



**California Department of Fish and Wildlife
Bay Delta Region
2825 Cordelia Road, Suite 100
Fairfield, CA 94534**

**Native Plant Protection Act
Incidental Take Permit No. 2081-2023-063-03**

CHIPPS ISLAND TIDAL HABITAT RESTORATION PROJECT

I. Authority:

This Native Plant Protection Act (NPPA) incidental take permit (ITP) is issued by the California Department of Fish and Wildlife (CDFW) pursuant to Fish and Game Code sections 1907 and 2081, subdivisions (b) and (c), and California Code of Regulations, title 14, section 783.0 et seq and 786.9, subdivision (b). The NPPA prohibits the take¹, possession, propagation, transportation, exportation, importation, or sale of any native plant designated by the California Fish and Game Commission as an endangered or rare species (Fish & G. Code, §§ 1904, 1908; Cal. Code Regs., tit. 14, §§ 670.2, 786.9., subd. (a)(2)).² However, CDFW may authorize the take of any such species by permit (Fish & G. Code, § 1907, subd. (a); Cal. Code Regs., tit. 14, § 786.9).

Permittee:	Department of Water Resources
Principal Officer:	Dan Riordan, Environmental Program Manager
Contact Person:	Shawn Rohrer, (916) 217-7666
Mailing Address:	3500 Industrial Boulevard West Sacramento, CA 95691

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 **December 31, 2028**.

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 5.7 of this ITP.

¹Pursuant 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".])

²The definitions of an endangered and rare species for purposes of NPPA are found in Fish and Game Code section 1901.

III. Project Location:

The Chipps Island Tidal Restoration Project (Project) is located in the southeastern edge of Suisun Marsh, in Solano County, California (FIGURE 1). The Project is located approximately one mile northwest of the City of Pittsburg at a latitude of North 38.057814 and a longitude of West 121.913245. The Project is bordered by Honker Bay to the west, the Sacramento River to the south, and Spoonbill Creek to northeast. The nearest public boat ramp is located at the Pittsburg Marina to the south, and the nearest land to Chipps Island is Van Sickle Island across Spoonbill Creek.

IV. Project Description:

Chipps Island is 910 acres in size and consists of permanent sloughs, ponds, and ditches, as well as remnant infrastructure and debris from past land uses. Chipps Island is composed of three separate parcels that were historically managed for waterfowl hunting: the north parcel with approximately 362-acres managed wetlands and 56 acres of existing tidal marsh; the east parcel with approximately 303-acres of tidal marsh with some tidal connectivity through culverts and openings in the levees; and the west parcel with approximately 243-acres of tidal marsh with tidal connectivity through eroded levees. Existing features on Chipps Island currently include bulkhead and corrugated metal pipe-mounted water control structures through perimeter levees; three buildings; two abandoned shipping containers, outbuildings, equipment, pilings, and power poles; and a large metal frame associated with a former lodge, which appears to have burned during the winter of 2013. Bridge footings from the historic Oakland Antioch and Eastern railroad bridge across Spoonbill Creek remain, as well as the berm of the former railroad bed separating the northern and eastern parcels of the island.

Of the 910-acre island, the Project will restore tidal hydrology to approximately 362 acres of muted and managed wetland. The Project will preserve and enhance approximately 546 acres of existing tidal marsh habitat on Chipps Island; this consists of 490 acres of existing tidal marsh on the east and west parcels, and 56 acres of existing tidal marsh on the north parcel. The remaining portions of the island are upland. Project activities include excavation of several existing drainage ditches, creation of new meandering channels to increase channel edge habitat and complexity to mimic natural tidal channels, partial excavation of shallow "starter" channels to accelerate development of a dendritic channel network connecting the marsh plain to the primary channels, breaching of multiple exterior levees, and removal of several water control structures (FIGURE 2). Project construction is expected to be completed by November 30, 2025.

Project Activities Include:

North Parcel Levee Repairs: Permittee will repair the Chipps Island north parcel levee in three locations using multiple repair methods. The Honker Bay breach and the Spoonbill North breach are temporary repair locations until the project is breached at these locations. The Spoonbill South levee repair will be permanently repaired. The Honker Bay Breach (west levee repair) will utilize a temporary water bladder backfilled with native material sourced from on-site. There are two breach repair locations located on the eastern levee along

Spoonbill Slough that will be repaired using sheet piles installed in the current levee profile. Sheet piles will be pushed into place using an excavator and supported by backfilled material. The Spoonbill north breach location will utilize on-site material to backfill. The Spoonbill south breach location will use imported material approved by the Regional Water Control Board as backfill. All breach location materials (sheet piles and water bladder) will be removed at the end of the restoration project during final site breaching. If smaller minor breaches in the perimeter levee occur during site maintenance or restoration, the locations will be repaired using on-site sourced material.

Water Control Structure Replacement: Permittee may replace up to six water control structures to allow passive draining of the site by gravity. Gravity draining will be used simultaneously with active pumping dependent on the site's inflow. Water control structure replacement will be completed by excavating the old water control structure, replacing the structure with a pipe or water control structure similar in size, and backfilling the replacement location with the excavated material. The replacement water control structures may differ in type and function from original structures. The type and function of the replacement water control structures will be determined based on the most appropriate for draining the site in each location.

Dewatering and Water Management: Permittee will drain and/or pump dry the interior restoration area for the purpose of creating suitable conditions for Project construction. Temporary coffer dams and platforms created with sheet piles, earthen material, or other temporary fill may be necessary to facilitate dewatering. Following passive dewatering prior to construction, active dewatering will be undertaken using drainage pumps installed at low points within the Project site. Fish stranding impacts could occur on the north parcel of Project when it is temporarily dewatered. If necessary and after consultation with CDFW, a fish rescue will be conducted to relocate stranded fish to nearby suitable tidal habitat.

Debris Removal: Permittee will remove and properly dispose of any man-made items, remnant infrastructure, or debris that would negatively affect the restoration sites including abandoned structures and equipment, foundations, and pilings. Debris will be dismantled on site to the extent feasible, removed, and transported to appropriately licensed waste facilities by barge and/or truck.

Staging Areas and Stockpiles: Permittee will create temporary staging areas for storage of materials and equipment and stockpiling required for construction. Multiple staging areas will be established in upland areas and in dewatered portions of Chipps Island (FIGURE 3) and an additional staging and stockpile area would be established on the adjacent Van Sickle Island. Additional staging areas may also be established on barges set along the exterior levee. Temporary access ramps and/or roads will be created using a combination of import and on-site materials to facilitate equipment entering and exiting Chipps Island (via Spoonbill Creek) and allow access to low elevation areas in the interior of the island. Staging areas will incorporate appropriate BMPs for erosion control, including reseeding (if applicable). Prior to breaching, staging areas, temporary buildings, access ramps and/or roads will be removed.

Excess soils will be used to fill any remaining borrow areas along the marsh plain, placed along the existing levee berms, or at designated stockpile locations at upland elevations.

Clearing and Invasive Plant Species Management: Permittee will clear areas of *Phragmites* that were unable to be removed under interim management prior to ground disturbing activities. This management will focus on *Phragmites australis* and will be treated in accordance with a proposed invasive vegetation management plan; however, removal of small amounts of native or non-target vegetation may occur as a result. Vegetation clearing will occur within a 25-foot buffer surrounding any areas with planned ground disturbance. Areas targeted for excavation that contain monospecific stands of native emergent aquatic vegetation (*Schoenoplectus spp.* and *Typha spp.*) may serve as source material for replanting. As feasible, salvaged native vegetation would be relocated to designated nursery areas within low-lying areas within Chipps Island, with irrigation supplied by water tanks or natural hydrology.

