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CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE  
CENTRAL REGION  
1234 EAST SHAW AVENUE  
FRESNO, CALIFORNIA 93710

OCT 03 2019  
HABITAT CONSERVATION  
PLANNING BRANCH



AMENDMENT NO. 15  
(A Major Amendment)  
California Endangered Species Act  
Incidental Take Permit No. 2081-2015-024-04  
California High-Speed Train Project Fresno to Bakersfield Section Permitting Phase 1

## INTRODUCTION

On June 15, 2015, the California Department of Fish and Wildlife (CDFW) issued Incidental Take Permit No. 2081-2015-024-04 (ITP) to the California High-Speed Rail Authority (Permittee) authorizing take of California tiger salamander (*Ambystoma californiense*), Swainson's hawk (*Buteo swainsoni*), Tipton kangaroo rat (*Dipodomys nitratoides nitratoides*), San Joaquin antelope squirrel (*Ammospermophilus nelsoni*), and San Joaquin kit fox (*Vulpes macrotis mutica*) (collectively, the Covered Species) associated with and incidental to the Permitting Phase 1 of the Fresno to Bakersfield Section of the High-Speed Train (HST) Project (Project). The Project as described in the ITP originally issued by CDFW includes HST alignment beginning on the south side of the G Street and San Benito Street intersection, north of Highway 41, in the City of Fresno, Fresno County, California. From this intersection, the Fresno to Bakersfield HST alignment extends south either along or adjacent to the Burlington Northern Santa Fe Railway (BNSF) for approximately 99 miles before reaching the section endpoint, at the intersection of 7<sup>th</sup> Standard Road, and Santa Fe Way, within the city limits of Shafter, in Kern County, California.

The total length of the Project is 99 miles. The Project is the second of the nine California HST sections to be constructed; each section will function independently, but once joined together will create a statewide HST system. The HST will be an electrically powered with steel-wheel-on-steel-rail technology and state-of-the-art safety, signaling, and automated train-control systems. The trains will be capable of operating at speeds of up to 220 miles per hour (mph) over a fully graded, separated, dedicated track alignment. The Project will be built using a design/build (D/B) approach, a method of construction by which one D/B contractor works under a single contract with the Permittee to provide design and construction services. The Project as originally permitted in the ITP included construction and installation of all Project components, including disturbance of up to 5,868.00 acres (hereafter, Construction Footprint). Construction may occur at any point along the Construction Footprint, and construction may occur at multiple locations simultaneously. The Project also includes operations,

maintenance, inspection activities within the Construction Footprint (O&M), and Mitigation Activities.

In an email dated June 24, 2016, the Permittee requested a revision of the ITP Project Description to include an increase in the Construction Footprint by 102.58 acres to 5,970.58 acres to accommodate eight additional Roadway Modifications, and in a subsequent email dated July 25, 2016, the Permittee requested the addition of a third designation of approvable project biologists to carry out small mammal habitat assessment and trapping activities. On March 7, 2017, CDFW issued **Major Amendment No. 1** to the ITP incorporating these requested revisions along with corrections to the acreage for the impacts, changes to the required Habitat Management lands acreage, and clarifications to the reporting requirement language.

On July 5, 2018 and September 19, 2018, CDFW initiated, issued, and re-issued respectively, **Major Amendment No. 2** to the ITP incorporating a Baseline Map Book as Exhibit 6 and added references to the map book throughout the ITP; further revising the Tracking Suitable Habitat Feature Disturbances, Map Updating, and Reporting requirements; added a specific Covered Activity (pile driving) and a species-specific Take Avoidance Measure for that Covered Activity; adding the third category of Biological Monitor, Designated Small Mammal Trapper, to Condition of Approval 6.2; clarified the Construction Monitoring Notebook requirement; added Condition of Approval 7.13 requiring survey and reporting requirements in advance of initiating Covered Activities; revising Conditions of Approval 8.13.2, 8.14.1, 8.15.1, 8.16.1, 8.16.2, 8.16.3, 8.17.2; and adding Condition of Approval 8.15.6. There was no change to the Construction Footprint acreage.

In a letter dated June 25, 2018, the Permittee requested a revision of the ITP to change the Mitigation Site Construction Elements from the Fagundes Compensatory Mitigation Site to a new location, now recognized as Cottonwood Creek. Because the Permittee would no longer be conducting riparian and wetland restoration at the Fagundes Compensatory Mitigation Site, all references to riparian and wetland restoration at the Fagundes site was removed and replaced with the Cottonwood Creek mitigation site. Due to the varying conditions at the Cottonwood Creek site, some Construction Elements also changed with the changes in mitigation site location. Further, on September 25, 2018, the Permittee requested a 7-day extension provision be added for San Joaquin antelope squirrel relocation. There was no change to the Construction Footprint acreage. On October 2, 2018, CDFW issued **Major Amendment No. 3** to the ITP incorporating these changes.

In an email dated October 4, 2018, the Permittee requested a revision of the ITP to extend the dry season work window beyond October 31<sup>st</sup> for ground-disturbing activities



at the Mitigation Site. There was no change to the Construction Footprint acreage. On November 15, 2018, CDFW originally issued **Minor Amendment No. 4** to the ITP incorporating these changes.

In an email dated November 27, 2018, the Permittee requested a revision to the ITP to allow for San Joaquin antelope squirrel (SJAS) relocation to occur prior to April 1 and to allow SJAS relocation to occur after November 15 on a case-by-case basis. There was no change to the Construction Footprint acreage. On November 29, 2018, CDFW issued **Major Amendment No. 5** to the ITP incorporating these changes.

In a letter dated September 10, 2018, the Permittee requested to revise the Project Description to allow for an increase in the Construction Footprint of 6.92 acres for a total of 5,977.50 acres to accommodate new Work Areas for the water pipeline irrigation casing installation and level 3 fiber optic line relocation. Additionally, CDFW initiated amending the Project Description to include installation of water pipeline irrigation casings, dry jack and bore, and horizontal directional drilling as Covered Activities as well as adding Condition of Approval 7.12. On January 17, 2019, CDFW issued **Major Amendment No. 6** to the ITP incorporating these changes.

In a letter dated October 19, 2018, the Permittee requested to revise the Project Description to increase the Construction Footprint by 2.01 acres to a total of 5,979.51 acres for road improvements to Wasco Avenue to function as an access road for agricultural operations north of Kimberlina Road in Kern County. Additionally, the Permittee requested a design change to the HST/Kimberlina Road location that will be contained within the current ITP Construction Footprint at that location. On February 1, 2019, CDFW issued **Major Amendment No. 7** to the ITP incorporating these changes.

In a letter dated August 22, 2018, the Permittee requested to revise the Project Description to accommodate advanced design changes requiring roadway modifications, utility relocations, access road alterations, and canal realignments along and adjacent to the HST alignment at South Avenue; two new locations in Fresno County at Conejo Avenue, and Peach Avenue; as well as changes for existing locations at Flint Avenue and Kent Avenue in Kings County; and Avenue 88 in Tulare County resulting in a net *decrease* of 1.96 acres changing the total Construction Footprint to 5,977.55 acres. In a subsequent email dated January 25, 2019, the Permittee requested an additional further revision of the ITP, as amended, to include the use of jack and bore and horizontal directional drilling as Covered Activities throughout the entire Construction Footprint. The Permittee also requested Condition of Approval 7.12, the notification and submission of a Horizontal Directional Drilling and Dry Jack and Bore Level 3 Fiber Optic Line Relocation Plan, be revised to serve as a notification and plan for

all horizontal directional drilling and jack and bore activities occurring within the entire Construction Footprint. On February 13, 2019, CDFW issued **Major Amendment No. 8** to the ITP incorporating these changes.

In a letter dated December 6, 2018, the Permittee requested to revise the Project Description to add construction of an intrusion protection barrier (IPB) within specific limits of the HST alignment to mitigate the risk of potential derailed trains from the adjacent BNSF rail line entering the path of the HST and increase the Construction Footprint by 0.75 acre bringing the total acres to 5,978.30. The IPB construction specific limits occur in various locations along the California HST route from the vicinity of State Route 43 and Whisler Road to the vicinity of Madera and Poplar Avenues near the City of Shafter in Kern County. IPB construction in this vicinity requires re-siting of two wildlife crossing structures. In an email dated January 23, 2019, Permittee further requested modifying the approval process for siting and constructing wildlife crossings. On February 20, 2019, CDFW issued **Major Amendment No. 9** to the ITP incorporating these changes

In a letter dated January 2, 2019, and a subsequent letter dated February 4, 2019, Permittee requested further revision to the ITP, as amended, to cover a 31.796-acre increase to the approved Project Construction Footprint and associated impacts to Covered Species to accommodate the "alternative technical concepts" (ATC) 11 and 13b (design variations). The changes are to employ "reverse stacking" over Garces Highway, Pond Road, and Peterson Road in Kern County; which means to place the railway over the surface roads instead of vice-versa; and a slight alignment revision to avoid a major agricultural water pumping facility known as the Semitropic Pump Station. In a letter dated February 12, 2019, Permittee requested amending the ITP to cover an 86.145-acre increase to the Project Construction Footprint to accommodate design variations including utility relocations, roadway modifications, temporary construction easements, and access roads at 23 locations. Altogether, this will bring the Construction Footprint acreage total to 6,096.241. On March 28, 2019, CDFW issued **Major Amendment No. 10** to the ITP incorporating these changes.

In a letter dated March 11, 2019, the Permittee requested further revision of the ITP as amended to cover a 141.60-acre increase to the approved Project Construction Footprint and associated impacts to Covered Species to accommodate four segments of intrusion protection barrier (IPB) between State Route 41 and approximately 1000 feet south of East American Avenue in Fresno County, and additional areas for construction access, fence and gate construction, utility relocations, and street and sidewalk modifications. In a letter dated March 12, 2019, the Permittee requested further revision of the ITP as amended to cover a 105.12-acre increase to the approved Project Construction Footprint and associated impacts to Covered Species to



accommodate design variations at 20 locations, in Fresno County. The design variations include utility relocation and protection, roadway modifications, temporary construction easement for staging equipment and materials, building demolition, additional earthwork, access roads, and/or waterway crossing structures. Altogether, this will bring the Construction Footprint acreage total to 6,342.961. On April 25, 2019, CDFW issued **Major Amendment No. 11** to the ITP incorporating these changes.

