

**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE**

CENTRAL REGION

1234 EAST SHAW AVENUE

FRESNO, CALIFORNIA, 93710

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**AUG 22 2019**

**HABITAT CONSERVATION  
PLANNING BRANCH**

AMENDMENT NO. 10

(A Major Amendment)

California Endangered Species Act

Incidental Take Permit No. 2081-2013-025-04

California High-Speed Train Project Merced to Fresno Section Permitting Phase 1



**INTRODUCTION**

On March 12, 2014, the California Department of Fish and Wildlife (CDFW) issued Incidental Take Permit No. 2081-2013-025-04 (ITP) to the California High Speed Rail Authority (Permittee) authorizing take of California tiger salamander (*Ambystoma californiense*), Swainson's hawk (*Buteo swainsoni*), and San Joaquin kit fox (*Vulpus macrotis mutica*) (collectively, the Covered Species) associated with and incidental to the Permitting Phase 1 of the Merced to Fresno Section of the High-Speed Train (HST) Project (Project). The Project as described in the ITP originally issued by CDFW includes HST alignment beginning at the intersection of Avenue 17 and the Burlington Northern Santa Fe (BNSF) Railway, in the City of Madera, Madera County, California, and continuing south to an area on the southern side of State Route (SR) 41, adjacent to Los Angeles Street in the City of Fresno, Fresno County, California. The total length of the Project is 24.1 miles. The Project is the first 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, high-speed train 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 grade 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 includes construction and installation of all Project components, including disturbance of up to 1,049.00 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, and inspection activities within the Construction Footprint (O&M), and Mitigation Site activities.

In a letter dated July 23, 2014, the Permittee requested revisions to several ITP Conditions of Approval, specifically those that mentioned Designated Biologists, so that individuals with less species-specific training ("General Biological Monitors") could be used to perform less technical monitoring tasks. The Permittee also requested the

deletion of Condition of Approval 8.48 (O&M Tree and Wood Shrub Removal), and minor modifications to several other measures, primarily for clarification purposes. In a follow up email on August 13, 2014, the Permittee also requested that a single Condition of Approval be modified (Condition of Approval 6.2) related to the Designated Biologist to help expedite processing of an Amendment. This amendment did not change the Construction Footprint, nor did it change the habitat impacts or the compensatory mitigation. CDFW issued **Minor Amendment No. 1** on August 21, 2014, incorporating these changes.

In an email dated April 24, 2015, the Permittee requested a revision of the ITP's Project Description for the Fresno River crossing, to modify the design in this area from a viaduct design to one with a partial retained fill segment and add two new staging areas. The size of the Construction Footprint increased by 54.39 acres from 1,049.00 acres to a total of 1,103.39 acres. In addition, the Permittee asked to include the previously requested Designated Biologist changes not addressed in Minor Amendment No. 1. The Permittee also requested that Wildlife Crossing #5 be moved slightly to a new location (approximately 50 feet from the authorized location), and that changes to the land use and vegetation communities be updated, and the applicable land cover designation be substituted. Lastly, in addition to the increased mitigation that was required to offset the requested Construction Footprint increase, CDFW also required additional mitigation to address a non-compliance event that occurred on June 2014; 7.2 acres of fallow land and 2 acres of grassland habitat that were disturbed by the Permittee's contractor outside of the footprint permitted by the ITP. The amount of compensatory mitigation, Habitat Management (HM) lands, increased from 234 acres to 254 acres. CDFW issued **Major Amendment No. 2** on June 12, 2015, incorporating these changes.

In a set of emails dated September 25, 2015, May 2, 2015, and May 23, 2016, the Permittee requested a revision to the ITP to increase the size of the Construction Footprint by 707.87 acres and 9.2 acres for a total increase of 780.07 acres for a new grand total of 1,883.46 acres. The increase of the Construction Footprint accommodates: (1) four new road crossings; (2) additional impact areas for repaving of asphalt at the ends of planned overpasses; (3) utility relocations; (4) construction access; (5) road improvements and right-of-way (ROW) acquisitions; (6) a temporary 20-foot construction easement, north of the San Joaquin River, to install barrier fence around the HST ROW; and (7) a 2.7-mile extension of the northern boundary of the Construction Footprint. The Permittee also requested: (1) the removal of overcrossing and road improvements; (2) additional road alignments and locations; (3) modification of the design and/or placement of bridges and ROW crossings; and (4) the addition of a paralleling station, radio tower, and two new permanent access roads to be located in Madera County, California. Because of the increase in habitat impacts by 364.91 acres,



the amendment request also included an increase in the amount of compensatory mitigation HM lands by 127 acres from 254 acres to 381 acres. This resulted in an increase in associated endowment, an increase in the Performance Security amount required to proceed with Covered Activities, and a request to extend the required timeframe to protect and transfer all HM lands and record any required conservation easements. Lastly, the State endangered hairy Orcutt grass (*Orcuttia pilosa*) was added to the list of Covered Species subject to take authorization. CDFW issued **Major Amendment No. 3** on September 20, 2016, incorporating these changes.

In an email dated October 24, 2016, the Permittee requested an amendment to the ITP to extend the dry season work window beyond October 31<sup>st</sup> to November 15<sup>th</sup> for ground-disturbing activities at the Lazy K Ranch Mitigation Site (Lazy K Ranch). In addition, the Permittee requested that exclusion fencing for California tiger salamander (CTS) be allowed for use during ground disturbance at the Lazy K Ranch, under the provision that the fencing would be removed when the proposed extended dry season work window expires. This amendment did not change the 1,883.46-acre Construction Footprint, nor did it change the habitat impacts or the compensatory mitigation. CDFW issued **Minor Amendment No. 4** on October 31, 2016, incorporating these changes.

