



**California Department of Fish and Wildlife**  
**North Central Region**  
**1701 NIMBUS ROAD**  
**RANCHO CORDOVA, CA 95670**

California Endangered Species Act  
 Incidental Take Permit No. 2081-2023-061-02

**I STREET BRIDGE REPLACEMENT**

**I. Authority:**

This California Endangered Species Act (CESA) incidental take permit (ITP) is issued by the California Department of Fish and Wildlife (CDFW) pursuant to Fish and Game Code section 2081, subdivisions (b) and (c), and California Code of Regulations, Title 14, section 783.0 et seq. CESA prohibits the take<sup>1</sup> of any species of wildlife designated by the California Fish and Game Commission as an endangered, threatened, or candidate species.<sup>2</sup> However, CDFW may authorize the take of any such species by permit pursuant to the conditions set forth in Fish and Game Code section 2081, subdivisions (b) and (c). (See Cal. Code Regs., tit. 14, § 783.4).

|                           |                                              |
|---------------------------|----------------------------------------------|
| <b>Permittee:</b>         | <b>City of Sacramento</b>                    |
| <b>Principal Officer:</b> | <b>Philip Vulliet, Supervising Engineer</b>  |
| <b>Contact Person:</b>    | <b>Michael Vondergeest, (916) 737-3000</b>   |
| <b>Mailing Address:</b>   | <b>915 I Street<br/>Sacramento, CA 95814</b> |

**II. Effective Date and Expiration Date of this ITP:**

This ITP is effective as of the date signed by CDFW below. Unless renewed by CDFW, this ITP and its authorization to take the Covered Species shall expire on **September 30, 2031**.

Notwithstanding the expiration date on the take authorization provided by this ITP, Permittee's obligations pursuant to this ITP do not end until CDFW accepts as complete the Permittee's Final Mitigation Report required by Condition of Approval 8.1 of this ITP.

**III. Project Location:**

The I Street Bridge Replacement (Project) is located at the Sacramento River between Railyards Boulevard in Sacramento and C Street in West Sacramento, in

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<sup>1</sup> Pursuant to Fish and Game Code section 86, "'take' means hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." (See also *Environmental Protection Information Center v. California Department of Forestry and Fire Protection* (2008) 44 Cal.4th 459, 507 [for purposes of incidental take permitting under Fish and Game Code section 2081, subdivision (b), "'take' ... means to catch, capture or kill".])

<sup>2</sup> The definition of an endangered, threatened, and candidate species for purposes of CESA are found in Fish and Game Code sections 2062, 2067, and 2068, respectively.

Sacramento County (See Figure 1). The Project is located approximately 0.2 miles north of the existing I Street Bridge at approximately latitude 38.588993, longitude -121.506445 (WGS 84 datum, decimal degrees). The Project site is bounded by the Sacramento River to the north and south.

#### **IV. Project Description:**

The Project includes the construction of a new bridge over the Sacramento River between the cities of Sacramento and West Sacramento to replace the existing I Street Bridge. The new bridge will cross the Sacramento River at C Street and provide a new bicycle, pedestrian, and automobile crossing. The structure will be a vertical lift bridge that satisfies vertical clearance and river navigation requirements.

The existing I Street Bridge will continue to be used by the railroad, and the car deck will be converted to a functioning bike and pedestrian path. The approach viaducts to the existing I Street Bridge will be demolished.

The new bridge and roadway alignment will begin approximately 100 feet west of the intersection of C Street and 5th Street in West Sacramento, and end approximately 200 feet east of the intersection of Railyards Boulevard and Bercut Drive in Sacramento. The new bridge will be approximately 848 feet long, and 83.5 feet wide, consisting of two vehicle lanes, on-street Class II bike lanes, and sidewalks along both sides of the street. Four piers and two abutments (Pier 1 and Pier 6) will support the bridge superstructure consisting of two cast-in-place fixed-span approach structures and a movable main span. Due to the existing soil conditions, the bridge pier foundations will utilize cast-in-drilled-hole (CIDH) piles and pile caps. The two outer piers (Pier 2 and Pier 5) will support the east and west fixed-span approach structures between the abutments and the towers. The outer piers will have flared columns approximately 45 feet above the top of the pile caps. The two inner piers (pier 3 and pier 4) are the main, movable-span towers containing mechanical lift equipment and counterweights. Each tower will be approximately 162 feet tall, 190 feet wide, and 26 feet thick. The bridge soffit elevation will be set no less than 3 feet above the 200-year water surface elevation of 33.05 feet (North American Vertical Datum of 1988 [NAVD 88]) to comply with the Central Valley Flood Protection Board (CVFPB) freeboard requirements. The piers will be aligned with the direction of the river flow to minimize scour. The movable span towers will provide a 278-foot clear channel opening approximately centered at the middle of the river.

Bridge construction activities are listed below in the general order of completion and shown in Figure 2.

### Work Barges

One or two barges, each approximately 60-feet wide and 190-feet long, will be present during the in-water construction periods (May 1 to November 30). The barges will be anchored to the river bottom with four 16-inch diameter spud piles that will be driven approximately 40 feet into the river substrate with an impact hammer. Up to two barges will be anchored in the river at one time. The barges will be stationary and will be repositioned in the channel throughout construction only as needed to complete the work. The barges will be removed after bridge in-water construction is completed.

### Cofferdams

To isolate pier construction activities from river flows, temporary sheet piles will be installed into the riverbed to create cofferdams around each of the four pier footprints using a vibratory pile driver. The contractor will capture and remove all the water from the interior of the cofferdams and implement water quality best management practices around the cofferdams. Inside the cofferdams, the nuisance water will be collected, and dewatering will occur via screened pumps conveying the water to shore, eventually being hauled away, and discharged for treatment. Once the cofferdams are in place, excavation of the riverbed to the elevation of the bottom of the seal course layer will occur to seal the work area from water infiltration below. Riverbed soil will be excavated from inside the pier cofferdams, collected, removed from the river channel, and discharged at an approved location. Once excavation in the cofferdams is complete, the bottom of the cofferdams will be sealed with seal course concrete. The finished cofferdams will isolate bridge foundation work from the river flows. The cofferdams are anticipated to be installed and removed during the proposed in-water work window (between May 1 and November 30). If the cofferdams will be left in the river over the winter season, then one or more sheet piles will be removed prior to the flood season to prevent fish from entering and being trapped within the cofferdam. Any sheet piles removed will be reinstalled during the subsequent in-water construction window using the same procedures as during the initial cofferdam installation.

### Bridge Foundations

Each of the bridge piers will be supported by a foundation consisting of 72-inch diameter CIDH piles and concrete pile caps. To create each pile foundation, a permanent 60-foot-long steel casing will be advanced through the seal course layer into the ground using a hydraulic casing oscillator or vibratory pile driving equipment. Large augers mounted on a crane will be used to excavate a hole approximately

176 feet deep within the Pier 2 and Pier 5 pile casings. The Pier 3 and Pier 4 holes will be approximately 184 feet deep. If necessary, sodium bentonite slurry will be pumped into the hole to maintain stability of the excavation perimeter and provide positive pressure while advancing the excavation to its final depth. The excavated soil and slurry will be transported up and out of the hole to collection drums or a haul truck that will take it to an approved disposal location. Upon reaching the final depth, the auger will be removed. Depending on site conditions, the bottom of the hole may be sealed with concrete using tremie methods. A steel reinforcing cage will be lowered and positioned inside the casing. Concrete will be pumped into the hole up to the top of the seal course layer where it is attached to the bottom of the pile cap. Five piles are required for Pier 2 and Pier 5. The Pier 3 and Pier 4 foundations will have 16 piles each. After the piles are cured, a reinforced cast-in-place concrete pile cap would be poured over the tops of the CIDH piles and seal course. A total of approximately 6,770 cubic yards of concrete will be used to create the portion of the bridge pier columns within the river. After piers have cured, approximately 115 cubic yards of the excavated riverbed soil will be used to cover the pile caps and restore the natural riverbed around the Pier 2 and Pier 5 columns. In total, construction of the bridge pier will involve excavation of approximately 11,784 cubic yards from the river and placement of 19,966 cubic yards of concrete and steel fill material in the river. Following pier construction, the sheet piles will be removed from the river, and work would then focus on constructing the approach superstructure and vertical lift towers.

### Clearing and Grubbing

Prior to working on the levees confining the Sacramento River, approximately 1.595 acres of existing vegetation, including cottonwood riparian forest and shaded riverine aquatic (SRA) habitat will be removed from the levees (1.158 acres and 26 trees from the west levee plus 0.436 acres and 16 trees from the east levee). Approximately 0.916 acres of riparian habitat is located between the land disturbance areas and the project boundary. This vegetation will not be cleared for construction unless absolutely necessary. Excavators, backhoes, and bulldozers will be used to remove all vegetation and properly dispose of it outside of the river channel.

### Bridge Abutments

The bridge abutments will be constructed at the top of the Sacramento River levees, above the river's ordinary high water mark (OHWM). Abutment construction will involve first excavating approximately 932 cubic yards of material from the top of the west riverbank and 387 cubic yards of material from the top of the east riverbank to

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create a shelf for the abutment footings. The foundation for Abutment 1 (Pier 1) will consist of forty-two 24-inch diameter, 140 feet long CIDH piles. To protect Abutment 1 and the levee from erosion and scour, rock slope protection (RSP) will be installed on the west bank. Prior to placing the RSP, approximately 1,144 cubic yards of levee embankment material immediately upstream, downstream, and below Abutment 1 will be removed using an excavator to be re-used onsite as needed, then backfilled with Class III Rock. Approximately 0.155 acres and 256 cubic yards of the RSP will be installed below the river's OHWM. Abutment 2 (Pier 6) will have 32 piles.

Approximately 1,205 cubic yards of soil will be excavated and backfilled with concrete to construct the abutment piles. An additional 554 cubic yards of concrete will be required to construct both abutment pile caps and backwalls. After the abutments have cured, approximately 388 cubic yards of the excavated levee material will be placed around and over the abutments to match the surrounding levee slope.

### Temporary Work Trestles

Temporary falsework platforms (trestles) are required to construct the bridge superstructure. The platforms will be constructed during the first construction season using temporary piles within the river. Each work trestle will require approximately 80, 16-inch diameter hollow steel or 16-inch diameter H piles driven approximately 70 feet below the riverbed using a vibratory pile driver. Steel beams will be installed that span the piles and wooden plywood sheets or planks will be used to create the final trestle deck. The temporary work platforms will be removed at the end of each construction season before the onset of winter and reinstalled after each winter. The temporary trestle piles will remain in the river throughout the duration of construction and will be removed in the fourth construction season following completion of overwater construction.

### Superstructure and Tower Construction

Bridge superstructure construction will be completed using equipment operated from barges or the temporary work trestles. Activities include forming and pouring the fixed span soffits and decks, constructing the vertical lift towers and barrier rails. The movable span will be constructed offsite, floated in, and erected once construction of the vertical lift towers is completed.

### Sacramento Roadway and Bikeway Modifications

A bike path will be reconstructed approximately 500 feet north and 330 feet south of Railyards Boulevard and be grade-separated under the bridge structure. Retaining

walls will be installed along the path that continues under the proposed bridge structure. The maximum retaining wall height along the bike path will be 16 feet.

### West Levee Improvements

The project will require improvements to the Sacramento River west levee, where the bridge will connect to C Street. Extending approximately 300 feet north and south of the C Street alignment, the levee cross-section will be reconstructed to meet current design standards, which will require 3:1 side slopes on the landside and waterside of the levee, and a 20-foot-wide crown at the top of the levee. The levee improvements also will include 309 linear feet of deep mixed method slurry cutoff wall extending to a depth of 110 feet below the original ground elevation. In addition, the roadway profile will be approximately 6 feet higher than the original ground elevation as it crosses over the levee. Access roads will be constructed from the new roadway to the top of the improved levee section. The grading for the levee will require relocation of the existing water tower that is located along 2nd Street, just north of the C Street alignment. The tower will be relocated to the northwest, approximately 43 feet from its existing location. The new west levee maintenance road also will serve as the future Class I River Walk Park trail extension in West Sacramento. Similar to the trail improvements proposed as part of the project in Sacramento, the trail will be grade-separated under the bridge structure.

### Staging and Access Areas

Two staging areas will be used to store materials and equipment during construction. One area will be located south of Railyards Boulevard under I-5 in Sacramento. The other staging area will be located west of the landward side of the levee, south of the new bridge location in West Sacramento. The staging area located along Railyards Boulevard will be accessed via the existing intersection at Jibboom Street. The staging area in West Sacramento will be accessed via the existing 2nd Street connection at 3rd Street, south of C Street. The areas will be in use throughout the duration of construction and will be returned to pre-project conditions at the completion of the project.

In-river work will be required for the installation of the above-mentioned activities. All in-water work in the Sacramento River will be conducted in two discreet periods between May 1 and November 30 and span approximately two construction seasons. A majority of the in-water work will be completed in the first in-water work period which occurs in the first construction season, with the remaining in-water work scheduled to be completed in the second in-water work period occurring in the fourth construction season.

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A variety of earthmoving equipment such as scrapers, excavators, backhoes, compactors, graders, tractors, loaders, dump trucks, drill rigs, impact pile driver, vibratory pile driver, and bulldozers will do most of the earthmoving work within the site. Water trucks, crane, tugboats, concrete trucks, concrete pumps, service trucks, and other typical construction vehicles will be present.

**V. Covered Species Subject to Take Authorization Provided by this ITP:**

This ITP covers the following species:

| <u>Name</u>                                                                          | <u>CESA Status</u> <sup>3</sup> |
|--------------------------------------------------------------------------------------|---------------------------------|
| 1. Central Valley spring-run Chinook salmon<br>( <i>Oncorhynchus tshawytscha</i> )   | Threatened <sup>4</sup>         |
| 2. Sacramento River winter-run Chinook salmon<br>( <i>Oncorhynchus tshawytscha</i> ) | Endangered <sup>5</sup>         |
| 3. White sturgeon ( <i>Acipenser transmontanus</i> )                                 | Candidate <sup>6</sup>          |

These species and only these species are the “Covered Species” for the purposes of this ITP.

**VI. Impacts of the Taking on Covered Species:**

Project activities and their resulting impacts are expected to result in the incidental take of individuals of the Covered Species. The activities described above expected to result in incidental take of individuals of the Covered Species include in-water pile driving (for the work barges, cofferdams, bridge foundations and piers, bridge abutments, and temporary work trestles), dewatering inside the cofferdams with pumps, in-water rock slope protection (RSP) placement, the clearing of riverine riparian habitat, and the shading of riverine aquatic habitat associated with the bridge construction (Covered Activities).

Incidental take of individuals of the Covered Species in the form of mortality (“kill”) may occur as a result of Covered Activities such as the striking of the impact hammer on the steel piles, which will cause sound waves to enter the water column that create underwater pressure and may damage tissues and organs of the Covered Species; and, the placement of RSP may result in the Covered Species being crushed

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<sup>3</sup> Under CESA, a species may be on the list of endangered species, the list of threatened species, or the list of candidate species.

<sup>4</sup> See Cal. Code Regs. tit. 14 § 670.5, subd. (b)(2)(C).

<sup>5</sup> See Cal. Code Regs. tit. 14 § 670.5, subd. (a)(2)(M).

<sup>6</sup> The species status may change following the decision of the Fish and Game Commission to designate the species as threatened or endangered but if there is such a designation, the species will remain a Covered Species.

by the equipment and/or rocks. Additionally, the Covered Activities may result in take of the Covered Species due to the temporary increase in sedimentation and turbidity, potential stranding of individuals in cofferdams, accidental spills of hazardous chemicals and materials to waters, removal of riverine riparian vegetation and habitat, changes in water temperature conditions, loss of food resources, and the temporary increase in underwater noise and vibrations from pile driving. Incidental take of individuals of the Covered Species may also occur from the Covered Activities in the form of pursue, catch, capture, or attempt to do so of the Covered Species from the fish rescue and relocation during the cofferdam dewatering and closure. The areas where authorized take of the Covered Species is expected to occur include: in the Sacramento River around the new bridge location and on the banks of the Sacramento River as shown in Figure 3 (collectively, the Project Area).

The Project is expected to cause the permanent loss of 1.61 acres of habitat (0.324 acres of aquatic and 1.29 acres of SRA) for the Covered Species, and temporary loss of 1.46 acres of habitat (0.250 acres of aquatic and 1.212 acres of SRA) for the Covered Species. Impacts of the authorized taking also include adverse impacts to the Covered Species related to temporal losses, increased habitat fragmentation and edge effects, and the Project's incremental contribution to cumulative impacts (indirect impacts). These impacts include: stress resulting from noise and vibrations from tunneling and capture and relocation, long-term effects due to increased pollution, displacement from preferred habitat, increased competition for food and space, and increased vulnerability to predation.

## **VII. Incidental Take Authorization of Covered Species:**

This ITP authorizes incidental take of the Covered Species and only the Covered Species. With respect to incidental take of the Covered Species, CDFW authorizes the Permittee, its employees, contractors, and agents to take Covered Species incidentally in carrying out the Covered Activities, subject to the limitations described in this section and the Conditions of Approval identified below. This ITP does not authorize take of Covered Species from activities outside the scope of the Covered Activities, take of Covered Species outside of the Project Area, take of Covered Species resulting from violation of this ITP, or intentional take of Covered Species except for capture and relocation of Covered Species as authorized by this ITP.

## **VIII. Conditions of Approval:**

The following requirements are intended to ensure the minimization of incidental take of Covered Species in the Project Area during Covered Activities. Permittee shall implement and adhere to the following conditions to minimize take of Covered Species.