In a letter dated January 8, 2019, Permittee requested that CDFW further amend the ITP, as amended, to cover increases in the Project Construction Footprint by 98.066 acres, for a new total of 6,441.027 acres, to accommodate additional temporary access routes, staging areas, and utility relocation at several locations in Kern County referred to as "Wasco Utilities" and "North-South Utilities." Permittee provided supplemental information related to the requested activities dated January 29 and April 30, 2019. In a letter dated March 6, 2019, Permittee requested that CDFW further amend the ITP, as amended, to remove the required CDFW written approval of pre-construction survey reports. On May 20, 2019, CDFW issued **Major Amendment No. 12** to the ITP incorporating these changes.

In a letter dated April 5, 2019, Permittee requested amending the ITP to increase the Construction Footprint by 19.36 acres to accommodate design changes and refinements in the vicinity of State Route (SR) 46, including utility relocations, removal and construction of a Caltrans retention pond, construction of a retention pond for the Authority, building demolition, and other Covered Activities related to relocation of utilities within Kern County. In a letter dated June 21, 2019, Permittee requested amending the ITP to increase in the Construction Footprint by 150.46 acres to accommodate design variations including utility relocations, roadway modifications, temporary construction easements, access roads, and other Covered Activities at 19 locations within Fresno, Kings and Tulare counties. Together these design variations will require an increase in the Construction Footprint of 169.82 acres bringing the total to 6,610.85 acres. On August 8, 2019, CDFW issued **Major Amendment No. 13** to the ITP incorporating these changes.

In a letter dated May 3, 2019 Permittee requested a 50.89-acre expansion of the approved ITP Construction Footprint to address 68 utility conflicts involving PG&E overhead powerlines, AT&T telecommunication lines, SoCal Edison optical fiber, Semitropic irrigation lines, and North Kern Water Storage District relocation of Canal 9-22 and Canal P1030. Work to resolve the utility conflicts will include bypass, civil work, protect in place, removal, relocation, and other Covered Activities within Kern County. This request also includes three roadway modifications in Kern County one of which is at a new location. The new total Construction Footprint is 6,661.74 acres. On

September 3, 2019, CDFW issued **Major Amendment No. 14** to the ITP incorporating these changes.

In issuing the ITP, Major Amendment No. 1, Major Amendment No. 2, Major Amendment No. 3, Minor Amendment No. 4, Major Amendment No. 5, Major Amendment No. 6, Major Amendment No. 7, Major Amendment No. 8, Major Amendment No. 9, Major Amendment No. 10, Major Amendment No. 11, Major Amendment No. 12, Major Amendment 13 and Major Amendment 14 (collectively the ITP, as amended), CDFW found, among other things, that Permittee's compliance with the Conditions of Approval would fully mitigate impacts to the Covered Species and would not jeopardize the continued existence of the Covered Species.

In a letter dated May 9, 2019, Permittee requested amending the ITP to increase the Construction Footprint by 146.77 acres to accommodate design variations to the Tule elevated structure as well as utility relocations, roadway modifications, access roads, and other covered activities at 11 locations. This amendment request also proposes the elimination of two Temporary Construction Easements (TCEs) and two overcrossings, resulting in a 368.58-acre reduction to the Construction Footprint, for a net decrease of 221.81 acres, bringing the new total Construction Footprint to 6,439.93 acres.

This Amendment No. 15 (Amendment), a Major Amendment, makes the following changes to the ITP, as amended:

First, this Amendment decreases the size of the entire Project Construction Footprint by 221.81 acres to a total of 6,439.93 acres of cumulative disturbance. The increase in the Construction Footprint by 146.77 acres is necessary to accommodate design variations to the Tule elevated structure as well as utility relocations, roadway modifications, access roads, and other covered activities at 11 locations. The decrease in the Construction Footprint by 368.58 acres is due to the elimination of two TCEs and two overcrossings.

Second, this Amendment updates the section entitled Table 1 to show the removal of 311.65 acres from TCEs, 150.74 acres of orchard and 160.90 acres of hay crop, in Tulare County because these areas will not be used for staging areas.

Third, this Amendment updates the section entitled "Roadway Modifications" and Table 8 to include the eight new locations being added, as well as new activities for three existing locations and the elimination of activities at two locations in Tulare County. This Amendment also updates Table 8 to include the changes for the two existing locations in Kern County from Amendment 14, however, the new location at State Route 46, is removed changing the number in Kern County back to 16 locations.



Fourth, this Amendment updates Table 9 and increases the Covered Species habitat impacts for San Joaquin antelope squirrel and Tipton kangaroo rat by 89.23 acres, decreases impacts for San Joaquin kit fox by 55.72 acres, and decreases impacts for Swainson's hawk by 55.72 acres as a result of the change to the Project Construction Footprint.

Fifth, this Amendment updates Table 11 and the required permanent protection of additional compensatory HM lands and increases the accompanying estimates of management costs required to mitigate for Covered Species impacts resulting from the increased Project Construction Footprint in covered species habitat.

Sixth, this Amendment increases the Performance Security amount required for Permittee to proceed with Covered Activities.

Seventh, this Amendment modifies Exhibit 6, the "Baseline Map Book," by replacing Map Book Pages 28 through 33 (a total of 6 pages) to reflect the increased Project Construction Footprint.

## AMENDMENT

The ITP, as amended, is further amended as follows (amended language in ***bold italics***; deleted language in ~~strikethrough~~):

1. The section entitled "Project Description" on page 3 of the ITP, as amended, paragraph one shall be further amended to read as follows:

The Project is approximately 99 miles in length and includes construction and installation of all Project components (Exhibits 1 and 2). Construction and installation of all Project components will disturb up to ~~6,640.85~~ ***6,439.93*** acres (hereafter, Construction Footprint). Construction may occur at any point along the Construction Footprint, and construction may occur at multiple locations simultaneously.

2. Table 1 on page 4 of the ITP is amended to read as follows:

**Table 1. Locations of Construction Easements**

County	Acres	Latitude	Longitude	Near Major Water Crossings
Fresno	7.94	36.70037906240	-119.75998694800	
Fresno	8.75	36.69906958170	-119.76065577400	
Fresno	13.54	36.69133990430	-119.75600865000	

County	Acres	Latitude	Longitude	Near Major Water Crossings
Fresno	2.97	36.68913078040	-119.75404315700	
Fresno	2.77	36.68770251460	-119.75392064000	
Fresno	86.21	36.68234823480	-119.75256845700	
Fresno	12.30	36.51686843730	-119.72163955200	
Fresno	90.46	36.50045118080	-119.71275397700	
Fresno	57.33	36.49955210640	-119.71716405200	
Fresno	15.98	36.45913257490	-119.63774721700	
Fresno	10.34	36.45312896600	-119.62924057900	Cole Slough (Kings River Complex)
Kings	33.03	36.44806322280	-119.62542082700	Dutch Johns Cut (Kings River Complex)
Kings	14.18	36.43089371170	-119.61001363900	Kings River (Kings River Complex)
Kings	80.67	36.33415208650	-119.59442814700	
Fresno	7.94	36.70037906240	-119.75998694800	
Kings	85.78	36.33043621240	-119.59595880400	
Kings	124.27	36.28929048990	-119.59444526600	
Kings	5.05	36.23420077730	-119.60140336800	
Kings	16.19	36.17272010110	-119.60961967200	Cross Creek
Kings	24.89	36.17028845860	-119.60760820800	Cross Creek
Tulare	27.15	36.04851334150	-119.51876259300	Tule River
Tulare	<del>168.65</del> <b>7.75</b>	36.03169582010	-119.50376605700	hay crop on E side
Tulare	<del>164.05</del> <b>13.31</b>	36.02481498120	-119.50869508500	Orchard on W side
Kern	164.52	35.76473394330	-119.39667571800	
Kern	41.13	35.64859420840	-119.33219671200	
Kern	177.16	35.58336972300	-119.32657617600	
Kern	17.97	35.57102103140	-119.33302191600	
Kern	12.81	35.49469259000	-119.26155739600	
Kern	16.36	35.49002581910	-119.25662171200	
Kern	272.32	35.46584809810	-119.22289895400	
Kern	66.84	35.45107069460	-119.21343780100	

3. The section entitled "Roadway Modifications" beginning on page 36 of the ITP is amended to read as follows:

- Roadway Modifications:** Changes to existing roads along or crossing the HST ROW will be needed because the HST requires a fully dedicated grade-separated track alignment for public safety and to achieve the desired speeds. The Project will require ~~424~~ **132** roadway modifications; 43 in Fresno County, 36 in Kings County, ~~24~~ **33** in Tulare County, and ~~17~~ **16** in Kern County. Roadway modifications will occupy ~~1,944.704~~ **2,092.16** total acres of the



Construction Footprint (Table 8). At some locations, there will be an option to perform the modification as either an undercrossing or an overcrossing of the HST ROW. In these instances, the more conservative impact in terms of acreage (e.g., higher acreage) has been included and evaluated in this ITP. Handrails, fences, and walkways will be provided for the safety of pedestrians and bicyclists during roadway modification.

