

PROJECT ALTERNATIVES

CHAPTER 2.0 – PROJECT ALTERNATIVES

2.1 PROJECT DESCRIPTION

The Project entails the phased reconfiguration and expansion of the existing LPOE to improve operational efficiency, security, and safety for cross-border travelers and federal agencies at the San Ysidro LPOE. Two Project build alternatives were considered by a multi-disciplinary team during the Project design process, following a scoping meeting and consultation with the community. Because the Project concerns improvements to a LPOE, alternative Project locations were not considered since the precise location of such a facility requires a formal agreement between the Governments of the U.S. and Mexico. Improvements at the existing Otay Mesa LPOE and development of a new LPOE at Otay Mesa East have been shown to be needed with or without the Project, and plans to move forward at these other LPOEs are currently in process. Consequently, all of the build alternatives considered represent design/operational variations at the existing LPOE location. The alternatives described and evaluated in this Final Environmental Impact Statement (EIS) include the Preferred Alternative, the Pedestrian Crossing Alternative, and the No Build Alternative. Alternatives considered and rejected are described in Section 2.2.

The environmentally preferable alternative is the alternative that best promotes the national environmental policy expressed within NEPA. In general, this refers to the alternative that would result in the least damage to the environment and best protects the natural and cultural resources. This determination will be based on the Final EIS and will be made in the Project Record of Decision.

2.1.1 Preferred Alternative

The Preferred Alternative would demolish most of the existing facilities and new facilities would be constructed, including new northbound primary and secondary inspection areas, an administration building, a pedestrian building, a central plant, one pedestrian bridge, a parking structure, and other support structures. The only building considered for retention and renovation is the Old Customs House, which is currently undergoing a Section 106 consultation with the State Historic Preservation Officer (SHPO), pursuant to the National Historic Preservation Act (NHPA). The expanded facility would consist of approximately 210,000 gross square feet (gsf) of building space, 31 northbound inspection lanes, two new southbound pedestrian crossings, and a new southbound roadway connecting with Mexico's planned El Chaparral LPOE facility. The Project would be constructed in three phases over a period of approximately four years, with some overlap of phases occurring. Each phase described below could function independently from subsequent phases without disrupting ongoing operations at the LPOE. Exact timing would depend upon the implementation of related facilities in Mexico.

Phase 1 – Northbound Facilities

Proposed improvements in Phase 1 would primarily entail reconfiguration of the northbound facilities to increase inspection processing capacity and operational efficiency. Figure 2-1 illustrates proposed improvements during Phase 1.

Primary Inspection Area

The northbound primary vehicle inspection area would be reconfigured to include 24 inspection lanes, consisting of 23 standard vehicular lanes (12 feet wide) and one bus lane (14 feet wide). The standard vehicular lanes would include 46 horizontally stacked inspection booths. Stacked booths consist of two booths arranged in tandem that allow for the concurrent inspection of two cars per lane. The bus lane would include a single inspection booth. A portion of the primary vehicle inspection area would be covered with canopies. Vehicles cleared to enter the U.S. from the primary inspection area would be directed to northbound lanes that merge with I-5. A total of six northbound lanes (12 feet wide) would be constructed; three along the eastern portion of the LPOE, and three in the middle of the LPOE, creating a central island for secondary inspections and operations.

Secondary Inspection Area

The existing northbound secondary inspection area would be demolished, and a new secondary inspection and operations center island would be constructed. The new secondary inspection area would contain up to 36 inspection spaces and five inspection booths, and would be covered with canopies. The access points to the secondary inspection area would be equipped with non-intrusive inspection facilities, such as gamma ray scanning equipment.

A new east-west connector road would be constructed to the north of the secondary inspection area that would connect to the northbound lanes merging onto I-5.

Auto Seizure and Impound Facilities

North of the secondary inspection area, an approximately 2,700-gsf auto seizure building and impound facility would be constructed. This facility would include an impound parking lot to accommodate approximately 45 spaces for impounded vehicles, as well as two spaces for disabled employees at the auto seizures building. A portion of this area would be covered with canopies. Access would be provided from the new east-west connector road.

Operations Center

A new operations center building would be constructed immediately east of the secondary inspection area. The operations center building would encompass approximately 50,000 gsf on two floors, and would contain a new head house and an auto breakdown facility.

Employee Parking Structure

A multi-story employee parking structure would be constructed on the west side of southbound I-5 during Phase 1. The proposed parking structure would provide approximately 300 parking spaces on five levels (one below grade, and four above grade). A staff pedestrian bridge would also be constructed between the parking structure and the operations center. This structure would require the demolition of the former USBP building and reconfiguration of the Camiones Way turn-around. The existing Camiones Way turn-around would be relocated slightly to the north and would terminate just west of I-5. Access to the parking structure would be provided from the reconfigured Camiones Way turn-around.

Pedestrian Facilities

Phase 1 would include construction of an east – west pedestrian bridge over the I-5 and LPOE, between the San Ysidro Intermodal Transportation Center and Camino de la Plaza. The proposed pedestrian bridge would connect to Camino de la Plaza from a bridge landing that would include a pedestrian ramp to the reconfigured Camiones Way turn-around. The pedestrian bridge would cross over southbound I-5, and the LPOE, and then would ramp down to the San Ysidro Intermodal Transit Center. In addition to the pedestrian ramp, a staircase also would be constructed at the eastern end of the bridge, connecting to the San Ysidro Intermodal Transit Center. A pedestrian walkway would be constructed between Camiones Way and the border to channel pedestrians around the new employee parking structure and into Mexico. The current design of the pedestrian facilities includes one canopy structure at the east end, with additional shaded areas being considered. GSA will also be locating and designing portions of these facilities to include shading and rest areas (i.e., trees and benches) for pedestrian traffic. While public restrooms are not included in the design of these pedestrian facilities, public restrooms will be provided in appropriate locations within the LPOE. The connection of the east-west pedestrian bridge to Camino de la Plaza could, in the future, be expanded as an elevated pedestrian plaza to be constructed by others as part of a separate project.

An existing staff pedestrian bridge that spans the East San Ysidro Boulevard freeway ramps and connects an employee parking lot with a walkway to the existing Pedestrian Inspection Building would be demolished. The existing elevated Administration Building would remain in place and operational during Phase 1, but public access to the existing pedestrian bridge along the existing Administration Building would be closed once the new east-west pedestrian bridge is constructed.