Excavate Constructed Channel Network: Permittee will construct a network of tidal channels by widening portions of the existing agricultural ditches, excavating new channels, and excavating shallow “starter” channels to enhance tidal connectivity and encourage natural formation of low order channels within the marsh plain. Excavated channels will be constructed at approximately 2.5:1 side slope, with channel widths of approximately 40-45 feet at the marsh plain elevation (approximately 4 to 5 ft NAVD88), and channel bottom inverts generally excavated to subtidal elevations (approximately -2 ft NAVD88). Any excavated materials not used for construction of temporary ramps and staging areas or as fill materials within remnant agricultural ditches, will be side-casted within adjacent areas at intertidal elevations (5 to 6 ft NAVD88), placed along the existing levee berms, or at designated stockpile locations at upland elevations.

Filling of Agricultural Ditches: Permittee will fill existing remnant agricultural ditches and borrow pits that may become tidally disconnected (i.e., ponded) during low tide. Agricultural ditches and borrow areas will be filled with excavated on-site materials and graded to the elevation of the existing marsh plain (approximately 4 to 5 ft NAVD88).

Planting and Revegetation: Permittee may plant native wetland vegetation along the excavated channel network, within filled drainage ditches, and other areas providing open-water edge habitat following breaching of the exterior levees. To the extent feasible, areas for replanting of wetland vegetation will use native wetland vegetation materials salvaged from the Project site. *Schoenoplectus spp.* and *Typha spp.* may be planted in cleared areas where higher wind fetch and erosion might occur. Following construction, areas used for temporary nurseries will be returned to previously existing conditions. Hydro-seeding of native herbaceous species may be used for erosion control of bare soil along levee slopes. In addition, planting of native vegetation appropriate to high marsh and/or upland elevations may be conducted along levee roads and staging areas disturbed during construction.

Removal of Access Roads and Ramps: Permittee will remove and regrade to design elevations any temporary access ramps, roads and staging areas following the completion of

site excavation and planting. Any land-side excavation connecting breach locations to the excavated channel network will be completed prior to removal of access roads and ramps. Excess materials will either be side casted at intertidal elevations (5-6 ft NAVD88) or transported to upland and stockpile locations.

Removal of Water Control Structures: Permittee will remove any remaining water control structures on Chipps Island. Construction will be timed to limit in-water work (e.g., interior water control structures removed first) as well as avoiding stranding equipment or fragmenting site access along levee roads. All parts of a water control structure will be removed with heavy machinery (e.g., excavator). Removal of water control structures that cannot be accomplished from the land side would be done from the water side and timed to coincide or follow planned breaches during applicable in-water work windows. Removal of water control structures may require temporary access by construction equipment in areas supporting tidal marsh vegetation. When that access is required, marsh mats would be employed to limit damage to marsh vegetation.

Exterior Levee Breach: Permittee will use excavators to construct exterior breaches with widths of approximately 40–60 ft, side slopes of 2:1, and invert elevations to match the connecting excavated channels. The material excavated from the levee will be handled in one or more of the following ways: (1) placed within the site interior near the levee breach at intertidal elevations (approximately 5–6 ft NAVD88), (2) spread on the top or interior side slopes of the levee as reinforcement, or (3) placed at upland stockpile locations. In-water work (i.e., exterior levee breaching) would be performed from 3 hours before to 3 hours after low tide to the extent feasible to minimize impacts on fish and water quality. A silt curtain may be placed across the opening to reduce sedimentation and siltation into the surrounding waterways. Erosion control materials (e.g., baffles, fiber rolls, or hay bales; temporary containment berms) and erosion control measures such as straw application or hydroseeding with native grasses on disturbed slopes, and floating sediment booms and/or curtains will be used to minimize impacts that may occur from increased mobilization of sediments.

Stockpile Stabilization: After completion of restoration activities, any excess material from excavation or grading will be side cast in mounds to create bathymetric diversity at intertidal elevations or placed on the disturbed upland levee tops and other upland staging areas for future levee maintenance. After Project completion, any upland stockpile locations, if used, will be seeded, mulched, and stabilized in accordance with applicable best management practices to minimize the potential for erosion. New colonization by undesirable plant species is expected to be ongoing during and immediately following restoration construction. To successfully target Project goals and objectives, vegetation management will be ongoing in accordance with a proposed invasive vegetation management plan, the adaptive management and monitoring plan.

Translocation of *Mason's lilaeopsis*: Removal of water control structures, the construction of exterior levee breaches and post-construction erosion have the potential to result in the incidental take of individuals of the Covered Species. If incidental take cannot be avoided, individuals will be collected and transplanted to suitable habitats.

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

This ITP covers the following species:

<u>Name</u>	<u>NPPA Status</u> ³
1. Mason's lilaepsis (<i>Lilaeopsis masonii</i>)	Rare ³

This species and only this species is the "Covered Species" for the purposes of this ITP.

VI. Impacts of the Taking on Covered Species:

Project activities and their resulting impacts have the potential to result in the incidental take of individuals of the Covered Species. The activities described that have the potential to result in incidental take of individuals of the Covered Species include excavation and breaching of exterior levees, removal of water control structures, grading, post-construction erosion of habitat and the collection, handling, and transplanting of the Covered Species (Covered Activities).

Incidental take of individuals of the Covered Species in the form of mortality ("kill") may occur as a result of the Covered Activities such as crushing or removal from excavation during breaching of exterior levees and removal of water control structures, mortality from post-construction erosion of established habitat, and mortality from an unsuccessful attempt at collection, handling, and transplanting of the Covered Species. The areas where authorized take of the Covered Species is expected to occur include interior muted tidal habitats influenced by water movement through the levees or existing leaky tide gates, levees, and adjacent tidal wetlands encompassing Chipps Island restoration sites, including areas used for heavy equipment ingress and egress, staging, and parking (collectively, the Project Area).

The Project is expected to cause the permanent loss of 20 square feet of 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), and stress resulting from collection, handling, and transplanting of the Covered Species.

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 the 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 the Covered Species from activities outside the scope of the Covered Activities, take of the Covered Species outside of the Project Area, take of the Covered Species resulting from violation of this ITP, or

³ See Cal. Code Regs. tit. 14 § 670.2, subd. (c)(3)(A).

intentional take of the Covered Species except for translocation of the Covered Species as authorized by this ITP.

VIII. Conditions of Approval:

Unless specified otherwise, the following measures apply to all the Covered Activities within the Project Area. 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:** CDFW, acting as lead agency, certified an Environmental Impact Report (SCH No. 2003112039) on December 22, 2011, and DWR, acting as a responsible agency, adopted an Addendum on January 5, 2024 analyzing the Project pursuant to the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). Permittee shall implement and adhere to the mitigation measures related to the Covered Species in the Biological Resources section of both the Environmental Impact Report and the 2024 Addendum to the Environmental Impact Report.
- 3. 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.
- 4. General Provisions:**
 - 4.1. Designated Representative.** Before starting the 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 the 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.
 - 4.2. Designated Biologist and Biological Monitors.** Permittee shall submit to CDFW in writing the name, qualifications, business address, and contact information of the Designated Biologist and Biological Monitors using the Biologist Resume Form (Attachment 2) or another format containing the same information at least 30 days before starting the Covered Activities. Permittee shall ensure that the Designated Biologist and Biological Monitors are knowledgeable and experienced in the biology, natural history, collecting and handling of the Covered Species which they are monitoring. The Designated Biologist and Biological Monitors shall be responsible for monitoring the Covered Activities to help minimize and fully mitigate or avoid the incidental take of individual Covered Species and to minimize disturbance of the

Covered Species' habitat. Permittee shall obtain CDFW approval of the Designated Biologist and Biological Monitors in writing before starting the Covered Activities and shall also obtain approval at least 14 days in advance, in writing, if there is a staffing change for the Designated Biologist or Biological Monitors.