4. Table 8 on page 37 of the ITP is amended to read as follows:

**Table 8. Location and Size of Project Roadway Modifications**

Street Modification	County	Activity	Latitude	Longitude	Acres
State Route 41	Fresno	under the SR 41	36.7240003997	-119.785037246	10.06
E California St	Fresno	Closed road	36.721458321	-119.782629217	0.28
S Cherry Ave	Fresno	Closed road	36.7209050938	-119.781823436	0.25
S Van Ness Ave	Fresno	At-grade crossing over UPRR closed	36.7196124444	-119.779041032	0.16
E Lorena Ave	Fresno	Closed road	36.7194140685	-119.780231792	0.05
E Florence Ave	Fresno	Closed road	36.7177546323	-119.77709763	0.18
S Sarah Ave	Fresno	Closed road	36.7176684642	-119.778356416	0.07
E Belgravia Ave	Fresno	Closed road	36.7159436652	-119.774934024	0.5
S Railroad Ave	Fresno	Closed at E California Ave and S Orange Ave.	36.7151761113	-119.775182119	7.8
E Church Ave	Fresno	E Church Ave pass over HST, UPRR, and BNSF. South Sunland Ave would be realigned and re-connected to E Church Ave farther to the east. Existing crossing over BNSF closed. South East would be raised to tie	36.7147224753	-119.771561352	10.7
S Golden State Boulevard	Fresno	Over pass	36.7140003336	-119.77576763	7.6
S East Ave	Fresno	Closed road	36.7119936988	-119.772581644	0.54
E Jenson Bypass	Fresno	under existing Jensen Ave bridge in shallow trench to meet vertical clearance requirements.	36.7068858745	-119.765524619	2.20
S Orange Ave	Fresno	Closed Road	36.7039734853	-119.763693594	0.77
E Hardy Ave	Fresno	pass over E Hardy Ave on aerial structure.	36.69362943	-119.756783931	0.52

Street Modification	County	Activity	Latitude	Longitude	Acres
E Central Ave	Fresno	E Central raised over the HST. Retaining wall for the industrial facility to the north and south of the road. S Cedar Ave will be raised to meet at E Central Ave.	36.6780820685	-119.752494327	7.10
E Malaga Ave	Fresno	E Malaga Ave closed with alternative crossings at E Central Ave and E American Ave.	36.6707157993	-119.750511173	0.45
E American Ave	Fresno	E American Ave will pass over HSTs and existing BNSF tracks. Connections to S Cedar Ave and S Maple Ave would be maintained.	36.6634446718	-119.750556964	17.32
East Jefferson Avenue	Fresno	Closed road. Access road, utility relocation, and modified watercourse.	36.6488869797	-119.750097517	31.438
E Lincoln Avenue	Fresno	Access road improvements and to accommodate construction activities associated with roadway modifications and utility relocations.	36.64956316	-119.750328	2.607
E Clayton Ave	Fresno	E Clayton Ave closed with alternative crossings at E Lincoln Ave and E Adams Ave. Road modifications, modified watercourse, and utility relocations.	36.6416773639	-119.750534472	4.699
E Adams Ave	Fresno	E Adams Ave will pass over the HST BNSF tracks along the current street alignment. Access road and utility relocations.	36.6343627947	-119.750282964	29.919
E Sumner Ave	Fresno	Closed road. Access road improvements, roadway modifications, and utility relocations.	36.6271449107	-119.750538734	5.563
E South Ave	Fresno	E South Ave will pass over HST and BNSF tracks. An existing canal would be relocated with a temporary bypass location while the permanent location is constructed.	36.6198925728	-119.750250294	24.60

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY  
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Fresno to Bakersfield Section Permitting Phase 1



Street Modification	County	Activity	Latitude	Longitude	Acres
E Manning Ave	Fresno	E Manning Ave will pass over HST and BNSF. Alterations to local access roads will be required to maintain existing level of access west of HST. S Chance Ave will pass under E Manning Ave. Access road improvements, roadway modifications, and utility relocations.	36.6053307794	-119.749144601	22.678
E Springfield Ave	Fresno	E Springfield Ave closed at HST with alternative crossing at E Manning Ave, access road improvements, roadway modifications, and utility relocations.	36.5980706722	-119.74970971	5.541
E Dinuba Ave	Fresno	Closed road. Access road improvements, roadway modifications, and utility relocations.	36.5909158368	-119.748104873	3.658
E Floral Ave	Fresno	E Floral Ave will pass over HST and BNSF RR. Access road, roadway modifications, and utility relocations.	36.5763818684	-119.744949519	35.120
E Rose Ave	Fresno	Closed road. Access road improvements, roadway modifications, and utility relocations.	36.5691985195	-119.742943503	3.942
S Topeka Ave	Fresno	Closed road. Road improvements, modified watercourse, and utility relocations.	36.5623511003	-119.740814011	3.720
SR 41	Fresno	HST will travel under the SR 41 structures.	36.7240003997	-119.785037246	10.06
E Nebraska Ave	Fresno	E Nebraska Ave will pass over HST and BNSF. Access to the commercial buildings (east) and residential properties (west) would be altered to accommodate the crossing structure. BNSF improvements, changes to the access road, roadway modifications, utility relocations, and modified watercourse.	36.5612880773	-119.741585117	44.942

Street Modification	County	Activity	Latitude	Longitude	Acres
E Mountain View Ave	Fresno	A combined overpass with S Chestnut Ave will pass over HST and existing BNSF. E Mountain View Ave will have the main overpass along existing road alignment with S Chestnut Ave north-south raised and connected to both sides of HST. Roadway modifications, utility relocations, and modified watercourse.	36.5483303047	-119.73558074	62.760
E Kamm Ave	Fresno	Closed road. Access road improvements, roadway modifications, and utility relocations.	36.532890995	-119.729874804	12.782
S Willow Ave	Fresno	Closed road	36.5266824194	-119.727818734	0.46
Conejo Ave	Fresno	HST will pass over BNSF on viaduct. Pergola will be approx. 2,200 linear ft with approx. 42 columns.	36.518916	-119.724052	29.77
Peach Ave	Fresno	Peach Ave will pass under HST via a three-span undercrossing with minor road improvements.	36.510600	-119.718883	30.66
E Clarkson Ave	Fresno	E Clarkson closed at the HST and connect E Clarkson Ave to S Minnewawa Ave. Roadway modifications and utility relocations.	36.5032176736	-119.714395289	5.419
S Minnewawa Ave	Fresno	North S Minnewawa Ave closed at HST. S Minnewawa Ave west of HST will connect to E Clarkson Ave in the north. Access road improvements, roadway modifications, and utility relocations.	36.499598307	-119.710569498	4.962
S Clovis Ave	Fresno	Will connect the north and south legs of the road by crossing roughly perpendicular over HST. Roadway modifications and utility relocations.	36.4939776544	-119.704104759	37.040
E Elkhorn Ave	Fresno	E Elkhorn Ave will pass over HST. Roadway modifications and utility relocations.	36.4892802291	-119.697998007	33.039

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Street Modification	County	Activity	Latitude	Longitude	Acres
S Fowler Ave	Fresno	S Fowler Ave will pass perpendicular over HST. Will directly link the north and south portions of S Fowler and will eliminate the tee intersections at E Elkhorn Ave. Access road improvements, construction of the overcrossing, roadway modifications, and utility relocations.	36.483458525	-119.687326275	72.435
West of Highway 43	Fresno	Access road, roadway modifications, utility relocations, and modified watercourse.	36.45964511	-119.6400016	7.317
Highland Ave	Fresno	Utility relocations.	36.457355	-119.636266	0.60
E Davis Ave	Fresno	E Davis will pass over HST. Road improvements, utility relocations, and an access road.	36.4742647863	-119.669315256	37.775
8 <sup>th</sup> Ave	Kings	A combined overpass solution with Dover Ave over the HST. 8 <sup>th</sup> Ave will be elevated to join Dover Ave. T	36.4163278231	-119.600141220	27.24
Dover Ave	Kings	Dover Ave will pass over HST, a shift in the 8 <sup>th</sup> Avenue roadway, utility relocation and access roads.	36.4158118612	-119.599568091	32.13
Excelsior Ave	Kings	Excelsior Ave will pass over HST. Canal will be box culverted. Utility relocations, road improvements, and waterway crossing structures.	36.4016824426	-119.594377839	37.643
Elder Ave	Kings	Elder Ave will pass over HST. Access roads provided to residential properties on both sides of the road. Utility relocations.	36.3869812649	-119.591806932	34.69
Flint Ave	Kings	Flint Ave will pass over HST. An access road will be provided for the dairy. The ditch canal will be relocated from the north to the south side of Flint Ave and converted to a box culverted. Utility relocation.	36.3721206526	-119.591579548	30.089

Street Modification	County	Activity	Latitude	Longitude	Acres
Fargo Ave	Kings	Fargo Ave will pass over HST. The bridge will also pass over 7 <sup>th</sup> Ave and HST. A new frontage road at the existing Fargo Ave will provide access to residential. Utility relocations and access roads.	36.3574180744	-119.5914857	35.35
Grangeville Boulevard	Kings	Utility relocations and roadway modification.	36.342398	-119.591324	21.39
Segment 2 Field Office/ Staging Area	Kings	Utility relocations and establishment of a field office and staging area.	36.332178	-119.590558	6.742
South of Highway 198	Kings	Utility relocations, watercourse modification earthwork, and access roads.	36.327629	-119.591544	12.07
Hanford-Armona Ave	Kings	Hanford-Armona will be on a bridge over HST. The canal will be box culverted. Utility relocations and access roads.	36.3134563282	-119.591619656	40.68
Houston Ave	Kings	Houston Ave will pass over HST. Access to industrial properties to the east will require minor adjustments. A small watercourse crossing will be box culverted. Utility relocations and roadway modification.	36.2984680583	-119.590975215	39.87
Iona Ave	Kings	Iona Ave will pass over HST. The canal will be box culverted.	36.2839523504	-119.591578265	23.96
Idaho Ave	Kings	Idaho Ave will pass over HST. The canal running adjacent to Idaho Ave will be diverted at the south end. There will be an access road for the traction power facility. Utility relocations.	36.2694080167	-119.591346644	41.057
Jackson Ave	Kings	Jackson Ave will pass over HST. The canal running parallel to the road will be diverted at the south end. Utility relocations.	36.2548952893	-119.592913232	41.32
South of Jackson Ave	Kings	Utility relocations and a waterway crossing structure.	36.247825, 36.250423	-119.59501, -119.59452	1.474
Jersey Ave	Kings	Jersey Ave closed at HST ROW east of SR 43. Utility relocations and roadway modification.	36.2404455095	-119.59861780	10.40
SR 43 near Jersey Ave	Kings	HST would be elevated and SR 43 would pass under HST.	36.2374830821	-119.600866596	53.61