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Unless specified otherwise, the following measures apply to all Covered Activities within the Project Area, including areas used for vehicular ingress and egress, staging and parking, and noise and vibration generating activities that may cause take]. CDFW's issuance of this ITP and Permittee's authorization to take the Covered Species are subject to Permittee's compliance with and implementation of the following Conditions of Approval:

- 1. Legal Compliance:** Permittee shall comply with all applicable federal, state, and local laws in existence on the effective date of this ITP or adopted thereafter.
- 2. CEQA Compliance:** Permittee shall implement and adhere to the mitigation measures related to the Covered Species in the Biological Resources section of the Environmental Impact Report (SCH No.: 2014092069) certified by City of Sacramento on June 26, 2019, as lead agency for the Project pursuant to the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.).
- 3. LSA Agreement Compliance:** Permittee shall implement and adhere to the mitigation measures and conditions related to the Covered Species in the Lake and Streambed Alteration Agreement (LSAA) (Notification No. EPIMS-SAC-36092-R2 for the Project executed by CDFW pursuant to Fish and Game Code section 1600 et seq.
- 4. ESA Compliance:** Permittee shall implement and adhere to the terms and conditions related to the Covered Species in the National Marine Fisheries Service's Biological Opinion (NMFS No. WCR-2018-9970) and the United States Fish and Wildlife Service's Biological Opinion (08FBDT00-2016-F-0227) for the Project pursuant to the Federal Endangered Species Act (ESA). For purposes of this ITP, where the terms and conditions for the Covered Species in the federal authorization are less protective of the Covered Species or otherwise conflict with this ITP, the conditions of approval set forth in this ITP shall control.
- 5. ITP Time Frame Compliance:** Permittee shall fully implement and adhere to the conditions of this ITP within the time frames set forth below and as set forth in the Mitigation Monitoring and Reporting Program (MMRP), which is included as Attachment 1 to this ITP.
- 6. Provisions Prior to Disturbing Soil or Vegetation:**
  - 6.1. Designated Biologist(s) and/or Biological Monitor(s).** Permittee shall submit to CDFW in writing the name, qualifications, business address, and contact information of the Designated Biologist(s) and Biological Monitor(s) using the

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Biologist Resume Form (ATTACHMENT 2) or another format containing the same information at least 30 calendar days before starting Covered Activities. Permittee shall ensure that the Designated Biologist(s) and Biological Monitor(s) are knowledgeable and experienced in the biology, natural history, collecting and handling of the Covered Species. The Designated Biologist(s) and Biological Monitor(s) shall be responsible for monitoring Covered Activities to help minimize and fully mitigate or avoid the incidental take of individual Covered Species and to minimize disturbance of Covered Species' habitat. Permittee shall obtain CDFW approval of the Designated Biologist(s) and Biological Monitor(s) in writing before starting Covered Activities and shall also obtain approval in advance, in writing, if the Designated Biologist(s) or Biological Monitor(s) must be changed.

**6.2. Notification Before Commencement.** The Designated Representative shall notify CDFW 14 calendar days before starting Covered Activities and shall document compliance with all pre-Project Conditions of Approval before starting Covered Activities.

**6.3. Delineation of Habitat.** Permittee shall clearly delineate aquatic habitat and riverine aquatic/riparian shaded and SRA habitats of the Covered Species within the Project Area with posted signs, posting stakes, flags, and/or rope or cord, and place fencing as necessary to minimize the disturbance of Covered Species' habitat.

**6.4. Habitat Management Land Acquisition and Restoration and Security Compliance.** Permittee shall comply with all conditions detailed in Section 9, Habitat Management Land Acquisition and Restoration and Security, that are required prior to the start of Covered Activities.

## **7. Provisions Prior to Disturbing Soil or Vegetation and for Entire Project:**

**7.1. Designated Representative.** Before starting Covered Activities, Permittee shall designate a representative (Designated Representative) responsible for communications with CDFW and overseeing compliance with this ITP. Permittee shall notify CDFW in writing before starting Covered Activities of the Designated Representative's name, business address, and contact information, and shall notify CDFW in writing if a substitute Designated Representative is selected or identified at any time during the term of this ITP.

**7.2. Education Program.** Permittee shall conduct an education program for all persons employed or otherwise working in the Project Area before performing any work. The program shall consist of a presentation from the

Designated Biologist that includes a discussion of the biology and general behavior of the Covered Species, information about the distribution and habitat needs of the Covered Species, sensitivity of the Covered Species to human activities, its status pursuant to CESA including legal protection, recovery efforts, penalties for violations and Project-specific protective measures described in this ITP. Permittee shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry in the Project Area. Permittee shall provide translation for non-English speaking workers, and the same instruction shall be provided to any new workers before they are authorized to perform work in the Project Area. Upon completion of the program, employees shall sign a form stating they attended the program and understand all protection measures. This training shall be repeated at least once annually for long-term and/or permanent employees that will be conducting work in the Project Area.

**7.3. Designated Biologist Authority.** To ensure compliance with the Conditions of Approval of this ITP, the Designated Biologist shall immediately stop any activity that does not comply with this ITP and/or order any reasonable measure to avoid the unauthorized take of an individual of the Covered Species. Permittee shall provide unfettered access to the Project Site and otherwise facilitate the Designated Biologist in the performance of his/her duties. If the Designated Biologist is unable to comply with the ITP, then the Designated Biologist shall notify the CDFW Representative immediately. Permittee shall not enter into any agreement or contract of any kind, including but not limited to non-disclosure agreements and confidentiality agreements, with its contractors and/or the Designated Biologist that prohibit or impede open communication with CDFW, including but not limited to providing CDFW staff with the results of any surveys, reports, or studies or notifying CDFW of any non-compliance or take. Failure to notify CDFW of any non-compliance or take or injury of a Covered Species as a result of such agreement or contract may result in CDFW taking actions to prevent or remedy a violation of this ITP.

**7.4. Construction Monitoring Documentation.** The Designated Biologist(s) and Biological Monitor(s) shall maintain construction-monitoring documentation on-site in either hard copy or digital format throughout the construction period, which shall include a copy of this ITP with attachments and a list of signatures of all personnel who have successfully completed the education program. Permittee shall ensure a copy of the construction-monitoring documentation is available for review at the Project site upon request by CDFW.

- 7.5. Trash Abatement.** Permittee shall initiate a trash abatement program before starting Covered Activities and shall continue the program for the duration of the Project. Permittee shall ensure that trash and food items are contained in animal-proof containers and removed, ideally at daily intervals but at least once a week, to avoid attracting opportunistic predators such as ravens, coyotes, and feral dogs.
- 7.6. Dust Control.** Permittee shall implement dust control measures during Covered Activities to facilitate visibility for monitoring of the Covered Species by the Designated Biologist. Permittee shall keep the amount of water used to the minimum amount needed and shall not allow water to form puddles.
- 7.7. Erosion Control Materials.** Permittee shall prohibit use of erosion control materials potentially harmful to Covered Species and other species, such as monofilament netting (erosion control matting) or similar material, in potential Covered Species' habitat.
- 7.8. Delineation of Property Boundaries.** Before starting Covered Activities, Permittee shall clearly delineate the boundaries of the Project Area with fencing, stakes, or flags. Permittee shall restrict all Covered Activities to within the fenced, staked, or flagged areas. Permittee shall maintain all fencing, stakes, and flags until the completion of Covered Activities in that area.
- 7.9. Project Access.** Project-related personnel shall access the Project Area using existing routes and routes identified in the Project Description and Project Impacts Maps (Figure 3) and shall not cross Covered Species' habitat outside of or en route to the Project Area. Permittee shall restrict Project-related vehicle traffic to established roads, staging, and parking areas. If Permittee determines construction of routes for travel are necessary outside of the Project Area, the Designated Representative shall contact CDFW at least 2 days prior for written approval before carrying out such an activity. CDFW may require an amendment to this ITP, among other reasons, if additional take of Covered Species will occur as a result of the Project modification.
- 7.10. Staging Areas.** Permittee shall confine all Project-related parking, storage areas, laydown sites, equipment storage, and any other surface-disturbing activities to the Project Area using, to the extent possible, previously disturbed areas. Additionally, Permittee shall not use or cross Covered Species' habitat outside of the marked Project Area unless provided for as described in Condition of Approval 7.8 of this ITP.

- 7.11. Hazardous Waste.** Permittee shall immediately stop and, pursuant to pertinent state and federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so. Permittee shall exclude the storage and handling of hazardous materials from the Project Area and shall properly contain and dispose of any unused or leftover hazardous products off-site. CDFW shall be notified immediately by the Permittee of any spills and shall be consulted regarding cleanup procedures.
- 7.12. CDFW Access.** Permittee shall provide CDFW staff with reasonable access to the Project and mitigation lands under Permittee control, and shall otherwise fully cooperate with CDFW efforts to verify compliance with or effectiveness of mitigation measures set forth in this ITP.
- 7.13. Notification of Non-compliance.** The Designated Representative shall immediately notify CDFW if the Permittee is not in compliance with any Condition of Approval of this ITP, including but not limited to any actual or anticipated failure to implement measures within the time periods indicated in this ITP and/or the MMRP. The Designated Representative shall follow up within 24 hours with a written report to CDFW describing, in detail, any non-compliance with this ITP and suggested measures to remedy the situation.
- 7.14. Compliance Monitoring.** The Designated Biologist shall be on-site daily when Covered Activities occur. The Designated Biologist shall conduct compliance inspections a minimum of once a week during periods of inactivity and after clearing, grubbing, and grading are completed. The Designated Biologist shall conduct compliance inspections to: minimize incidental take of the Covered Species; prevent unlawful take of species; check for compliance with all measures of this ITP; check all exclusion zones; and ensure that signs, stakes, and fencing are intact, and that Covered Activities are only occurring in the Project Area. The Designated Representative or Designated Biologist shall prepare daily written observation and inspection records summarizing oversight activities and compliance inspections, observations of Covered Species and their sign, survey results, and monitoring activities required by this ITP.
- 7.15. Monthly Compliance Report.** The Designated Representative or Designated Biologist shall compile the observation and inspection records identified in Condition of Approval 7.4 into a Monthly Compliance Report and submit it to CDFW along with a copy of the MMRP table with notes showing the current implementation status of each mitigation measure. Monthly Compliance

Reports shall be submitted to the CDFW offices listed in the Notices section of this ITP and via e-mail to CDFW's Regional Representative and Headquarters CESA Program. At the time of this ITP's approval, the CDFW Regional Representative is R2 CESA Desk ([R2CESA@wildlife.ca.gov](mailto:R2CESA@wildlife.ca.gov)) and Headquarters CESA Program email is [CESA@wildlife.ca.gov](mailto:CESA@wildlife.ca.gov). CDFW may at any time increase the timing and number of compliance inspections and reports required under this provision depending upon the results of previous compliance inspections. If CDFW determines the reporting schedule must be changed, CDFW will notify Permittee in writing of the new reporting schedule.

- 7.16. Annual Status Report.** Permittee shall provide CDFW with an Annual Status Report (ASR) no later than January 31 of every year, beginning with issuance of this ITP and continuing until CDFW accepts the Final Mitigation Report identified below. Each ASR shall include, at a minimum: (1) a summary of all Monthly Compliance Reports for that year identified in Condition of Approval 7.15; (2) a general description of the status of the Project Area and Covered Activities, including actual or projected completion dates, if known; (3) a copy of the table in the MMRP with notes showing the current implementation status of each mitigation measure; (4) an assessment of the effectiveness of each completed or partially completed mitigation measure in avoiding, minimizing and mitigating Project impacts; (5) all available information about Project-related incidental take of the Covered Species, including but not limited to, date, species name, number taken, location of take, description of take; (6) an accounting of the number of acres subject to both temporary and permanent disturbance, both for the prior calendar year, and a total since ITP issuance; and (7) information about other Project impacts on the Covered Species.
- 7.17. CNDDDB Observations.** The Designated Biologist shall submit all observations of Covered Species to CDFW's California Natural Diversity Database (CNDDDB) within 60 calendar days of the observation, and the Designated Biologist shall include copies of the submitted forms with the next Monthly Compliance Report or ASR, whichever is submitted first relative to the observation.
- 7.18. Movement of Covered Species Out of Harm's Way.** This ITP authorizes the Designated Biologist to capture, temporarily possess, and relocate Covered Species to reduce harm or mortality in connection with otherwise lawful Project activities.

**7.18.1. Relocation Parameters.** If the Designated Biologist determines individuals of Covered Species would be able to volitionally move away from the in-water work area during exclusion and dewatering activities, then they shall be allowed to do so. The Designated Biologist shall ensure that there are no barriers to movement upstream or downstream of the work area.

If Covered Species will not be able to volitionally move away, they shall be relocated according to the Handling Protocol below (Condition of Approval 7.18.3). Should the protocol or methods of the Relocation Plan (Condition of Approval 7.17) come into conflict with this ITP, the conditions of approval set forth in the ITP shall control.

**7.18.2. Notification.** Permittee shall provide CDFW staff the opportunity to be present during Covered Species relocation. If individuals of the Covered Species need to be relocated, Permittee shall immediately notify CDFW.

**7.18.3. Handling Protocol.** If the Covered Species is unable to volitionally exit the work area and are present during or after dewatering, the Designated Biologist shall use either a beach seine or heavy-duty dip net for capture of the Covered Species. Captured individual shall be placed in clean, oxygenated water in a shaded, uncrowded cooler at temperature ranges similar to the Sacramento River (less than 58°F). For white sturgeon, it shall be placed in a fish cradle with the ventral side up to induce a catatonic state.

Each individual captured shall be evaluated for condition (e.g., lethargy, abrasions or injury to body and fins) and checked for presence of a 69 kHz acoustic transmitter using a portable VR100-200 acoustic receiver and for the presence of a passive integrated transponder (PIT) tag using a PIT tag reader. The Designated Biologist shall record acoustic transmitter and PIT tag identification numbers if present, as well as fork length, total length, and girth behind the pelvic fins.

Any individuals of the Covered Species captured from the dewatered area of the Project Area shall be relocated according to the Relocation Plan outlined in Condition of Approval 7.26.

- 7.19. Covered Species Injury.** If a Covered Species is injured or stunned, the affected Covered Species shall be captured and relocated according to the Relocation Plan outlined in Condition of Approval 7.26.
- 7.20. Covered Species Mortality.** If a Covered Species is found recently deceased, the carcass shall be immediately bagged, labeled, and preserved in a freezer. The label shall include time and date, GPS location, circumstances surrounding death (if known), and ITP tracking number. White sturgeon specimens shall be delivered to the CDFW Low Elevation Fisheries Lab, Attention: Marc Beccio, 1701 Nimbus Road, Suite 1, Rancho Cordova, CA 95670 within two calendar days of the discovery. Chinook salmon specimens shall be delivered to the CDFW North Central Region Valley District Anadromous Fisheries, Attention: Skyler Burson, 1701 Nimbus Road, Rancho Cordova, CA 95670 within two calendar days of the discovery.
- 7.21. Notification of Take or Injury.** Permittee shall immediately notify the Designated Biologist if a Covered Species is taken or injured by a Project-related activity, or if a Covered Species is otherwise found dead or injured within the vicinity of the Project. The Designated Biologist or Designated Representative shall provide initial notification to CDFW by calling the Regional Office at (916) 907-3438. The initial notification to CDFW shall include information regarding the location, species, and number of animals taken or injured and the ITP Number. Following initial notification, Permittee shall send CDFW a written report to [R2CESA@wildlife.ca.gov](mailto:R2CESA@wildlife.ca.gov) within two calendar days. The report shall include the date and time of the finding or incident, location of the animal or carcass, and if possible, provide a photograph, explanation as to cause of take or injury, and any other pertinent information.
- 7.22. Timing of Work for Construction Activities.** All in-water and pile driving related Covered Activities within Covered Species habitat shall be conducted between May 1 and November 30.
- 7.23. Work Period Modification.** If the Permittee needs more time to complete a Covered Activity, the work may be permitted outside of the work period and extended. The Permittee shall submit a written request for a work period variance to CDFW. The work period variance request shall: 1) describe the extent of work already completed; 2) detail the activities that remain to be completed; 3) detail the time required to complete each of the remaining activities; and 4) provide photographs of both the current work completed and the proposed site for continued work. Work period variances are issued

at the discretion of CDFW. CDFW will review the written request to work outside of the established work period.

- 7.24. Night Work.** If night work is necessary, lighting shall be selectively placed, shielded, and directed away from Covered Species' natural habitat. Night work shall be restricted to activities that are not in-water and are not pile driving to ensure the Covered Species are allowed to migrate upstream and downstream (10pm to 8am are typical periods for the migration of the Covered Species in their juvenile and adult life stages).
- 7.25. Dewatering Plan.** Since flowing water is present or reasonably anticipated, Permittee shall submit for written approval a detailed dewatering plan to CDFW no later than 60 business days prior to commencing Covered Activities. The Permittee may not commence dewatering activities without written approval from CDFW. During all de-watering activities, the Designated Biologist shall monitor within de-watering areas and within adjacent river reaches to ensure no aquatic species are stranded or in distress. Permittee shall take immediate remedial actions if any conditions causing or contributing to stress and/or injury of the Covered Species are observed. Dewatering activities shall not impede the natural flow of the Sacramento River.
- 7.26. Relocation Plan.** Permittee shall prepare and submit to CDFW for approval, a plan to remove, and return to the same waterway, any Covered Species trapped within the area bounded by the cofferdam(s), other construction areas, or sections of the Project Area scheduled for dewatering. The Relocation Plan shall include the name(s) of the Designated Biologist who will relocate the Covered Species; pre-construction habitat assessment methodology; description of capture, handling, and relocation methods; a map and description of the relocation area(s) for captured Covered Species, including relative location, quality of habitat, the potential for non-native species or predators to be present, and potential barriers for movement. The Relocation Plan shall be submitted to CDFW no less than 60 business days prior to start of Covered Activities.
- 7.26.1. Covered Species Relocation.** If Covered Species is encountered within the Project Area, is directly threatened by Covered Activities, and is unable to move to a safe area on its own, the Designated Biologist shall relocate Covered Species to a safe area in accordance with the Relocation Plan and Condition of Approval 7.18.3. The Permittee or Designated Representative shall notify CDFW within 24 hours of each

time Covered Species is relocated. Notification to CDFW shall be via telephone or email, followed by a written incident report. Notification shall include the date, number, and specific location of all Covered Species that are relocated from the cofferdam in addition to any direct mortality observed during in-water work and relocation.