- 4.3. 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 the 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.
- 4.4. 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 NPPA including legal protection, recovery efforts, penalties for violations and Project-specific protective measures described in this ITP. Permittee shall provide interpretation 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. Permittee shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry in the Project Area. Upon completion of the program, employees shall sign a form stating they attended the program and understand all protection measures.
- 4.5. Construction Monitoring Documentation.** The Designated Biologist shall maintain a construction-monitoring notebook on-site 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 notebook is available for review at the Project site upon request by CDFW.
- 4.6. Trash Abatement.** Permittee shall initiate a trash abatement program before starting the 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.

- 4.7. Dust Control.** Permittee shall implement dust control measures during Covered Activities to facilitate visibility for monitoring of the Covered Species by the Designated Biologist and Biological Monitors. Permittee shall keep the amount of water used to the minimum amount needed and shall not allow water to form puddles.
- 4.8. Erosion Control Materials.** Permittee shall not use erosion control materials that cover, inhibit, or alter the spread of the Covered Species along levees in the Project Area, except where the Permittee has consulted with and received written approval from CDFW to allow the use of erosion control materials in a specific area of the levees.
- 4.9. Delineation of Occupied Habitat.** The Designated Biologist shall clearly delineate the extent of the Covered Species occurrences 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 the Covered Species.
- 4.10. Project Access.** Project-related personnel shall access the Project Area using existing routes, routes identified in the Project Description and shall not cross the Covered Species' habitat outside of or enroute 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 for written approval before carrying out such an activity. Barge access points must be surveyed for the Covered Species prior to use by the Designated Biologist. CDFW may require an amendment to this ITP, among other reasons, if additional take of the Covered Species will occur as a result of the Project modification or access.
- 4.11. 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 the marked and delineated Covered Species' habitat as described in Condition of Approval 4.9 of this ITP. Staging areas include areas where barges come into contact with the exterior levee and barge loading areas.
- 4.12. Vehicle/Equipment Cleaning and Maintenance.** Prior to the entry of any vehicle or equipment into the Project site including the staging area, Permittee shall ensure equipment and vehicles are clean of vegetation and not leaking fluids. Any equipment or vehicles driven and/or operated in proximity of sloughs and wetlands shall be maintained in good working order to prevent the release of contaminants that if introduced to water could be deleterious to aquatic life, wildlife, or riparian habitat. If a vehicle is found to be leaking fluids of any kind, Permittee shall take

immediate measures to stop and/or contain the leak and then remove the vehicle to an off-site location until properly repaired.

- 4.13. 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.
- 4.14. CDFW Access.** Permittee shall provide CDFW staff with reasonable access to the Project and shall otherwise fully cooperate with CDFW efforts to verify compliance with or effectiveness of mitigation measures set forth in this ITP. Permittee shall provide CDFW staff with the necessary personal protective equipment needed to enter the Project site.
- 4.15. Refuse Removal.** Upon completion of the 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.

5. Monitoring, Notification and Reporting Provisions:

- 5.1. Notification Before Commencement.** The Designated Representative shall notify CDFW 14 calendar days before starting the Covered Activities and shall document compliance with all pre-Project Conditions of Approval before starting the Covered Activities.
- 5.2. 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.
- 5.3. Compliance Monitoring.** The Designated Biologist and/or a Biological Monitor shall be on-site daily when the Covered Activities occur. The Designated Biologist and/or Biological Monitor shall conduct compliance inspections to:
- (1) minimize incidental take of the Covered Species;
 - (2) prevent unlawful take of species;
 - (3) check for compliance with all measures of this ITP;

- (4) check all exclusion zones; and
- (5) ensure that signs, stakes, and fencing are intact, and that the 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 the Covered Species and their sign, survey results, and monitoring activities required by this ITP.

- 5.4. Monthly Compliance Report.** The Designated Representative or Designated Biologist shall compile the observation and inspection records identified in Compliance Monitoring 5.3 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, by the 5th of each month following the first month of the Covered Activities. 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 Aicha Ougzin (Aicha.Ougzin@wildlife.ca.gov) and Headquarters CESA Program email is 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.
- 5.5. Annual Status Report.** Permittee shall provide CDFW with an Annual Status Report 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 Annual Status Report shall include, at a minimum: (1) a summary of all Monthly Compliance Reports for that year identified in Condition of Approval 5.4; (2) a general description of the status of the Project Area and the 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; (6) an accounting of the number of acres subject to both temporary and permanent disturbance since ITP issuance; and (7) information about other Project impacts on the Covered Species.
- 5.6. CNDDDB Observations.** The Designated Biologist shall submit all observations of the 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.

5.7. 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 and all ASRs; (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; (4) information about other Project impacts on the Covered Species; (5) beginning and ending dates of the 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 the 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.

5.8. Notification of Take or Injury Permittee shall immediately notify the Designated Biologist if the Covered Species is taken, including translocated, or impacted by a Project-related activity, or if the Covered Species is otherwise found dead within the vicinity of the Project. The Designated Biologist or Designated Representative shall provide initial notification to CDFW by calling the Regional Office at (707) 428-2002. The initial notification to CDFW shall include information regarding the location, species, and number of plants (or area of occupied habitat) taken or impacted and the ITP Number. Following initial notification, Permittee shall send CDFW a written report within two calendar days. The report shall include the date and time of the finding or incident, location of the plant, and if possible provide a photograph, explanation as to cause of take or impact, and any other pertinent information.

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

6.1. Daily Work Restriction. Permittee shall terminate all the Covered Activities at sunset and shall not resume the Covered Activities until sunrise. Permittee shall use sunrise and sunset times established by the U.S. Naval Observatory Astronomical Applications Department for the geographic area (<https://www.esrl.noaa.gov/gmd/grad/solcalc/sunrise.html>).

6.2. Precipitation Work Limit. Permittee shall restrict work activities on exterior levees to periods of low rainfall (less than 1/10th of an inch per 24-hour period) and periods of dry weather (with less than a 30 percent chance of rain). Permittee shall initiate all erosion control measures prior to all storm events. Permittee shall monitor the National Weather Service (<http://www.nws.noaa.gov>) 72-hour forecast for the Project site. No work shall occur during a dry-out period of 24 hours after the above referenced wet weather. Weather forecasts shall be documented upon request by CDFW.