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Street Modification	County	Activity	Latitude	Longitude	Acres
Kent Ave	Kings	Kent Ave will pass over HST south of existing road with minor road improvements to the Kent Ave and SR 43 intersection. The watercourse would be converted to a box culvert and run underneath the crossing.	36.2253417496	-119.607327673	27.63
South of Kent Avenue	Kings	Utility relocations.	36.222732	-119.607658	0.77
Kansas Ave	Kings	Kansas Ave will pass over HST south of existing road. The watercourse will run underneath the crossing.; Utility relocations and watercourse modification.	36.2106038495	-119.610564571	61.75
North of Lansing Ave	Kings	Watercourse modification earthwork, and Temporary Construction Easement (TCE).	36.196450	-119.612016	0.90
Lansing Ave	Kings	Closed road.	36.1966069820	-119.612228752	2.53
South of Lansing Avenue	Kings	Activities associated with utility relocation, roadway modification a new undercrossing and a waterway crossing structure.	36.195186	-119.611023	2.534
Nevada Ave	Kings	Nevada Ave pass over HST, BNSF, and SR 43 & connect with Nevada Ave east of SR 43. Road improvements, utility relocations, and waterway crossing structures.	36.1373421563	-119.583354212	42.014
South of Nevada Ave	Kings	Utility relocations.	36.130668	-119.578892	1.16
Newark Ave	Kings	Niles Ave will extend east of 5 <sup>th</sup> Ave to the north and connect to Newark Ave.	36.1189926032	-119.567495303	6.03
Newark Ave to Niles Ave	Kings	Utility relocations, roadway modifications, and waterway crossing structures.	36.117625	-119.563267	9.552
5 <sup>th</sup> Ave	Kings	5 <sup>th</sup> Ave will realign and connect to Niles Ave east of HST	36.117254885	-119.562223263	7.02
Niles Ave	Kings	Closed road.	36.1161945405	-119.561904128	1.5
Niles Ave/ Waukena Ave/ Orange Ave	Kings	Utility relocations, TCEs, site preparation and demolition, earthwork, and access roads.	36.111744	-119.556361	20.11

Street Modification	County	Activity	Latitude	Longitude	Acres
5 <sup>th</sup> Avenue	Kings	Closed road. 5 <sup>th</sup> Ave will realign and connected to Orange Ave east of HST.	36.1111929720	-119.554167071	2.44
Waukena Ave	Kings	Waukena Ave will shift north slightly and pass over HST and a new connector road will be constructed to connect with Orange Ave east of HST.	36.110697480	-119.551415469	20.42
Orange Ave	Kings	Closed road. Orange Ave will connect with 5 <sup>th</sup> Ave and Waukena Ave via new connector.	36.1089925221	-119.554048577	14.37
Whitley Ave/ State Rte 137	Kings	Whitley Ave will pass under HST	36.0979694613	-119.541762648	13.70
Whitley Avenue	Kings	Utility relocations and access roads.	36.097772	-119.543966	1.527
South of Road 19/ North of Avenue 156	Kings	Utility relocation and waterway crossing structures.	36.079981	-119.577325	0.279
Avenue 156, west of 6 <sup>th</sup> Ave	Kings	Activities associated with utility relocation, roadway modification and new undercrossing.	36.072451	-119.577325	2.783
Oregon Avenue	Tulare	Utility relocations and an additional access road.	36.086194	-119.535603	0.111
<b>North of Avenue 144</b>	<b>Tulare</b>	<b>Tule Elevated Structure and utility relocation</b>	<b>36.060687°</b>	<b>-119.525523°</b>	<b>12.97</b>
Ave 144	Tulare	Utility relocations. <i>Tule Elevated Structure, additional utility relocations, and roadway modifications.</i>	36.050889	-119.521987	17.86 25.31
<b>Tule River</b>	<b>Tulare</b>	<b>Change from single pile with four columns, two on the north and two on the south of the channel for the Tule Elevated Structure as well as utility relocations.</b>	<b>36.042562°</b>	<b>-119.516311°</b>	<b>4.78</b>
Ave 136	Tulare	Closed connection to the west of SR 43 and retain the connection to the east. <i>Access roads, roadway modifications and improvements, and utility relocations.</i>	36.0363518397	-119.511898228	5.24 6.05
<b>South of Ave 136</b>	<b>Tulare</b>	<b>Road improvements and utility relocations.</b>	<b>36.031173°</b>	<b>-119.507935°</b>	<b>15.79</b>

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Street Modification	County	Activity	Latitude	Longitude	Acres
Ave 128	Tulare	East-west Ave 128 will flare to the south on the west side and cross over the HST, RR, and SR 43 and then curve to the south on the east end and loop around into SR 43. <i>Shift in roadway modifications and improvements.</i>	36.0204664620	-119.500397704	25.20 13.38
Ave 120/ Hesse Ave	Tulare	East-west Ave 120 will flare away from road on west to the north in order to cross over the HST, RR, canal, Rd 36, and SR 43 and then curve south to intersect Ave 120 to the east of SR 43. <i>Realignment of the Avenue 120 overcrossing.</i>	36.0089150833 36.009212°	-119.492146804 -119.492361°	22.78
<b>Avenue 120 to Avenue 112</b>	<b>Tulare</b>	<b>shift HSR alignment to the west, add access roads and utility relocations</b>	<b>Various</b>	<b>Various</b>	<b>4.556</b>
Ave 112	Tulare	East-west Ave 112 will flare away north from road on the west to cross over the HST, RR, canal, and SR 43, then curve south to intersect Ave 112 to the east of SR 43. <i>Shift in roadway modifications and improvements.</i>	35.9944181126	-119.48114389	21.86 9.87
<b>South of Avenue 112</b>	<b>Tulare</b>	<b>Shift HSR alignment, add access roads, roadway modifications, modified watercourse, and utility relocations.</b>	<b>Various</b>	<b>Various</b>	<b>45.71</b>
<b>Avenue 96</b>	<b>Tulare</b>	<b>Add roadway modifications and utility relocations.</b>	<b>35.963832°</b>	<b>-119.458183°</b>	<b>5.92</b>
Ave 88	Tulare	East-west Ave 88 will flare away south from the existing road on the west to cross over the HST, RR, and SR 43, then curve north to intersect Ave 88 to the east of SR 43 with road improvements to the Ave 88 and SR 43 intersection and access roads.	35.9479258019	-119.447170390	24.51
<b>Road 40 and Avenue 88</b>	<b>Tulare</b>	<b>Shift in roadway modifications and improvements resulting from updated surveys.</b>	<b>35.983010°, 35.949161°</b>	<b>-119.482835°, -119.459275°</b>	<b>10.35</b>
<b>South of Avenue 88</b>	<b>Tulare</b>	<b>Add roadway modifications and utility relocations.</b>	<b>35.939888°</b>	<b>-119.441272°</b>	<b>5.31</b>

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Street Modification	County	Activity	Latitude	Longitude	Acres
County Rd J22/Ave 56	Tulare	East-west County Rd J22/Ave 56 will cross over HST along the same alignment of County Rd J22. Road modifications, utility relocation, and waterway crossing structures.	35.8912828441	-119.416263948	26.154
Ave 136	Tulare	Reconstruction	36.03633283	-119.5142807	3.21
Road 24	Tulare	Overlay	36.02178803	-119.5184409	12.00
Ave 120	Tulare	Reconstruction	36.00727783	-119.4976477	17.56
New Frontage Road	Tulare	Construction	36.00146513	-119.487012	8.68
Road 40	Tulare	Overlay	35.98197868	-119.4828371	25.07
South of Avenue 96	Tulare	Utility relocations.	35.958487	-119.454124	5.80
Ave 88	Tulare	Construction	35.94908946	-119.467986	6.92
Ave 56	Tulare	Reconstruction	35.89128551	-119.414089	2.56
Avenue 52	Tulare	Construction activities associated with a waterway crossing structure, access road, and utility relocation.	35.884424	-119.414394	1.309
Avenue 48	Tulare	Construction activities associated with a modified watercourse.	35.876661	-119.41318	0.030
South of Avenue 48	Tulare	Construction activities associated with the waterway crossing structure, access road, and utility relocation.	35.86958	-119.412787	0.596
West of Avenue 36	Tulare	Construction activities associated with the waterway crossing structure and access road.	35.855280	-119.412188	5.391
North of Avenue 24	Tulare	Construction activities associated with the access road	35.840467, 35.834915	-119.410318, -119.40947	2.991
Ave 24	Tulare	Reconstruction. Accommodate construction activities associated with utility relocation, roadway modification and access roads new undercrossing.	35.83345072	-119.3933522	22.134
South of Ave 24 to North of Ave 16	Tulare	Construction activities associated with the access road and utility relocation	35.831605, 35.819052	-119.409127, -119.407938	8.702
Ave 16, Ave 12, and Ave 8	Tulare	Utility relocations across the HSR alignment	35.818805, 35.814595, 35.804763	-119.408356, -119.405901, -119.406032	2.159

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Street Modification	County	Activity	Latitude	Longitude	Acres
Garces Hwy	Kern	East-west Garces Hwy will cross over the HST along the same alignment as Garces Hwy. A local access road to the east of the HST will be improved for access to parcels.	35.7631490982	-119.395443877	35.77
Pond Rd	Kern	East-west Pond Rd will cross over HST north of t Pond Rd to reduce the skew of bridge.	35.7182372558	-119.360357959	47.83
Peterson Rd	Kern	East-west Peterson Rd will cross over HST along the same alignment as Peterson Rd. A local access road to the east of the HST alignment will be added for access to parcels.	35.7031553450	-119.349554364	24.25
Blankenship Ave	Kern	Closed road. <b>Added work on a cul-de-sac.</b>	35.6668444098	-119.334372525	<del>0.37</del> <b>0.43</b>
Taussig Ave	Kern	Closed road	35.6523207048	-119.331945499	0.59
McCombs Ave	Kern	McCombs Ave will shift north and pass over HST, BNSF, and SR 43 and the overcrossing will connect with existing street east of SR 43. The existing intersection between SR 43 and McCombs Ave will be maintained. The BNSF RR crossing will be removed.	35.6173101823	-119.331999588	38.87
Wasco Ave	Kern	closed between Jackson Ave and Prospect Ave. Maintained as access road between Prospect Ave and Kimberlina Rd., graveled when complete.	35.5634158500	-119.331126469	5.91
Kimberlina Rd	Kern	Kimberlina Rd will pass under HST and BNSF RR east of the intersection with SR 43. Existing BNSF RR at-grade crossing will be removed. Vertical profile over Kimberlina Rd increased up to 21 ft, grade separation at Kimberlina Rd and BNSF Railroad modified, and relocation of 15,900 linear ft for BNSF RR between Jackson and Merced Ave eliminated.	35.5581240099	-119.328935692	11.89