**7.27. Noise and Vibration Reduction.** The Permittee shall furnish, install, operate and maintain a sound attenuation system for all piles installed in water by impact hammer to reduce noise generated into the water. If the sound attenuation system fails, pile driving shall immediately stop and may not resume at the location until the system is put back into operation. A design of the sound attenuation system shall be submitted to CDFW for written approval no less than 60 days prior to the start of Covered Activities. Acoustic attenuation devices for the Cast-in-Steel-Shell (CISS) piles will be routinely inspected for proper installation, operation, and functionality by the Designated Biologist. The following sound attenuation systems may be employed including but not limited to:

- (1) Confined bubble curtain
- (2) An unconfined bubble curtain
- (3) Isolation casings
- (4) Wooden pile cushions
- (5) Other methods approved in advance by CDFW

**7.28. Pile Driving Hydro-Acoustic Limits.** Sound pressure levels generated by impact pile driving within the river, or within a reasonable distance from the water (on dry land) where sound levels may reach the water that are injurious to Covered Species shall be kept below the interim thresholds, 206 decibels (dB) peak Sound Pressure Level (SPL) and 187 dB cumulative Sound Exposure Level (SEL). If the 206 dB SPL or 187 cumulative SEL threshold injury zones are exceeded for impact pile driving the Permittee shall stop all impact pile driving activities and not continue until CDFW has been consulted. The Permittee shall monitor sound levels as specified in Condition of Approval 7.30, during impact pile driving activities occurring within the river channel, as well as for piles within a reasonable distance from the water on dry land (within 200 feet of the edge of water in the active channel) where sound levels may be injurious to Covered Species. If peak levels exceed the 206 dB

criteria of more than 15 strikes per day (one percent of the estimated daily strikes), Permittee shall notify CDFW within 24 hours.

- 7.29. Soft Start Pile Driving.** The initial strikes of all in-water piles, or piles that occur within 200 linear feet of the water's edge in the active channel in which injurious sound levels to Covered Species could reach the water, shall occur at less than full impact force for a period of 15 seconds followed by 30 seconds of no activity. This action shall be repeated two additional times, and impact shall be gradually brought up to full force blows to reduce the initial sound level and provide warning blows to allow Covered Species adequate time to leave the Project Area.
- 7.30. Hydro-Acoustic Monitoring Plan.** A minimum of 60 days prior to the start of Covered Activities, an acoustic monitoring plan to evaluate sound levels during pile driving activities shall be prepared by the designated hydro-acoustic monitoring specialist who shall possess the same authority as a Designated Biologist and have the ability to direct the resident engineer to stop work as necessary by the conditions of this ITP. The acoustic monitoring plan and hydro-acoustic monitoring specialist must be approved in writing by CDFW before pile driving activities can proceed. The acoustic monitoring plan shall be implemented during all impact pile driving activities, including near water piles within 200 feet of the edge of water in the active channel. At minimum, the monitoring plan will include the following:
- i. Daily acoustical monitoring by the designated hydro-acoustic monitoring specialist.
  - ii. A description of the methods necessary to continuously assess underwater noise on a real-time basis, including details on the number, location, distance and depth of hydrophones and associated monitoring equipment.
  - iii. Provide a means of recording the time, number of pile strikes, peak sound energy per strike, and interval between strikes.
  - iv. A minimum of two hydrophone underwater sound monitoring systems (hydrophone, signal amplifier and calibrator) that utilize current National Institute of Standards and Technology traceable calibration method.
  - v. Require a minimum recording distance of 10 meters from each pile being monitored.

- vi. Positioning of a hydrophone at the proposed limits of peak and cumulative strikes to ensure threshold distances are not surpassed or provide specific analysis on how the proposed limits shall be measured and monitored.
- vii. Providing specific inputs and calculations for cumulative sound exposure limits in the monitoring reports.

**7.31. Water Pumps Screening.** All water pumping or withdrawal from the river shall comply with the 1997 NMFS Fish Screening Criteria for Anadromous Salmonids, where applicable, to avoid entrainment of fish. The criteria include but are not limited to the following:

**7.31.1.** Screen design must provide for uniform flow distribution over the surface of the screen;

**7.31.2.** Screen material openings shall not exceed 3/32 inches for fry sized salmonids and shall not exceed 1/4 inches for fingerling sized salmonids;

**7.31.3.** Where physically practical, the screen shall be constructed at the diversion entrance. The screen face should be generally parallel to river flow and aligned with the adjacent riverbank;

**7.31.4.** The design approach velocity shall not exceed 0.33 feet per second for fry sized salmonids or 0.8 feet per second for fingerling sized salmonids; and

**7.31.5.** The screen design must provide for uniform flow distribution over the surface of the screen.

## **8. Post Construction Conditions**

**8.1. Final Mitigation Report.** No later than 45 days after completion of all mitigation measures, Permittee shall provide CDFW with a Final Mitigation Report. The Designated Biologist shall prepare the Final Mitigation Report which shall include, at a minimum: (1) a summary of all Monthly Compliance Reports (Condition of Approval 7.15) and all ASRs (Condition of Approval 7.16); (2) a copy of the table in the MMRP with notes showing when each of the mitigation measures was implemented; (3) all available information about Project-related incidental take of the Covered Species, including but not limited to, date, species name, number taken, location of take,

description of take; (4) information about other Project impacts on the Covered Species; (5) beginning and ending dates of Covered Activities; (6) an assessment of the effectiveness of this ITP's Conditions of Approval in minimizing and fully mitigating Project impacts of the taking on Covered Species; (7) recommendations on how mitigation measures might be changed to more effectively minimize take and mitigate the impacts of future projects on the Covered Species; and (8) any other pertinent information.

**8.2. Refuse Removal.** Upon completion of Covered Activities, Permittee shall remove from the Project Area and properly dispose of all temporary fill and construction refuse, including, but not limited to, broken equipment parts, wrapping material, cords, cables, wire, rope, strapping, twine, buckets, metal or plastic containers, and boxes.

**9. Habitat Management Land Acquisition, Restoration, and Security:** CDFW has determined that permanent protection and acquisition 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 from 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 Covered Species, and CDFW's estimate of the protected acreage required to provide for adequate compensation.

**To meet this requirement, the Permittee shall complete one of the following options<sup>6</sup> for Central Valley spring-run Chinook salmon and Sacramento River winter-run Chinook salmon:**

- 1) purchase 4.83 acres of Chinook salmon creation credits or 9.66 acres of Chinook salmon enhancement credits from a CDFW-approved mitigation or conservation bank pursuant to Condition of Approval 9.2 below;
- 2) shall provide for both the permanent protection and management of 4.83 acres of Habitat Management (HM) lands for Covered Species 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; or

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<sup>6</sup> Permittee may combine mitigation options if approved in advance by CDFW.

3) shall provide funding for CDFW-approved project(s) that provides Covered Species restoration and enhancement of Covered Species habitats pursuant to Condition of Approval 9.7

**To meet this requirement, the Permittee shall complete one of the following options<sup>6</sup> for white sturgeon:**

1) purchase 4.83 acres of white sturgeon creation credits or 9.66 acres of white sturgeon enhancement credits from a CDFW-approved mitigation or conservation bank pursuant to Condition of Approval 9.2 below;

2) shall provide for both the permanent protection and management of 4.83 acres of Habitat Management (HM) lands for Covered Species 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; or

3) shall provide funding for CDFW-approved project(s) that provides Covered Species research protection, restoration, and enhancement of Covered Species habitats pursuant to Condition of Approval 9.7

Purchase of Covered Species credits, permanent protection and funding for perpetual management of HM lands, AND/OR funding of CDFW-approved research/restoration/enhancement project(s) must be complete before starting Covered Activities, or within 24 months of the effective date of this ITP if Security is provided pursuant to Condition of Approval 9.8 below for all uncompleted obligations. The Permittee shall also restore on-site 1.46 acres of temporarily impacted Covered Species habitat pursuant to Condition of Approval 9.6 below.

**9.1. Cost Estimates.** For the purposes of determining the Security amount, CDFW has estimated the cost sufficient for CDFW or its contractors to complete acquisition, protection, and perpetual management of the HM lands and restoration of temporarily disturbed habitat as follows:

**9.1.1.** Land acquisition costs for HM lands identified in Condition of Approval 9.3 below, estimated at \$83,412.00/acre for 9.66 acres: **\$805,759.92**. Land acquisitions costs are estimated using local fair market current value per acre for lands with habitat values meeting mitigation requirements;

**9.1.2.** All other costs necessary to review and acquire the land in fee title and record a conservation easement as described in Condition of Approval 9.3.1 and 9.3.2 below: **\$19,320.00**;

- 9.1.3.** 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 **\$2,040,000.00**;
- 9.1.4.** Interim management period funding as described in Condition of Approval 9.3.6 below, estimated at **\$95,340.15**;
- 9.1.5.** Long-term management funding as described in Condition of Approval 9.4 below, estimated at **\$908,001.29**. Long-term management funding is estimated initially for the purpose of providing Security to ensure implementation of HM lands management.
- 9.1.6.** CDFW site protection monitoring and easement funding as described in Condition of Approval 9.3.2 below, estimated at **\$72,686.43**. Stewardship funding is estimated initially for the purpose of providing Security to ensure implementation of conservation easement monitoring.
- 9.1.7.** 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 **\$116,000.00**.
- 9.1.8.** Restoration of on-site temporary effects to Covered Species habitat as described in Condition of Approval 9.6, calculated at \$4000.00/acre for 1.46 acres: **\$5,840.00**.
- 9.1.9.** All costs associated with CDFW engaging an outside contractor to complete the mitigation tasks, including but not limited to acquisition, protection, and perpetual funding and management of the HM lands and restoration of temporarily disturbed habitat. These costs include but are not limited to the cost of issuing a request for proposals, transaction costs, contract administration costs, and costs associated with monitoring the contractor's work: **\$4,062,947.79**.
- 9.2. Covered Species Credits.** If the Permittee elects to purchase Covered Species credits to complete compensatory mitigation obligations, then Permittee shall purchase 4.83 acres of Covered Species creation credits or 9.66 acres of Covered Species enhancement credits from a CDFW-approved mitigation or conservation bank prior to initiating Covered Activities for each Covered Species (Chinook salmon and white sturgeon), or no later than 18 months from the issuance of this ITP if Security is provided

pursuant to Condition of Approval 9.8 below. Prior to purchase of Covered Species credits, Permittee shall obtain CDFW approval to ensure the mitigation or conservation bank is appropriate to compensate for the impacts of the Project. Permittee shall submit to CDFW a copy of the Bill of Sale(s) and Payment Receipt prior to initiating Covered Activities or within 18 months from issuance of this ITP if Security is provided. The purchase of Covered Species Credits may be combined with the funding of CDFW-approved project(s) in Condition of Approval 9.7 to satisfy mitigation requirement with CDFW approval.

**9.3. Habitat Management Lands Acquisition and Protection.** If the Permittee elects to provide for the acquisition, permanent protection, and perpetual management of HM lands to complete compensatory mitigation obligations, then the Permittee shall:

**9.3.1. Fee Title.** Transfer fee title of the HM lands to CDFW pursuant to terms approved in writing by CDFW. Alternatively, CDFW, in its sole discretion, may authorize a governmental entity, special district, non-profit organization, for-profit entity, person, or another entity to hold title to and manage the property provided that the district, organization, entity, or person meets the requirements of Government Code sections 65965-65968, as amended.

**9.3.2. Conservation Easement.** If CDFW does not hold fee title to the HM lands, CDFW shall act as grantee for a conservation easement over the HM lands or shall, in its sole discretion, approve a non-profit entity, public agency, or Native American tribe to act as grantee for a conservation easement over the HM lands provided that the entity, agency, or tribe meets the requirements of Civil Code section 815.3. If CDFW elects not to be named as the grantee for the conservation easement, CDFW shall be expressly named in the conservation easement as a third-party beneficiary. The Permittee shall obtain CDFW written approval of any conservation easement before its execution or recordation. No conservation easement shall be approved by CDFW unless it complies with Civil Code sections 815-816, as amended, and Government Code sections 65965-65968, as amended and include provisions expressly addressing Government Code sections 65966(j) and 65967(e). Because the "doctrine of merger" could invalidate the conservation interest, under no circumstances can the fee title owner of the HM lands serve as grantee for the conservation easement.

- 9.3.3. HM Lands Approval.** Obtain CDFW written approval of the HM lands before acquisition and/or transfer of the land by submitting, at least three months before acquisition and/or transfer of the HM lands, documentation identifying the land to be purchased or property interest conveyed to an approved entity as mitigation for the Project's impacts on Covered Species;
- 9.3.4. HM Lands Documentation.** Provide a recent preliminary title report, Phase I Environmental Site Assessment, and other necessary documents (please contact CDFW for document list). All documents conveying the HM lands and all conditions of title are subject to the approval of CDFW, and if applicable, the Wildlife Conservation Board and the Department of General Services;
- 9.3.5. Land Manager.** Designate both an interim and long-term land manager approved by CDFW. The interim and long-term land managers may, but need not, be the same. The interim and/or long-term land managers may be the landowner or another party. Documents related to land management shall identify both the interim and long-term land managers. Permittee shall notify CDFW of any subsequent changes in the land manager within 30 days of the change. If CDFW will hold fee title to the mitigation land, CDFW will also act as both the interim and long-term land manager unless otherwise specified. The grantee for the conservation easement cannot serve as the interim or long-term manager without the express written authorization of CDFW in its sole discretion.
- 9.3.6. Start-up Activities.** Provide for the implementation of start-up activities, including the initial site protection and enhancement of HM lands, once the HM lands have been approved by CDFW. Start-up activities include, at a minimum: (1) preparing a final management plan for CDFW approval (see optional management plan template at <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=227736>) (2) conducting a baseline biological assessment and land survey report within four months of recording or transfer; (3) developing and transferring Geographic Information Systems (GIS) data if applicable; (4) establishing initial fencing; (5) conducting litter removal; (6) conducting initial habitat restoration or enhancement, if applicable; and (7) installing signage;

**9.3.7. Interim Management (Initial and Capital).** Provide for the interim management of the HM lands. The Permittee shall ensure that the interim land manager implements the interim management of the HM lands as described in the final management plan and conservation easement approved by CDFW. The interim management period shall be a minimum of three years from the date of HM land acquisition and protection and full funding of the Endowment and includes expected management following start-up activities. Interim management period activities described in the final management plan shall include fence repair, continuing trash removal, site monitoring, and vegetation and invasive species management.

Permittee shall either (1) provide Security to CDFW for the minimum of three years of interim management that the land owner, Permittee, or land manager agrees to manage and pay for at their own expense, (2) establish an escrow account with written instructions approved in advance in writing by CDFW to pay the land manager annually in advance, or (3) establish a short-term enhancement account with CDFW or a CDFW-approved entity for payment to the land manager.

**9.4. Endowment Fund.** If the Permittee elects to provide for the acquisition, permanent protection, and perpetual management of HM lands to complete compensatory mitigation obligations, then the Permittee shall ensure that the HM lands are perpetually managed, maintained, and monitored by the long-term land manager as described in this ITP, the conservation easement, and the final management plan approved by CDFW. After obtaining CDFW approval of the HM lands, Permittee shall provide long-term management funding for the perpetual management of the HM lands by establishing a long-term management fund (Endowment). The Endowment is a sum of money, held in a CDFW-approved fund that is permanently restricted to paying the costs of long-term management and stewardship of the mitigation property for which the funds were set aside, which costs include the perpetual management, maintenance, monitoring, and other activities on the HM lands consistent with this ITP, the conservation easement, and the management plan required by Condition of Approval 9.3.5. Endowment as used in this ITP shall refer to the endowment deposit and all interest, dividends, other earnings, additions and appreciation thereon. The Endowment shall be governed by this ITP, Government Code sections 65965-65968, as amended, and Probate Code sections 18501-18510, as amended.

After the interim management period, Permittee shall ensure that the designated long-term land manager implements the management and monitoring of the HM lands according to the final management plan. The long-term land manager shall be obligated to manage and monitor the HM lands in perpetuity to preserve their conservation values in accordance with this ITP, the conservation easement, and the final management plan. Such activities shall be funded through the Endowment.

- 9.4.1. Identify an Endowment Manager.** The Endowment shall be held by the Endowment Manager, which shall be either CDFW or another entity qualified pursuant to Government Code sections 65965-65968, as amended.