Southbound Pedestrian Crossing

A new southbound pedestrian crossing would be provided in the eastern portion of the LPOE near the Old Customs House. It is anticipated that this new pedestrian crossing could require modifications to the Old Customs House. Per Section 106 of the NHPA, GSA is currently in consultation with the SHPO, Advisory Council on Historic Preservation, and other parties regarding the potential future use of the Old Customs House. GSA is currently working with its Mexican counterpart to determine the time frame for implementation of the proposed southbound pedestrian crossing on the east side of the LPOE. This southbound crossing is proposed to occur in Phase 1, although the exact timing would depend on implementation of related facilities in Mexico.

Central Plant

Phase 1 would include construction of a new central plant on the eastern side of the LPOE. Two existing buildings along Rail Court (currently occupied by a Payless Shoe Store and a privately owned and operated long-haul bus station) would be demolished, and a two-story central plant encompassing approximately 24,000 gsf would be constructed to house electrical and mechanical equipment. An employee surface parking lot with approximately 35 spaces would be constructed on the east side of the central plant.

Other Features

Other proposed features during Phase 1 would include construction of a detainee holding facility at the LPOE, and a telecommunications tower in the vicinity of the employee parking structure.

Construction of Phase 1 is anticipated to begin in winter 2009/2010 with an estimated duration of 18 to 24 months.

Phase 2 – Northbound Buildings

Phase 2 improvements would involve the reconfiguration of the eastern operational area and construction of new buildings. Figure 2-2 illustrates proposed improvements during Phase 2.

The existing Pedestrian Building would be demolished, and a new Administration and Pedestrian Building would be constructed east of the reconfigured northbound inspection facilities. The proposed Administration and Pedestrian Building would encompass approximately 100,000 gsf on three levels, and an approximately 20,000-gsf underground central detention facility. A new north–south pedestrian ramp would be constructed to channel northbound pedestrians and bicyclists from Mexico to the inspection processing facilities on the second level of this structure. During construction of the Administration and Pedestrian Building, pedestrian processing operations would temporarily be transferred to the Old Customs House. The Old Customs House would be renovated to accommodate these interim uses, and a new pedestrian sidewalk would be constructed between the border crossing and the renovated building. Following construction of the proposed improvements, the existing Administration Building and bridge (supporting the Administration Building) would be demolished.

Construction of Phase 2 is anticipated to begin in 2011 with an estimated duration of 24 to 30 months.

Phase 3 – Southbound Facilities

Proposed Phase 3 improvements primarily would entail the reconfiguration of the southbound facilities to connect with Mexico's planned El Chaparral facility. The reconfiguration of the southbound facilities would require removal of existing structures and Camiones Way. The existing commercial retail building (UETA Duty Free Shop) and large surface parking lots between Virginia Avenue and I-5 would be demolished. Construction of the proposed southbound roadway also would remove Camiones Way. Figure 2-3 illustrates proposed improvements during Phase 3.

Southbound Roadway

A new southbound roadway would be constructed at the terminus of southbound I-5, just south of the Camino de la Plaza overcrossing, and would curve southwestward within the LPOE to connect with the planned El Chaparral LPOE in Mexico. The roadway would consist of six southbound lanes (each 12 feet wide) plus an additional 14-foot-wide lane for employee/bus traffic into the LPOE for the first 1,000 feet. Beyond this point, the roadway would widen to 14 lanes (each 12 feet wide), and then would divide into two sets of seven lanes each just prior to the international border. This configuration of the roadway terminus would be compatible with the design of the planned El Chaparral LPOE in Mexico. A last-chance turn-around lane would be provided on the east side of the southbound roadway to allow vehicles to make a direct U-turn from the southbound roadway to northbound I-5. Additionally, the westernmost southbound lane would include a gated emergency access road to Camino de la Plaza.

Northbound Secondary Inspection Overflow Area/Future Southbound Secondary Inspection Area

A secondary inspection area would be constructed northeast of the employee parking structure, and would include up to 17 inspection spaces and up to nine inspection booths covered with canopies. This secondary inspection area would serve as an overflow area for the northbound secondary inspection process, but could be utilized in the future for southbound secondary inspections. The access points to the secondary inspection area would be equipped with non-intrusive inspection facilities, such as gamma ray scanning equipment. The secondary inspection area also would include an auto inspection/breakdown building. This building would encompass approximately 9,000 gsf on two floors.

The east-west connector road (constructed during Phase 1) would be extended to the west to connect the east and west portions of the LPOE and provide access to the additional secondary vehicle inspection area, employee parking, the USBP facility, and the southbound roadway.

Pedestrian Facilities

A new southbound pedestrian crossing facility would be constructed in the western portion of the LPOE at Virginia Avenue during Phase 3. The new facility would include a new crossing and a southbound pedestrian building. The pedestrian crossing would connect to Mexico's planned El Chaparral LPOE. Once the new pedestrian crossing is constructed and operational, the existing southbound pedestrian crossing would be removed.

In addition, a pedestrian ramp would be constructed between the east-west pedestrian bridge (to be completed during Phase 1), and a proposed sidewalk that would connect with Virginia Avenue to the east.

Transit Facility

As described above, the new southbound roadway would remove Camiones Way, which includes a bus turn-around at its terminus. A new turn-around and loading facility would be constructed in the western portion of the LPOE along Virginia Avenue to accommodate buses, taxis, jitneys, and privately owned vehicles.

USBP Facility

A new USBP station would be constructed in the southern portion of the LPOE, between the new southbound roadway and the U.S.-Mexico border. The station would consist of an approximately 3,500-gsf building a small parking area for USBP employees, and a repatriation gate. Vehicular access to the new USBP station would be provided from the internal east-west connector road.

Employee Parking Area

An employee parking area would be constructed in the southern portion of the LPOE between the new southbound roadway, the employee parking structure, the U.S.-Mexico border, and the USBP facility. This area would provide approximately 300 surface parking spaces, and possibly storm water retention facilities.

Northbound Primary Inspection Area Expansion

During Phase 3, the northbound primary inspection area would be expanded by seven lanes (12 feet wide) on the west with 14 stacked inspection booths, resulting in a total of 31 new lanes (24 lanes would be constructed in Phase 1).

Table 2-1 summarizes the major proposed capacity changes under the Preferred Alternative by phase. Note that exact timing would depend upon the implementation of related facilities in Mexico.