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Street Modification	County	Activity	Latitude	Longitude	Acres
Merced Ave	Kern	Merced Ave will shift north and pass over HST, BNSF, and SR 43. The overcrossing will connect with existing street east of SR 43. The existing intersection between SR 43 and Merced Ave will be maintained. <b><i>Additional road modifications.</i></b>	35.5304382202	-119.306338886	<del>25.77</del> <b>30.02</b>
Madera Ave	Kern	Closed road.	35.5216067729	-119.295016740	0.28
Poplar Ave	Kern	Poplar Ave will pass over HST, BNSF, and SR 43. A new connector will connect Poplar Ave and SR 43 west of HST. The existing BNSF RR will be removed.	35.5211784275	-119.295605562	24.42
Mettler Ave	Kern	Closed road.	35.5157746253	-119.284763972	2.29
Fresno Ave	Kern	Fresno Ave will shift south and pass over HST, BNSF, and SR 43 and the overcrossing will connect with existing street east of SR 43. The existing intersection between SR 43 and Fresno Ave will be maintained.	35.5137628140	-119.287362735	29.03
Burbank St	Kern	Burbank St will pass over HST on a new alignment.	35.4701140102	-119.234730188	26.95
Santa Fe Way	Kern	Santa Fe Way will be realigned west of HST.	35.4694180812	-119.234377238	81.47
7th Standard Rd	Kern	7th Standard overcrossing will be raised to provide HST vertical clearance.	35.4412771476	-119.200791639	14.71

5. The section entitled "Impacts of the Taking on Covered Species" on page 59, of the ITP, as amended, shall be further amended to read as follows:

This ITP covers all Project related activities that cumulatively disturb no more than ~~6,610.85~~ **6,439.93** acres within the Construction Footprint (as depicted in the Baseline Map Book, Exhibit 6, Baseline Maps 1 through 53 and generated from the metadata provided by the Permittee) and no more than 17.32 acres at the Mitigation Site (collectively, the Project Area). Project activities are more fully described in the Project Description of this ITP and include subsurface geotechnical drilling and boring; habitat grubbing, vegetation removal, clearing, demolition, construction of a geotechnical test embankment and associated borrow site excavation and mass grading followed by the mobilization of equipment and



materials; earthwork including construction of temporary and permanent excavation support structures; pile driving, excavation of open cut slope and fill, at grade profile excavation and leveling, and retained fill cut, rail bed foundation soil compaction, and elevated profiles and elevated profile structure components including construction and installation of straddle bents, foundations, pile caps, substructures, and superstructures; trench digging and other subsurface utility installation, relocation, and protection; pad preparation and construction of a batch plant, materials storage, fabrication, casting areas, access roads, and staging areas; rotary drilled reinforced concrete cast in place pile and drive pile installation; excavation of drainage swales and fabrication and installation of underground drainage culverts and pipes; ~~424132~~ roadway modifications including realignment and resurfacing, construction of new access roads, overcrossing, and undercrossing; construction of waterway crossing structures over the Kings River Complex, Cross Creek, Tule River, Deer Creek, Poso Creek, and other watercourse crossings, partial dewatering and diversion of water; construction and assembly of tie and ballast and slab track railway systems, and shoofly track; erecting mast poles; construction of electrical systems facilities including the OCS, nine TPSS, up to nine switching stations, and up to 27 paralleling stations; construction of signal huts and bungalows including installation of cabling to the field hardware and track stations; traction electrification; excavation and construction of wildlife crossings, construction of the Kings/Tulare Regional Station; construction of a maintenance-of-infrastructure facility; installation of AD and AR fence; construction of temporary job site trailers and field offices including the development of building pads and preparation of parking areas; application of dust suppressants; operation and maintenance activities such as track, power, structure, signaling, train control, communications, intruder, and right-of way inspection and repair; equipment staging, mowing, inoculum collection, land grading, and excavation of wetlands at the Mitigation Site; and hand tool or auger planting of trees and shrubs, and other activities within the Construction Footprint and Mitigation Site described in the Project Description section of this ITP. All these Project activities are collectively referred to as the Covered Activities.

6. Table 9 on page 61 of the ITP, as amended, shall be further amended to read as follows:

**Table 9. Covered Species Habitat Impacts**

<b>Covered Species</b>	<b>Habitat Type</b>	<b>Impact Type</b>	<b>Impact Acres</b>
California tiger salamander	Upland refugia (annual grassland, pasture, barren, fallow field, inactive agriculture, and ruderal)	Permanent	9.06
	Aquatic breeding (vernal pool, open water, seasonal wetland)	Permanent	9.64
		<b>Total</b>	<b>18.70</b>
	Upland refugia (annual grassland at Mitigation Site)	Temporary	16.56
	Aquatic breeding habitat (vernal pools at Mitigation Site)	Temporary	0.76
		<b>Total</b>	<b>17.32</b>
Tipton kangaroo rat	Annual grassland, Alkali desert scrub, barren, pasture, fallow field, inactive agriculture, and ruderal	Permanent	<del>508.70</del> <b>597.92</b>
San Joaquin antelope squirrel	Annual grassland, Alkali desert scrub, barren, pasture, fallow field, inactive agriculture, and ruderal	Permanent	<del>508.70</del> <b>597.92</b>
Swainson's hawk	Foraging (California annual grassland, pasture, barren, fallow field, inactive agriculture, ruderal, field crops, row crops, and irrigated hay crops)	Permanent	<del>2,387.12</del> <b>2,331.40</b>
	Foraging (annual grassland at Mitigation Site)	Temporary	17.32
	Nesting (riparian and eucalyptus woodland and individual trees)	Permanent	5 nesting tree(s)
San Joaquin kit fox	Alkali desert scrub, annual grassland, barren, pasture, fallow field, inactive agriculture, ruderal, field crops, row crops, and irrigated hay crops	Permanent	<del>3,820.52</del> <b>3,764.81</b>



Covered Species	Habitat Type	Impact Type	Impact Acres
	Foraging and denning (annual grassland at Mitigation Site)	Temporary	17.32

7. The first paragraph of the section titled "Tipton Kangaroo Rat," on page 62 of the ITP, as amended, shall be further amended to read as follows:

The extent of the impacts of the taking of Tipton kangaroo rat (TKR) is based on the amount of vegetation cover types that could function as TKR foraging, burrowing, and breeding habitat within the Construction Footprint, the assumption that all potentially suitable habitat in the Construction Footprint would be permanently destroyed, and an evaluation of Project indirect impacts. The Covered Activities are expected to result in the permanent loss of up to ~~508.70~~ **597.92** acres of potential habitat (Table 9).

8. The first paragraph of the section titled "San Joaquin Antelope Squirrel," on page 62 of the ITP, as amended, shall be further amended to read as follows:

The extent of the impacts of the taking of San Joaquin antelope squirrel (SJAS) is based on the amount of vegetation cover types that could function as SJAS foraging, burrowing, and breeding habitat within the Construction Footprint, the assumption that all potentially suitable habitat in the Construction Footprint would be permanently destroyed, and an evaluation of Project indirect impacts. The Covered Activities are expected to result in the permanent loss of up to ~~508.70~~ **597.92** acres of potential habitat (Table 9).

9. The first paragraph of the section titled "Swainson's Hawk," on page 63 of the ITP, as amended, shall be further amended to read as follows:

Up to ~~2,387.12~~ **2,331.40** acres of foraging habitat, including areas within active agricultural production, and five nest trees for Swainson's hawk (SWHA) could be permanently impacted as a result of Covered Activities. In addition, grading and excavation at the Mitigation Site would also result in up to 17.32 acres of temporary impacts to SWHA foraging habitat (Table 9). It is expected that all potentially suitable habitat (~~2,387.12~~ **2,331.40** acres) within the Construction Footprint would be permanently destroyed. Based on the results of baseline surveys conducted within the Construction Footprint in spring 2013, there are five known SWHA nest trees within 0.5-miles of the Construction Footprint (Table 10). The foraging habitat impact acres were determined based on these five nest trees along with the guidelines set forth in the *Staff Report Regarding Mitigation for*

*Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley of California* (CDFW, 1994).

10. The first paragraph of the section titled "San Joaquin Kit Fox," on page 64 of the ITP, as amended, shall be further amended to read as follows:

The extent of the impacts of the taking of San Joaquin kit fox (SJKF) is based on the amount of vegetation cover types that could function as SJKF foraging, denning, and breeding habitat within the Construction Footprint, the assumption that all potentially suitable habitat in the Construction Footprint would be permanently destroyed, and an evaluation of Project indirect impacts. The Covered Activities are expected to result in the permanent loss of up to 3,820.52 **3,764.81** acres of potential habitat (Table 9). Grading and excavation at the Mitigation Site would also result in up to 17.32 acres of temporary impacts to SJKF habitat.

11. Table 11 on page 105 of the ITP, as amended, shall be further amended to read as follows:

**Table 11. Required Mitigation for Project-Related Impacts to Covered Species**

Covered Species Name (Common Name/ Scientific Name)	Habitat Type	Project Impacts	Required Mitigation Acreage
California tiger salamander ( <i>Ambystoma californiense</i> )	Upland	9.06	27.18
	Aquatic	9.64	0.96
Swainson's hawk ( <i>Buteo swainsoni</i> ) (active trees within 0.5 mile of the project footprint)	Foraging habitat 0-1 miles	574.76 <b>515.88</b>	574.76 <b>515.88</b>
	Foraging habitat 1-5 miles	1,164.75 <b>1,167.91</b>	873.56 <b>875.93</b>
	Foraging habitat 5-10 miles	647.61	323.18
San Joaquin antelope squirrel ( <i>Ammospermophilus nelsoni</i> )	Natural	508.70 <b>597.93</b>	1,526.09 <b>1,793.78</b>
Tipton kangaroo rat ( <i>Dipodomys nitratoides nitratoides</i> )	Natural	508.70 <b>597.93</b>	1,526.09 <b>1,793.78</b>
San Joaquin kit fox ( <i>Vulpes macrotis mutica</i> )	Natural and agriculture	3,820.52 <b>3,764.81</b>	2,042.63 <b>2,218.49</b>
<b>Total Compensatory Mitigation</b>			6,895.07 <b>7,549.18</b>



12. Condition of Approval 9.1 (Cost Estimates) on pages 106 and 107 of the ITP, as amended, shall be further amended to read as follows:

9.1. Cost Estimates. CDFW has estimated the cost of acquisition, protection, and perpetual management of the HM lands as follows:

9.1.1. Land acquisition costs for HM lands identified in Condition of Approval 9.2 below, estimated at an average of \$11,413.90/acre for up to ~~6895.07~~ **7,549.18** acres: ~~\$78,699,639.47~~ **\$86,165,585.60**. Land acquisition costs are estimated using local fair market current value for lands with habitat values meeting mitigation requirements;

9.1.2. Start-up costs for HM lands, including initial site protection and enhancement costs as described in Condition of Approval 9.2.5 below, estimated at ~~\$3,665,704.90~~ **\$4,013,456.88**;

9.1.3. Interim management period funding as described in Condition of Approval 9.2.6 below, estimated at ~~\$1,619,779.43~~ **\$1,773,441.97**;

9.1.4. Long-term management funding as described in Condition of Approval 9.3 below, estimated at \$3,570.26/acre for up to ~~6895.07~~ **7,549.18** acres: ~~\$24,617,192.62~~ **\$26,952,535.39**. Long-term management funding is estimated initially for the purpose of providing Security to ensure implementation of HM lands management.