Permittee shall submit to CDFW a written proposal that includes: (i) the name of the proposed Endowment Manager; (ii) whether the proposed Endowment Manager is a governmental entity, special district, nonprofit organization, community foundation, or congressionally chartered foundation; (iii) whether the proposed Endowment Manager holds the property or an interest in the property for conservation purposes as required by Government Code section 65968(b)(1) or, in the alternative, the basis for finding that the Project qualifies for an exception pursuant to Government Code section 65968(b)(2); and (iv) a copy of the proposed Endowment Manager's certification pursuant to Government Code section 65968(e).

Within thirty days of CDFW's receipt of Permittee's written proposal, CDFW shall inform Permittee in writing if it determines the proposal does not satisfy the requirements of Fish and Game Code section 2081(b)(3) and, if so, shall provide Permittee with a written explanation of the reasons for its determination. If CDFW does not provide Permittee with a written determination within the thirty-day period, the proposal shall be deemed consistent with Section 2081(b)(3).

- 9.4.2. Calculate the Endowment Funds Deposit.** After obtaining CDFW written approval of the HM lands, long-term management plan, and Endowment Manager, Permittee shall prepare an endowment assessment (equivalent to a Property Analysis Record (PAR)) to calculate the amount of funding necessary to ensure the long-term management of the HM lands (Endowment Deposit Amount). Note that the endowment for the easement holder should not be included in this calculation. The Permittee shall submit to CDFW for review and approval

the results of the endowment assessment before transferring funds to the Endowment Manager.

**9.4.2.1. Capitalization Rate and Fees.** Permittee shall obtain the capitalization rate from the selected Endowment Manager for use in calculating the endowment assessment and adjust for any additional administrative, periodic, or annual fees.

**9.4.2.2. Endowment Buffers/Assumptions.** Permittee shall include in the endowment assessment assumptions the following buffers for endowment establishment and use that will substantially ensure long-term viability and security of the Endowment:

**9.4.2.2.1. 10 Percent Contingency.** A 10 percent contingency shall be added to each endowment calculation to hedge against underestimation of the fund, unanticipated expenditures, inflation, or catastrophic events.

**9.4.2.2.2. Three Years Delayed Spending.** The endowment shall be established assuming spending will not occur for the first three years after full funding.

**9.4.2.2.3. Non-annualized Expenses.** For all large capital expenses to occur periodically but not annually such as fence replacement or well replacement, payments shall be withheld from the annual disbursement until the year of anticipated need or upon request to Endowment Manager and CDFW.

**9.4.3. Transfer Long-term Endowment Funds.** Permittee shall transfer the long-term endowment funds to the Endowment Manager upon CDFW approval of the Endowment Deposit Amount identified above.

**9.4.4. Management of the Endowment.** The approved Endowment Manager may pool the Endowment with other endowments for the operation, management, and protection of HM lands for local populations of the Covered Species but shall maintain separate accounting for each Endowment. The Endowment Manager shall, at all times, hold and manage the Endowment in compliance with this ITP, Government Code sections 65965-65968, as amended, and Probate Code sections 18501-18510, as amended.

Notwithstanding Probate Code sections 18501-18510, the Endowment Manager shall not make any disbursement from the Endowment that will result in expenditure of any portion of the principal of the endowment without the prior written approval of CDFW in its sole discretion. Permittee shall ensure that this requirement is included in any agreement of any kind governing the holding, investment, management, and/or disbursement of the Endowment funds.

Notwithstanding Probate Code sections 18501-18510, if CDFW determines in its sole discretion that an expenditure needs to be made from the Endowment to preserve the conservation values of the HM lands, the Endowment Manager shall process that expenditure in accordance with directions from CDFW. The Endowment Manager shall not be liable for any shortfall in the Endowment resulting from CDFW's decision to make such an expenditure.

- 9.5. Reimburse CDFW.** Permittee shall reimburse CDFW for all reasonable costs incurred by CDFW related to issuance and monitoring of this ITP, including, but not limited to transaction fees, administrative fees, and costs incurred from other state agency reviews.
- 9.6. Habitat Restoration.** Permittee shall restore on-site the 1.46 acres of Covered Species habitat that will be temporarily disturbed during construction to pre-project or better conditions.
- 9.7. Research, Restoration, or Enhancement Project for Covered Species Habitat.** With written approval of CDFW, the Permittee may elect to provide funding equivalent to the cost of the mitigation obligation for the Covered Species. To meet this requirement, the Permittee shall complete one or all the following options:
- 1) For Central Valley spring-run Chinook salmon and Sacramento River winter-run Chinook salmon, the Permittee must provide a Funding Plan to CDFW for review and approval that provides a detailed description of the restoration or enhancement project(s), including what project activities will occur, what project benefits will be provided to the Covered Species, the timeline and milestones of the project(s), how project success and uplift for the Covered Species will be measured and monitored, and how the Permittee's funding will contribute to the project(s) goals and recovery of the Covered Species. The project will be deemed complete when the final monitoring reports are submitted for the enhancement or restoration project. Multiple CDFW-approved projects may be funded.

- 2) For white sturgeon, the Permittee must provide a Funding Plan to CDFW for review and approval that provides a detailed description of the research, restoration, or enhancement project(s), including what project activities will occur, what project benefits will be provided to the Covered Species, the timeline and milestones of the project(s), how project success and uplift for the Covered Species will be measured and monitored, and how the Permittee's funding will contribute to the project(s) goals and recovery of the Covered Species. Research projects on white sturgeon may include recruitment conditions, required spawning habitat, sources of adult mortality rates, diet, optimal water passage conditions, or other CDFW-approved topics that will provide critical information to assist with future restoration projects for the uplift of white sturgeon habitat. The project will be deemed complete when the final monitoring reports are submitted for the enhancement or restoration project or a final research paper is submitted to CDFW. Multiple CDFW-approved projects may be funded.

**9.8. Security.** The Permittee may proceed with Covered Activities only after the Permittee has ensured funding (Security) to complete any activity required by Condition of Approval 9 that has not been completed before Covered Activities begin. Permittee shall provide Security as follows:

- (1) Security Amount. The Security shall be in the amount of **\$4,062,947.79** or in the amount identified in 9.1 specific to the obligation that has not been completed. This amount is determined by CDFW based on the cost estimates identified in Condition of Approval 9.1 above, sufficient for CDFW or its contractors to complete Covered Species credits acquisition, habitat restoration, and monitoring.
- (2) Security Form. The Security shall be in the form of an irrevocable escrow agreement (see Attachment 3) or another form of Security approved in advance in writing by CDFW.
- (3) Security Timeline. The Security shall be provided to CDFW before Covered Activities begin or within 30 days after the effective date of this ITP, whichever occurs first.
- (4) Security Holder. The Security shall be held by CDFW or in a manner approved in advance in writing by CDFW.

- (5) Security Transmittal. Permittee shall transmit the Security to CDFW by way of an approved instrument such as an escrow agreement, irrevocable letter of credit, or other.
- (6) Security Drawing. The Security shall allow CDFW to draw on the principal sum if CDFW, in its sole discretion, determines that the Permittee has failed to comply with the Conditions of Approval of this ITP.
- (7) Security Release. The Security (or any portion of the Security then remaining) shall be released to the Permittee after CDFW has conducted an on-site inspection and received confirmation that all secured requirements have been satisfied, as evidenced by:

For Credit Purchase:

- Copy of Bill of Sale(s) and Payment Receipt(s) or Credit Transfer Agreement for the purchase of Covered Species credits; and
- Timely submission of all required reports.

For Habitat Management Land Acquisition (HMLA):

- Written documentation of the acquisition of the HM lands;
- Copies of all executed and recorded conservation easements;
- Written confirmation from the approved Endowment Manager of its receipt of the full Endowment; and
- Timely submission of all required reports.

For Funding of CDFW-approved Research, Restoration, or Enhancement Project(s):

- Copies of all funding transfer statements to the organization/agencies in charge of the research, restoration, or enhancement projects;
- Timely submission of all required reports.

Even if Security is provided, the Permittee must complete the required acquisition, protection and transfer of all HM lands and record any required conservation easements no later than 24 months from the effective date of this ITP. 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.

#### **IX. Amendment:**

This ITP may be amended as provided by California Code of Regulations, Title 14, section 783.6, subdivision (c), and other applicable law. This ITP may be amended without the concurrence of the Permittee as required by law, including if CDFW determines that continued implementation of the Project as authorized under this ITP would jeopardize the continued existence of the Covered Species or where Project changes or changed biological conditions necessitate an ITP amendment to ensure that all Project-related impacts of the taking to the Covered Species are minimized and fully mitigated.

#### **X. Stop-Work Order:**

If CDFW determines the Permittee has violated any term or condition of this ITP or has engaged in unlawful take, CDFW may issue Permittee a written stop-work order instructing the Permittee to suspend any Covered Activity for an initial period of up to 30 days or risk suspension or revocation of this ITP. CDFW can issue a stop-work order to prevent or remedy a violation of this ITP, including but not limited to the failure to comply with reporting or monitoring obligations, or to prevent the unauthorized take of any CESA endangered, threatened, or candidate species, regardless of whether that species is a Covered Species under this ITP. Permittee shall stop work immediately as directed by CDFW upon receipt of any such stop-work order. Upon written notice to Permittee, CDFW may extend any stop-work order issued to Permittee for a period not to exceed 30 additional days.

If Permittee fails to remedy the violation or to comply with a stop-work order, CDFW may proceed with suspension and revocation of this ITP. Suspension and revocation of this ITP shall be governed by California Code of Regulations, Title 14, section 783.7, and any other applicable law. Neither the Designated Biologist nor CDFW shall be liable for any costs incurred in complying with stop-work orders.

#### **XI. Liability:**

All terms and conditions of this ITP shall be binding upon each Permittee. Notwithstanding California Civil Code section 1431 or any other provision of law, each Permittee shall be jointly and severally liable for performance of all terms, conditions, and obligations of this ITP and shall be jointly and severally liable for any unauthorized take or other violations of this ITP, whether committed by Permittees or any person acting on behalf of one or more Permittees, including their officers, employees, representatives, agents or contractors and subcontractors. Any failure by

one or more Permittees to comply with any term, condition, or obligation herein shall be deemed a failure to comply by all Permittees.

**XII. Compliance with Other Laws:**

This ITP sets forth CDFW's requirements for the Permittee to implement the Project pursuant to CESA. This ITP does not necessarily create an entitlement to proceed with the Project. Permittee is responsible for complying with all other applicable federal, state, and local law.

**XIII. Notices:**

Written notices, reports and other communications relating to this ITP shall be delivered to CDFW by email or registered first class mail at the following address, or at addresses CDFW may subsequently provide the Permittee. Notices, reports, and other communications shall reference the Project name, Permittee, and ITP Number (2081-2023-061-02) in a cover letter and on any other associated documents.

Original cover with attachment(s) to:

Morgan Kilgour, Regional Manager  
California Department of Fish and Wildlife  
1701 Nimbus Road  
Rancho Cordova, CA 95670  
Telephone (916) 907-3438  
[R2CESA@wildlife.ca.gov](mailto:R2CESA@wildlife.ca.gov)

and a copy to:

Habitat Conservation Planning Branch  
California Department of Fish and Wildlife  
Attention: CESA Permitting Program  
Post Office Box 944209  
Sacramento, CA 94244  
[CESA@wildlife.ca.gov](mailto:CESA@wildlife.ca.gov)

Incidental Take Permit  
No. 2081-2023-061-02  
**CITY OF SACRAMENTO**  
**I STREET BRIDGE REPLACEMENT**

Unless Permittee is notified otherwise, CDFW's Regional Representative for purposes of addressing issues that arise during implementation of this ITP is:

Region 2 CESA Desk  
1701 Nimbus Road  
Rancho Cordova, CA 95670  
Telephone (916) 907-3438  
[R2CESA@wildlife.ca.gov](mailto:R2CESA@wildlife.ca.gov)

#### **XIV. Compliance with the California Environmental Quality Act:**

CDFW's issuance of this ITP is subject to CEQA. CDFW is a responsible agency pursuant to CEQA with respect to this ITP because of prior environmental review of the Project by the lead agency, the City of Sacramento. (see generally Pub. Resources Code, §§ 21067, 21069.) The lead agency's prior environmental review of the Project is set forth in the EIR, (SCH No.: 2014092069) dated May 2019 that the City of Sacramento adopted for the I Street Bridge Replacement Project on August 13, 2019. At the time the lead agency adopted the EIR and approved the Project it also adopted various mitigation measures for the Covered Species as conditions of Project approval.

This ITP, along with CDFW's related CEQA findings, which are available as a separate document, provide evidence of CDFW's consideration of the lead agency's EIR for the Project and the environmental effects related to issuance of this ITP (CEQA Guidelines, § 15096, subd. (f)). CDFW finds that issuance of this ITP will not result in any previously undisclosed potentially significant effects on the environment or a substantial increase in the severity of any potentially significant environmental effects previously disclosed by the lead agency. Furthermore, to the extent the potential for such effects exists, CDFW finds adherence to and implementation of the Conditions of Project Approval adopted by the lead agency, and that adherence to and implementation of the Conditions of Approval imposed by CDFW through the issuance of this ITP, will avoid or reduce to below a level of significance any such potential effects. CDFW consequently finds that issuance of this ITP will not result in any significant, adverse impacts on the environment.

#### **XV. Findings Pursuant to CESA:**

These findings are intended to document CDFW's compliance with the specific findings requirements set forth in CESA and related regulations. (Fish & G. Code § 2081, subs. (b)-(c); Cal. Code Regs., tit. 14, §§ 783.4, subds, (a)-(b), 783.5, subd. (c)(2).)

CDFW finds based on substantial evidence in the ITP application, the EIR, the LSA Agreement, the Biological Opinions, the results of site visits and consultations, and the

Incidental Take Permit  
No. 2081-2023-061-02  
**CITY OF SACRAMENTO**  
**I STREET BRIDGE REPLACEMENT**

administrative record of proceedings, that issuance of this ITP complies and is consistent with the criteria governing the issuance of ITPs pursuant to CESA:

- (1) Take of Covered Species as defined in this ITP will be incidental to the otherwise lawful activities covered under this ITP;
- (2) Impacts of the taking on Covered Species will be minimized and fully mitigated through the implementation of measures required by this ITP and as described in the MMRP. Measures include: (1) permanent habitat protection, purchase of species credits, and/or research/restoration/enhancement activities; (2) establishment of avoidance zones; (3) worker education; and (4) Monthly Compliance Reports. CDFW evaluated 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. Based on this evaluation, CDFW determined that the protection and management in perpetuity of at least 9.66 acres of compensatory habitat that is contiguous with other protected Covered Species habitat and/or is of higher quality than the habitat being destroyed by the Project, along with the minimization, monitoring, reporting, and funding requirements of this ITP minimizes and fully mitigates the impacts of the taking caused by the Project;
- (3) Research on white sturgeon is appropriate mitigation for the Covered Species because of the lack of knowledge on the Covered Species to determine which mitigation options are effective for the protection and recovery of the Covered Species. Additional research on the white sturgeon will provide critical information to assist with future restoration projects and mitigation for the uplift of the Covered Species.
- (4) The take avoidance and mitigation measures required pursuant to the conditions of this ITP and its attachments are roughly proportional in extent to the impacts of the taking authorized by this ITP;
- (5) The measures required by this ITP maintain Permittee's objectives to the greatest extent possible;
- (6) All required measures are capable of successful implementation;
- (7) This ITP is consistent with any regulations adopted pursuant to Fish and Game Code sections 2112 and 2114;
- (8) Permittee has ensured adequate funding to implement the measures required

Incidental Take Permit  
No. 2081-2023-061-02  
**CITY OF SACRAMENTO**  
**I STREET BRIDGE REPLACEMENT**

by this ITP as well as for monitoring compliance with, and the effectiveness of, those measures for the Project; and

- (9) Issuance of this ITP will not jeopardize the continued existence of the Covered Species based on the best scientific and other information reasonably available, and this finding includes consideration of the species' capability to survive and reproduce, and any adverse impacts of the taking on those abilities in light of (1) known population trends; (2) known threats to the species; and (3) reasonably foreseeable impacts on the species from other related projects and activities. Moreover, CDFW's finding is based, in part, on CDFW's express authority to amend the terms and conditions of this ITP without concurrence of the Permittee as necessary to avoid jeopardy and as required by law.