- 6.3. SWPPP Preparation.** Prior to initiating the Covered Activities, Permittee shall submit to CDFW a Stormwater Pollution Prevention Plan (SWPPP) or a Water Quality Control Program to address Best Management Practices (BMPs) utilized to prevent erosion, sediment loss, and potential pollution within the Project site for CDFW review and acceptance.
- 6.4. Pesticide and Herbicide Use.** Integrated pest management solutions that emphasize non-chemical pest management shall be used over chemical pesticides when working within 20 feet of the Covered Species. Herbicides may be used at the Permittee's discretion with implementation of the following protective measures:
- 6.4.1.** All herbicides shall be applied by a certified pesticide applicator or under the supervision of a certified pesticide applicator in accordance with regulations set by the California Department of Pesticide Regulation and according to labeled instructions.
 - 6.4.2.** Herbicides shall only be applied on calm days with wind speed below 5 miles per hour unless applied directly with a brush or a wick.
 - 6.4.3.** Permittee shall use caution to apply the least practicable amount of herbicides necessary to effectively control nuisance plants.
 - 6.4.4.** Permittee shall use the least concentrated formulation of herbicide possible and practicable to accomplish the task.
 - 6.4.5.** Permittee shall not apply certain herbicides within 60 feet from the edge of salmon-supporting waters (<http://www.cdpr.ca.gov/docs/endspec/salmonid.htm>).
 - 6.4.6.** Herbicide mixing sites shall be located on existing roadways or upland locations where they may not enter into streams or wetlands.
 - 6.4.7.** Permittee shall only apply herbicides after vegetation removal by another method, such as hand trimming or mowing, except during the spot treatment on non-native invasive vegetation.
 - 6.4.8.** Permittee shall only use herbicides registered with the California Department of Pesticide Regulation (CDPR). Permittee shall consult the Pesticide Regulation's Endangered Species Custom Realtime Internet Bulletin Engine (PRESCRIBE) to determine specific pesticide use limitations (<http://www.cdpr.ca.gov/docs/endspec/prescint.htm>).
 - 6.4.9.** Permittee shall only use pesticides for which a "no effect" determination has been issued by the U.S. EPA's Endangered Species Protection Program (<http://www.epa.gov/espp/>) for any species likely to occur within the Project site or downstream. Prior to applying pesticides, Permittee shall verify that selected

pesticides are not on an endangered species bulletin issued by the U.S. EPA for the Project Area. Bulletins can be accessed using the interactive map, Bulletins Live! Two, at: <https://www.epa.gov/endangered-species/bulletins-live-two-view-bulletins>.

- 6.4.10.** A list of the herbicides intended for use and their labeled instructions shall be made available to CDFW for review prior to an application event.
- 6.4.11.** Permittee is responsible for maintaining its herbicide use records for ensuring herbicide use and timing is consistent with any federal, State, or local regulations.
- 6.4.12.** Any hazardous or toxic materials that could be deleterious to aquatic life that could be washed into state waters or their tributaries shall be contained in watertight containers or removed from the Project site.
- 6.4.13.** Care shall be taken to avoid spraying native vegetation with herbicides. Spraying within 100 feet of existing mitigation sites shall be done by hand.
- 6.4.14.** Should any fish or animal kills occur following application of herbicides, such kills shall be reported to CDFW Bay Delta Region within 24 hours.

Regardless of the contents of this ITP, Permittee is responsible for any environmental damage caused by the application or use of substances that prove harmful to fish and aquatic wildlife.

- 6.5. Pre-Construction Survey for Covered Species.** The Designated Biologist shall conduct pre-construction surveys for the Covered Species within a month prior to starting construction activities each construction year. If the Covered Species is identified in the Project Area, they shall be flagged (as described in Condition of Approval 4.9) and avoided.
- 6.6. Translocation of Mason's Lilaepsis.** If impacts to the Covered Species cannot be avoided, a Designated Biologist shall translocate the individuals to suitable habitats. Permittee shall consult with CDFW before attempting to transplant these individuals. At least 6 months prior to take of the Covered Species, Permittee shall submit to CDFW for approval a Mason's lilaepsis translocation plan pursuant to Condition of Approval 7.2.8.2.
- 6.7. Minimize Impacts to Waterside Wetlands.** Permittee shall minimize impacts to tidal wetland habitat along levees as this habitat may support the Covered Species. Permittee shall operate construction equipment from the top of levees or from barges to the extent possible.
- 6.8. Stockpiles.** Permittee shall not stockpile soil or store construction material or debris where it could wash into the waterway or where it would cover the Covered Species

habitat. Construction material and debris shall be limited to designated staging areas.

6.9. Invasive Species. Permittee shall conduct Project activities in a manner that prevents the introduction, transfer, and spread of invasive species, including plants, animals, and microbes (e.g., algae, fungi, parasites, bacteria, etc.), from one project site and/or waterbody to another. Prevention best management practices and guidelines for invasive plants can be found on the California Invasive Plant Council's website at: <http://www.cal-ipc.org/ip/prevention/index.php> and for invasive mussels and aquatic species can be found at the Stop Aquatic Hitchhikers website: <http://www.protectyourwaters.net/>.

6.10. Post-Construction Survey for Covered Species. Permittee shall conduct a Post-Project Survey for the Covered Species at each breach location where the Pre-Construction Survey (Condition of Approval 6.5) indicated the Covered Species was present within 100 feet of each side of the breach. This survey shall be conducted within 45 days of completing breaching activities. If within the first 45 days tides are not low enough to expose mud banks (less than +0.64 ft NAVD88 as estimated for the Pittsburg, New York Slough, Suisun Bay, California Tide Station), the survey shall be completed during the first low tide thereafter. The survey shall indicate the relative condition of each population, identify any construction-related impacts (e.g., covered in silt, crushed by equipment, erosion, etc.), and assess the erosion risk to the Covered Species caused by the breach. Permittee shall submit the survey results to CDFW no later than 30 days after completing the Post-Project Survey.

6.11. Post-Project Breach Stabilization. If bank erosion at a constructed breach will result in the take or foreseeable take of the Covered Species in the upcoming wet season(s), Permittee shall consult with CDFW to discuss bank stabilization measures or other measures to prevent the Covered Species from eroding away. If bank stabilization measures are not feasible, CDFW may require Permittee to transplant and monitor the Covered Species.

7. Habitat Management Land Acquisition and Restoration: CDFW has determined that permanent protection and perpetual management of compensatory habitat is necessary and required pursuant to the NPPA 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 habitat, and CDFW's estimate of the protected acreage required to provide for adequate compensation.

To meet this requirement, Permittee shall translocate, monitor, and manage occupied Mason's lilaepsis habitat that will be impacted by the Covered Activities and provide for the preservation, permanent protection, and management of 200 square feet of occupied Mason's lilaepsis habitat on the Project site, which is currently owned by Permittee.

Collectively, these mitigation lands are Habitat Management (HM) lands pursuant to Condition of Approval 7.2 below and the calculation and funding of management funds are subject to Condition of Approval 7.3 below. The final size of the HM lands may be adjusted up or down depending on the results of the pre-construction and post-construction surveys for the Covered Species (Conditions of Approval 6.5 and 6.10). Permanent protection and funding for perpetual management of compensatory habitat must be complete before starting the Covered Activities, or within 18 months of the effective date of this ITP if Security is provided pursuant to Condition of Approval 8, below, for all uncompleted obligations.

7.1. 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:

- 7.1.1.** Land acquisition costs for the purpose of performance security for HM lands identified in Condition of Approval 7.2 below, estimated at \$3,000/acre for one acre: **\$3,000**. Land acquisitions costs are estimated using local fair market current value for lands with habitat values meeting mitigation requirements;
- 7.1.2.** All other costs necessary to review and acquire the land in fee title and record a conservation easement as described in Condition of Approval 7.2.1 and 7.2.2 below: **\$150,000**;
- 7.1.3.** Start-up costs for HM lands, including initial site protection and enhancement costs as described in Condition of Approval 7.2.6 below, are estimated at **\$20,000**;
- 7.1.4.** Interim management period funding as described in Condition of Approval 7.2.7 below, is estimated at **\$18,000**;
- 7.1.5.** Long-term management funding as described in Condition of Approval 7.3 below is estimated at **\$6,000** annually in perpetuity for 200 square feet. Long-term management funding is estimated initially for the purpose of providing Security to ensure implementation of HM lands management.
- 7.1.6.** Covered Species management and monitoring funding as described in Condition of Approval 7.2.8 below, is estimated at **\$140,000**.
- 7.1.7.** 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, are estimated at **\$3,000**.
- 7.1.8.** 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.