9.1.5. Related transaction fees including but not limited to account set-up fees, administrative fees, title and documentation review and related title transactions, expenses incurred from other state agency reviews, and overhead related to transfer of HM lands to CDFW as described in Condition of Approval 9.4, estimated at \$12,000.

13. Condition of Approval 10.1 (Performance Security) on page 112 of the ITP, is amended to read as follows:

10.1. Security Amount. The Security shall be in the amount of ~~\$108,614,316.43~~ **\$118,917,019.84**. This amount is based on the cost estimates identified in Condition of Approval 9.1 above.

14. Exhibit 6 ("Baseline Map Book") in the list of attachments on page 115 of the ITP, as amended, is amended to include the replacement of Map Book pages 6, 12, 14-23, 25-29, 32-33, and 45 (a total of 20 pages) with the corresponding page included in Attachment 2 of this Amendment, to reflect the increased Project Footprint.

The corresponding measures in the Mitigation Monitoring and Reporting Program (MMRP) (Attachment 1 of the ITP, as amended) shall be further amended to read the same as above. All terms and conditions of the ITP, as amended, and the MMRP that are not expressly amended herein remain in effect and must be implemented and adhered to by the Permittee.

## FINDINGS

*Issuance of this Amendment will increase the amount of take for some of the Covered Species compared to the Project as originally approved; however, because the HM lands protection and management funding requirements will be commensurately increased, it is not expected that this Amendment will increase Project impacts on these species (i.e., "impacts of taking" as used in Fish and Game Code Section 2081, subd. (b)(2)).*

Discussion: This Amendment makes seven specific changes to the ITP, as amended. First, this Amendment decreases the size of the entire Project Construction Footprint by 221.81 acres to a total of 6,439.93 acres of cumulative disturbance. The increase in the Construction Footprint by 146.77 acres is necessary to accommodate design variations to the Tule elevated structure as well as utility relocations, roadway modifications, access roads, and other covered activities at 11 locations. The decrease in the Construction Footprint by 368.58 acres is due to the elimination of two TCEs and two overcrossings.

Second, this Amendment updates the section entitled Table 1 to show the removal of 311.65 acres from two temporary construction easements, 150.74 acres of orchard and 160.90 acres of hay respectively, in Tulare County because these areas will not be used for staging areas.

Third, this Amendment updates the section entitled "Roadway Modifications" and Table 8 to include the eight new locations being added, as well as new activities for three existing locations and the elimination of activities at two locations in Tulare County. This Amendment also updates Table 8 to include the changes for the two existing locations in Kern County from Amendment 14; however, the new location at State Route 46, is removed changing the number in Kern County back to 16 locations.



Fourth, this Amendment updates Table 9 and increases the Covered Species habitat impacts for San Joaquin antelope squirrel and Tipton kangaroo rat by 89.23 acres, decreases impacts for San Joaquin kit fox by 55.72 acres, and decreases impacts for Swainson's hawk by 55.72 acres as a result of the change to the Project Construction Footprint.

Fifth, this Amendment updates Table 11 and the required permanent protection of additional compensatory HM lands and increases the accompanying estimates of management costs required to mitigate for Covered Species impacts resulting from the increased Project Construction Footprint in covered species habitat.

Sixth, this Amendment increases the Performance Security amount required for Permittee to proceed with Covered Activities.

Seventh, this Amendment modifies Exhibit 6, the "Baseline Map Book," by replacing Map Book Pages 28 through 33 (a total of 6 pages) to reflect the increased Project Construction Footprint.

CDFW has determined that although this Amendment may result in an increase in take of the Covered Species, and increased Covered Species Habitat impacts, the additional impacts of the taking will be minimized and fully mitigated through implementation of the Conditions of Approval. Because the impacts will be minimized and fully mitigated, there will be no increase in Project impacts to the Covered Species with this Amendment.

*Issuance of this Amendment does not affect CDFW's previous determination that issuance of the ITP, as amended meets and is otherwise consistent with the permitting criteria set forth in Fish and Game Code section 2081, subdivisions (b) and (c).*

Discussion: CDFW determined in June 2015 that the Project as approved, met the standards for issuance of an ITP under CESA. CDFW determined in March 2017, in September 2018, in October 2018, again in October 2018, in November 2018, in January 2019, three times in February 2019, in March 2019, in April 2019, in May 2019, and in August 2019 that Amendments No. 1, No. 2, No. 3, No. 4, No. 5, No. 6, No. 7, No. 8, No. 9, No. 10, No. 11, No. 12, No. 13, and No. 14 respectively, to the ITP met the standards for issuance of an ITP under CESA. This determination included findings that, among other things, the impacts of the taking would be minimized and fully mitigated and that the Project would not jeopardize the continued existence of the Covered Species. Those findings are unchanged with respect to this Amendment because the Project and ITP, as amended: (1) will increase the habitat compensation in proportion to the increase in impacts so that the fully mitigate standard is still met, (2) does not alter the Permittee's continued adherence to and implementation of the avoidance and minimization

measures set forth in the Conditions of Approval in the ITP, as amended, and MMRP which will minimize and fully mitigate impacts of the taking on the Covered Species.

*None of the factors that would trigger the need for subsequent or supplemental environmental analysis of the Project under Public Resources Code section 21166 or California Code of Regulations, title 14, sections 15162 and 15163, exist as a result of this Amendment.*

Discussion: CDFW issued the original ITP in June 2015, Major Amendment No. 1 to the ITP in March 2017, Major Amendment No. 2 in September 2018, Major Amendment No. 3 in October 2018, Minor Amendment No. 4 in October 2018, Major Amendment No. 5 in November 2018, Major Amendment No. 6 in January 2019, Major Amendments 7, 8, and 9 in February 2019, Major Amendment No. 10 in March 2019, Major Amendment No. 11 in April 2019, Major Amendment No. 12 in May 2019, Major Amendment No. 13 in August 2019, and Major Amendment No. 14 in September 2019 as a responsible agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.) after, among other things, considering the California High-Speed Train: Fresno to Bakersfield Section Final Project Environmental Impact Report/Environmental Impact Statement (EIR/EIS) (SCH No. 2009091126) certified by the lead agency, California High-Speed Rail Authority, on May 7, 2014. As explained in the findings below, CDFW finds for purposes of CESA that this Amendment represents a major change to the ITP, as amended. However, for the reasons explained above, CDFW concludes that approval of this Amendment will not result in and does not have the potential to create any new significant or substantially more severe environmental effects than previously analyzed and disclosed by California High Speed Rail Authority during its lead agency review of the Project, particularly with respect to the impacts authorized by CDFW pursuant to the ITP, as amended. As a result, CDFW finds that no subsequent or supplemental environmental review is required by CEQA as part of CDFW's approval of this Amendment.

*CDFW finds that this Amendment is a Major Amendment, as defined in California Code of Regulations, title 14, section 783.6, subdivision (c)(5).*

Discussion: This Amendment decreases the size of the entire Project Construction Footprint by 221.81 acres to a total of 6,439.93 acres of cumulative disturbance. The increase in the Construction Footprint by 146.77 acres is necessary to accommodate design variations to the Tule elevated structure as well as utility relocations, roadway modifications, access roads, and other covered activities at 11 locations. The decrease in the Construction Footprint by 368.58 acres is due to the elimination of two TCEs and two overcrossings. This Amendment updates the section entitled Table 1 to show the removal of 311.65 acres from two temporary construction easements, 150.74 acres of



orchard and 160.90 acres of hay crop, in Tulare County because these areas will not be used for staging areas. This Amendment updates the section entitled "Roadway Modifications" and Table 8 to include the eight new locations being added, as well as new activities for three existing locations and the elimination of activities at two locations in Tulare County. This Amendment also updates Table 8 to include the changes for the two locations in Kern County from Amendment 14; however, the new location at State Route 46, is removed changing the number in Kern County back to 16 locations. This Amendment updates Table 9 and increases the Covered Species habitat impacts for San Joaquin antelope squirrel and Tipton kangaroo rat by 89.23 acres, decreases impacts for San Joaquin kit fox by 55.72 acres, and decreases impacts for Swainson's hawk by 55.72 acres as a result of the change to the Project Construction Footprint. This Amendment updates Table 11 and the required permanent protection of additional compensatory HM lands and increases the accompanying estimates of management costs required to mitigate for Covered Species impacts resulting from the increased Project Construction Footprint in Covered Species habitat. This Amendment increases the Performance Security amount required for Permittee to proceed with Covered Activities. This Amendment modifies Exhibit 6, the "Baseline Map Book," by replacing Map Book Pages 28 through 33 (a total of 6 pages) to reflect the increased Project Construction Footprint.

As described above, these changes to the ITP, as amended, decrease the size of the entire Project Construction Footprint by net 221.81 acres to a total of 6,439.93 acres of cumulative disturbance, but also adds new locations of Covered Activities. While the net change in acres is a decrease, the decrease in the Construction Footprint occurs predominantly in irrigated agricultural areas with lower quality habitat, particularly for San Joaquin kit fox. Although the total acres for San Joaquin kit fox decrease, the mitigation for San Joaquin kit fox increases due to the higher functional value of the natural lands. Further, while the mitigation for Swainson's hawk habitat at 0-5 miles decreased, all the other elements that changed resulted in increases to the required mitigation. Because of the net increase of the Habitat Management (HM) Lands protection requirements, estimated management costs, and Performance Security, it is still essential to balance the type of habitat lost commensurately with the impacts. Therefore, this Amendment will substantially increase the scope or nature of the permitted Project or activity, or significantly modify the minimization, mitigation, or monitoring measures in the ITP, as amended. CDFW has determined that the changes to the ITP, as amended, constitutes a Major Amendment as defined in California Code of Regulations, title 14, section 783.6, subdivision (c)(5).