## **XVI. Attachments:**

|              |                                             |
|--------------|---------------------------------------------|
| FIGURE 1     | Project Location Map                        |
| FIGURE 2     | Project Plans                               |
| FIGURE 3     | Project Impacts Maps                        |
| ATTACHMENT 1 | Mitigation Monitoring and Reporting Program |
| ATTACHMENT 2 | Biologist Resume Form                       |
| ATTACHMENT 3 | Escrow Agreement Form                       |

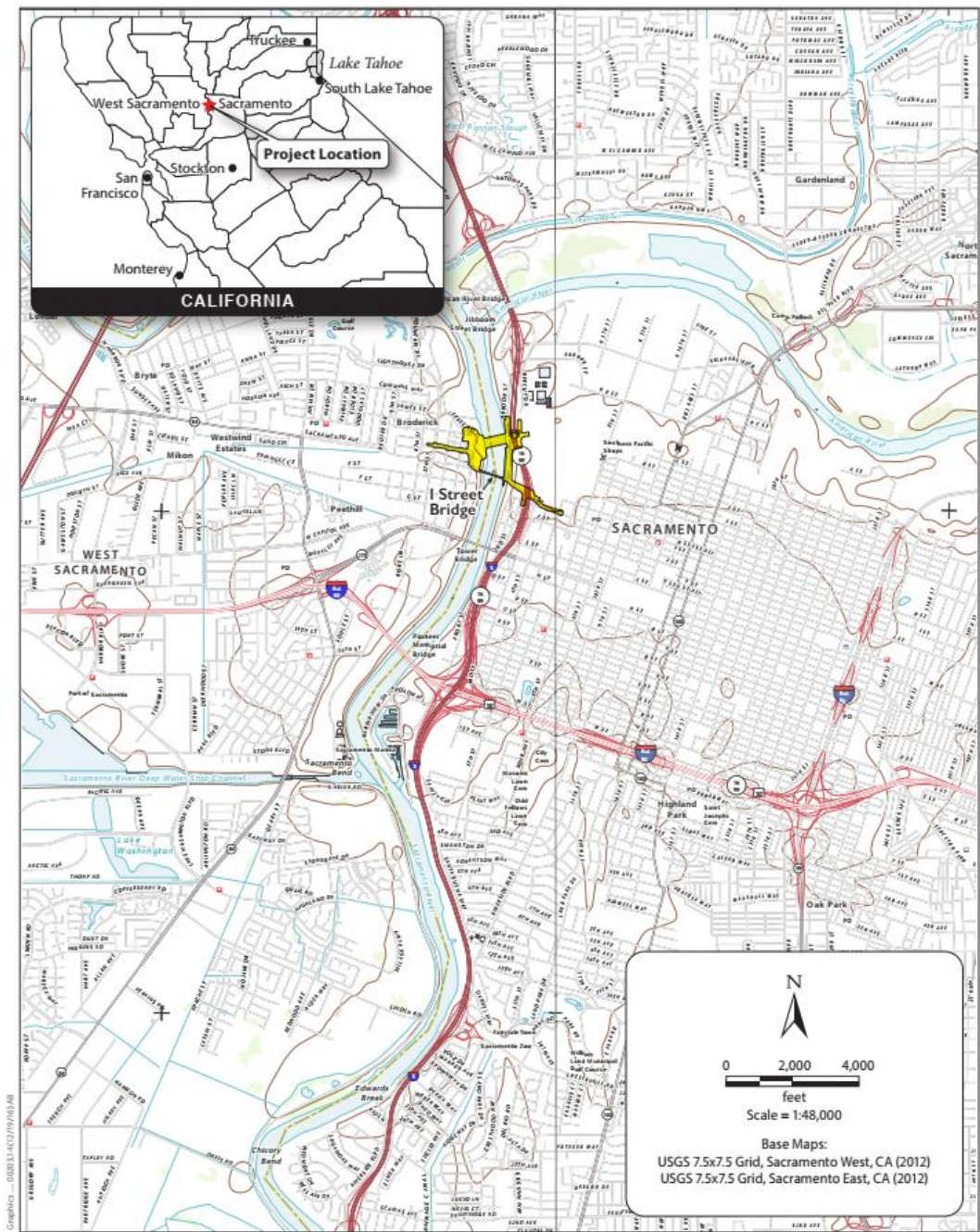
**ISSUED BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE ON 9/16/2026**

DocuSigned by:  
  
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Morgan Kilgour, Regional Manager  
 North Central Region

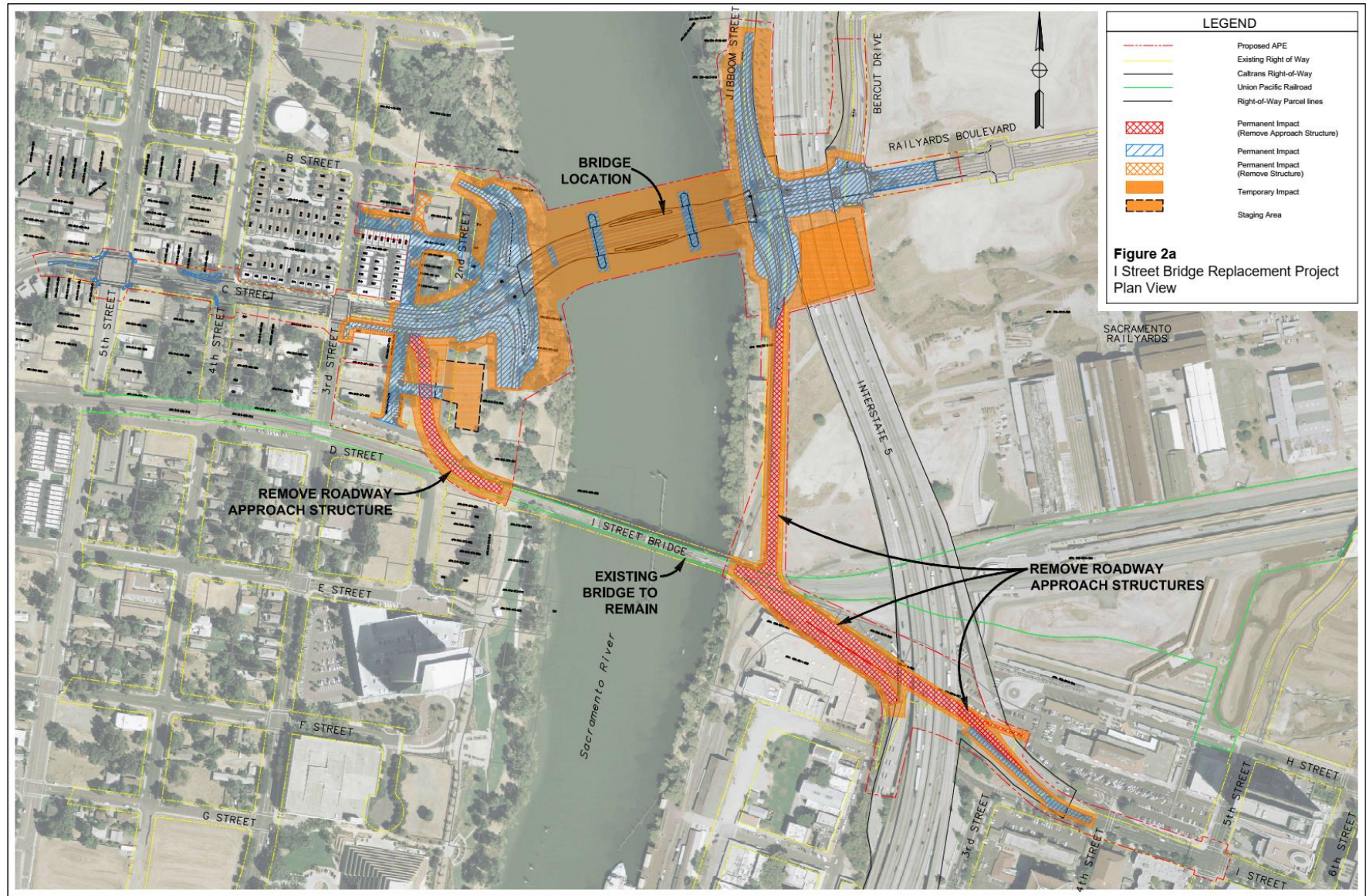
Incidental Take Permit  
 No. 2081-2023-061-02  
**CITY OF SACRAMENTO**  
**I STREET BRIDGE REPLACEMENT**

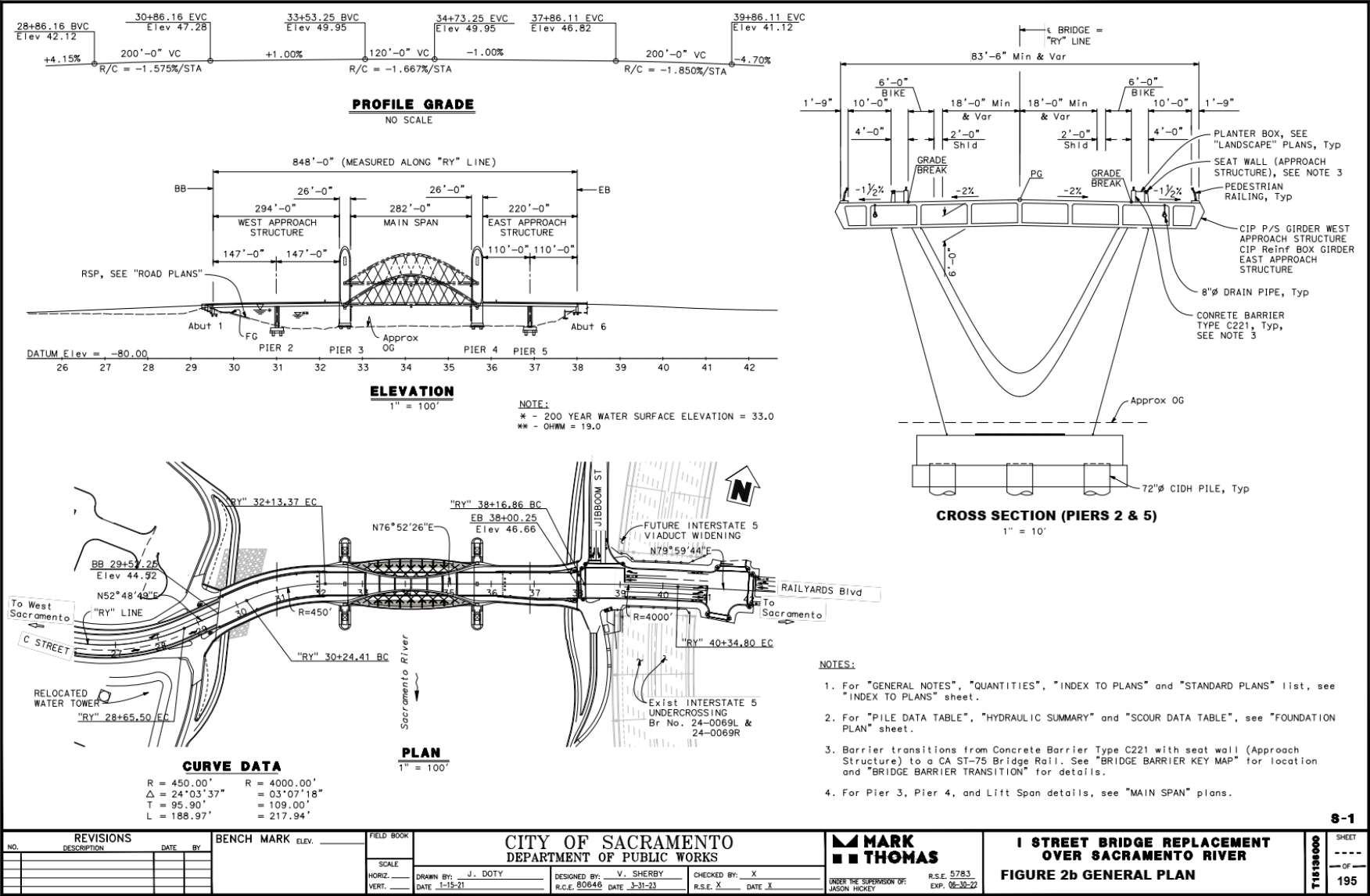
Figure 1: Project Location



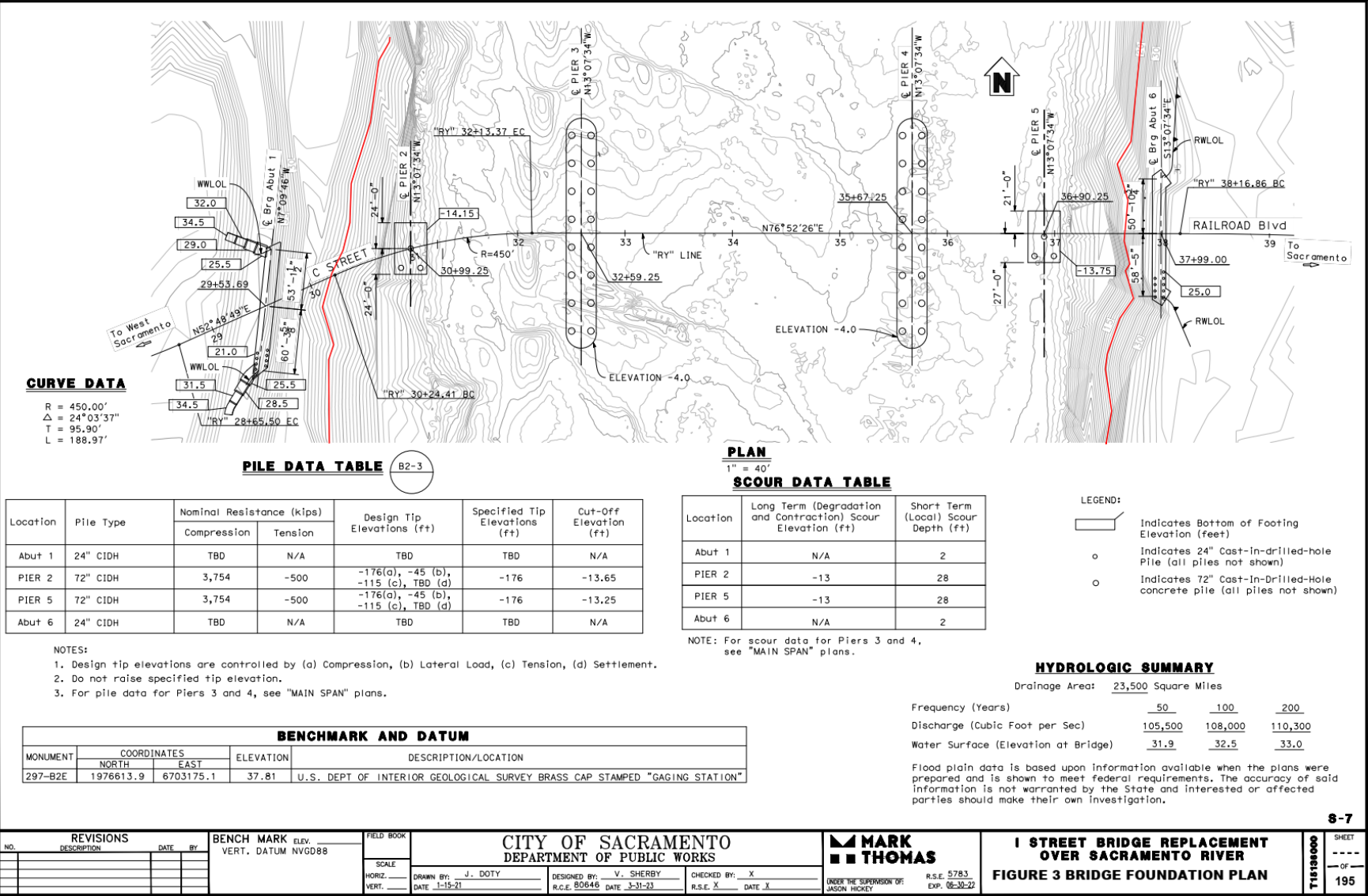
Vicinity Map  
I Street Bridge Replacement Project

Figure 2: Project Plans





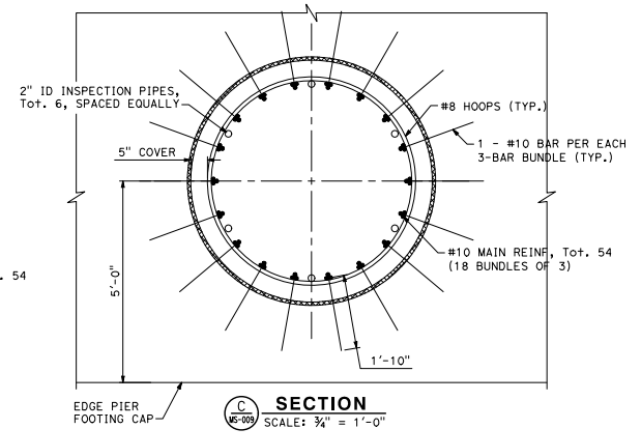
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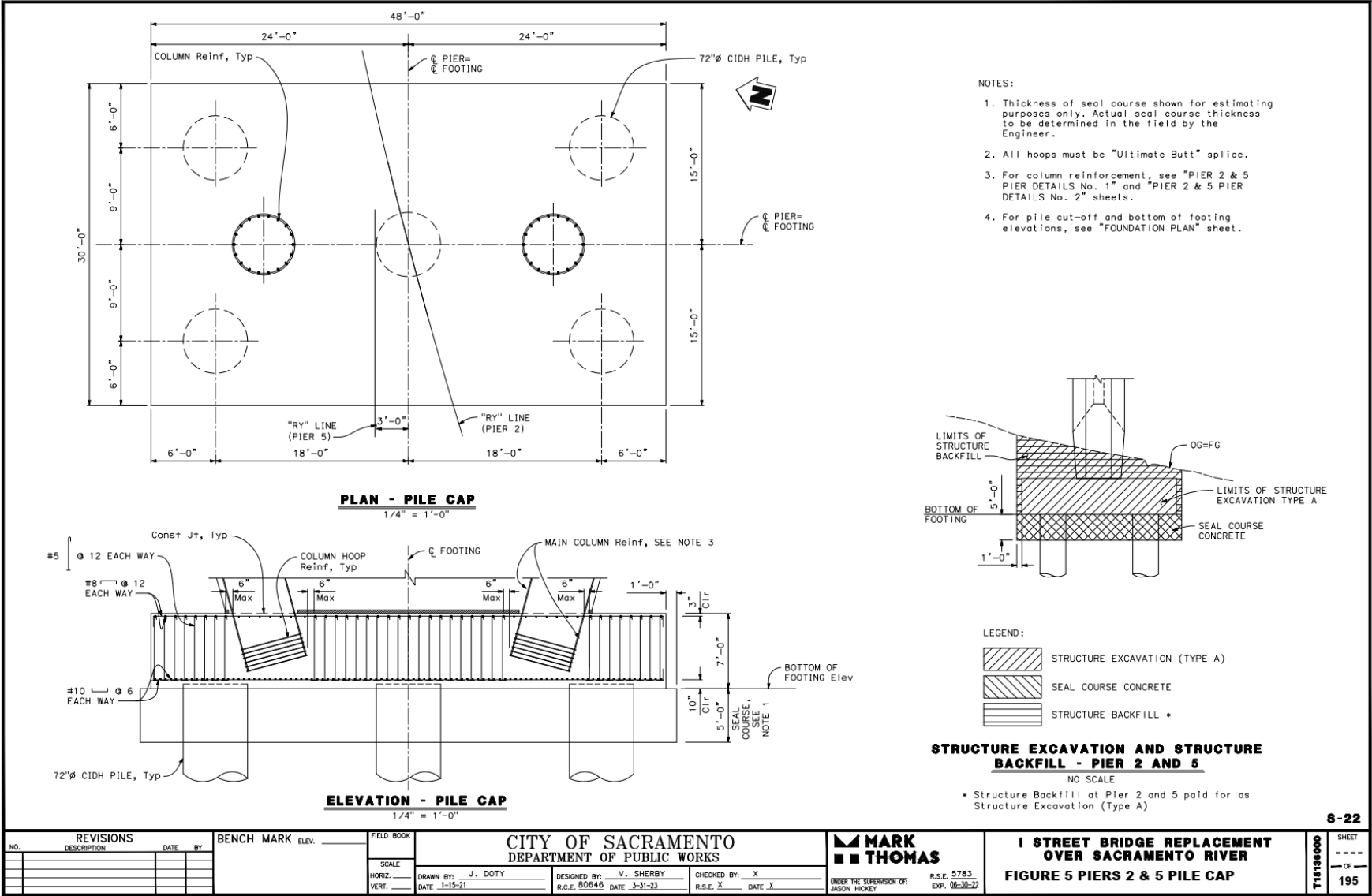


1. DESIGN TIP ELEVATIONS ARE CONTROLLED BY: (a) COMPRESSION, (b) TENSION, (d) LATERAL LOAD.
2. THE CIDH SPECIFIED TIP ELEVATION SHALL NOT BE RAISED.
3. UNSUITABLE SOIL LAYERS (VERY SOFT, LIQUEFIABLE, SCOURABLE) THAT DO NOT CONTRIBUTE TO THE DESIGN NOMINAL RESISTANCE EXIST AT PIERS 3 AND 4 EXTENDING TO ELEVATION OF -11 ft.