In an email dated April 5, 2017, the Permittee requested an amendment of the ITP to increase the size of the Construction Footprint by 155.72 acres to a total of 2,039.18 acres. This increase in the Construction Footprint is necessary to accommodate the full extent of the footprint for the north extension of the Project. The north extension includes 2.89 miles of guideway, construction of an at-grade bridge over Schmidt Creek, a wildlife crossing north of Road 27, and a four-lane overcrossing at Road 26. Additional design refinements in the request include structural design changes to the Avenue 17 overcrossing, which includes replacing a planned retaining wall with an engineered embankment, an additional 0.35 acres of land at El Paso Road, 0.008 additional acres at Ridgedale Drive to accommodate final design of the road, and the inclusion of approximately 14.97 acres of the BNSF transportation corridor between Avenue 17 and Avenue 19 to be used for geotechnical investigation, utility relocation and potential access improvements between the BNSF and HST corridors. In addition to the major construction elements and design refinements listed above, Covered Activities that will occur within the increased Construction Footprint include the construction and improvement of private and public access ways, structure demolitions, utility relocation and protection, and fencing. Because of the increase in habitat impacts by 109.42 acres and decreased habitat impacts by 84.80 acres for a net increase of 24.62 acres, the amendment also included an increase in the amount of compensatory mitigation HM lands by 11.42 acres from 381 acres to 392.42 acres. This resulted in an increase in associated endowment, and an increase in the Performance Security

amount required to proceed with Covered Activities. CDFW issued **Major Amendment No. 5** on June 23, 2017, incorporating these changes.

In a letter dated September 19, 2017, the Permittee requested an amendment of the ITP to include an alternative option to fulfill their mitigation obligation that increased as a result of the increased Construction Footprint as issued in Major Amendment No. 5. To address this request the ITP was revised to: (1) provide an option to purchase 6.9 acres (6.43 acres of currently released vernal pool fairy shrimp credits that are also designated as "future release" CTS aquatic breeding habitat credits and 0.47 acres of currently released CTS upland habitat that has been identified to hold water with sufficient duration to support breeding) of Covered Species credits from CDFW-approved Dutchman Creek Conservation Bank; (2) provide a modified timeframe in which the remaining 10.39-acre mitigation obligation must be met; and (3) revise the Performance Security amount required in order to proceed with Covered Activities. There was no increase to Construction Footprint for this amendment. CDFW issued **Major Amendment No. 6** on August 3, 2018, incorporating these changes.

In a letter dated September 24, 2018, the Permittee requested further revision to the ITP, as amended, to revise the Project Description to allow for an increase in the Construction Footprint by 1.53 acres to a total of 2,040.71 acres. The Construction Footprint increase accommodates new Work Areas for improvements to Dry Creek Canal and the use of the roads adjacent to Dry Creek Canal for construction access. The new Work Areas would result in an increase of 1.53 acres of permanent impacts. Because of the increase in the Construction Footprint, the amendment also included an increase in the amount of compensatory mitigation HM lands by 1.53 acres which resulted in an increase in associated endowment, and an increase in the Performance Security amount required to proceed with Covered Activities. In a letter dated December 3, 2018, the Permittee requested amending the ITP, as amended, to accommodate construction of an intrusion protection barrier (IPB) within specific limits of the HST alignment in Fresno County to mitigate the risk of any potential derailed trains from the adjacent private rail lines from entering the path of the HST. The IPB would be a concrete wall and will not require additional Project Construction Footprint area beyond what was already permitted. IPB construction would occur in three locations totaling 4,060 linear feet, within downtown Fresno, along the "Fresno Trench." CDFW issued **Major Amendment No. 7** on February 28, 2019.

In a letter dated May 1, 2019, the Permittee requested further revision to the ITP, as amended, to increase the extent of take of hairy Orcutt grass (HaOrGr) by 0.91 acres; increase the habitat management (HM) lands requirements for HaOrGr by 5.46 acres; allow the take of HaOrGr to proceed with Security in place; change pre-construction



botanical inventory requirements to require only focused surveys for HaOrGr; revise HaOrGr buffer and salvage requirements to reduce impacts to the species by eliminating the requirement to salvage all HaOrGr within 50 feet of the Construction Footprint, including outside of the right-of-way; and, because the impact/salvage areas have low HaOrGr seed abundance and high invasive plant seed abundance, eliminate the requirement to salvage plants in the Construction Footprint in lieu of CDFW's acceptance of the required Habitat Enhancement Plan for HaOrGr. There was no increase to Construction Footprint for this amendment. CDFW issued **Major Amendment No. 8** on May 31, 2019.

In a letter dated February 15, 2019, the Permittee requested further revision to the ITP, as amended, (1) to increase the size of the Construction Footprint by 89.78 acres from 2,040.71 to a total of 2,130.49 acres to accommodate 24 proposed design variations listed below, (2) an increase in the length of intrusion protection barrier (IPB) by 14 miles from 4,060 linear feet to 73,894 linear feet, and (3) to allow for wildlife crossing variations at three locations. Because of the increase in habitat impacts by 24.09 acres for Swainson's Hawk (SWHA) and 89.78 acres for San Joaquin kit fox (SJKF) the amendment also included an increase in the amount of compensatory mitigation HM lands by 24.09 acres for SWHA and 81.76 acres for SJKF for a total of 107.13 acres. This resulted in an increase in associated endowment, and an increase in the Performance Security amount required to proceed with Covered Activities. CDFW issued **Major Amendment No. 9** on June 10, 2019, incorporating these changes.

In issuing the ITP, Minor 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, and Major Amendment No. 9 (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 February 25, 2019, the Permittee requested further revision to the ITP, as amended, to increase in the Construction Footprint by 10.07 acres from 2,130.49 to 2,140.56. The increase in the Construction Footprint is necessary to accommodate additional utility relocation, residential building demolition, and road work at 11 locations along the HST alignment between Avenues 17 and Avenues 19 in Madera County. This also increases the potential impacts to Covered Species and their habitats including direct impacts to ruderal habitat (0.272 acres) and fallow fields (3.458 acres), potential dispersal habitat for SJKF, potential foraging habitat for SWHA, and potential upland refugia/foraging habitat for CTS. The Permittee also requests to convert the 0.022 acre

of indirect vernal pool impact to 0.022 acre of direct impact and add 0.076 acre of direct impacts for a vernal pool not previously identified which will be bisected (totaling 0.098 acre of direct impact to CTS aquatic breeding). Because of the increase in habitat impacts the amendment also included an increase in the amount of compensatory mitigation HM lands by 7.73 acres for CTS, 3.73 acres for SWHA, and 7.46 acres for SJKF. This resulted in an increase in associated endowment, and an increase in the Performance Security amount required to proceed with Covered Activities.

This Major Amendment No. 10 (Amendment) makes the following changes to the ITP, as amended:

First, this Amendment increases the size of the entire Project Construction Footprint by 10.07 acres to a total of 2,140.56 acres of cumulative impact disturbance.