The authorization provided by this Amendment is not valid until Permittee signs and dates the acknowledgement below, and returns one of the duplicate originals of this Amendment by registered first class mail to CDFW at:

Major Amendment No. 15  
Incidental Take Permit 2081-2015-024-04  
CALIFORNIA HIGH-SPEED RAIL AUTHORITY  
CALIFORNIA HIGH-SPEED TRAIN PROJECT  
Fresno to Bakersfield Section Permitting Phase 1

California Department of Fish and Wildlife  
Habitat Conservation Planning Branch  
Attention: CESA Permitting Program  
Post Office Box 944209  
Sacramento, California 94244-2090

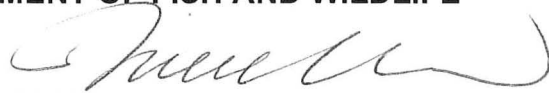
**Attachment:**

ATTACHMENT 1 EXHIBIT 6 Baseline Map Book pages 28 through 33

**APPROVED BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE**

on

9/9/19

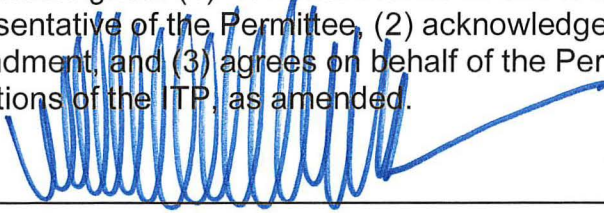


Julie A. Vance, Regional Manager  
Central Region

**ACKNOWLEDGMENT**

The undersigned: (1) warrants that he or she is acting as a duly authorized representative of the Permittee, (2) acknowledges receipt of the original ITP and this Amendment, and (3) agrees on behalf of the Permittee to comply with all terms and conditions of the ITP, as amended.

By:



Date:

September 18, 2019

Printed Name:

Mark A. McLoughlin

Title:

Director of Environmental Services



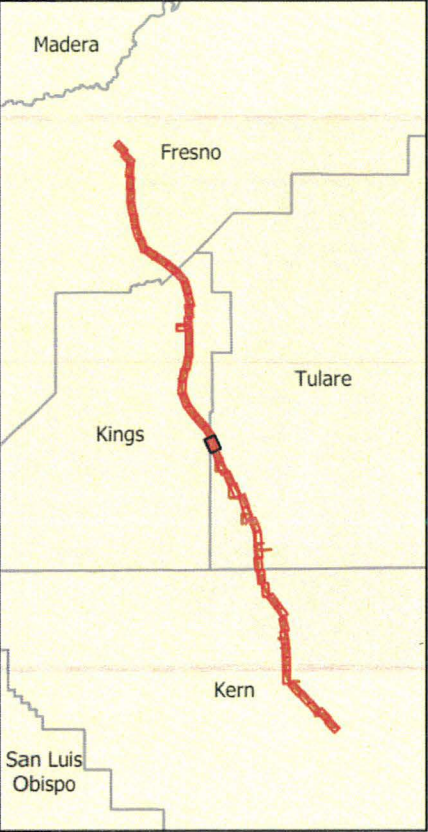
ATTACHMENT 1

Exhibit 6. Baseline Map Book pages 28 through 33



High-Speed Train  
Fresno to Bakersfield  
Construction Footprint  
CP 2-3

Index Map



ITP Footprint

- Permanent Impacts
- Amendment 15 Expansion
- Amendment 15 Reduction

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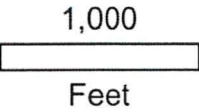
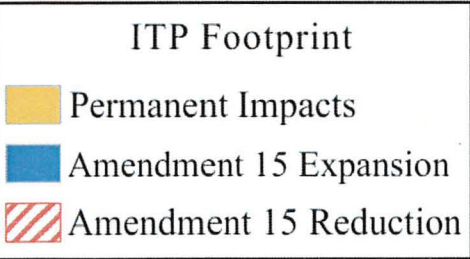
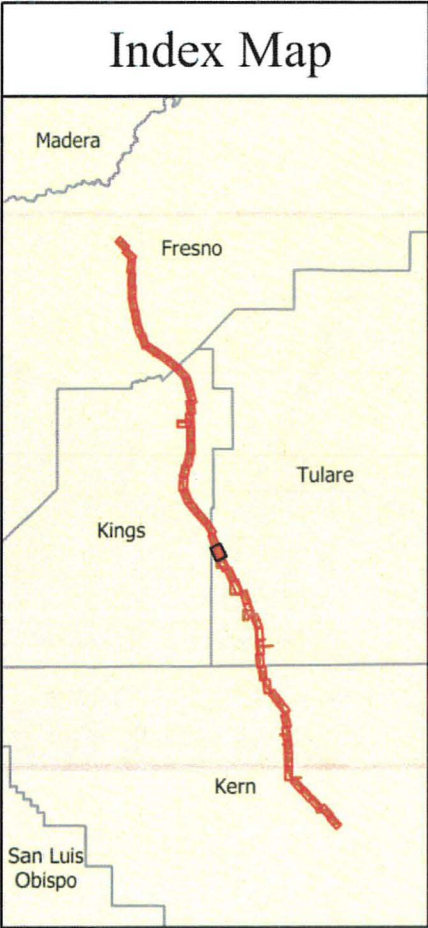
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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus, USDA, USGS, AeroGRID, IGN, and the GIS User Community. Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community. File Name: S:\GIS\Local\Projects\High-Speed-Rail\HSR\_Mapbook\_Template.aprx. Source: Aerial Image (DigitalGlobe, 6/2019). ITP Footprint (HSRA, 8/2019). EarlyWorks ITP Amendment (HSRA, 2018). ITP Amendment Q (4/2019).

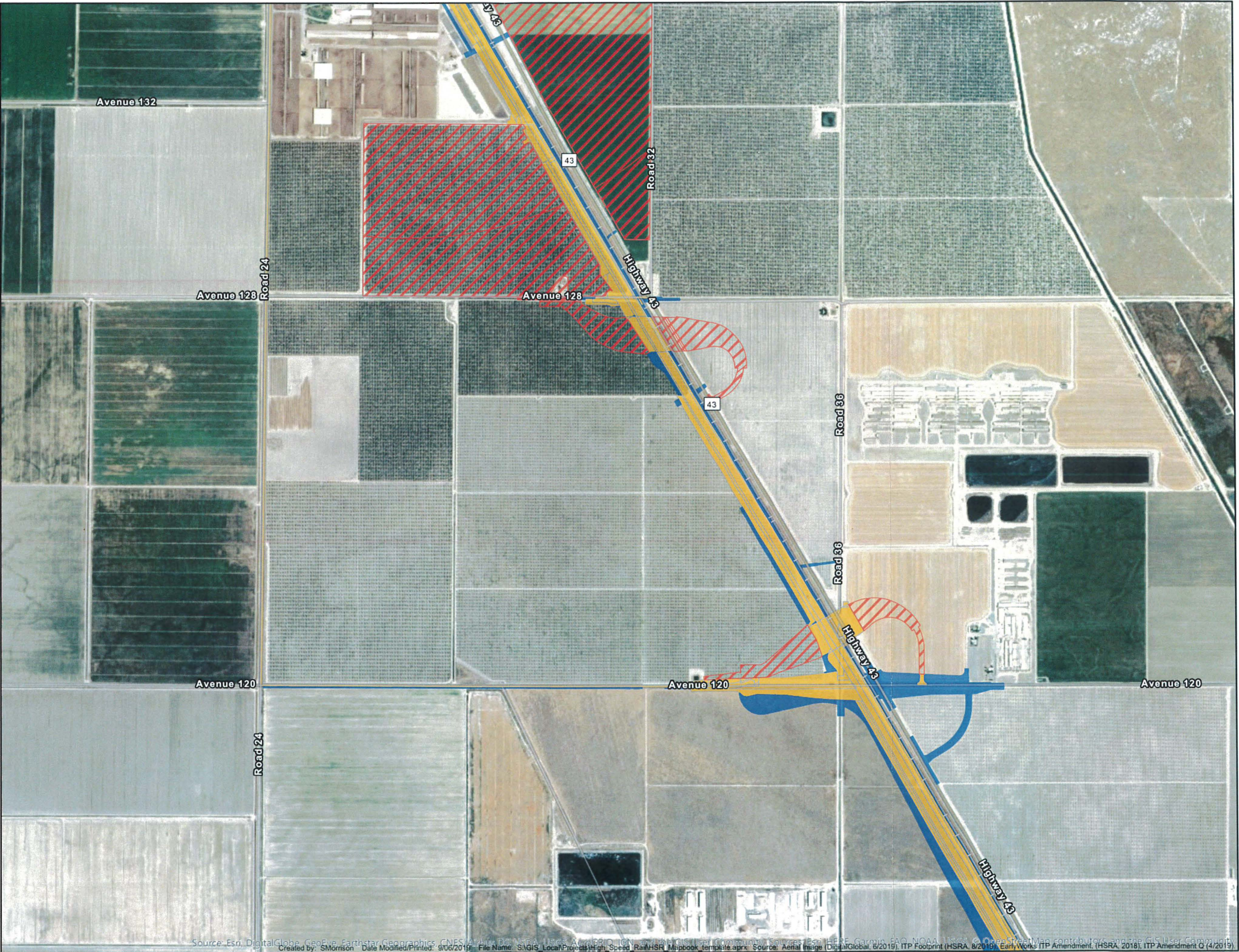
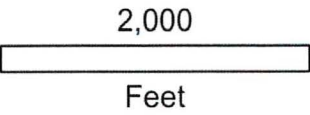
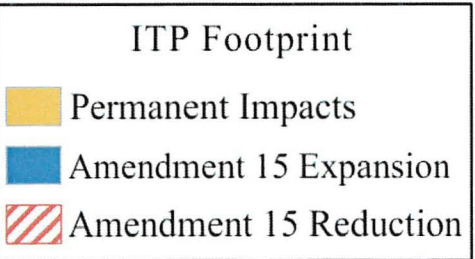
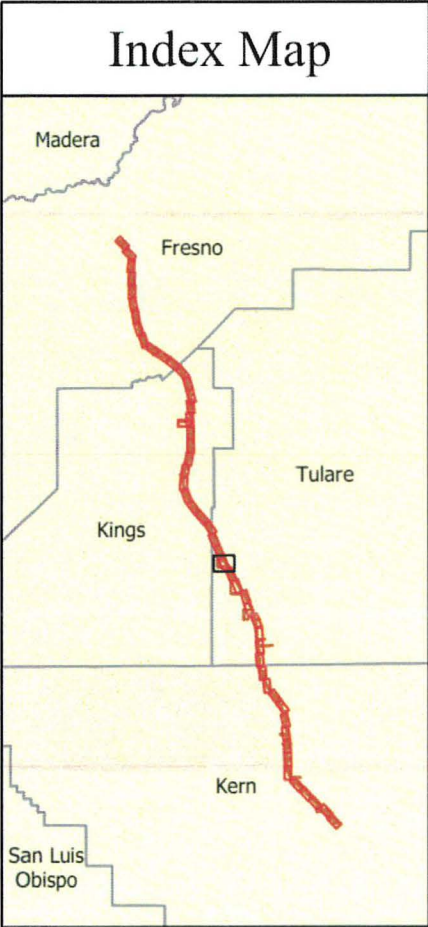