- 7.2. 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:
- 7.2.1. Fee Title.** Transfer fee title to 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.
- 7.2.2. 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 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 Government Code sections 65965-65968, as amended, and includes 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.
- 7.2.3. 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;
- 7.2.4. HM Lands Documentation.** Provide a recent preliminary title report, initial hazardous materials survey report, and other necessary documents. All documents conveying a conservation easement over 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.
- 7.2.5. 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.

- 7.2.6. Start-up Activities.** Provide for the implementation and funding 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 <https://www.wildlife.ca.gov/Conservation/Planning/Banking>). This plan can be incorporated into the larger Chipps Island land management plan); (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) conducting litter removal; (5) conducting initial habitat enhancement; and (6) installing signage.
- 7.2.7. Interim Management (Initial and Capital).** Enhancement of the HM lands shall begin in 2024 with site preparation related to preparing and enhancing the site for the translocation and monitoring of the Covered Species. Permittee shall fund and ensure implementation of the interim management on the HM lands. The interim management period shall be a minimum of three years from the date that the Permittee begins the Covered Activities. Interim management period activities shall be those defined as necessary to manage the land and shall include trash removal, site monitoring, vegetation and invasive species management, mowing, and overall site maintenance.
- 7.2.8. Covered Species Management and Monitoring.** To mitigate habitat impacts associated with the Covered Activities, Permittee shall survey and monitor the status of translocated plants and representative reference occurrences of the Covered Species on Project levees. Permittee shall develop a monitoring and management plan to benefit the Covered Species using management funds as described in Condition of Approval 7.3 and subject to Condition of Approval 7.4.
- 7.2.8.1.** At least 6 months prior to take of the Covered Species, Permittee shall prepare and submit to CDFW for approval a Mason's lilaepsis Monitoring and Management Plan (MLMMP), including a baseline assessment, to facilitate management and monitoring of Mason's lilaepsis on the Project site. The MLMMP shall include detail adequate to allow efficient implementation by vegetation management contractors under the direction of the Designated Biologist. Management activities

may include, but are not limited to, invasive species control, trash removal, and biotechnical bank stabilization measures to abate Project-related erosion of Mason's lilaepsis habitat. The MLMMP shall be updated upon the completion of the pre-construction survey for the covered species (as described in Condition of Approval 6.5).

- 7.2.8.2.** As part of the MLMMP, Permittee shall include a translocation plan for Mason's lilaepsis occurrences where Mason's lilaepsis could be permanently impacted by the Covered Activities. This plan shall describe: (1) the location and patch size of the existing occurrences to be transplanted; (2) identify the HM lands where the Mason's lilaepsis will be transplanted. Subject to CDFW approval, this identified area shall become part of the HM lands; (3) the existing habitat conditions of the proposed HM lands; (4) transplanting methods and techniques; (5) a monitoring and maintenance plan for the HM lands; and (6) success criteria for the transplanted Covered Species. The monitoring and maintenance plan reporting shall be incorporated into the Annual Mason's Lilaepsis Monitoring Report (Annual Report) as described below in Condition of Approval 7.2.8.4.
- 7.2.8.3.** Permittee shall monitor all transplanted individuals and populations in the vicinity of any breach for potential erosion impacts to Mason's lilaepsis for a minimum of seven years. HM lands shall be managed and monitored in perpetuity.
- 7.2.8.4.** Permittee shall provide CDFW an Annual Report on the status of the Covered Species located on the Project Area, no later than January 31 of every year beginning with issuance of this ITP and continuing for seven years. Each annual report shall include, at a minimum: (1) names and titles of each survey crew member; (2) survey methods and dates; (3) the size and location of each reference site and translocated occurrence of the Covered Species in the HM lands; (4) the relative habitat condition of each occurrence; (5) the specific habitat conditions in the HM lands, including percent cover of all other plant species in the HM lands; and (6) a brief analysis of the status of translocated Covered Species relative to the other occurrences in the Project Area. Each Annual Report shall also include a summary of any Covered Species management that occurred during the year. The Annual Report information may be included as part of the Fish Restoration Program Annual Chipps Island Report submitted to CDFW and the Fish Agency Strategy Team (FAST).
- 7.2.8.5.** After initiating management activities, Permittee or CDFW may determine that an alternative management approach would be more successful in protecting or enhancing Covered Species habitat or is

necessary to ensure successful implementation of this mitigation. The MLMMP may be revised accordingly. Permittee shall acquire CDFW's approval of all revisions to the MLMMP at least one month prior to conducting new or modified activities.

7.2.8.6. Following completion of the seven-year monitoring period for translocated Mason's lilaeopsis, Permittee shall prepare a summary report describing the success of the translocated plants as specified in the MLMMP. The report shall detail Covered Species monitoring and management approaches used in the Project Area, any management adaptations attempted, the percent invasive species cover in each management area at the end of each management year, a description of the response of Covered Species to management activities over the management period, and any other information that would inform future monitoring and management activities in the Project Area. The report shall be submitted to CDFW staff for review.

7.3. In Perpetuity Management Funding: 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. Permittee shall provide long-term management funding for the perpetual management of the HM lands by using revenues derived from the SWP as defined in the October 18, 2010, Agreement between the Department of Water Resources and the Department of Fish and Game (now Department of Fish and Wildlife) Regarding Implementation of a Fish Restoration Program in Satisfaction of Federal Biological Opinions for State Water Project Delta Operations; Section "H. Property Transfer and Management Costs."

The Permittee shall enter into a Project-specific agreement with CDFW which will include assurances for sufficient funding through DWR's SWP operations and maintenance budget for perpetual operations and maintenance (O&M) of the restoration project in perpetuity and adjusted for inflation. As shall be further described in terms approved by CDFW in the Project-specific agreement, if funding is no longer available from SWP charges to the SWP Contractors, Permittee shall annually fund in-perpetuity management activities through another funding source, until Permittee has established and fully funded an Endowment. If another funding source is required, it shall be established within six months of identifying that the previous funding source will no longer be available. Additionally, if funding from SWP charges to the SWP Contractors is no longer available, Permittee shall fund an Endowment amount sufficient to fund these activities in perpetuity as established through the Property Analysis Record or Property Analysis Record equivalent analysis (PAR) prepared for this Project pursuant to Condition 7.3.2 of this ITP. Permittee shall fund the Endowment by contributing a minimum of ten percent of the amount required by the PAR (adjusted for present value) annually, commencing the fiscal year that SWP charges to the SWP Contractors funding is no longer available,

to a mutually agreed upon account, until the Endowment is fully funded, after which time the activities under the management plan will be funded from interest generated from the Endowment principal.

The Endowment as used in this ITP is a sum of money, held in a CDFW-approved fund that provides funds for the perpetual management, maintenance, monitoring, and other activities on the HM lands consistent with the management plans required by Condition of Approval 7.2.6. The Endowment 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 as described above.

- 7.3.1. Identify an Endowment Manager.** If Endowment establishment is triggered, per Condition of Approval 7.3, 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).