Second, Horizontal Direction Drilling (HDD) and the “jack and bore” method of pipeline construction and relocation is required for some of the additional utility work and are added as Covered Activities.

Third, this Amendment adds 11 design variations to the Project Description.

Fourth, this Amendment increases the Covered Species impacts for Swainson’s hawk, California tiger salamander, and San Joaquin kit fox by 3.73 acres as a result of the modified Project Construction Footprint. The increase is in addition to a 0.10-acre increase in direct impacts to potential California tiger salamander breeding (aquatic) habitat.

Fifth, this Amendment changes 0.02 acre of indirect impacts to potential California tiger salamander breeding (aquatic) habitat to 0.02 acre of direct impact as a result of modifying the Project Construction Footprint.

Sixth, this Amendment revises Condition of Approval 7 to include Condition of Approval 7.12, the notification and submission of an HDD and Jack and Bore Plan.

Seventh, this Amendment requires either the purchase of additional Covered Species credits or the permanent protection of additional HM lands and accompanying management costs to compensate for Covered Species impacts associated with the increase in the Construction Footprint.



Eighth, commensurate with the increased impacts, this Amendment increases the Performance Security amount required for the Permittee to proceed with Covered Activities.

Ninth, this Amendment changes Condition of Approval 10, Security Timeline (10.3) to allow Security for all Covered Species HM Lands requirement, in excess of available HM Land Mitigation at the Lazy K Ranch, to be in a form acceptable to CDFW and subject to CDFW's written acceptance; and increases the completion of the required acquisition, protection and transfer of all HM lands and recording of any required conservation easements by one year.

Tenth, this Amendment revises the Baseline Map Book, Exhibit 5, maps 36 through 39 (a total of 4 pages) to reflect the increased Project Area.

## AMENDMENT

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

1. The third paragraph of the section entitled "Project Description" on pages 2 and 3 of the ITP, as amended, shall be further amended to read as follows:

The Project is 27.01 miles in length and includes construction and installation of all Project components (Exhibit 1). Construction and installation of all Project components will disturb up to ~~2,130.492~~***2,140.56*** acres (hereafter, Construction Footprint). Construction may occur at any point along the Construction Footprint, and construction may occur at multiple locations simultaneously. For purposes of this ITP, in addition to Construction Footprint activities (i.e., construction of the California HST), the Project also includes operations, maintenance, and inspection activities within the Construction Footprint (O&M); and Mitigation Site activities. The three types of general activities are described more fully in this Project Description. Also, each of the three general types of activities requires their own Conditions of Approval.

2. The section entitled "Project Description" on page 4 of the ITP, shall be amended to read as follows:

Utility relocation and protection: High-risk utilities, such as overhead high-voltage wires, pressurized transmission mains, water lines, fiber optics, and communications will be relocated and/or protected by the Permittee. ***The use of***

***jack and bore or horizontal directional drilling (HDD) will occur throughout the entire Construction Footprint, as defined above, and may be used to relocate utilities where indicated.*** Permittee will be responsible for completing designs and preparing plans and specification for relocation and construction of utilities. The construction and relocation of utilities will begin once Permittee has completed their design to ensure Project components are well coordinated. Permittee will be responsible to coordinate the relocation of utilities with local jurisdictions and utility owners throughout the Project and will design and construct the relocation of utilities in conflict with the Project. This ITP only covers utility relocation and protection occurring within the Construction Footprint, as defined on Page 2 of this ITP.

***Jack and Bore: Jack and bore is a method of horizontal boring that involves drilling a hole underground, horizontally between two points without disturbing the surface between sending and receiving pits. Jack and bore is a typical method used for installing underground utilities such as: fiber optic, telephone, TV, power lines, irrigation, water and gas lines.***

***Jack and bore installation methods are being utilized to relocate utilities under County, City and Caltrans roadways, BNSF and UPRR Railroads, canal and stream crossings, and potentially new HSR embankment. The depths of the installation can be as deep as 20 feet and typically done with steel casing with minimal disturbance to the existing soil surrounding the casing. Jacking and receiving pit dimensions can vary up to 48 feet long by 30 feet wide by 25 feet deep.***

3. The section entitled "Project Description" of the ITP, as amended to add 24 design variations, shall be further amended to add the following descriptions of the 11 design variations bringing the total to 35. The new additions follow:

- 25) ***Parcel site preparation and demolition near the intersection of Avenue 19 and Pickflar Way at APN 032-440-002;***
- 26) ***Parcel site preparation and demolition near the intersection of Ridgedale Drive and Hanover Drive at APN 032-440-022;***
- 27) ***Water line abandonment and relocation, including, jack and bore methods along Tremaine Avenue at 37.008696, -120.056948;***
- 28) ***Parcel site preparation and demolition north of the intersection of Tremaine Avenue and Road 27 at APN 036-280-009;***
- 29) ***Cul-de-sac redesign at the intersection of Tremaine Avenue and Road 27 at 37.009168, -120.056516;***



- 30) *Parcel site preparation and demolition south of the intersection of Tremaine Avenue and Road 27 at 037-280-004;*
- 31) *Telecommunication line relocation at 37.008696, -120.056948;*
- 32) *Parcel site preparation, demolition and staging south and east of the intersection of BNSF Railway and Road 27 at APN 037-010-001*
- 33) *Parcel site preparation and demolition north and west of the intersection of BNSF Railway and Avenue 17 at APN 037-010-031;*
- 34) *Parcel site preparation and demolition north of Avenue 17 and west of the BNSF Railway at APN 037-010-024;*
- 35) *Parcel site preparation and demolition south of Avenue 17 and west of the BNSF Railway at APN 037-030-002;*

4. The first paragraph of the section entitled "Impacts of the Taking on Covered Species" on pages 32 and 33 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 ~~2,130.492~~, **140.56** acres within the Construction Footprint and 529.79 acres within the Lazy K Ranch Mitigation Site (the Construction Footprint and Lazy K Ranch Mitigation Site are collectively, the Project Area). Project activities include subsurface geotechnical drilling and boring; habitat grubbing, vegetation removal, clearing, and mass grading followed by the mobilization of equipment and materials; earthwork including construction of temporary and permanent excavation support structures; 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; 23 roadway modifications including realignment and resurfacing, construction of new access roads, overcrossing, and undercrossing; construction of waterway crossing structures over the Fresno River, Cottonwood Creek, and the San Joaquin River including 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, TPSS, two switching stations, and six 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 Downtown Fresno Station; 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; and equipment staging, inoculum collection, land grading, and excavation of wetlands in the Wetland Restoration Area and mowing, hand tool or auger planting of trees and shrubs, and installation of irrigation systems in the Riparian Restoration Area within the Lazy K Ranch Mitigation Site and other activities within the Construction Footprint and Mitigation Site described in the Project Description section of this ITP (Covered Activities).