Table 2-1 SUMMARY OF MAJOR PROPOSED CAPACITY CHANGES BY PHASE PREFERRED ALTERNATIVE				
	Existing facility	Phase 1	Phase 2	Phase 3
Northbound				
Primary Inspection lanes:				
-Vehicular lanes	23	23	23	30
-Bus lanes	1	1	1	1
-Total lanes	24	24	24	31
Primary Inspection Booths	24	47	47	61
Secondary Inspection Lanes	0	6	6	6
Secondary Inspection Spaces	27	Up to 36 spaces plus 5 inspection booths	Up to 36 spaces plus 5 inspection booths	Up to 36 spaces plus 5 inspection booths. Overflow area would add 17 spaces plus 9 booths.
Pedestrian Crossings	One on eastern side	One on eastern side. Expanded facilities.	One on eastern side. Expanded facilities.	One on eastern side. Expanded facilities.
Southbound				
Vehicle Lanes	6	6	6	14
Pedestrian Crossings	One (in central area)	Two (one each in eastern and central areas)	Two (one each in eastern and central areas)	Two (one each on western and eastern sides)

Shading indicates the onset of a capacity change.

Construction of Phase 3 is estimated to begin as early as 2011, or as late as 2013, depending on the schedule provided by Mexico for their construction of the El Chaparral facility, and would last approximately 20 to 24 months.

2.1.2 Pedestrian Crossing Alternative

The Pedestrian Crossing Alternative is similar to the Preferred Alternative, but would entail a different cross-border pedestrian circulation scheme. While the Preferred Alternative proposes to remove the existing southbound pedestrian crossing and construct two new southbound pedestrian crossings (one at Virginia Avenue and one east of the Old Customs House), the Pedestrian Crossing Alternative would provide a single southbound pedestrian crossing at its existing location.

The Pedestrian Crossing Alternative would demolish most of the existing LPOE facilities, except for the existing southbound pedestrian crossing facility and the Old Customs House. New facilities to be constructed, including new northbound primary and secondary inspection areas, an administration building, a pedestrian building, a central plant, pedestrian bridges, a parking structure and other support structures, would generally be the same as the Preferred Alternative, with some variations in configuration and location within the LPOE. This alternative would be constructed in three phases that would correspond to those of the Preferred Alternative (i.e., Phase 1 would construct the northbound facilities, Phase 2 would construct northbound buildings, and Phase 3 would construct the southbound facilities). Construction of this alternative would occur over a period of approximately four years within the same estimated time frames as the Preferred Alternative identified above. Construction phases would overlap, but each phase could function independently from successive phases.

Phase 1 – Northbound Facilities

Proposed improvements in Phase 1 would entail construction of new northbound facilities similar to those described above for the Preferred Alternative. Figure 2-4 shows the proposed improvements during Phase 1. The proposed new northbound primary and secondary inspection areas, operations center, employee parking structure, and reconfiguration of the Camiones Way turn-around, would be the same as proposed under the Preferred Alternative. The auto seizure and impound facilities and central plant would be constructed at the same location as the Preferred Alternative, but the configuration would be slightly different.

The east-west pedestrian bridge would be constructed over I-5 and the LPOE, but instead of landing at the San Ysidro Intermodal Transportation Center, it would land on the north side of the East San Ysidro Boulevard/I-5 freeway ramp. The west end of the pedestrian bridge would connect to an elevated bridge deck extending from Camino de la Plaza. This deck would be larger than the bridge landing proposed under the Preferred Alternative.

Phase 2 – Northbound Buildings

Proposed improvements during Phase 2 under the Pedestrian Crossing Alternative would be the same as the Preferred Alternative identified above. Figure 2-5 illustrates proposed improvements during Phase 2.

Phase 3 – Southbound Facilities

Proposed Phase 3 improvements would primarily consist of the construction of new southbound facilities similar to those described above for the Preferred Alternative. Figure 2-6 depicts proposed improvements during Phase 3.

The proposed northbound secondary inspection overflow area/future southbound secondary inspection area, the pedestrian ramp connecting to the east-west pedestrian bridge (constructed in Phase 1), the removal of Camiones Way, and the northbound primary inspection area

expansion would be the same as proposed under the Preferred Alternative. The southbound roadway would be the same as proposed under the Preferred Alternative except that an exit lane to Virginia Avenue would be provided from the westernmost southbound lane.

A new north–south pedestrian bridge would be built over the proposed southbound roadway, connecting the proposed elevated bridge deck and main east–west pedestrian bridge (to be completed during Phase 1) to the pedestrian walkway at the existing southbound pedestrian crossing facility.

The USBP station would be constructed in the southern portion of the LPOE, just west of the employee parking structure and north-south pedestrian bridge.

This alternative would not construct the bus-turn around facility in the western portion of the LPOE along Virginia Avenue proposed under the Preferred Alternative, but would provide a smaller turn-around at the south leg of the Camino de la Plaza/I-5 southbound ramps intersection.

Table 2-2 summarizes the major proposed capacity changes under the Pedestrian Crossing Alternative by phase. Note that exact timing would depend upon the implementation of related facilities in Mexico.

Table 2-2 SUMMARY OF MAJOR PROPOSED CAPACITY CHANGES BY PHASE PEDESTRIAN CROSSING ALTERNATIVE				
	Existing facility	Phase 1	Phase 2	Phase 3
Northbound				
Primary Inspection lanes:				
-Vehicular lanes	23	23	23	30
-Bus lanes	1	1	1	1
-Total lanes	24	24	24	31
Primary Inspection Booths	24	47	47	61
Secondary Inspection Lanes	0	6	6	6
Secondary Inspection Spaces	27 spaces	Up to 36 spaces plus 5 inspection booths	Up to 36 spaces plus 5 inspection booths	Up to 36 spaces plus 5 inspection booths. Overflow area would add 17 spaces plus 9 booths.
Pedestrian Crossings	One on eastern side	One on eastern side	One on eastern side	One on eastern side
Southbound				
Vehicle Lanes	6	6	6	14
Pedestrian Crossings	One (in central area)	One (in central area)	One (in central area)	One (in central area)

Shading indicates the onset of a capacity change.

2.1.3 No Build Alternative

The No Build Alternative is included and analyzed to provide a baseline for comparison with impacts from the Project, and also to satisfy federal requirements for analyzing “no action” under the National Environmental Policy Act (NEPA; 40 Code of Federal Regulations [CFR] 1502.14(d)). The No Build Alternative assumes that no improvements to the existing San Ysidro LPOE would be implemented. This alternative would not meet the purpose and need of the Project (as identified in Chapter 1.0 of this Draft EIS), as operational constraints and safety/security deficiencies would not be corrected, and the wait times to cross the border would be expected to increase.