1. XXX
2. XXX
3. XXX

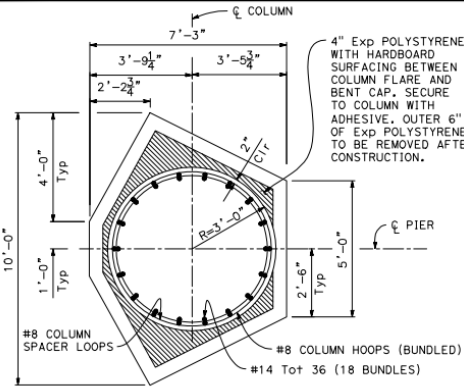


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|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| <div style="display: flex; justify-content: space-between;"> <div> REVISIONS<br/> NO.      DESCRIPTION      DATE      BY </div> <div>  <p>MODJESKI AND MASTERS, INC.<br/> 100 STERLING PARKWAY, SUITE 302<br/> MECHANICSBURG, PA 17050</p> </div> <div> FIELD BOOK<br/> ****<br/> SCALE<br/> AS SHOWN </div> <div> CITY OF SACRAMENTO<br/> DEPARTMENT OF PUBLIC WORKS </div> <div> 1 STREET BRIDGE REPLACEMENT PROJECT<br/> OVER THE SACRAMENTO RIVER<br/> <b>FIGURE 4 72" DIAMETER PILE DETAILS</b> </div> <div> DWG NO.: MS-009<br/> SHEET NO.: ##<br/> OF ##<br/> PRJ: [PROJECT] </div> </div> |  |  |  |
| <div style="display: flex; justify-content: space-between;"> <div> DRAWN BY: F. LAST<br/> DATE: MM/DD/YYYY </div> <div> DESIGNED BY: F. LAST<br/> DATE: MM/DD/YYYY </div> <div> CHECKED BY: F. LAST<br/> DATE: MM/DD/YYYY </div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |

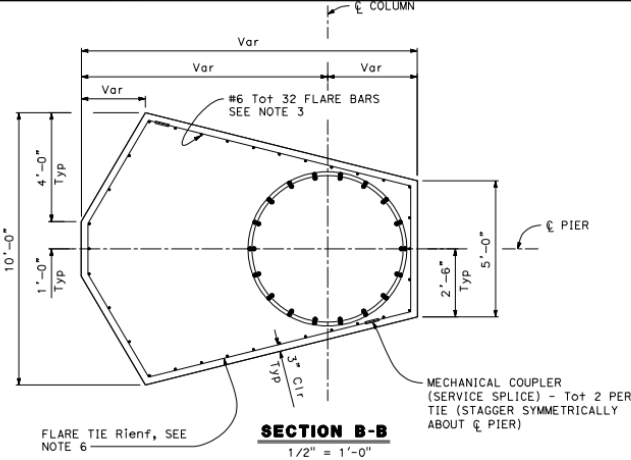


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|-----------|-------------|------|----|------------|-------|------------|--------------------------------------------------|-------------------|---------------------------|-----------------|---------------------------------------------------------------------------------------|---------------------------|--|------------|--------------|
| REVISIONS |             |      |    | BENCH MARK | ELEV. | FIELD BOOK | CITY OF SACRAMENTO<br>DEPARTMENT OF PUBLIC WORKS |                   |                           | MARK<br>THOMAS  | 1 STREET BRIDGE REPLACEMENT<br>OVER SACRAMENTO RIVER<br>FIGURE 5 PIERS 2 & 5 PILE CAP |                           |  | T151586000 | SHEET<br>195 |
| NO.       | DESCRIPTION | DATE | BY |            |       |            | SCALE                                            | DRAWN BY: J. DOTY | DESIGNED BY: V. SHERBY    | CHECKED BY: X   |                                                                                       |                           |  |            |              |
|           |             |      |    |            |       |            | HORIZ. DATE 1-15-21                              | DATE 1-15-21      | R.C.E. 80646 DATE 3-31-23 | R.S.E. X DATE X | UNDER THE SUPERVISION OF JASON HICKEY                                                 | R.S.E. 5783 EXP. 06-30-22 |  |            |              |



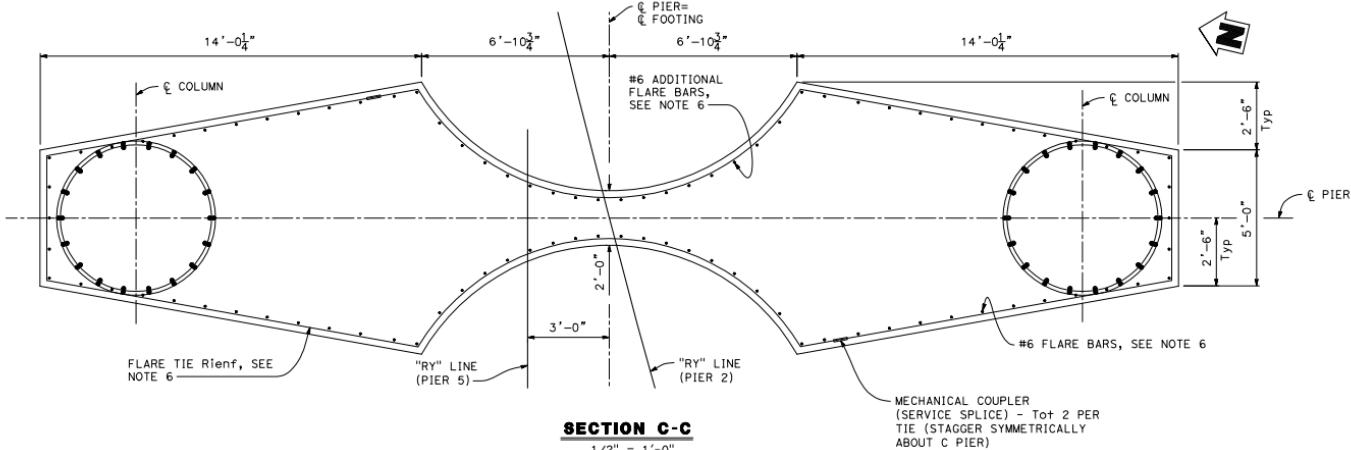


**SECTION A-A**  
1/2" = 1'-0"



**SECTION B-B**  
1/2" = 1'-0"

NOTE: For information not shown, see "SECTION A-A".



**SECTION C-C**  
1/2" = 1'-0"

NOTE: For information not shown, see "SECTION A-A".

- NOTES:
1. All hoops must be "Ultimate Butt" spliced.
  2. See "COLUMN GEOMETRICS" sheet for column geometrics and Architectural Treatment.
  3. Stop flare reinforcement below bent cap and above pile cap.
  4. Place stirrup reinforcement normal to and splice along centerline of column.
  5. Flare tie reinforcement must be service spliced. Splices must be staggered both within each tie and adjacent ties.
  6. See "ELEVATION" on "PIER 2 & 5 LAYOUT" sheet for Flare Bars and Flare Tie Reinf additional details.
  7. For locations of Section A-A, B-B and C-C, see "PIER 2 & 5 LAYOUT" sheet.

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|------------|-------|
| BENCH MARK | ELEV. |
|            |       |

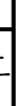
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| VERT. DATE  |

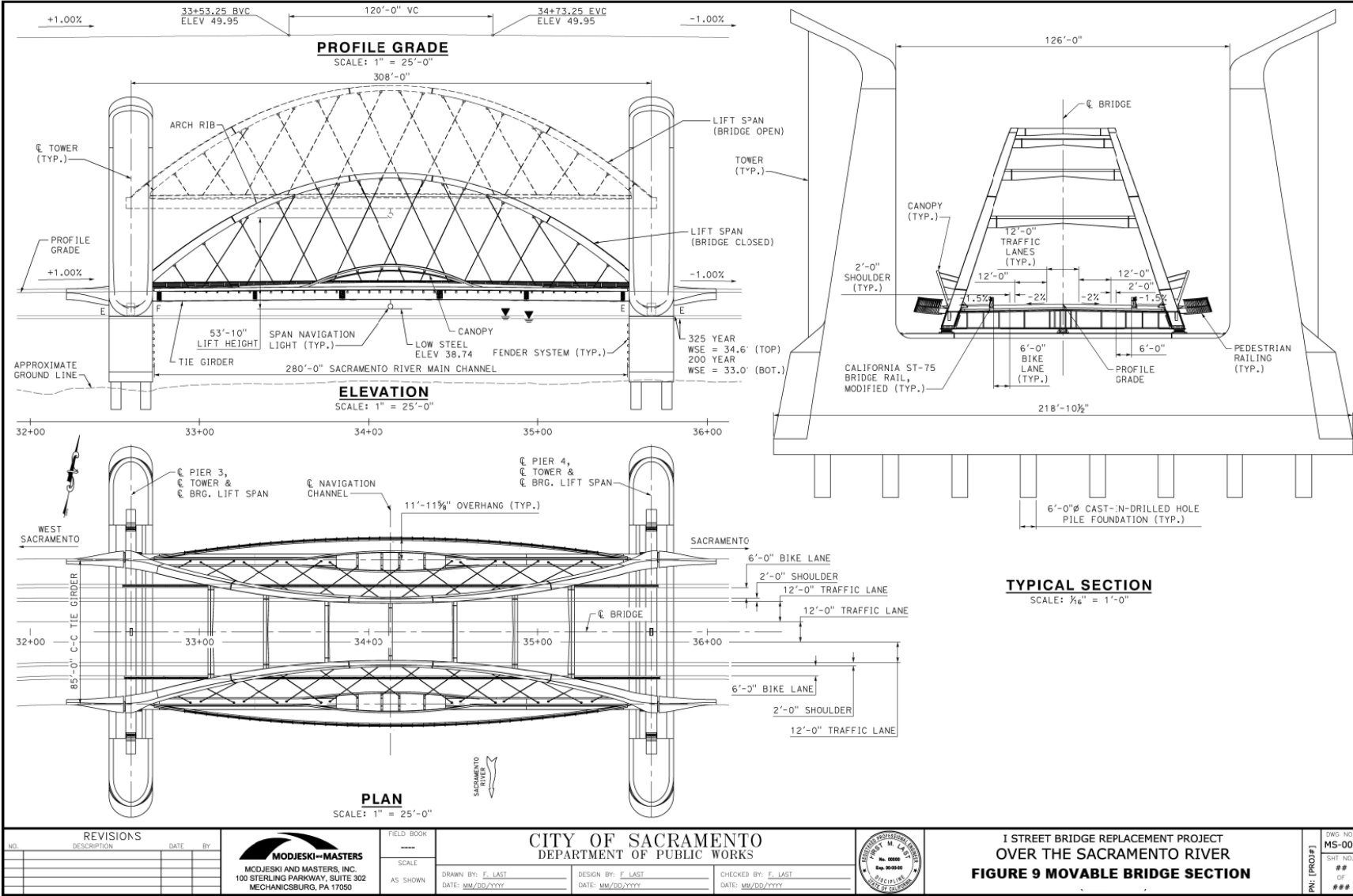
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| CITY OF SACRAMENTO<br>DEPARTMENT OF PUBLIC WORKS |                            |                  |                                       |
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| DATE: 1-15-21                                    | R.C.E. 80846 DATE: 3-31-23 | R.S.E. X DATE: X | R.S.E. 5783 EXP. 06-30-22             |

|                                       |
|---------------------------------------|
| <b>MARK THOMAS</b>                    |
| UNDER THE SUPERVISION OF: JASON HICKY |

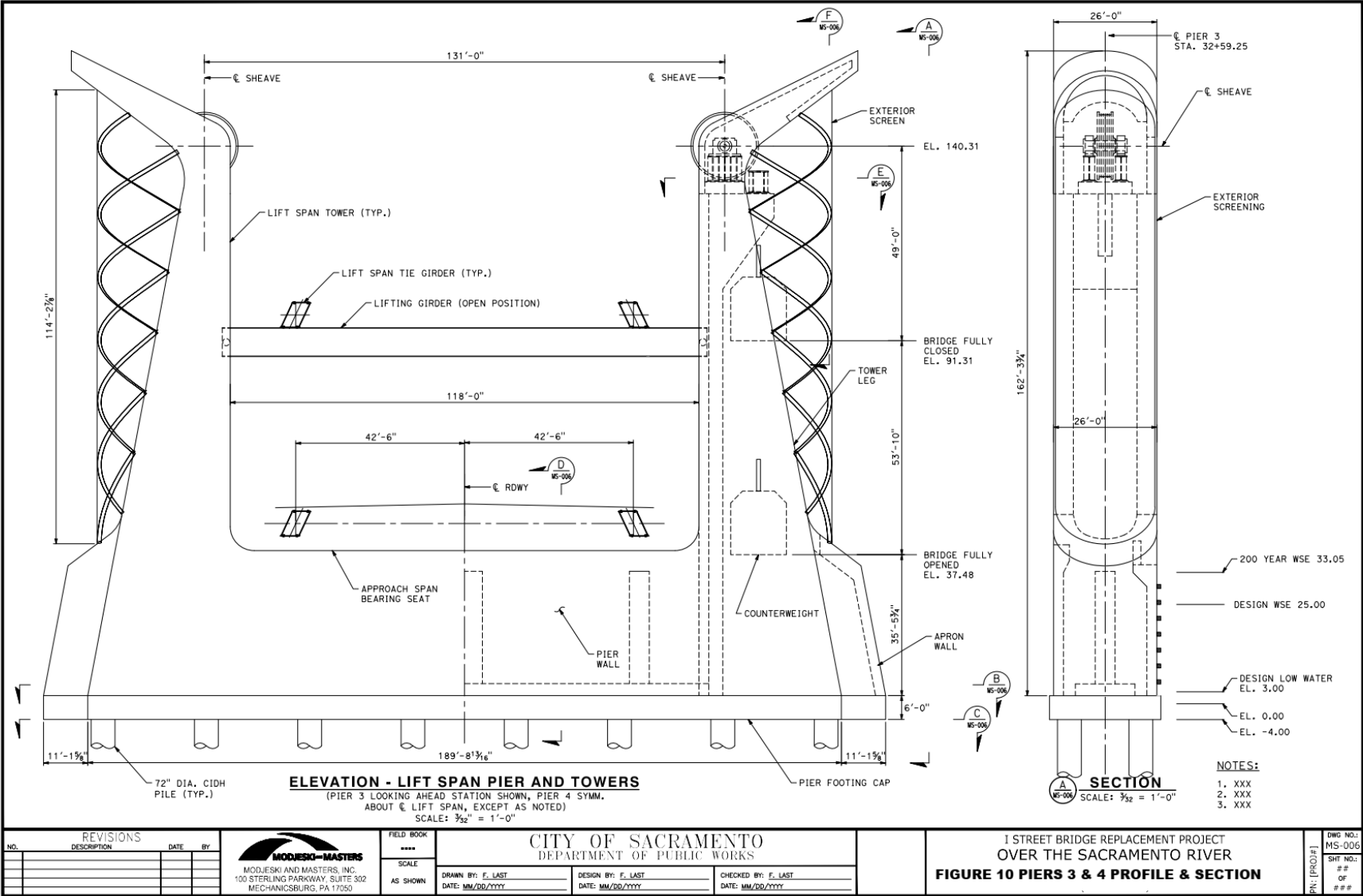
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| <b>I STREET BRIDGE REPLACEMENT<br/>OVER SACRAMENTO RIVER<br/>FIGURE 7 PIERS 2 &amp; 5 COLUMN SECTIONS</b> |
|-----------------------------------------------------------------------------------------------------------|