- 7.3.2. Calculate the Endowment Funds Deposit.** If Endowment establishment is triggered, per Condition of Approval 7.3, and after obtaining CDFW written approval of the HM lands, long-term management plan, and Endowment Manager, Permittee shall prepare a PAR to calculate the amount of funding

necessary to ensure the long-term management of the HM lands (Endowment Deposit Amount). If the HM lands have been managed pursuant to a final long-term management plan approved by CDFW for at least five years, the PAR and Endowment shall be based on the actual costs of managing the HM lands. Permittee shall submit to CDFW for review and approval the results of the PAR before transferring funds to the Endowment Manager.

- 7.3.2.1. Capitalization Rate and Fees.** Permittee shall obtain the capitalization rate from the selected Endowment Manager for use in calculating the PAR and adjust for any additional administrative, periodic, or annual fees.
- 7.3.2.2. Endowment Buffers/Assumptions.** Permittee shall include in PAR assumptions the following buffers for endowment establishment and use that will substantially ensure long-term viability and security of the Endowment:
- 7.3.2.2.1. 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.
- 7.3.2.2.2. Three Years Delayed Spending.** The endowment shall be established assuming spending will not occur for the first three years after full funding.
- 7.3.2.2.3. 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.

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).

7.3.3. Transfer Long-term Endowment Funds. If Endowment establishment is triggered, per Condition of Approval 7.3, the Permittee shall fund the Endowment Deposit Amount over a maximum 10-year period, in annual amount of at least 10 percent of the total Endowment Deposit Amount, adjusted for inflation, as approved by CDFW in writing. 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.

7.3.4. 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 of 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 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.

7.4. 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, account set-up fees, administrative fees, title and documentation review and related title transactions, costs incurred from other state agency reviews, and overhead related to transfer of HM lands to CDFW.

8. Performance and Security: Permittee may proceed with the Covered Activities based on the Security as described below. Permittee is a party to a long-term water supply contract with each of its 29 water supply customers, who are generally referred to as “SWP Contractors.” SWP Contractors contract with Permittee to pay for the operation, maintenance, planning, and capital costs of the SWP. Under Water Code section 11651, “any agency which contracts to purchase from the department any water, use of water, water storage, electric power, or other service shall provide for the punctual payment to the department of all amounts which become due under the contract.” In accordance with a statutory requirement, each water supply contract between Permittee and an SWP Contractor requires that if that SWP Contractor fails or is unable to raise sufficient funds by other means, the SWP Contractor must levy upon all taxable property in the SWP Contractor’s service area a tax or assessment sufficient (with other available moneys) to provide for all payments under the water supply contract. If the SWP Contractor defaults in payment, Permittee may, and under certain conditions is required to, upon six months’ notice, suspend water deliveries during the period of default.

Permittee will treat the costs of ITP implementation as components of the SWP and address such costs to fulfill those requirements as part of overall SWP costs. Costs, such as routine operation, maintenance, and power (e.g., monitoring of mitigation sites) are not financed, but are instead paid in monthly installments in the calendar year, incurred based upon estimates developed by Permittee and delivered to the SWP Contractors in July of the preceding year.

Permittee shall provide Security as follows:

- 8.1. Security Amount.** Security is assured by Permittee’s long-term water supply contracts and applicable state law. Estimated costs to implement acquisition, protection, restoration, and perpetual management of Covered Species HM lands is **\$340,000**. This amount is based on the cost estimates identified in Condition of Approval 7.1 of this ITP.
- 8.2. Mitigation Implementation.** Payment of the costs of mitigation projects is assured by Permittee’s long-term water supply contracts and applicable state law. All costs of the Project, including the costs of mitigation and monitoring activities required by this ITP shall be paid by Permittee and charged to SWP Contractors.

Permittee shall prepare and submit to CDFW within one year of the effective date of this ITP an initial Covered Species mitigation funding strategy for review and approval. The strategy shall include detailed cost estimates regarding: (1) HM lands acquisition and start-up costs and interim management period costs; and (2) long-term management costs for HM lands.

Permittee shall submit annual updates to the strategy to CDFW for review and approval. These updates shall include extension of the detailed funding strategy for five years post submission date and shall include a description of expenditures to date for compliance with Conditions of Approval 7.1 and 7.2. To the degree that

annual charges to SWP Contractors are relied upon, the funding strategy shall demonstrate that those funds have been or will be charged to SWP Contractors and received by Permittee consistent with SWP Contractor billing practices.

8.3. Demonstration of Performance. Permittee shall demonstrate to CDFW that Covered Species requirements have been satisfied, as evidenced by:

- Within one year of the effective date of this ITP, submission of an initial Covered Species mitigation funding strategy for concurrence by CDFW;
- Receipt by CDFW of documentation, acceptable to CDFW, demonstrating that Permittee will treat the mitigation obligations of this ITP as components of SWP and will fulfill these mitigation obligations as part of the overall SWP costs;
- Within 18 months of the effective date of this ITP, receipt by CDFW of documentation of the required acquisition and protection of Covered Species HM lands and copies of all recorded and executed conservation easements for HM lands; and
- Within 18 months of the effective date of this ITP, receipt by CDFW of the final CDFW-approved management plans for HM lands.

Permittee shall demonstrate to CDFW that Covered Species requirements have been satisfied on an ongoing basis, as evidenced by:

- Timely submission of Covered Species mitigation funding strategy annual updates for HM lands;
- Timely submission of all required reports; and
- If Endowment establishment is triggered, Condition of Approval 7.3, written confirmation from approved Endowment Manager of its receipt of the full Endowment.

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, sections 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 NPPA rare plants or 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. Compliance with Other Laws:

This ITP sets forth CDFW's requirements for the Permittee to implement the Project pursuant to the NPPA. 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.

XII. 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 (2081-2023-063-03) in a cover letter and on any other associated documents.

Original cover with attachment(s) to:

Erin Chappell, Regional Manager
California Department of Fish and Wildlife
2825 Cordelia Road, Suite 100
Fairfield, CA 94534
Telephone: (707) 428-2002
R3CESA@wildlife.ca.gov

and a copy to:

Incidental Take Permit
No. 2081-2023-063-03
DEPARTMENT OF WATER RESOURCES
CHIPPS ISLAND RESTORATION PROJECT

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

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

Aicha Ougzin, Environmental Scientist
California Department of Fish and Wildlife – Bay Delta Region
2109 Arch Airport Road, Suite 100
Stockton, CA 95206
Telephone: (209) 234-3434
Aicha.Ougzin@wildlife.ca.gov

XIII. Compliance with the California Environmental Quality Act:

CDFW's issuance of this ITP is subject to CEQA. CDFW is the lead agency pursuant to CEQA with respect to this ITP because of its prior environmental review of the Project. (See generally Pub. Resources Code, §§ 21067, 21069). CDFW's prior environmental review of the Project is set forth in the Suisun Marsh Habitat Management, Preservation, and Restoration Plan Environmental Impact Statement/Environmental Impact Report (SCH No. 2003112039). DWR, as responsible agency, adopted the Suisun Marsh Habitat Management, Preservation, and Restoration CEQA Addendum for the Chipps Island Restoration Project on January 5, 2024 (Addendum). At the time DWR adopted the CEQA Addendum and approved the Project it also adopted various mitigation measures for the Covered Species as conditions of Project approval.

The action of ITP approval carries out an activity contemplated by CDFW's 2011 Suisun Marsh Habitat Management, Preservation, and Restoration Plan EIR, which activity is described in more specificity by the Addendum. 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, the Addendum and DWR's adopted mitigation measures, 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 CDFW in 2011, adherence to and implementation of the mitigation measures adopted by DWR in 2024, and 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.