2.2 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER DISCUSSION

In addition to the Preferred Alternative and the Pedestrian Crossing Alternative, the Freeway Realignment Alternative was considered as a potential build alternative during the Project design process. This alternative and the reasons for its elimination from further analysis are discussed below.

2.2.1 Freeway Realignment Alternative

The Freeway Realignment Alternative would have consisted of a new southbound inspection facility along Virginia Avenue, expanded northbound vehicle inspection lanes, and reconfigured northbound inspection facilities. Figure 2-7 illustrates the Freeway Realignment Alternative.

This alternative would have realigned the southernmost segments of I-5 and I-805 to the west to connect with Mexico’s planned El Chaparral LPOE. The new southbound inspection facility would have been located on the west side of Virginia Avenue and would have consisted of 12 primary vehicular inspection lanes, one bus inspection lane, a head house building, a secondary inspection area for passenger vehicles, an impound vehicle area, a drop-off area, and parking. A dedicated pedestrian path and bicycle lane also would have been constructed to provide access into Mexico. To accommodate the southbound facilities, Camino de la Plaza would have been realigned, which would have required demolition of the existing overcrossing and a new overcrossing structure to the north. Access to the new southbound facility would have been provided from I-5, I-805, and Camino de la Plaza.

The existing northbound facility would have been expanded to include between 40 and 50 primary inspection booths in a stacked configuration, a new secondary inspection area, a new single head house building, and a new pedestrian inspection facility. A new administration building would have been constructed above the secondary inspection area, and parking areas would have been built.

The Freeway Realignment Alternative was eliminated as a viable build alternative due to non-standard design features, potential community impacts, safety concerns, and cost. Most noteworthy, the realignment of the I-5 and I-805 segments to connect with the planned El Chaparral LPOE would have required a horizontal curve that would not meet the American Association of State Highway and Transportation Officials (AASHTO) design speed criteria.

Moreover, the implementation of this alternative could have further divided the San Ysidro community. The overall development footprint of this alternative is greater when compared to the Preferred Alternative. The northbound facilities (e.g., buildings and inspection areas) would have been separated from the southbound facilities by a distance of approximately 1,700 feet,

with parking areas between them. The realignment of the southbound freeway segments would have created large areas between the realigned southbound lanes and the existing northbound lanes. This design configuration could have created the perception of a larger LPOE, further bifurcating the east and west sides of the community. Additionally, the distance between the northbound and southbound facilities and connections to surrounding areas would have required longer walking distances to and from the LPOE, impacting mobility within the community.

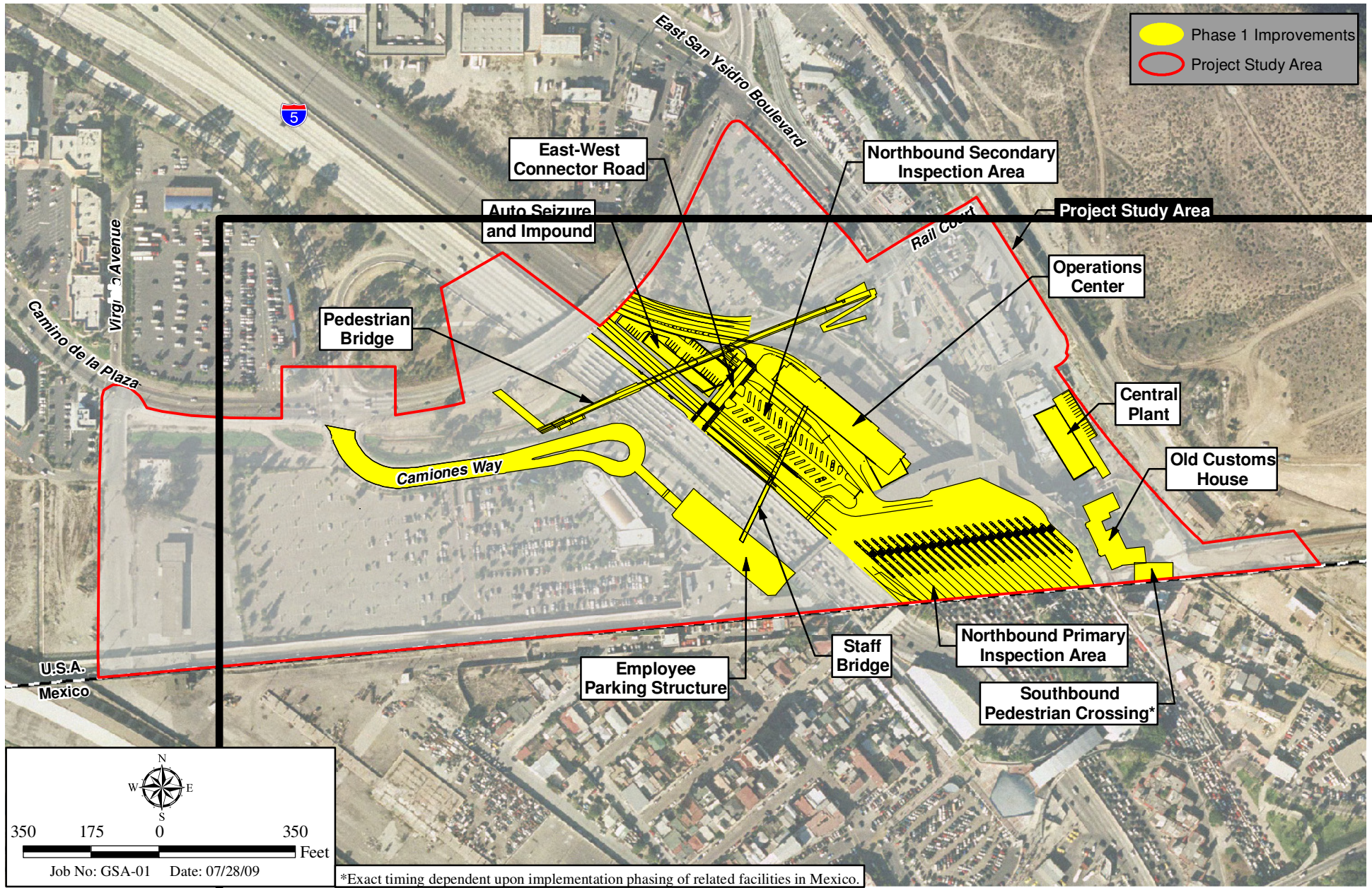
Construction of the Administrative Building above inspection facilities would not improve the safety and security concerns currently present at the existing LPOE facility. Federal employee safety would have continued to be at risk because, like the current configuration, federal offices would have been located directly above the primary inspection area. This would have created a potential risk in the event of a criminal incident within the inspection area below. Therefore, the goal of improving safety for employees, as identified in Chapter 1.0, would not have been met.