5. The first paragraph under the section titled "California Tiger Salamander," on page 33 of the ITP, is further amended to read as follows:

The Covered Activities are expected to result in the permanent loss of up to ~~150.53~~ **154.26** acres of upland refugia habitat, direct permanent loss of ~~6.47~~ **6.57** acres of aquatic breeding habitat, and indirect permanent loss of ~~6.07~~ **6.05** acres of aquatic breeding habitat for California tiger salamander (CTS) (Table 5). This determination was made based on an identification of baseline vegetation cover types within the Construction Footprint. Vegetation cover type acreage that could function as CTS upland refugia and breeding habitat were quantified and subsequently used as a habitat-based proxy to estimate the extent of incidental take in the form of mortality and indirect impacts that will occur as a result of Project build out.

6. The first paragraph of the section entitled "Swainson's Hawk" on page 34 of the ITP, as amended, shall be further amended to read as follows:

Up ~~417.15~~ **420.88** acres of foraging habitat and one nest tree for Swainson's hawk (SWHA) could be permanently impacted as a result of Covered Activities (Table 5) and it is expected that all potentially suitable habitat would be permanently destroyed. Based on the results of baseline surveys conducted within the Construction Footprint in spring 2013, there is one known location of a SWHA nest tree within 0.5-mile of the Construction Footprint, on the west side of SR 99 south of the San Joaquin River. The foraging habitat impact acres were determined based on this one nest tree and the guidelines set forth in the Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (*Buteo swainsoni*) in the Central Valley of California (California Department of Fish and Game, 1994).



7. The first paragraph of the section entitled "San Joaquin Kit Fox" on page 35 of the ITP, as amended, shall be further amended to read as follows:

Up to ~~528.68~~**532.41** total acres, of habitat for San Joaquin kit fox (SJKF) could be permanently impacted as a result of Covered Activities (Table 5). This determination was based on an identification of baseline vegetation cover types and that all potentially suitable habitat would be permanently destroyed within the Construction Footprint. Vegetation cover type acres that could function as SJKF foraging, denning, and breeding habitat were quantified and subsequently used as a habitat-based surrogate to estimate the extent of incidental take in the form of mortality and indirect impacts that will occur as a result of Project build out.

8. Table 5 on page 36 of the ITP, as amended, shall be further amended to read as follows:

**Table 5. 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 (California annual grassland, pasture, barren, fallow field, inactive agriculture, and ruderal)	Permanent	<del>150.53</del> <b>154.26</b>
	Aquatic breeding (vernal pool, open water, seasonal wetland)	Permanent (Direct)	<del>6.47</del> <b>6.57</b>
		Permanent (Indirect)	<del>6.07</del> <b>6.05</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>417.15</del> <b>420.88</b>
	Nesting (riparian and eucalyptus woodland)	Permanent	1 nesting tree(s)
San Joaquin kit fox	Upland (California annual grassland, pasture, barren, fallow field, inactive agriculture, ruderal, field crops, row crops, and irrigated hay crops)	Permanent (Preferred)	<del>92.38</del> <b>96.11</b>

<b>Covered Species</b>	<b>Habitat Type</b>	<b>Impact Type</b>	<b>Impact Acres</b>
San Joaquin kit fox	Urban, transportation corridors, commercial/industrial, constructed watercourses, and residential rural	Permanent (Marginal)	528.68 <b>436.30</b>
Hairy Orcutt grass	vernal pool, seasonal wetland	Permanent (Direct)	1.85
		Permanent (Indirect)	3.35

9. Condition of Approval 7 entitled "Monitoring, Notification and Reporting Provisions", beginning on page 70 of the ITP, as amended, shall be further amended to add the following:

***7.12 Notification and Submission of an HDD and Jack and Bore Plan. Designated Representative shall notify CDFW at least 14 calendar days before starting HDD or jack and bore activities in the Construction Footprint and shall document compliance with all pre-Project Conditions of Approval before starting such Covered Activities. Permittee shall also prepare an HDD and Jack and Bore Plan. The HDD and Jack and Bore Plan shall include, but not be limited to, a discussion (and map) of the portion of the Construction Footprint where the activities will occur, a description of the activities that will be completed, "take" minimization and avoidance measures for Covered Species, and any other pertinent information. The HDD and Jack and Bore Plan shall be submitted to CDFW for written approval (email will suffice) prior to starting such Covered Activities. Such Covered Activities may not proceed until the HDD and Jack and Bore Plan approval is received.***

10. Condition of Approval 9 (Habitat Management Land Acquisition) on page 71 of the ITP, as amended, shall be further amended to read as follows:

CDFW has determined that permanent protection and perpetual management of compensatory habitat is necessary and required pursuant to CESA to fully mitigate Project-related impacts of the taking on the Covered Species that will result with implementation of the Covered Activities. This determination is based on factors including an assessment of the importance of the habitat in the Project Area, the



extent to which the Covered Activities will impact the habitat, and CDFW's estimate of the acreage required to provide for adequate compensation.