High-Speed Train  
Fresno to Bakersfield  
Construction Footprint  
CP 2-3





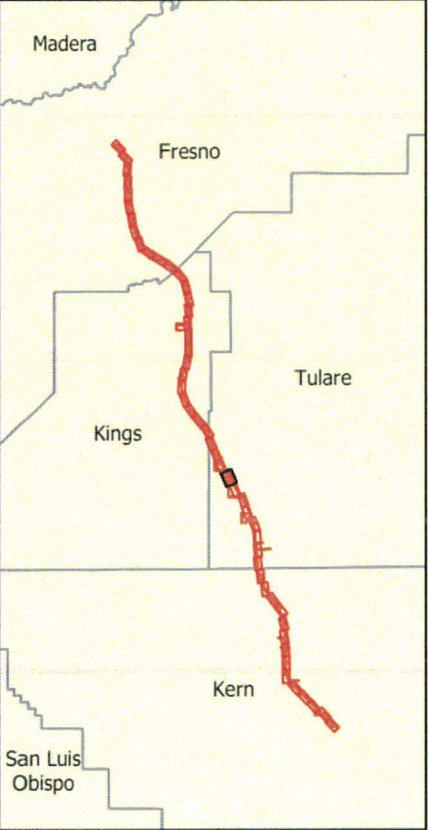
High-Speed Train  
Fresno to Bakersfield  
Construction Footprint  
CP 2-3





High-Speed Train  
Fresno to Bakersfield  
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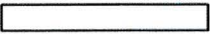
Index Map



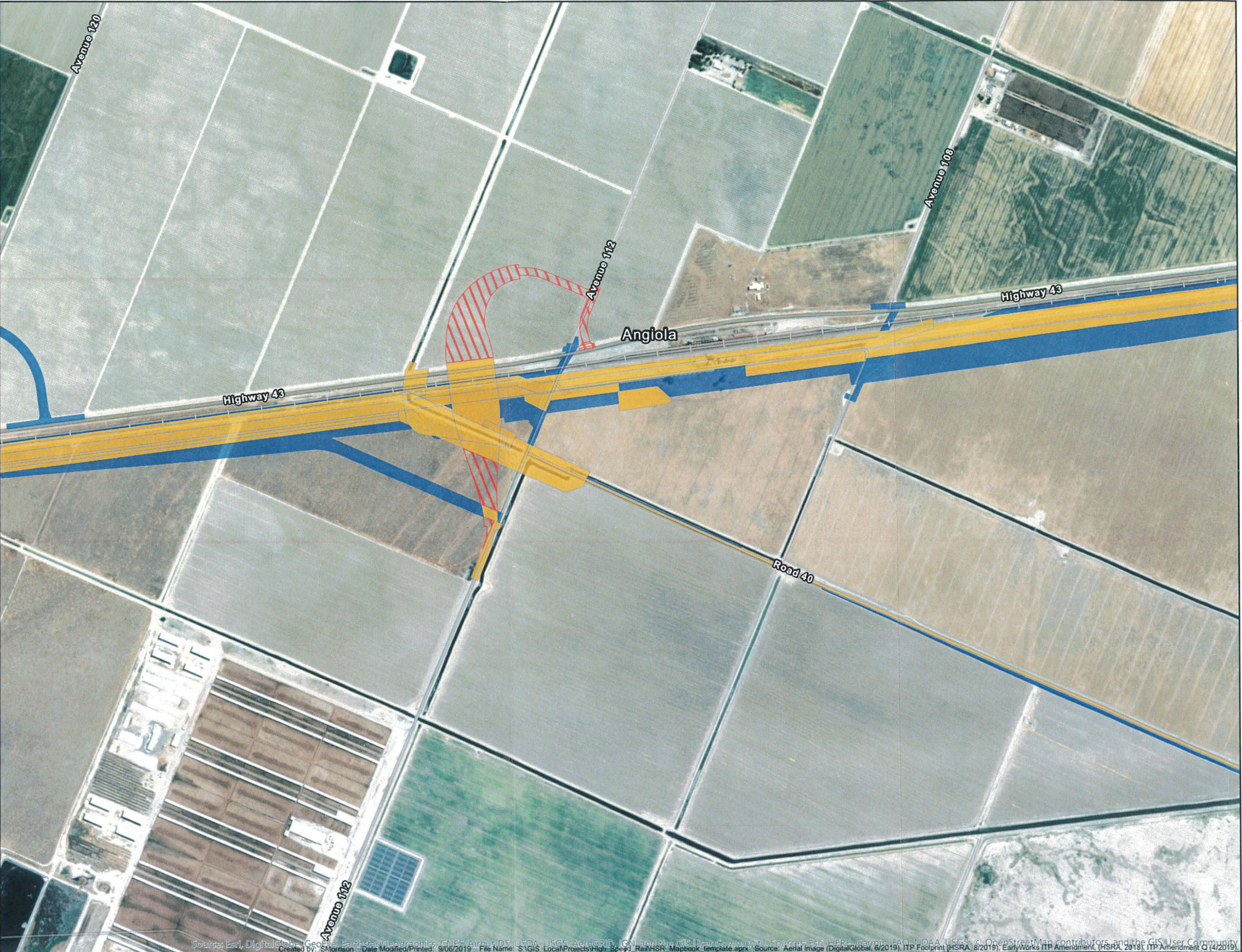
ITP Footprint

- Permanent Impacts
- Amendment 15 Expansion
- Amendment 15 Reduction

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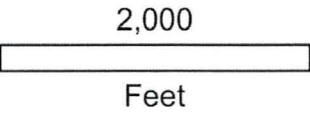
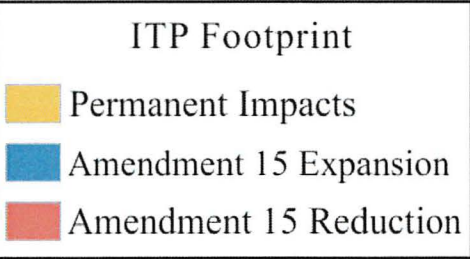
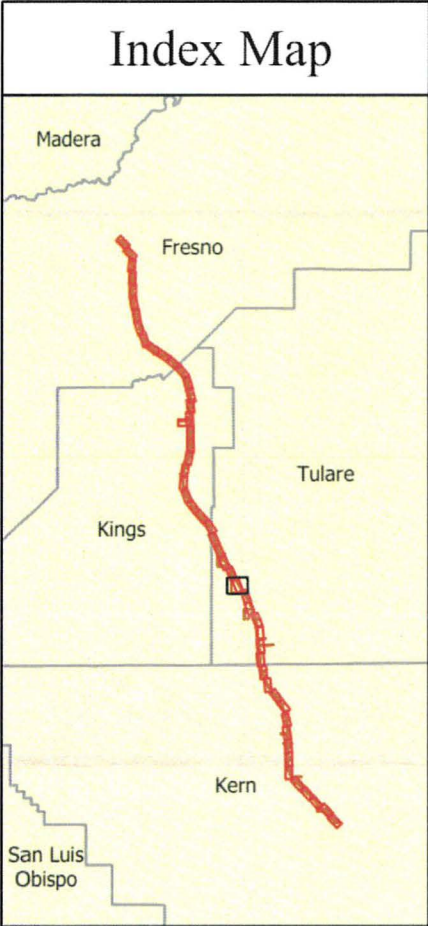


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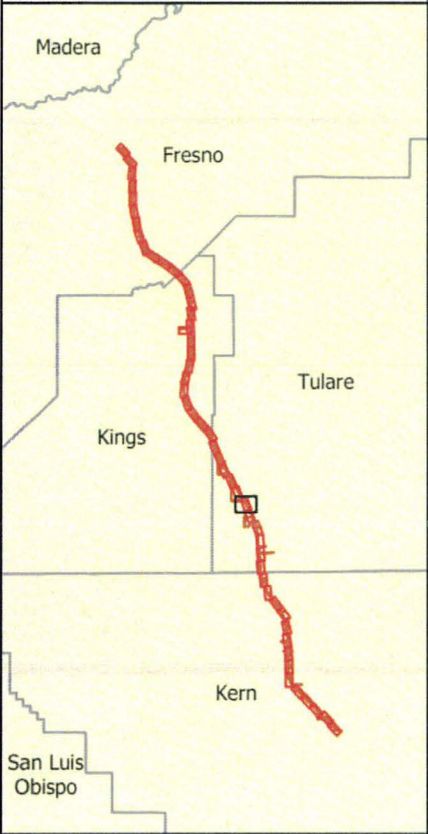
High-Speed Train  
Fresno to Bakersfield  
Construction Footprint  
CP 2-3





High-Speed Train  
Fresno to Bakersfield  
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