Finally, the cost to realign the freeway and the Camino de la Plaza overcrossing was substantially higher than that identified for the proposed Project for a less preferred design.

2.3 PERMITS AND APPROVALS NEEDED

The following permits and approvals would be required for the Project:

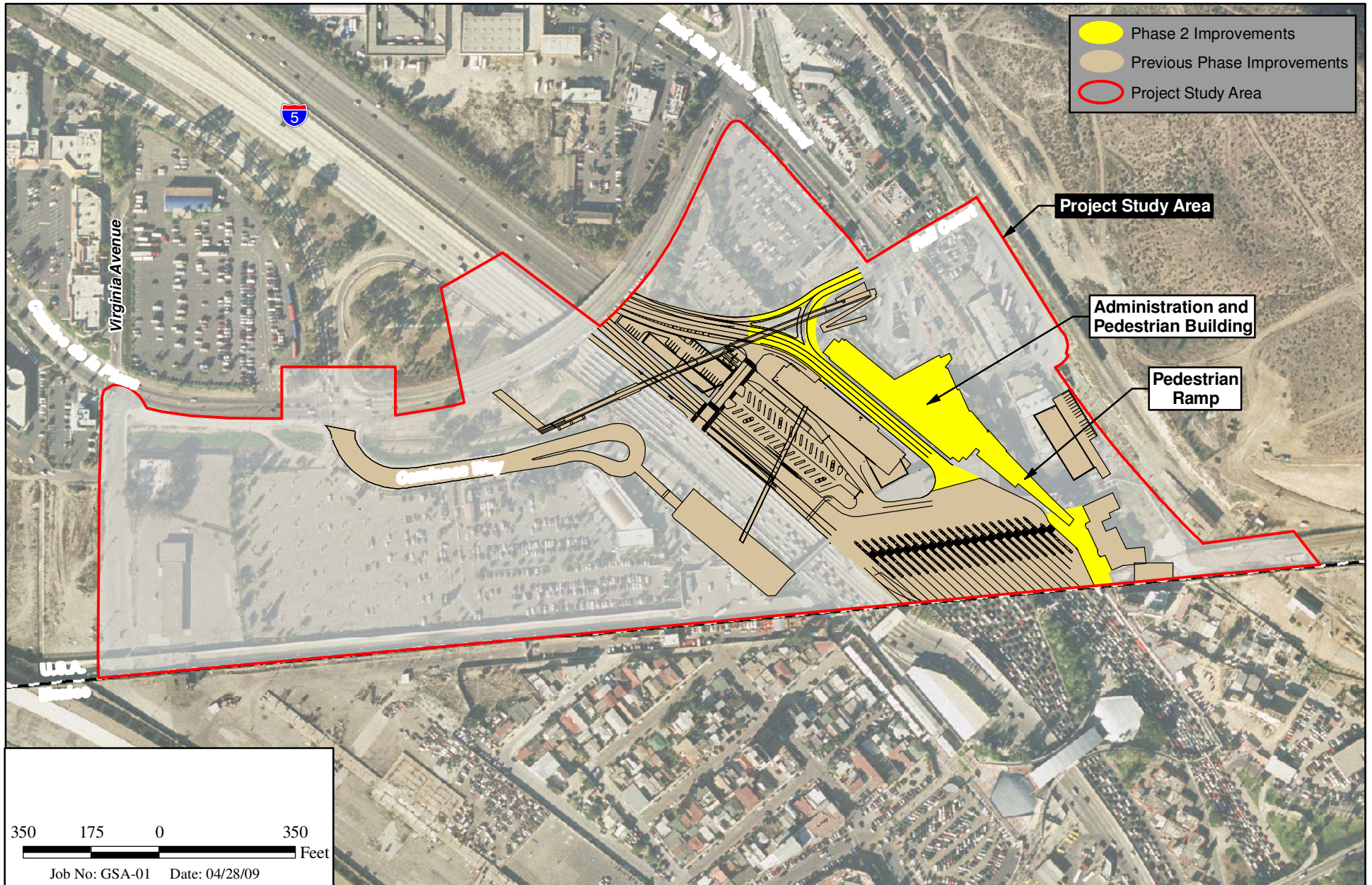
Permit or Approval	Agency	Purpose
Presidential Permit	U.S. Department of State	Approve new points of crossing, certain construction activities and otherwise comply with EO 13337 (April 30, 2004).
Clean Water Act Section 404 Nationwide Permit	U.S. Army Corps of Engineers (Corps)	Impacts to waters of the U.S.
Section 401 Water Quality Certification	Regional Water Quality Control Board (RWQCB)	Impacts to waters of the U.S.
National Pollutant Discharge Elimination System (NPDES)	State Water Resources Control Board	General Construction Activity Permit
General Groundwater Extraction Waste Discharge Permit	RWCQB	General Construction Activity Permit
Permits to Operate emergency generators	San Diego Air Pollution Control District (SDAPCD)	Air quality impacts
Section 106 consultation	SHPO, pursuant to the NHPA	Old Customs House
GSA Public Buildings Service Commissioner approval of project design	GSA	Design approval
Temporary Construction Easement	Caltrans	For work within Caltrans' ROW on Camino de la Plaza (if needed)



Preferred Alternative - Phase 1 Improvements

SAN YSIDRO LAND PORT OF ENTRY IMPROVEMENTS

Figure 2-1 (Revised)