To meet this requirement for all Covered Species other than hairy Orcutt grass, the Permittee shall purchase 6.9 acres (6.43 acres of currently released vernal pool fairy shrimp credits that are also designated as "future release" CTS aquatic breeding habitat and 0.47 acres of currently released CTS upland habitat that has been identified to hold water with sufficient duration to support breeding) of Covered Species credits from the CDFW approved Dutchman Creek Mitigation Bank (Condition of Approval 9.2). The Permittee shall also either purchase an additional ~~24.73~~**28.46** acre of Covered Species credit for SWHA foraging habitat and ~~82.40~~**89.86** acre of Covered Species credit for SJKF upland habitat from a CDFW-approved mitigation or conservation bank with a service area that encompasses the Project Area OR shall provide for the permanent protection and management of an additional ~~24.73~~**28.46** acre of SWHA foraging habitat and ~~82.40~~**89.86** acre of SJKF upland Habitat Management (HM) lands pursuant to Condition of Approval 9.3 below and the calculation and deposit of the management funds pursuant to Condition of Approval 9.4 below. The Permittee shall also provide for the permanent protection and management of 392.42 acres of Habitat Management (HM) lands within the Preservation Area at Lazy K Ranch pursuant to Condition of Approval 9.3 below and the calculation and deposit of the management funds pursuant to Condition of Approval 9.4 below. Furthermore, prior to commencement of vegetation- or ground-disturbing activities or any other Covered Activities, Permittee shall permanently preserve and fund the perpetual management of an additional ~~40.39~~**10.68** acres of California tiger salamander breeding (***0.29 acre of which may be potential breeding habitat demonstrated to hold water sufficient for CTS reproduction***) and **7.46 acres of California tiger salamander upland** Habitat Management lands.

11. Table 6 of the ITP, as amended, is amended to read as follows:

**Table 6. Compensatory Mitigation Acres for Covered Species**

Impact Type	Acres
<i>California Tiger Salamander</i>	
Indirect Permanent Breeding Habitat	<del>6.07</del> <b>6.05</b>
Direct Permanent Breeding Habitat	<del>6.47</del> <b>6.57</b>
Direct Permanent Upland Refugia/Foraging Habitat	<del>150.53</del> <b>154.26</b>
<b>Total Impacts</b>	<del>163.07</del> <b>166.88</b>
Upland Compensatory Mitigation	<del>301.06</del> <b>308.52</b>

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CALIFORNIA HIGH-SPEED RAIL AUTHORITY  
CALIFORNIA HIGH-SPEED TRAIN PROJECT  
Merced to Fresno Section Permitting Phase 1

Impact Type	Acres
Breeding Habitat Compensatory Mitigation	25.48 <b>25.76</b>
<b>Total Compensatory Mitigation</b>	<b>326.54334.28</b>
<i>Swainson's Hawk</i>	
Direct Permanent Foraging Habitat	417.15 <b>420.88</b>
Direct Permanent Nesting Habitat	1 nest tree
<b>Total Impacts</b>	<b>417.15420.88</b>
<b>Total Compensatory Mitigation</b>	<b>417.15420.88</b>
<i>San Joaquin Kit Fox</i>	
Direct Permanent Preferred Foraging/Dispersal Habitat	92.38 <b>96.11</b>
Direct Permanent Marginal Dispersal Habitat	436.30
<b>Total Impacts</b>	<b>528.68532.41</b>
<b>Total Compensatory Mitigation</b>	<b>402.91410.37</b>
<i>Hairy Orcutt Grass</i>	
Direct Permanent	1.85
Indirect Permanent	3.35
<b>Total Impacts</b>	5.20
Compensatory Habitat Mitigation Lands	20.80
Enhancement and Translocation Lands	10.40
<b>Total Compensatory Mitigation</b>	31.20

12. Condition of Approval 9.1 (Cost Estimates) on pages 72 and 73 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 for all Covered Species other than hairy Orcutt grass as follows:

- 9.1.1. Land acquisition costs for HM lands identified in Condition of Approval 9.3 below, estimated at \$5,025.93/acre for ~~392.42~~ **392.40** acres **at Lazy K Ranch: \$1,972,174.93; Land acquisition costs are estimated at \$20,135.06/acre for the additional 40.39 10.68** acres of CTS aquatic breeding habitat: **\$209,203.27 \$215,042.44; Land acquisition costs are estimated at \$5,025.93/acre for additional uplands including: \$124,291.25 \$143,037.97** for the additional ~~24.73~~ **28.46** acres of SHWA foraging

Major Amendment No. 10  
Incidental Take Permit 2081-2013-025-04  
CALIFORNIA HIGH-SPEED RAIL AUTHORITY  
CALIFORNIA HIGH-SPEED TRAIN PROJECT  
Merced to Fresno Section Permitting Phase 1



habitat; and ~~\$414,136.63~~ **\$1,210,344.46** for the additional 82.40 **89.86** acres of SJKF upland habitat; for: ~~\$1,970,164.56~~ for 392.42 acres of HM lands, **and** ~~\$209,203.27~~ **\$37,493.44** for 40.39 **7.46** acres of additional CTS aquatic-breeding **upland** habitat, **bringing the total land acquisition cost for CTS to \$252,535.88** and ~~\$538,427.88~~ for 24.73 acres of additional SWHA foraging habitat and ~~82.40~~ acres of additional SJKF upland habitat. Land acquisition costs are estimated using local fair market current value for lands with habitat values meeting mitigation requirements; **for a grand total of \$2,819,378.85;**

- 9.1.2. Start-up costs for HM lands, including initial site protection and enhancement costs as described in Condition of Approval 9.3.5 below, estimated at ~~\$563,381.06~~ **\$612,157.30** for 392.42 **392.40** acres of HM lands **at Lazy K Ranch**, ~~\$14,932.47~~ **\$28,299.01** for 40.39 **18.14** acres of additional CTS aquatic-breeding habitat, and ~~\$167,126.43~~ **\$44,398.56** for 24.73 **28.46** acres of additional SWHA foraging habitat and **\$140,184.65** for 82.40 **89.86** acres of additional SJKF upland habitat; **for a grand total of \$825,039.52;**
- 9.1.3. Interim management period funding as described in Condition of Approval 9.3.6 below, estimated at ~~\$80,284.12~~ **\$612,157.30** for 392.42 **392.40** acres of HM lands **at Lazy K Ranch**, ~~\$2,125.66~~ **\$4,342.81** for 40.39 **18.14** acres of additional CTS aquatic-breeding habitat, and ~~\$25,647.49~~ **\$6,813.47** for 24.73 **28.46** acres of additional SWHA foraging habitat and **\$21,512.96** for 82.40 **89.86** acres of additional SJKF upland habitat; **for a grand total of \$126,611.89;**
- 9.1.4. Long-term management funding as described in Condition of Approval 9.4 below, estimated at \$5,806.00/acre for 392.42 **392.40** acres **at Lazy K Ranch**: \$2,275,952.00 and ~~\$60,324.34~~ **\$105,320.84** for 40.39 **18.14** acres of additional CTS aquatic breeding habitat and ~~\$3,715.84/0.64 acre~~ **\$165,238.76** for 24.73 **28.46** acres of additional SWHA foraging habitat and **\$521,727.16** for 82.40 **89.86** acres of additional SJKF upland habitat: ~~\$2,275,952.00, \$60,324.34, \$143,582.38 and \$478,414.40,~~ respectively. Long-term management funding is estimated initially for the purpose of providing Security to ensure implementation of HM lands management; **for a grand total of \$3,070,561.16;**

- 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 9.5, estimated at \$48,000.00.