XIV. Findings Pursuant to CESA and NPPA:

These findings are intended to document CDFW's compliance with the specific findings requirements set forth in the NPPA, CESA and related regulations, as applicable to issuance of a permit under the NPPA. (Fish & G. Code § 2081, subs. (b)-(c); Cal. Code Regs., tit. 14, §§ 783.4, subs., (a)-(b), 783.5, subd. (c)(2), 786.9, subd. (b).)

CDFW finds based on substantial evidence in the ITP application, Chipps Island Restoration Project CEQA Addendum to the Suisun Marsh Habitat Management, Preservation, and Restoration Plan Environmental Impact Statement/Environmental Impact Report, the results of site visits and consultations, and the administrative record of proceedings, that issuance of this ITP complies and is consistent with the criteria governing the issuance of ITPs pursuant to the NPPA:

- (1) Take of the 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 the 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) implementation of a MLMMP; (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 translocation of the Covered Species from the breach location, the protection and management in perpetuity of 199.7 square feet of compensatory occupied Covered Species habitat, 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) 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;
- (4) The measures required by this ITP maintain Permittee's objectives to the greatest extent possible;
- (5) All required measures are capable of successful implementation;
- (6) This ITP is consistent with any regulations adopted pursuant to Fish and Game Code sections 2112 and 2114;
- (7) Permittee has ensured adequate funding to implement the measures required by this

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

- (8) 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.

XV. Attachments:

FIGURE 1	Map of Project
FIGURE 2	Chipps Island Restoration Site Plan
FIGURE 3	Map of Staging Areas
ATTACHMENT 1	Mitigation Monitoring and Reporting Program
ATTACHMENT 2	Biologist Resume Form
ATTACHMENT 3	Design Drawings

ISSUED BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

ON 6/19/2024

DocuSigned by:
Erin Chappell
 B77E9A6211FF486

Erin Chappell, Regional Manager
Bay Delta Region

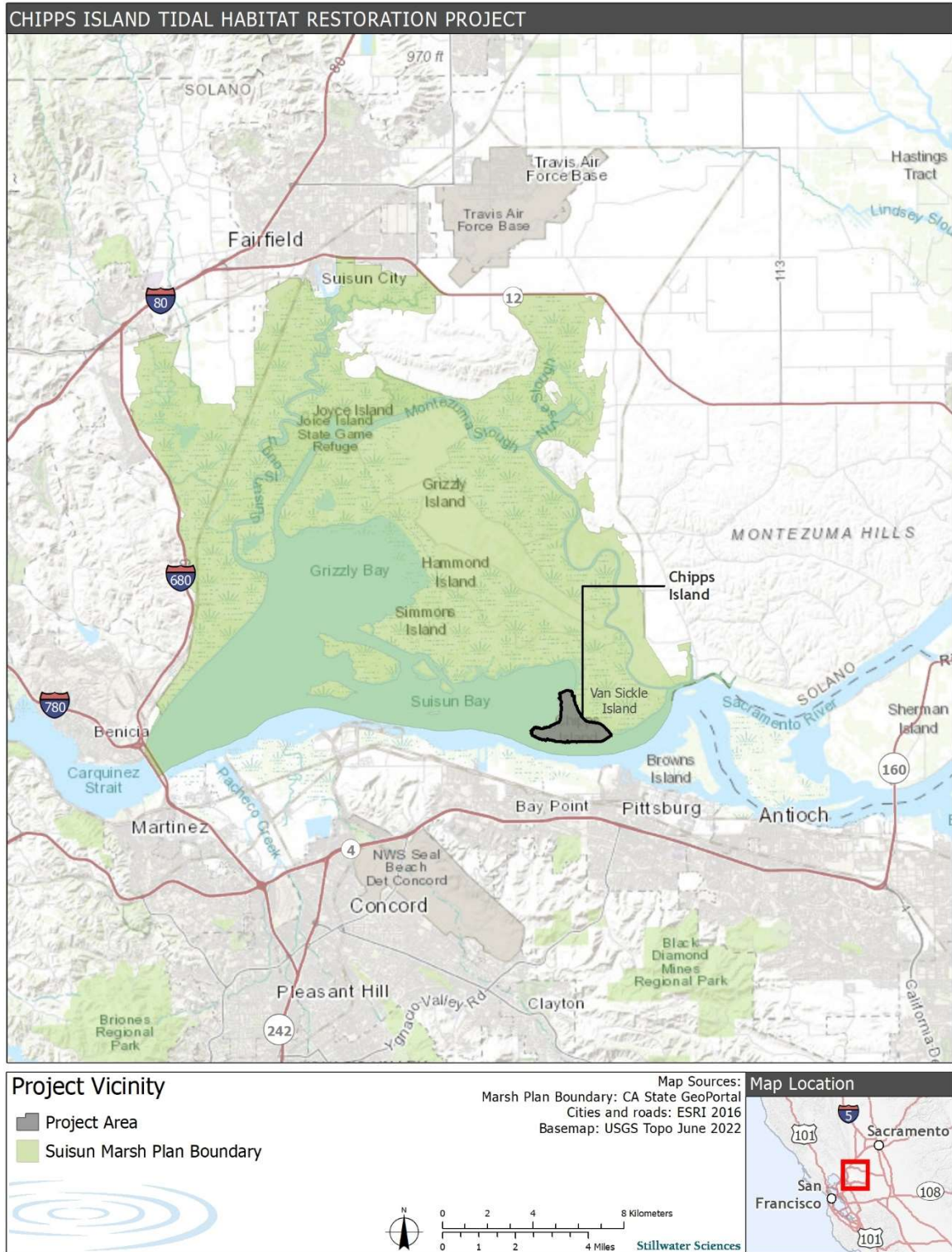


Figure 2-1. Chipps Island location within the Suisun Marsh Plan area.

Addendum to the SMP Final EIS/EIR



Figure 2-2. Proposed Project.



Figure 2-4. Clearing areas.

Attachment 1

**CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)
NATIVE PLANT PROTECTION ACT**

INCIDENTAL TAKE PERMIT NO. 2081-2023-063-03

PERMITTEE: Department of Water Resources

PROJECT: Chipps Island Tidal Restoration Project

PURPOSE OF THE MMRP

The purpose of the MMRP is to ensure that the impact minimization and mitigation measures required by the California Department of Fish and Wildlife (CDFW) for the above-referenced Project are properly implemented, and thereby to ensure compliance with section 2081(b) of the Fish and Game Code and section 786.9 and 783.0 et seq. of California Code of Regulations, Title 14. A table summarizing the mitigation measures required by CDFW is attached. This table is a tool for use in monitoring and reporting on implementation of mitigation measures, but the descriptions in the table do not supersede the mitigation measures set forth in the California Incidental Take Permit (ITP) and in attachments to the ITP, and the omission of a permit requirement from the attached table does not relieve the Permittee of the obligation to ensure the requirement is performed.

OBLIGATIONS OF PERMITTEE

Mitigation measures must be implemented within the time periods indicated in the table that appears below. Permittee has the primary responsibility for monitoring compliance with all mitigation measures and for reporting to CDFW on the progress in implementing those measures. These monitoring and reporting requirements are set forth in the ITP itself and are summarized at the front of the attached table.

VERIFICATION OF COMPLIANCE, EFFECTIVENESS

CDFW may, at its sole discretion, verify compliance with any mitigation measure or independently assess the effectiveness of any mitigation measure.