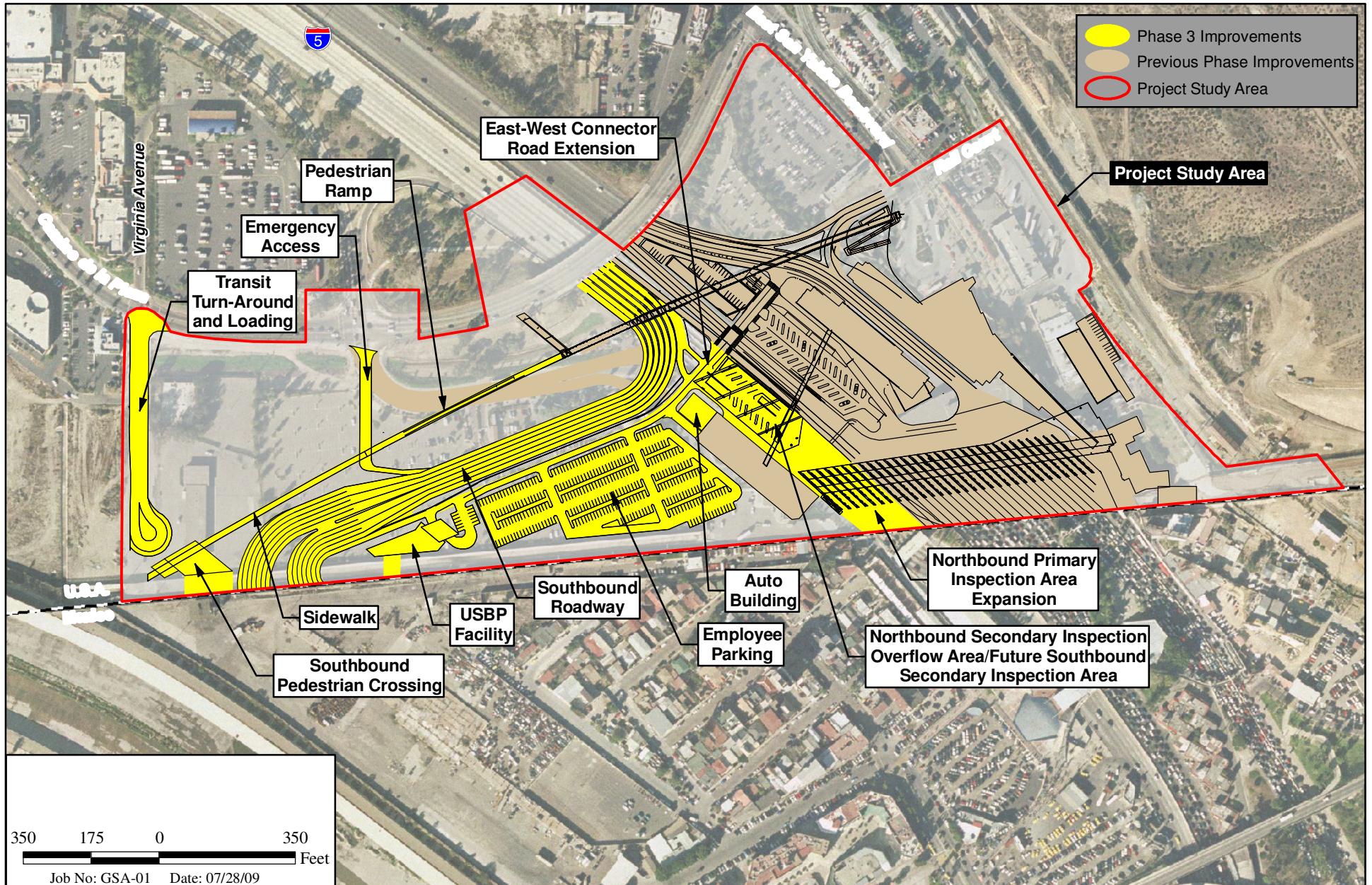


Preferred Alternative - Phase 2 Improvements

SAN YSIDRO LAND PORT OF ENTRY IMPROVEMENTS

Figure 2-2

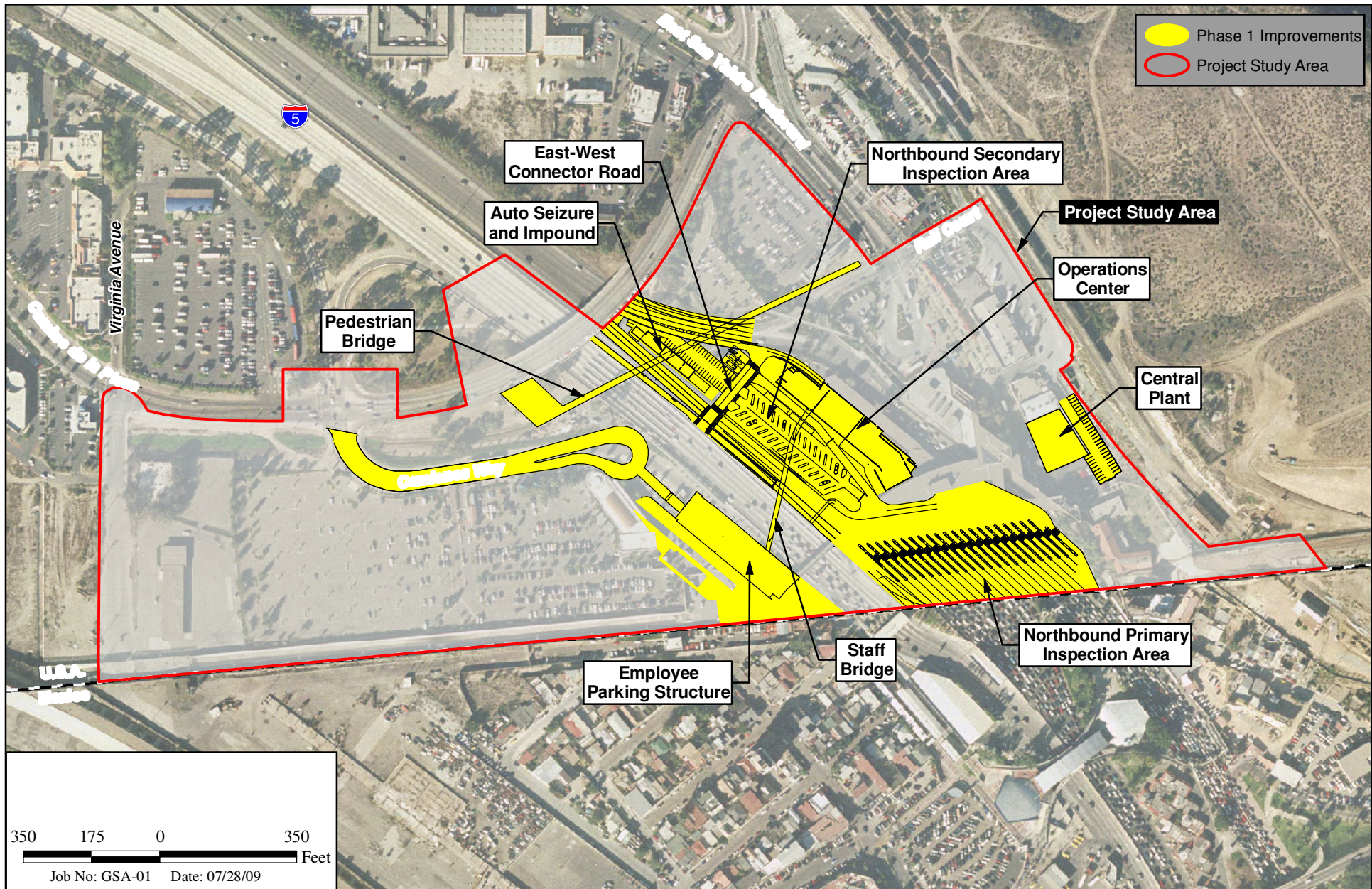
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Preferred Alternative - Phase 3 Improvements