13. Condition of Approval 10.1 (Performance Security) on page 77 of the ITP, as amended, shall be further amended to read as follows:

Security Amount. The Security shall be in the amount of \$4,901,781.74 **\$4,968,549.27** for ~~392.42~~ **392.40** acres of HM lands **at Lazy K Ranch**; ~~\$298,585.74~~ **\$402,498.55** for ~~40.39~~ **18.14** acres of additional CTS aquatic breeding habitat; and ~~\$324,373.76~~ **\$371,488.77** for ~~24.73~~ **28.46** acre of additional SWHA foraging habitat **and \$1,052,824.82 \$1,147,054.84 for 82.40 89.86** acre of additional SJKE upland habitat **for a grand total of \$6,889,591.42**. These amounts are based on the cost estimates identified in Condition of Approval 9.1 above and are Security only for Covered Species other than hairy Orcutt grass.

14. Condition of Approval 10.3 (Performance Security) on page 77 of the ITP, as amended, shall be further amended to read as follows:

Security Timeline. The Security shall be provided to CDFW within 30 days after the effective date of this Amendment and within 30 days after the effective date of any subsequent amendment(s), prior to commencement of vegetation- or ground-disturbing activities or any other Covered Activities, whichever comes first. For the HaOrGr security requirement described in Conditions of Approval 9 and 10.2.1, **and the security requirement in excess of the available acres at Lazy K Ranch for all other Covered Species**, Permittee shall obtain CDFW's written acceptance of the Security prior to commencing Covered Activities that may cause the take or affect the habitat of HaOrGr **and all other Covered Species**.

15. Condition of Approval 10 of the ITP, as amended, on page 78 (Performance Security) is further amended to read as follows:

Even if Security is provided under this Condition of Approval 10, the Permittee must complete the required acquisition, protection and transfer of all HM lands and record any required conservation easements by December 31, 2019 **2020**. CDFW may require the Permittee to provide additional HM lands and/or additional funding to ensure the impacts of the taking are minimized and fully mitigated, as required



by law, if the Permittee does not complete these requirements within the specified timeframe.

The corresponding measures in the Mitigation Monitoring and Reporting Plan (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 of the Covered Species compared to the Project as originally approved; however, by implementing the avoidance, minimization, and mitigation measures contained in the ITP, as amended, and in this Amendment, this Amendment will not increase Project impacts on the Covered Species (i.e., "impacts of taking" as used in Fish and Game Code Section 2081, subd. (b)(2)).*

Discussion: This Amendment makes ten specific changes to the ITP, as amended.

First, this Amendment increases the size of the entire Project Construction Footprint by 10.07 acres to a total of 2,140.56 acres of cumulative impact disturbance. This increase in the Construction Footprint is necessary to accommodate additional utility relocation, residential building demolition, and road work at 11 locations along the HST alignment between Avenues 17 and 19 in Madera County.

Second, HDD and the "jack and bore" method of pipeline construction and relocation is required for some of the additional utility work and are added as Covered Activities.

Third, this Amendment adds 11 design variations to the Project Description.

Fourth, this Amendment increases the Covered Species impacts for Swainson's hawk, California tiger salamander, and San Joaquin kit fox by 3.73 acres as a result of the modified Project Construction Footprint. The increase is in addition to a 0.10-acre increase in direct impacts to potential California tiger salamander breeding (aquatic) habitat.

Fifth, this Amendment changes 0.02 acre of indirect impacts to potential California tiger salamander breeding (aquatic) habitat to 0.02 acre of direct impact as a result of modifying the Project Construction Footprint.

Sixth, this Amendment revises Condition of Approval 7 to include Condition of Approval 7.12, the notification and submission of a HDD and Jack and Bore Plan for review and approval.

Seventh, this Amendment requires either the purchase of additional Covered Species credits or the permanent protection of additional HM lands and accompanying management costs to compensate for Covered Species impacts associated with the increase in the Construction Footprint.

Eighth, commensurate with the increased impacts, this Amendment increases the Performance Security amount required for the Permittee to proceed with Covered Activities.

Ninth, this Amendment changes Condition of Approval 10, Security Timeline (10.3) to allow Security for all Covered Species HM Lands requirement, in excess of available HM Land Mitigation at the Lazy K Ranch, to be in a form acceptable to CDFW and subject to CDFW's written acceptance; and increases the completion of the required acquisition, protection and transfer of all HM lands and recording of any required conservation easements by one year.

Tenth, this amendment revises the Baseline Map Book, Exhibit 5, maps 36 through 39 (a total of 4 pages) to reflect the increased Project Area.