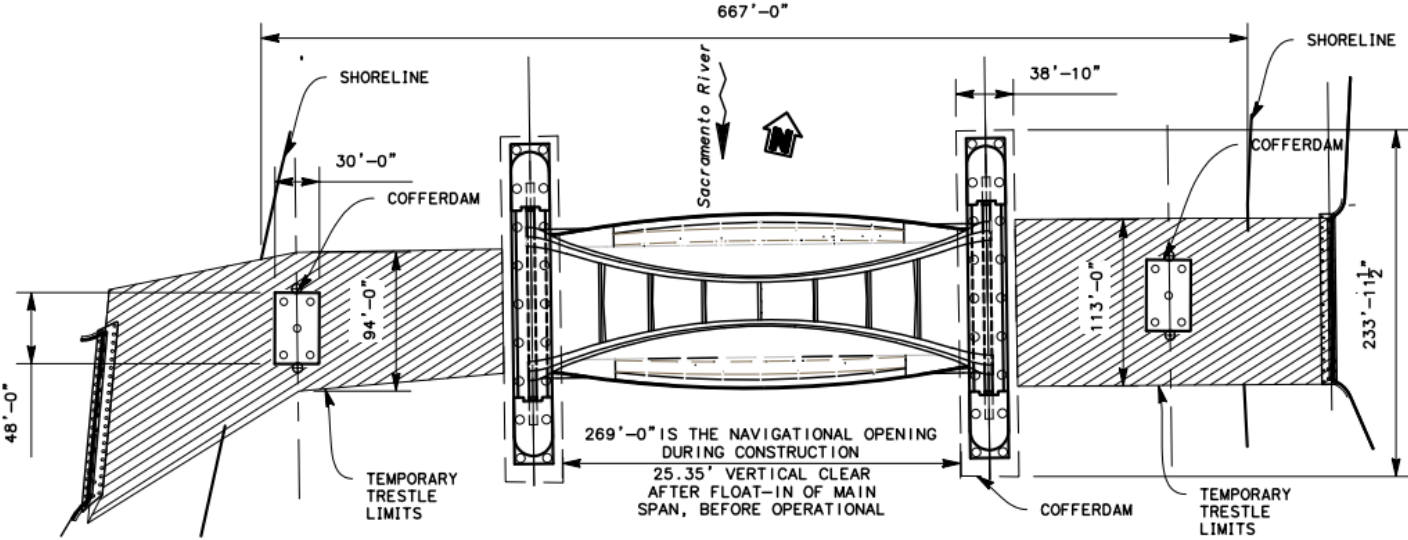
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| <b>S-16</b> |
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| OF          |
| 195         |





I STREET BRIDGE REPLACEMENT PROJECT OVER THE SACRAMENTO RIVER

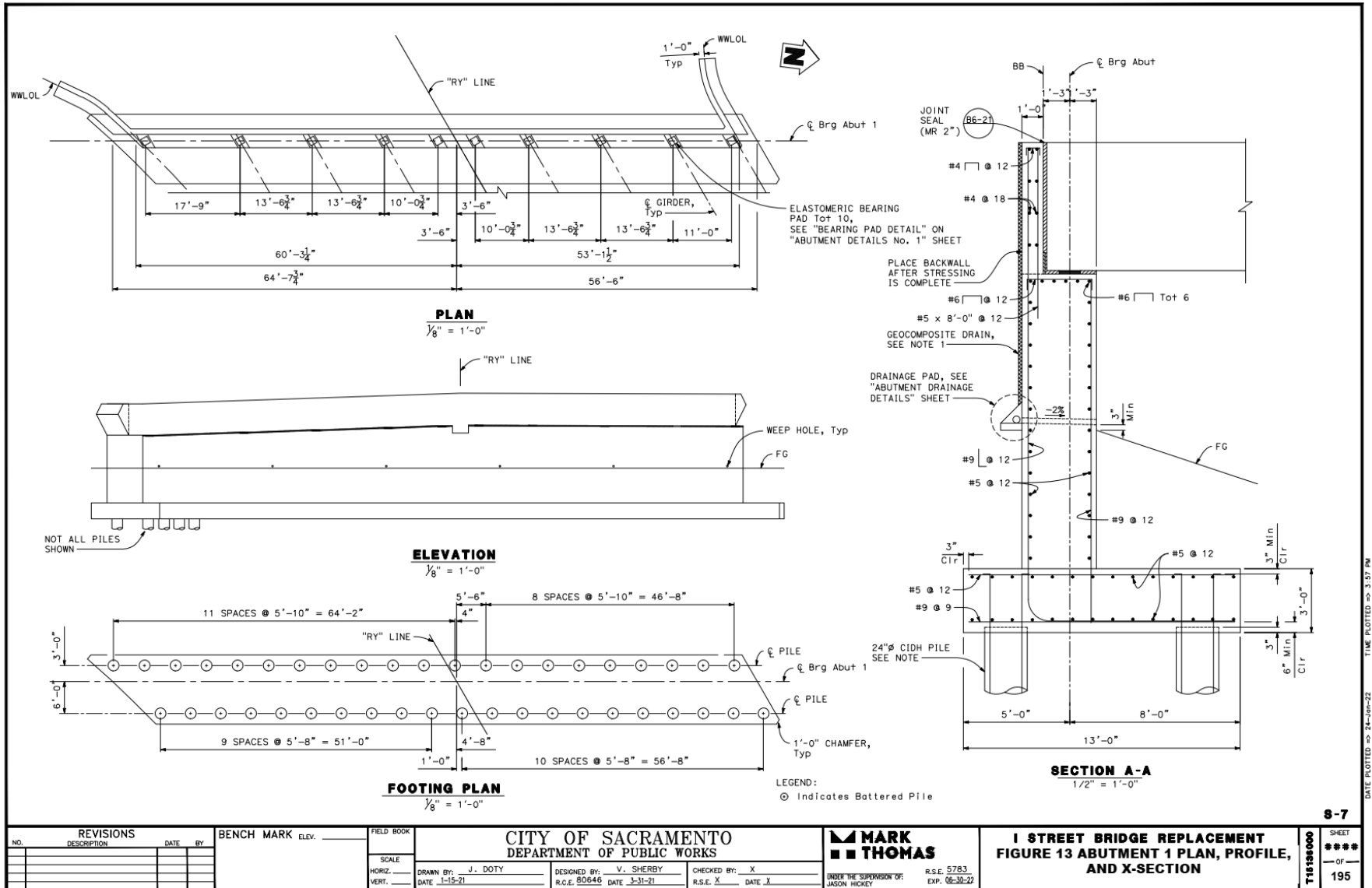


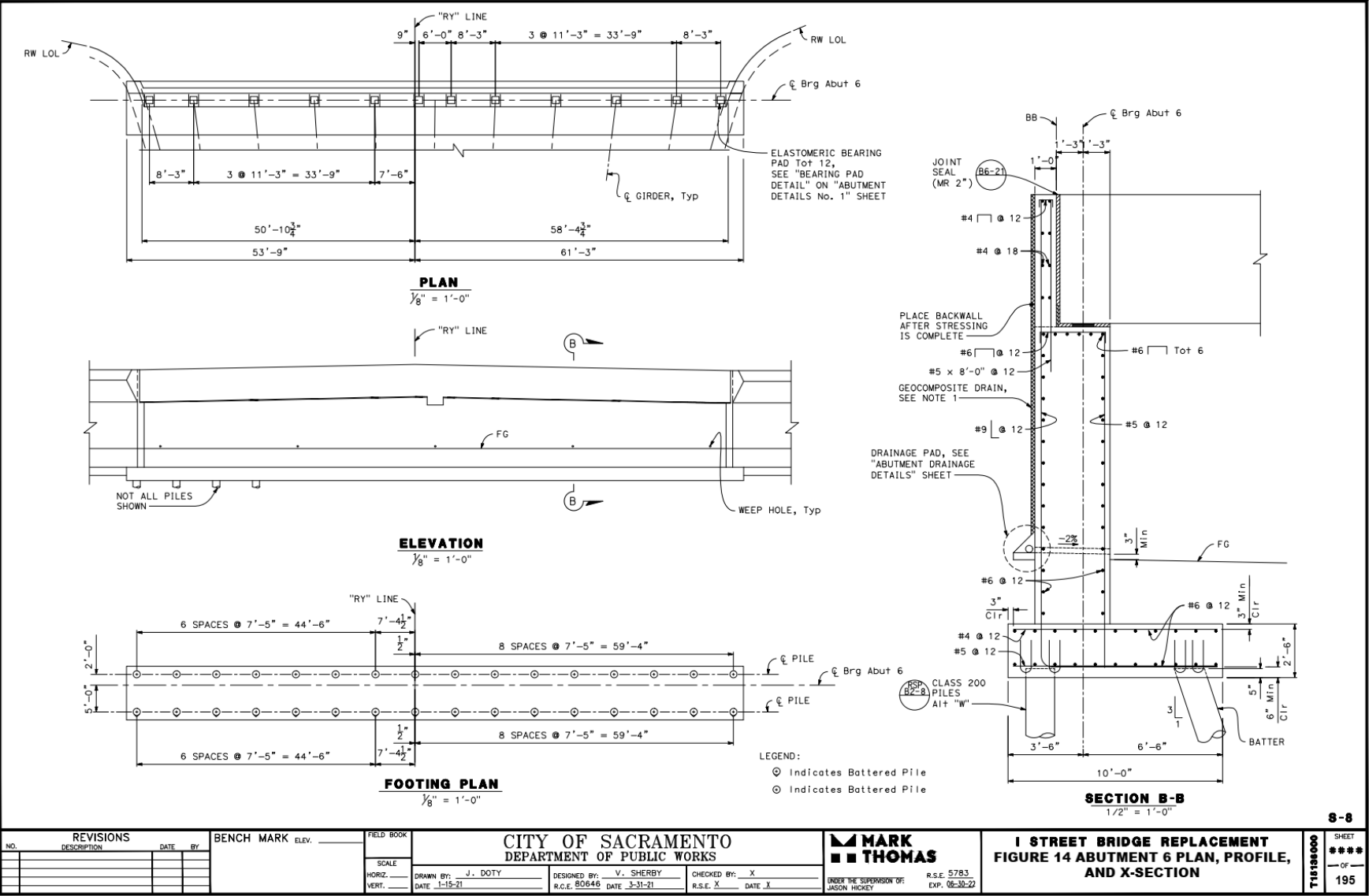


**PLAN**  
1" = 100'

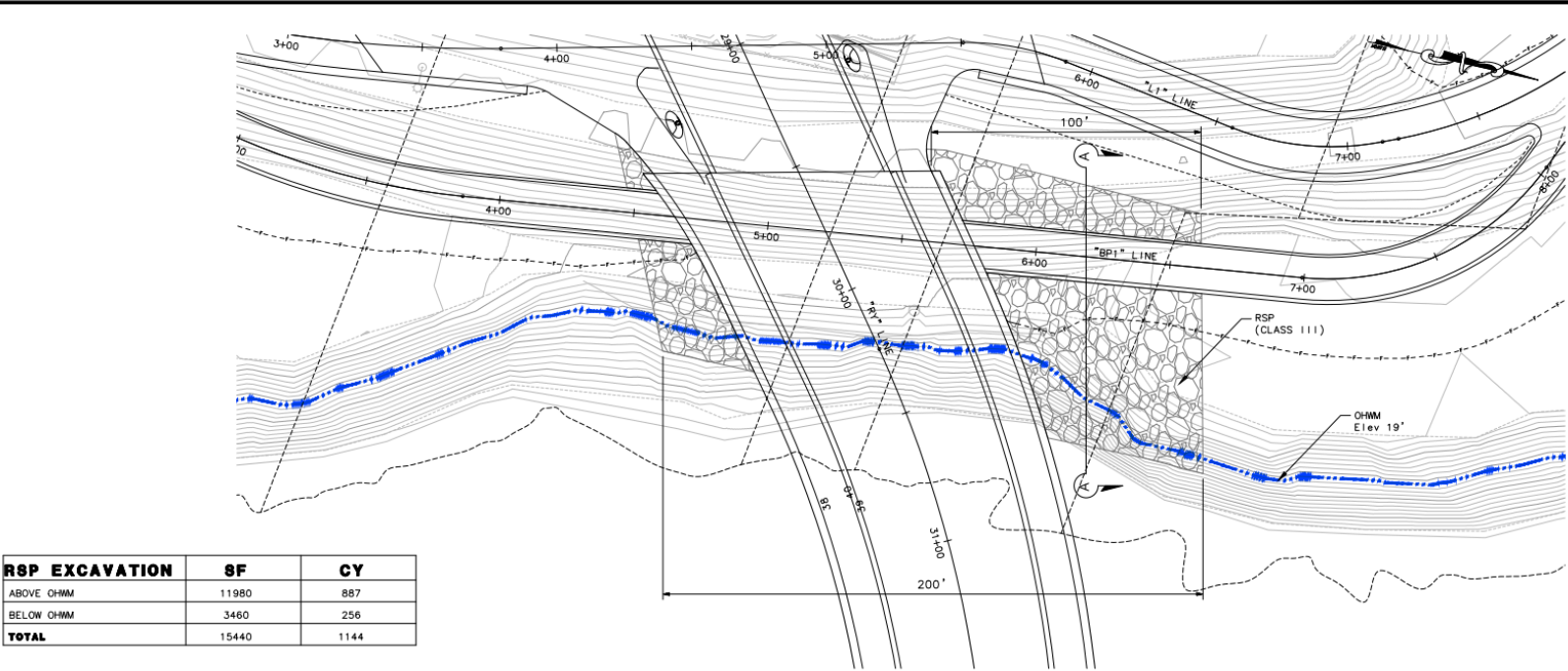


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|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| <b>APPLICANT:</b><br>CITY OF SACRAMENTO, PUBLIC WORKS<br>916 1ST, SUITE 200, SACRAMENTO, CA | <b>FIGURE 11 TEMPORARY COFFERDAMS AND<br/>WORK TRESTLES</b>                                                  |
| <b>ENGINEER:</b> MARK THOMAS<br>701 UNIVERSITY AVE, #200 SACRAMENTO, CA                     |                                                                                                              |
| <b>SHEET 3 OF 3</b><br><b>DATE 6/4/2022</b>                                                 |  <b>MARK<br/>THOMAS</b> |
|                                                                                             |                                                                                                              |

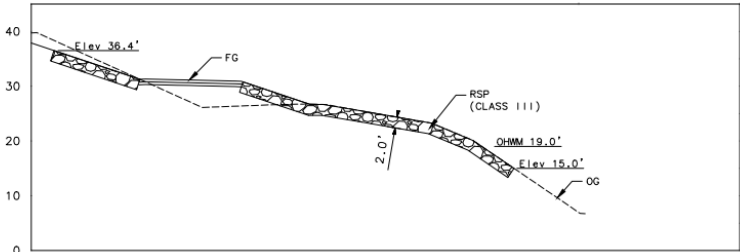




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| RSP EXCAVATION | SF           | CY          |
|----------------|--------------|-------------|
| ABOVE OHMM     | 11980        | 887         |
| BELOW OHMM     | 3460         | 256         |
| <b>TOTAL</b>   | <b>15440</b> | <b>1144</b> |



SECTION A-A

SCALE: 1" = 10'

AMPHITHEATER GRADING

SCALE: 1" = 20'

65% (NOT FOR CONSTRUCTION)

| NO. | REVISIONS | DATE | BY |
|-----|-----------|------|----|
|     |           |      |    |
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|                    |       |
|--------------------|-------|
| BENCH MARK         | ELEV. |
| VERT. DATUM NVGD88 |       |

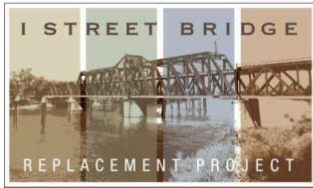
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| FIELD BOOK    |
| SCALE         |
| HORIZ. 1"=50' |
| VERT.         |

|                            |                         |                         |                     |
|----------------------------|-------------------------|-------------------------|---------------------|
| CITY OF SACRAMENTO         |                         |                         |                     |
| DEPARTMENT OF PUBLIC WORKS |                         |                         |                     |
| DRAWN BY: C. MARINO        | DESIGNED BY: K. CASELLI | CHECKED BY: Z. SIVIGLIA | R.C.E. 73128        |
| DATE: NOVEMBER 2021        | R.C.E. 86464            | DATE: NOVEMBER 2021     | DATE: NOVEMBER 2021 |