SAN YSIDRO LAND PORT OF ENTRY IMPROVEMENTS

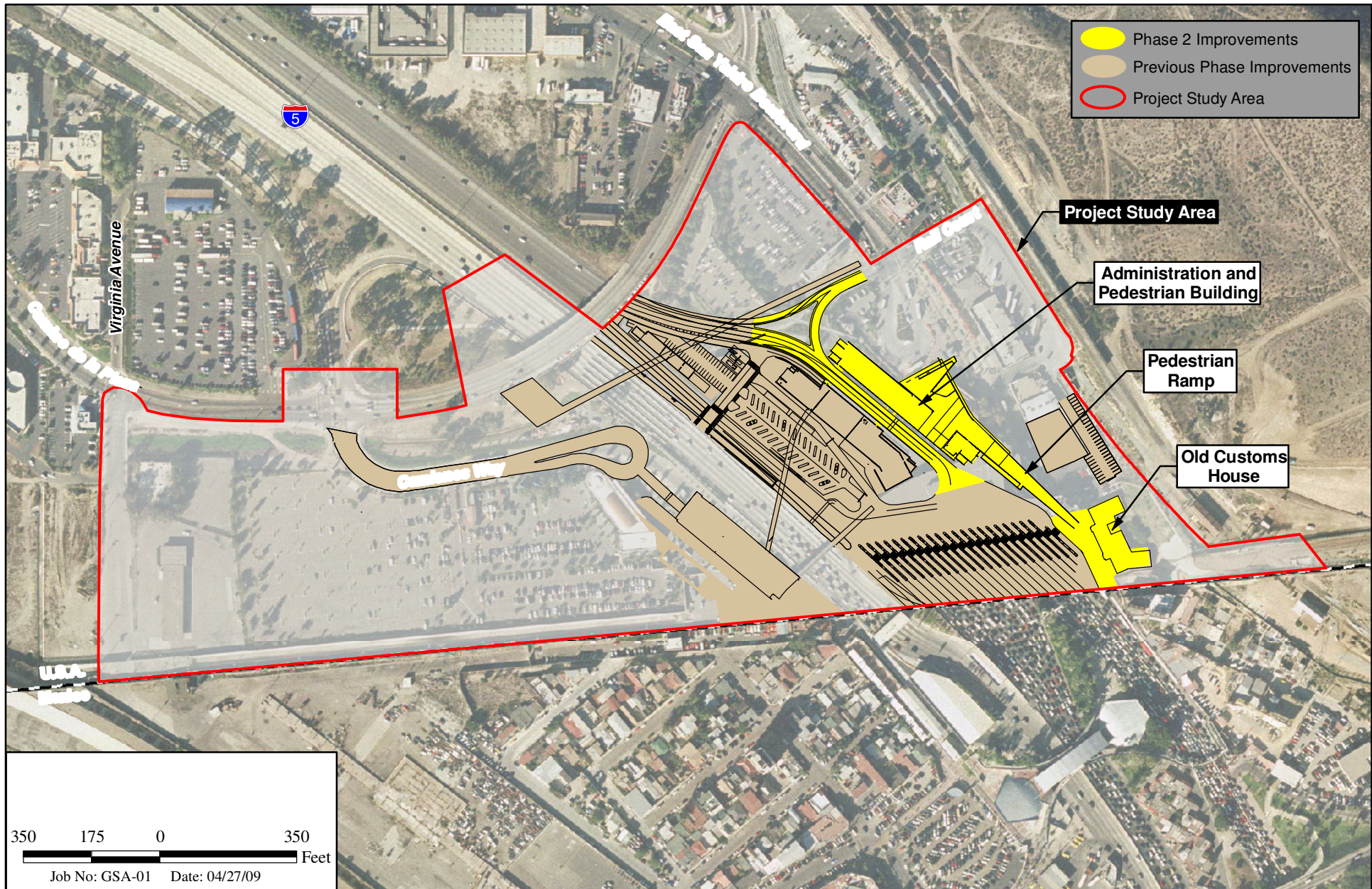
Figure 2-3 (Revised)



Pedestrian Crossing Alternative - Phase 1 Improvements

SAN YSIDRO LAND PORT OF ENTRY IMPROVEMENTS

Figure 2-4 (Revised)