CDFW has determined that although the Amendment may result in an increase in take of the Covered Species, any additional impacts of the taking that would arise will be minimized and fully mitigated through implementation of the Conditions of Approval. Accordingly, 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 March 2014 that the Project as approved, met the standards for issuance of an ITP under CESA. CDFW determined in August 2014, in June 2015, in September 2016, in October 2016, in June 2017, in August 2018, in February 2109, in May 2019, and in June 2019 that Minor Amendment No. 1, Major Amendments No. 2 and No. 3, Minor Amendment No. 4, and Major Amendments No. 5, No. 6, No. 7, No. 8, and No. 9, 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 impact due to the increase in habitat impact 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 March 2014, Minor Amendment No. 1 to the ITP in August 2014, Major Amendment No. 2 in June 2015, Major Amendment No. 3 in September 2016, Minor Amendment No. 4 in October 2016, Major Amendment No. 5 in June 2017, Major Amendment No. 6 in August 2018, Major Amendment No. 7 in February 2019, Major Amendment No. 8 in May 2019, and Major Amendment No. 9 in June 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: Merced to Fresno Section Final Project Environmental Impact Report/Environmental Impact Statement (EIR/EIS) (SCH No. 2009091125) certified by the lead agency, California High-Speed Rail Authority, on May 3, 2012; Addendum 2013-1 to the Final Merced to Fresno Project Section EIR/EIS (October 2013); and Addendum 2013-2 to the Final Merced to Fresno Section Project EIR/EIS (November 2013). 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 increases the size of the Construction Footprint by 10.07 acres to a total of 2,140.56 acres to accommodate 11 locations with Project design variations. This Amendment also adds HDD and "jack and bore" method of pipeline construction and relocation required for some of the additional utility work as Covered Activities, increases the Covered Species impacts for Swainson's hawk, California tiger salamander, and San Joaquin kit fox by 3.73 acres as a result of the modified Project Construction Footprint. This amendment includes an additional 0.10-acre increase in direct impacts to potential California tiger salamander breeding (aquatic) habitat and a reduction of 0.02 acre of indirect impacts to potential California tiger salamander breeding (aquatic) as a result of modifying the Project Construction Footprint. This Amendment requires either the purchase of additional Covered Species credits or the permanent protection of additional HM lands and accompanying management costs to compensate for Covered Species impacts associated with the increase in the Construction Footprint. Commensurate with the increased impacts, this Amendment increases the Performance Security amount required for the Permittee to proceed with Covered Activities. This Amendment changes the security timeline to allow security for all Covered Species HM Lands requirement, in excess of available HM Land Mitigation at the Lazy K Ranch, to be in the form that is acceptable to CDFW as approved in writing and increases the completion of acquisition, protection and transfer of all HM Lands and recording of conservation easements by one year. Lastly, this Amendment revises the Baseline Map Book, Exhibit 5, maps 36 through 39 (a total of 4 pages) to reflect the increased Project Area.

As described above, these changes to the ITP, as amended, will increase the Project impacts on Covered Species previously analyzed and authorized by the ITP, as amended, affect Permittees' substantive mitigation obligations under the ITP, as amended, and will increase temporal impacts on the Covered Species. 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:

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

Major Amendment No. 10  
Incidental Take Permit 2081-2013-025-04  
CALIFORNIA HIGH-SPEED RAIL AUTHORITY  
CALIFORNIA HIGH-SPEED TRAIN PROJECT  
Merced to Fresno Section Permitting Phase 1



**Attachment:**

ATTACHMENT 1 EXHIBIT 5 Baseline Map Book pages 36-39

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

on August 8, 2019 Julie A. Vance

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: [Signature]

Date: August 15, 2019

Printed Name: Mark H. McLaughlin

Title: Director of Environmental Services

Major Amendment No. 10  
Incidental Take Permit 2081-2013-025-04  
CALIFORNIA HIGH-SPEED RAIL AUTHORITY  
CALIFORNIA HIGH-SPEED TRAIN PROJECT  
Merced to Fresno Section Permitting Phase 1

