revetment       | 299.0      | 83<br>27.8%      | -                 | 216<br>72.24%                              | -                                |
| Existing Stone Masonry Wall                                  | 4,911.5    | 1,265.0<br>25.8% | 2,427.5<br>49.4%  | 1,009.0<br>20.5%                           | 210.0<br>4.3%                    |
| Existing Concrete Wall                                       | 6,264.0    | 3,263.5<br>52.1% | 1,099.5<br>17.6%  | 1,796.0<br>28.7%                           | 105.0<br>1.7%                    |
| Existing Box Culvert Wall                                    | 8,125.0    | 388.0<br>4.8%    | 7,737.0<br>95.2%  | -<br>0.0%                                  | -<br>0.0%                        |
| Existing Brick Masonry Wall                                  | 106.0      | 106.0<br>100.0%  | -<br>0.0%         | -<br>0.0%                                  | -<br>0.0%                        |
| Existing Brick Foundation Wall                               | 66.0       | 66.0<br>100.0%   | -<br>0.0%         | -<br>0.0%                                  | -<br>0.0%                        |
| Existing<br>Masonry/Concrete<br>Revetment Foundation<br>Wall | 74.0       | -                | 74.0<br>100.0%    | -  | -                                |
| All Existing Walls   | 19,845.5   | 5,171.5<br>26.1% | 11,338.0<br>57.1% | 3,021.0<br>15.2%                           | 315.0<br>1.6%                    |

### Visual Impacts to Historic Resources

In addition to direct physical adverse impacts of the undertaking on potentially eligible historic resources, the proposed project will also have visual impacts on resources found within the APE and outside of but bordering the APE. Some of these impacts can be considered positive impacts to resources while others will be negative impacts to the urban landscape that lines the channel of San Pedro Creek.

In a number of locations along the project limits, the historic NRHP-eligible stone masonry walls have been damaged over time either by invasive vegetation growing immediately against and through the retaining walls (Figure 10), structural weaknesses (Figure 11, 12), or human alterations (Figure 13, 14).



**Figure 10.** Stone masonry wall damage caused by roots.



**Figure 11.** Separation of masonry wall from bank due to lack of proper anchoring.



**Figure 12.** Extensive wall failure of stone masonry wall.



**Figure 13.** Bridge footing that damaged stone masonry wall at W. Travis St.

The proposed undertaking plans to stabilize all damaged and deteriorating potentially eligible stone masonry walls that will remain in situ as part of the San Pedro Creek Improvements Project. These stabilization efforts will extend to all wall segments that are structurally unstable, have been damaged by human intervention, and or will be impacted by planned construction through partial modifications (i.e., shortened height). These actions will have a positive visual effect on these remaining examples of NRHP-eligible resources along the project area.

In addition, the removal of invasive vegetation from along the creek banks will also contribute to a positive visual effect and it will also enhance the long-term preservation of the remaining NRHP-eligible wall segments. The removal of invasive vegetation coupled with urban trash that typically accumulates over time in the channel of the creek also will have a positive visual impact in that it will help return the creek to the sense of a waterway rather than a drainage ditch and trash dump. Finally, the removal of some of the retaining walls that constructed the flow of water along the creek, and the subsequent softening of the channel banks will aid in re-establishing the look of the waterway as a dynamic creek that directed water flow from San Pedro Creek along the western margins of Old San Antonio.

Of course, some of the planned actions that are part of this undertaking will also have an adverse visual impact on the project APE. Among these impact can be counted the replacement of several historic NRHP-eligible bridges, and the removal of several hundred feet of historic masonry retaining wall segments. The replacement of the bridges with newly constructed bridges will alter the visual impact currently possessed by these creek crossing but such alterations are necessary to allow for increased flow-capacity of the creek derived from channel widening. In effect all adverse impacts to historic NRHP-eligible resources are being proposed because other alternative approaches to reducing flooding frequency and scale of flood damage cannot be cost-effectively achieved without them. The design team is highly cognizant of the significance of the historic fabric that has developed on and along the banks of the creek and has considered numerous alternative design approaches to minimize adverse impacts to this fabric while still achieving the reduction of potential flood damage to downtown San Antonio.

Those NRHP-eligible features that will be preserved and stabilized will remain as testament to the evolution of San Pedro Creek over the 300 years of its current life and the proposed HABS and HAER documentation of the resources that will be adversely impacted will forever preserve the historic character, spirit and visual feel of the resources that evolved along the creek to serve as testimony of the history of a town and a people.