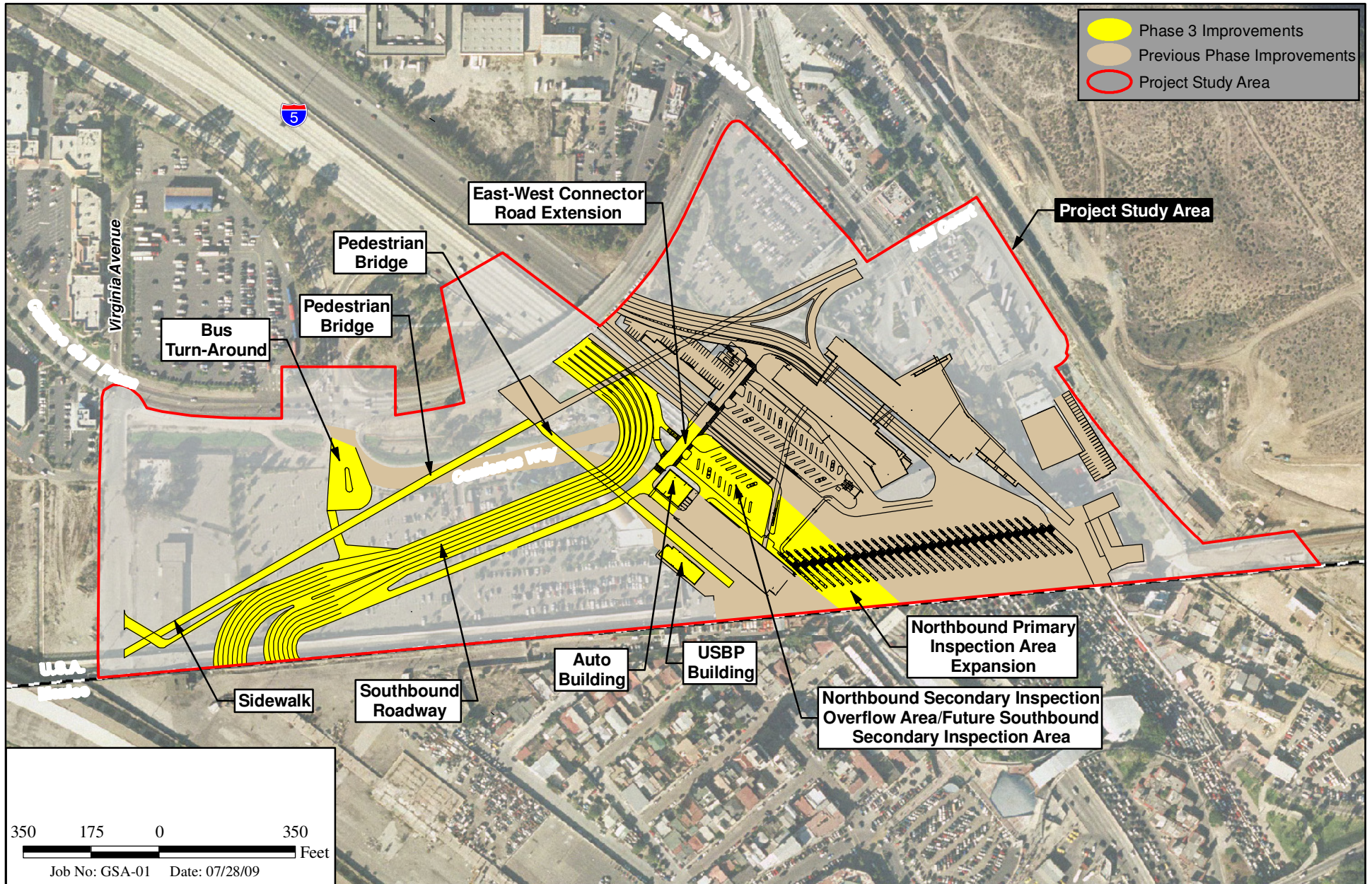


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Pedestrian Crossing Alternative - Phase 2 Improvements

SAN YSIDRO LAND PORT OF ENTRY IMPROVEMENTS

Figure 2-5

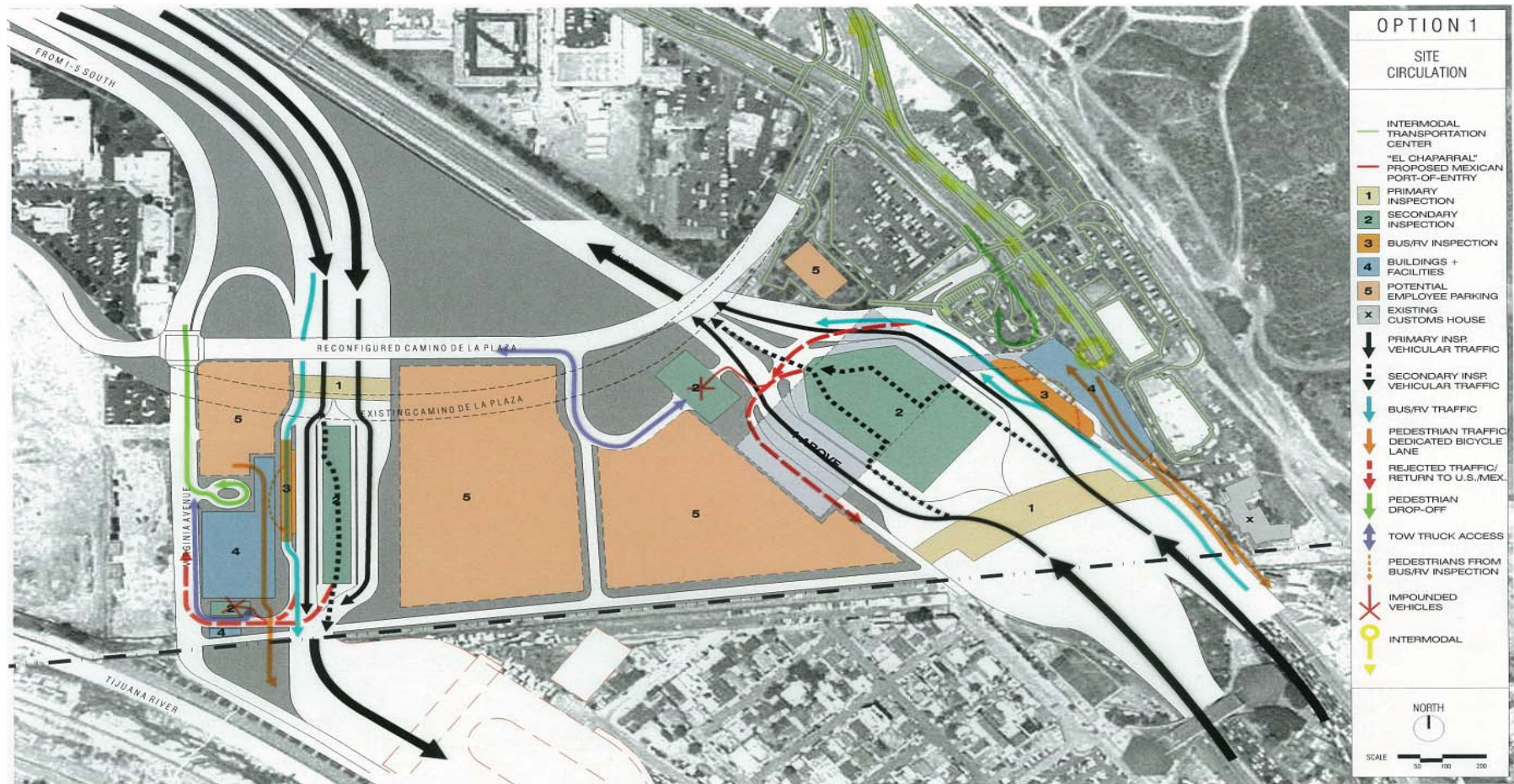


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Pedestrian Crossing Alternative - Phase 3 Improvements

SAN YSIDRO LAND PORT OF ENTRY IMPROVEMENTS

Figure 2-6 (Revised)



Source: GSA; Cannon Design

Freeway Realignment Alternative

SAN YSIDRO LAND PORT OF ENTRY IMPROVEMENTS

Figure 2-7