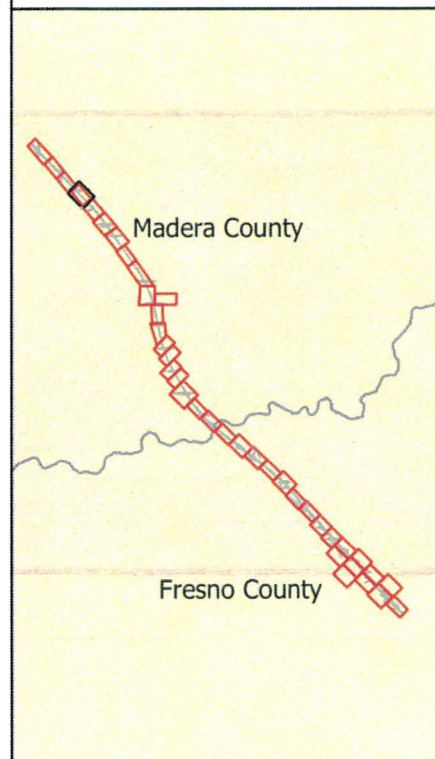
ATTACHMENT 1

Exhibit 5. Baseline Map Book pages 36-39





**High-Speed Train  
Merced to Fresno  
Construction Footprint  
CP 1D**

**Index Map**



**ITP Footprint**

-  Permanent Impacts
-  Amendment 10

825

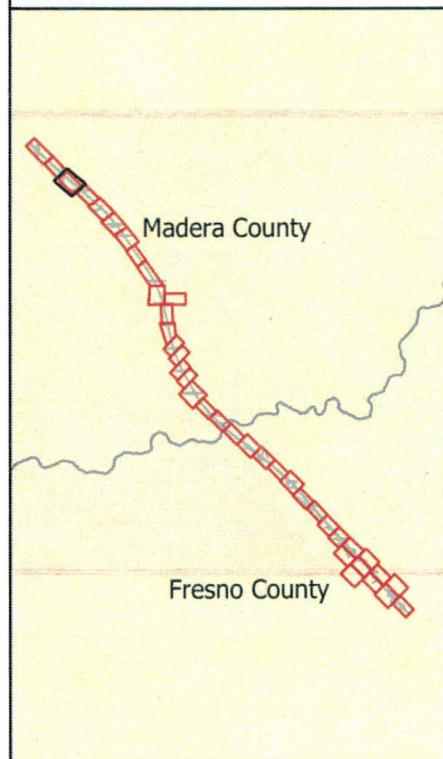
Feet







**High-Speed Train  
Merced to Fresno  
Construction Footprint  
CP 1D**

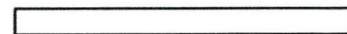
**Index Map**



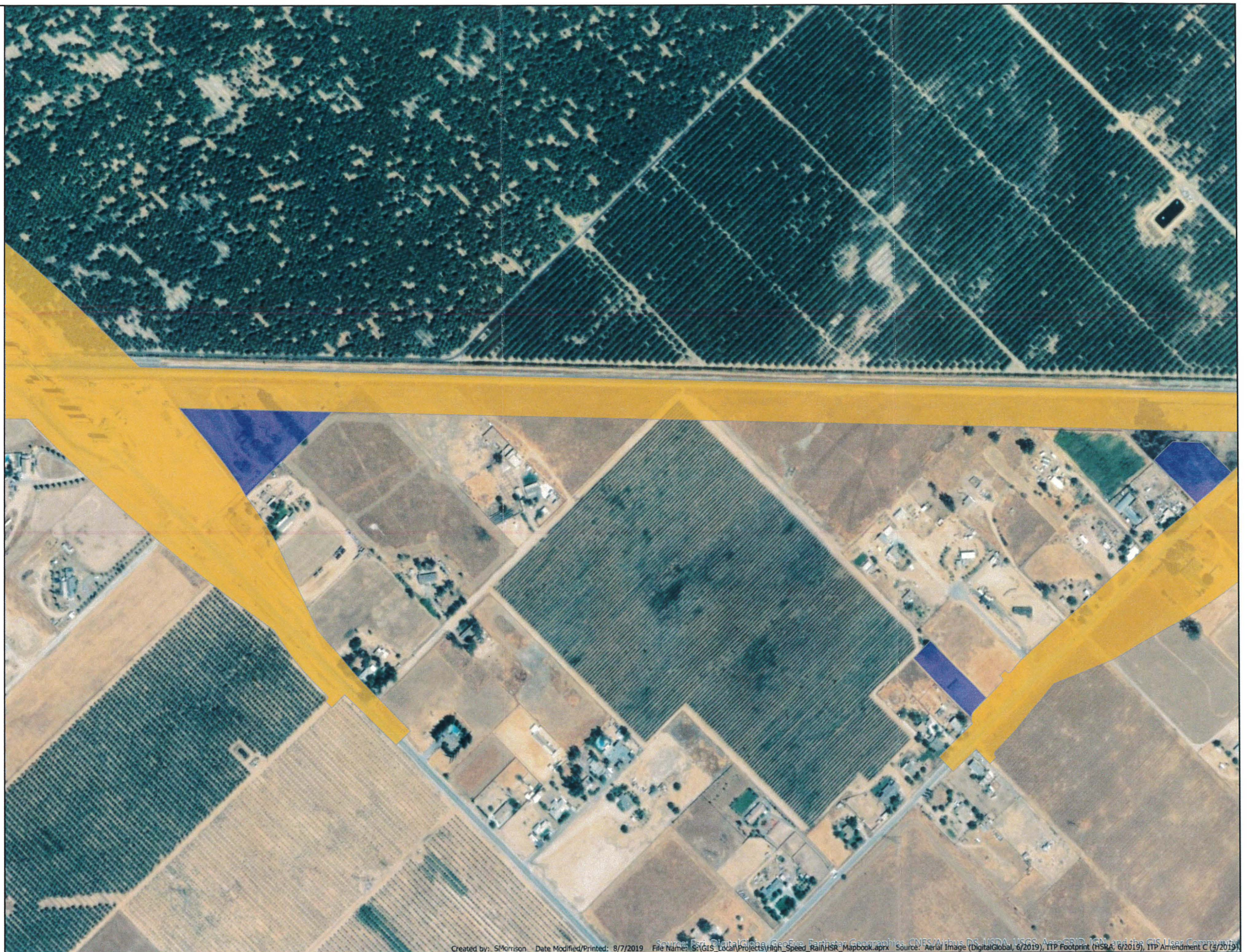
**ITP Footprint**

-  Permanent Impacts
-  Amendment 10

830

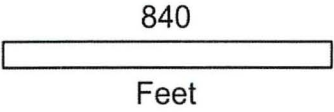
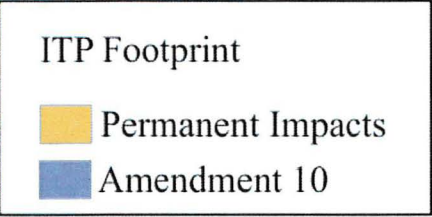
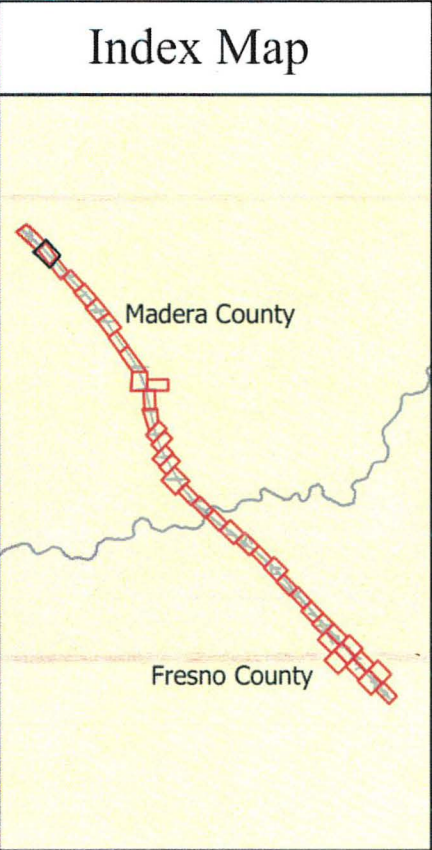


Feet





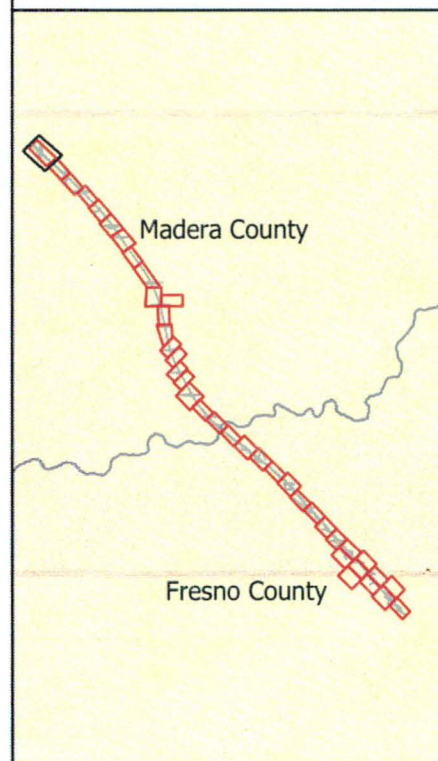
**High-Speed Train  
Merced to Fresno  
Construction Footprint  
CP 1D**







**High-Speed Train  
Merced to Fresno  
Construction Footprint  
CP 1D**

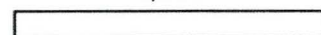
**Index Map**



**ITP Footprint**

-  Permanent Impacts
-  Amendment 10

1,000



Feet