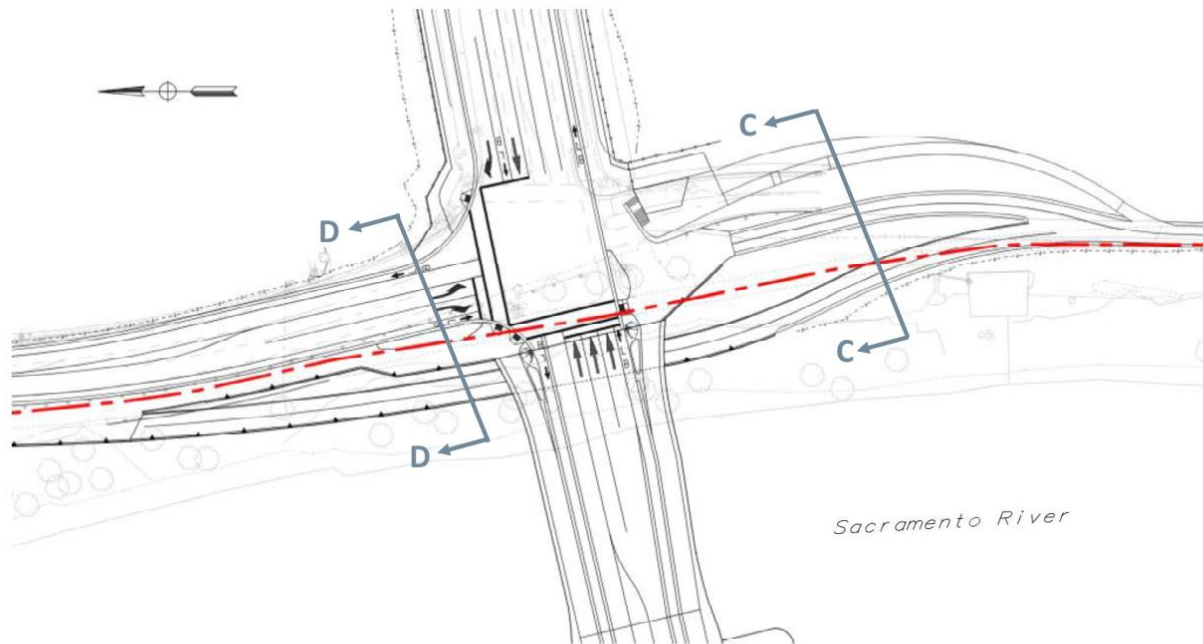
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| MARK                     | THOMAS        |
| UNDER THE SUPERVISION OF |               |
| ZACH SIVIGLIA            |               |
| R.C.E. 73128             | EXP. 12-31-22 |

|                                    |  |
|------------------------------------|--|
| I STREET BRIDGE REPLACEMENT        |  |
| FIGURE 15 ROCK SLOPE PROTECTION AT |  |
| ABUTMENT 1                         |  |

|       |
|-------|
| C-65  |
| SHEET |
| 65    |
| OF    |
| 195   |



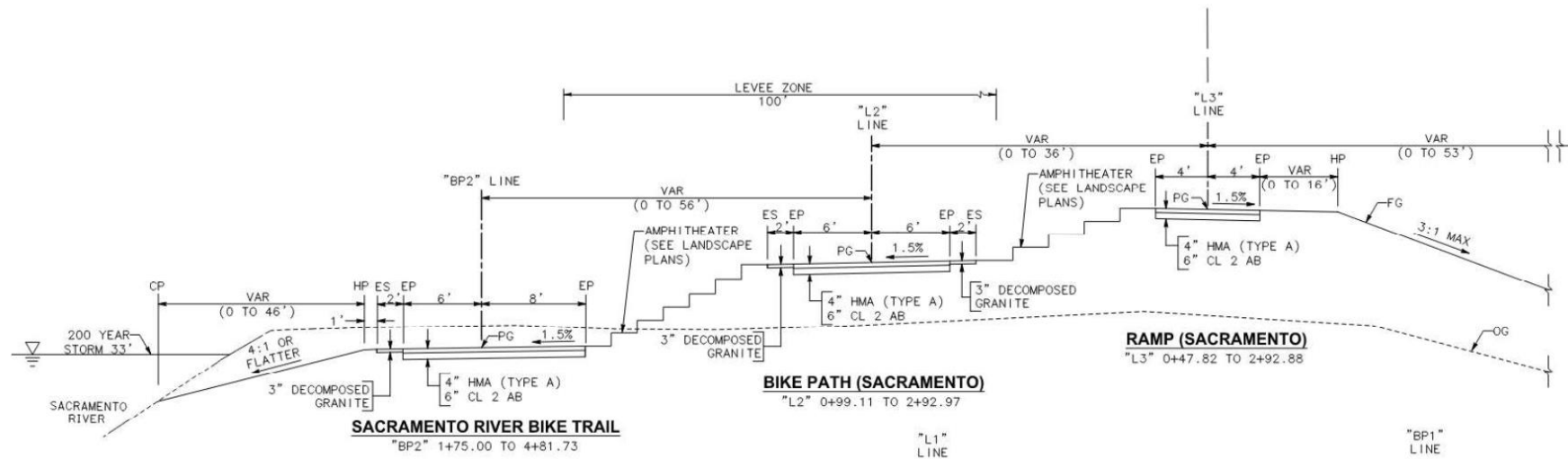
## Sacramento - Levee



**FIGURE 17a EAST LEVEE ROADWAY AND  
BIKEWAY MODIFICATIONS PLAN VIEW**



# Sacramento - Levee

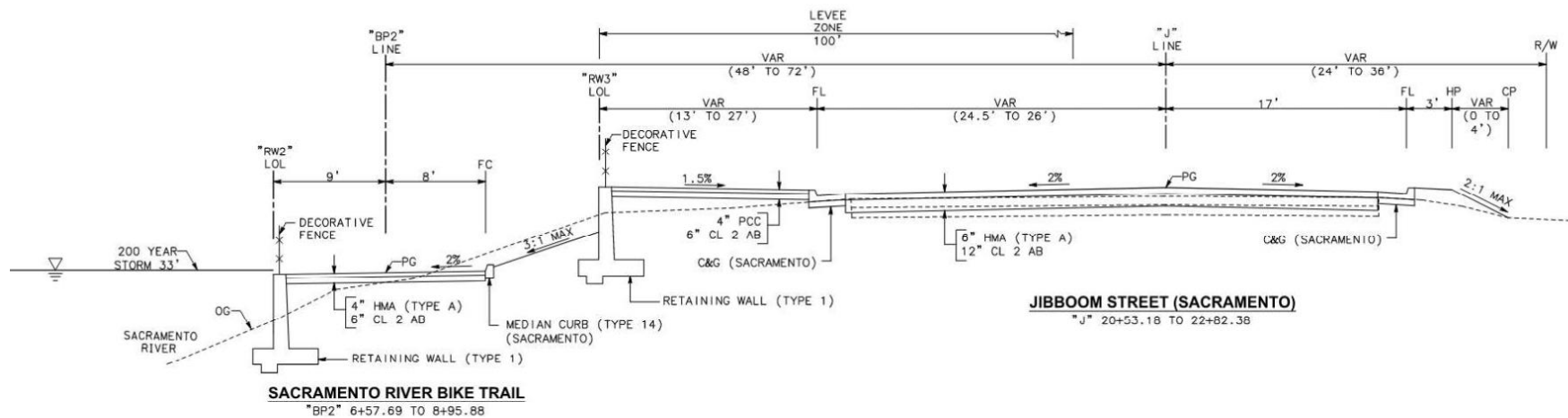


**FIGURE 17b EAST LEVEE BIKEWAY MODIFICATIONS CROSS SECTION C**



# Sacramento - Levee

- Retaining Walls

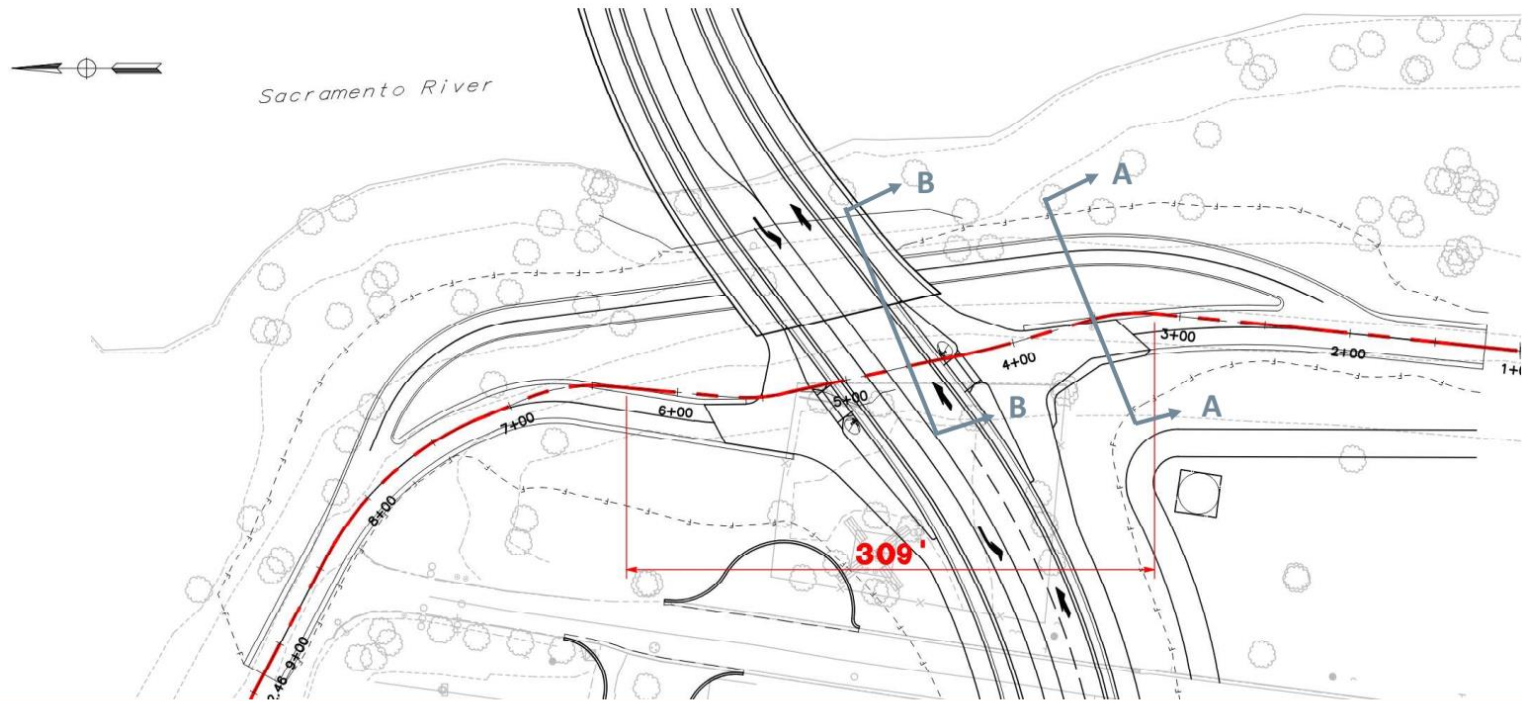


Section D-D

**FIGURE 17c EAST LEVEE BIKEWAY MODIFICATIONS CROSS SECTION D**



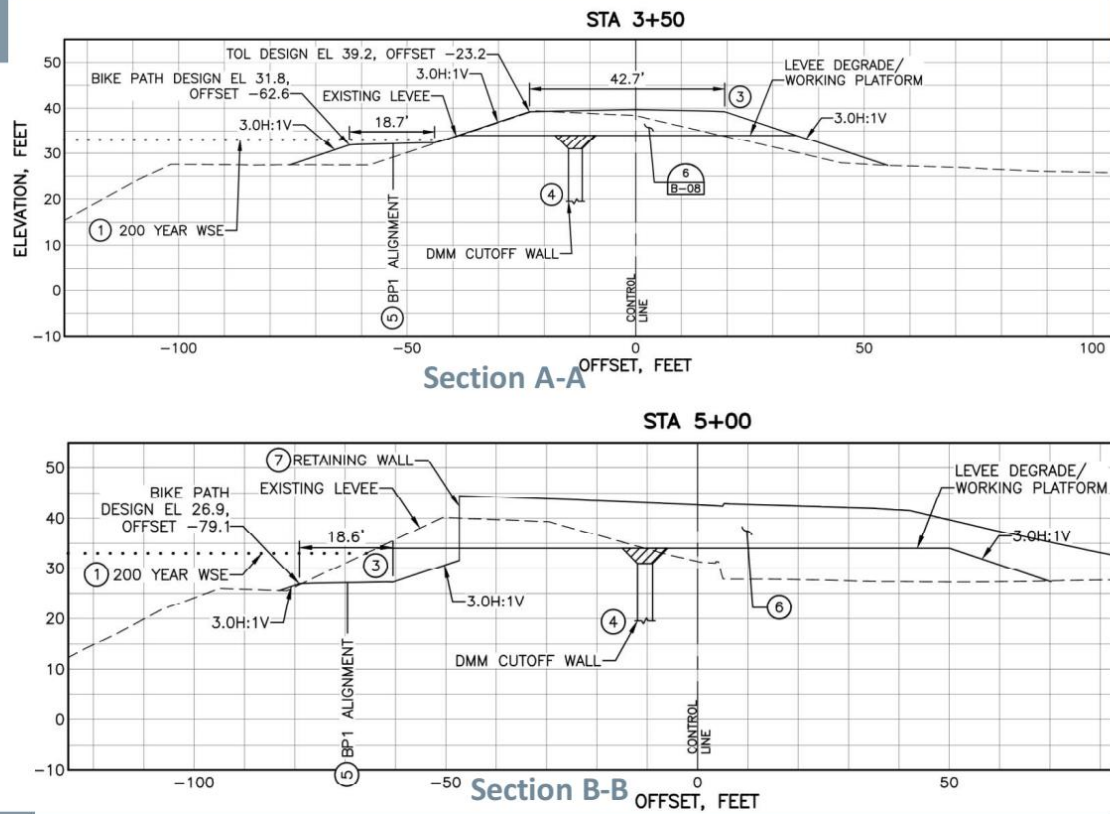
## West Sacramento – Levee



**FIGURE 18a WEST LEVEE IMPROVEMENTS  
PLAN VIEW**

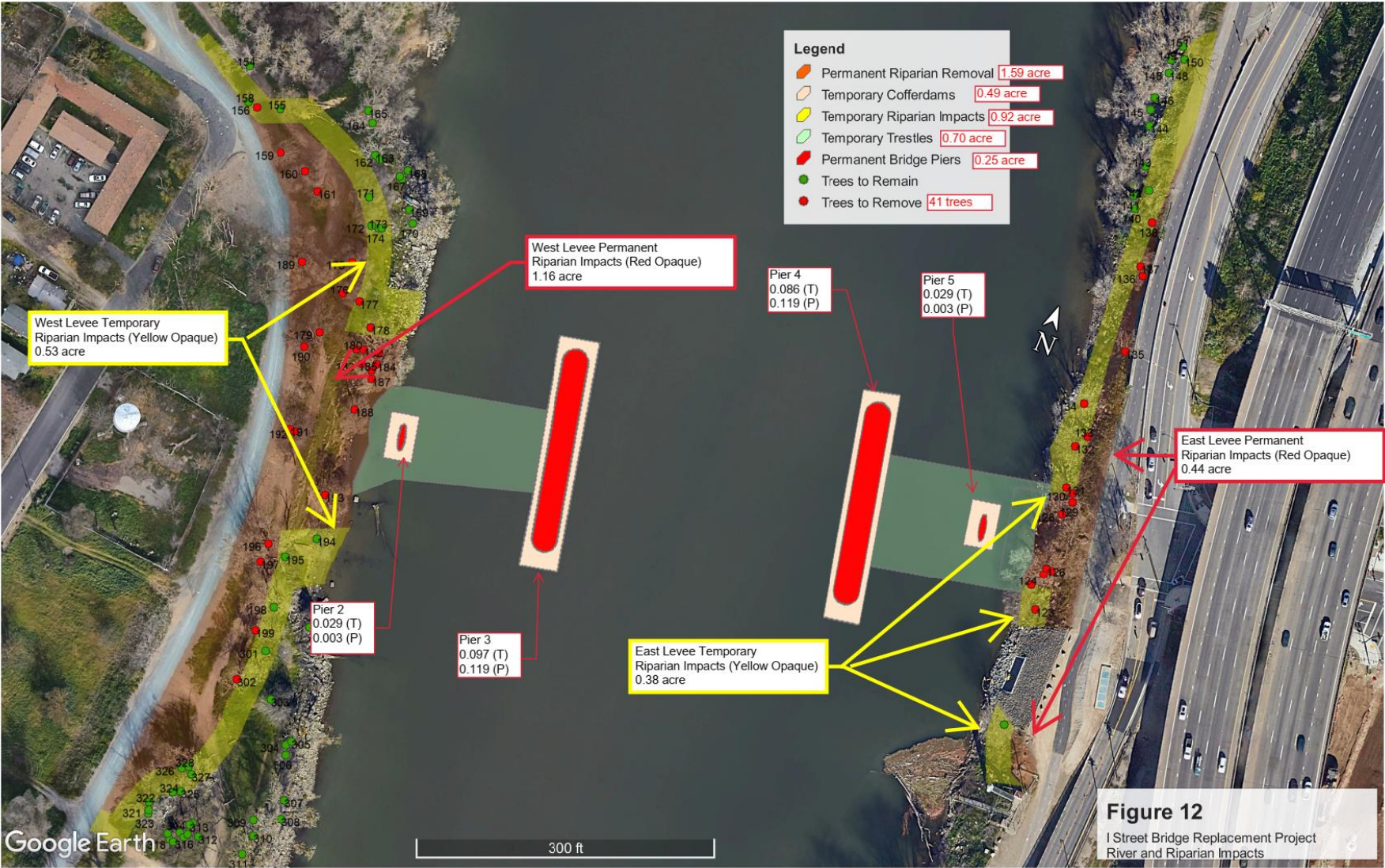


# West Sacramento – Levee



**FIGURE 18b WEST LEVEE IMPROVEMENTS  
CROSS SECTIONS A & B**

Figure 3: Project Impacts Maps





**Figure 1**  
Land Cover types in the I Street Bridge Replacement Project-Geotechnical Investigations Biological Study Area