TABLE OF MITIGATION MEASURES

The following items are identified for each mitigation measure: Mitigation Measure, Source, Implementation Schedule, Responsible Party, and Status/Date/Initials. The Mitigation Measure column summarizes the mitigation requirements of the ITP. The Source column identifies the ITP condition that sets forth the mitigation measure. The Implementation Schedule column shows the date or phase when each mitigation measure will be implemented. The Responsible Party column identifies the person or agency that is primarily responsible for implementing the mitigation measure. The Status/Date/Initials column shall be completed by the Permittee during preparation of each Status Report and the Final Mitigation Report, and must identify the implementation status of each mitigation measure, the date that status was determined, and the initials of the person determining the status.

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
BEFORE DISTURBING SOIL OR VEGETATION					
1	Designated Representative. Before starting the 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 the 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.	ITP Condition # 4.1	Before commencing ground- or vegetation-disturbing activities/ Entire Project	Permittee	
2	Designated Biologist and Biological Monitors. Permittee shall submit to CDFW in writing the name, qualifications, business address, and contact information of the Designated Biologist and Biological Monitors using the Biologist Resume Form (Attachment 2) or another format containing the same information at least 30 days before starting the Covered Activities. Permittee shall ensure that the Designated Biologist and Biological Monitors are knowledgeable and experienced in the biology, natural history, collecting and handling of the Covered Species which they are monitoring. The Designated Biologist and Biological Monitors shall be responsible for monitoring the Covered Activities to help minimize and fully mitigate or avoid the incidental take of individual Covered Species and to minimize disturbance of the Covered Species' habitat. Permittee shall obtain CDFW approval of the Designated Biologist and Biological Monitors in writing before starting the Covered Activities and shall also obtain approval at least 14 days in advance, in writing, if there is a staffing change for the Designated Biologist or Biological Monitors.	ITP Condition # 4.2	Before commencing ground- or vegetation-disturbing activities	Permittee	
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 the 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.	ITP Condition # 4.3	Before commencing ground- or vegetation-disturbing activities/ Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
4	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 NPPA including legal protection, recovery efforts, penalties for violations and Project-specific protective measures described in this ITP. Permittee shall provide interpretation 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. Permittee shall prepare and distribute wallet-sized cards or a fact sheet handout containing this information for workers to carry in the Project Area. Upon completion of the program, employees shall sign a form stating they attended the program and understand all protection measures.	ITP Condition # 4.4	Before commencing ground- or vegetation-disturbing activities/ Entire Project	Permittee	
5	Trash Abatement. Permittee shall initiate a trash abatement program before starting the 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.	ITP Condition # 4.6	Before commencing ground- or vegetation-disturbing activities and during construction/ Entire Project	Permittee	
6	Delineation of Occupied Habitat. The Designated Biologist shall clearly delineate the extent of the Covered Species occurrences 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 the Covered Species.	ITP Condition # 4.9	Before commencing ground- or vegetation-disturbing activities and during construction/ Entire Project	Permittee	
7	CDFW Access. Permittee shall provide CDFW staff with reasonable access to the Project and shall otherwise fully cooperate with CDFW efforts to verify compliance with or effectiveness of mitigation measures set forth in this ITP. Permittee shall provide CDFW staff with the necessary personal protective equipment needed to enter the Project site.	ITP Condition # 4.14	Before commencing ground- or vegetation-disturbing activities and during construction/ Entire Project	Permittee	
8	Notification Before Commencement. The Designated Representative shall notify CDFW 14 calendar days before starting the Covered Activities and shall document compliance with all pre-Project Conditions of Approval before starting the Covered Activities.	ITP Condition # 5.1	Before commencing ground- or vegetation-disturbing activities	Permittee	
9	SWPPP Preparation. Prior to initiating the Covered Activities, Permittee shall submit to CDFW a Stormwater Pollution Prevention Plan (SWPPP) or a Water Quality Control Program to address Best Management Practices (BMPs) utilized to prevent erosion, sediment loss, and potential pollution within the Project site for CDFW review and acceptance.	ITP Condition # 6.3	Before commencing ground- or vegetation-disturbing activities	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
10	Pre-Construction Survey for Covered Species. The Designated Biologist shall conduct pre-construction surveys for the Covered Species within a month prior to starting construction activities each construction year. If the Covered Species is identified in the Project Area, they shall be flagged (as described in Condition of Approval 4.9) and avoided.	ITP Condition # 6.5	Within a month prior to ground- or vegetation-disturbing activities, each year	Permittee	
11	Translocation of Mason's Lilaepsis. If impacts to the Covered Species cannot be avoided, a Designated Biologist shall translocate the individuals to suitable habitats. Permittee shall consult with CDFW before attempting to transplant these individuals. At least 6 months prior to take of the Covered Species, Permittee shall submit to CDFW for approval a Mason's lilaepsis translocation plan pursuant to Condition of Approval 7.2.8.2.	ITP Condition # 6.6	At least 6 months prior to take of Covered Species	Permittee	
12	<p>CDFW has determined that permanent protection and perpetual management of compensatory habitat is necessary and required pursuant to the NPPA 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 habitat, and CDFW's estimate of the protected acreage required to provide for adequate compensation.</p> <p>To meet this requirement, Permittee shall translocate, monitor, and manage occupied Mason's lilaepsis habitat that will be impacted by the Covered Activities and provide for the preservation, permanent protection, and management of 200 square feet of occupied Mason's lilaepsis habitat on the Project site, which is currently owned by Permittee. Collectively, these mitigation lands are Habitat Management (HM) lands pursuant to Condition of Approval 7.2 below and the calculation and funding of management funds are subject to Condition of Approval 7.3 below. The final size of the HM lands may be adjusted up or down depending on the results of the pre-construction and post-construction surveys for the Covered Species (Conditions of Approval 6.5 and 6.10). Permanent protection and funding for perpetual management of compensatory habitat must be complete before starting the Covered Activities, or within 18 months of the effective date of this ITP if Security is provided pursuant to Condition of Approval 8, below, for all uncompleted obligations.</p>	ITP Condition # 7	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of this ITP if Security is provided)	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
13	<p>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:</p> <p>Land acquisition costs for the purpose of performance security for HM lands identified in Condition of Approval 7.2 below, estimated at \$3,000/acre for one acre: \$3,000. Land acquisitions costs are estimated using local fair market current value for lands with habitat values meeting mitigation requirements;</p> <p>All other costs necessary to review and acquire the land in fee title and record a conservation easement as described in Condition of Approval 7.2.1 and 7.2.2 below: \$150,000;</p> <p>Start-up costs for HM lands, including initial site protection and enhancement costs as described in Condition of Approval 7.2.6 below, are estimated at \$20,000;</p> <p>Interim management period funding as described in Condition of Approval 7.2.7 below, is estimated at \$18,000;</p> <p>Long-term management funding as described in Condition of Approval 7.3 below is estimated at \$6,000 annually in perpetuity for 200 square feet. Long-term management funding is estimated initially for the purpose of providing Security to ensure implementation of HM lands management.</p> <p>Covered Species management and monitoring funding as described in Condition of Approval 7.2.8 below, is estimated at \$140,000.</p> <p>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, are estimated at \$3,000.</p> <p>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.</p>	ITP Condition # 7.1-7.1.8	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of this ITP if Security is provided)	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
14	<p>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:</p> <p>Fee Title. Transfer fee title to 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.</p>	ITP Condition # 7.2-7.2.1	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of this ITP if Security is provided)	Permittee	
15	<p>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 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 Government Code sections 65965-65968, as amended, and includes 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.</p>	ITP Condition # 7.2.2	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of this ITP if Security is provided)	Permittee	
16	<p>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;</p>	ITP Condition # 7.2.3	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of this ITP if Security is provided)	Permittee	
17	<p>HM Lands Documentation. Provide a recent preliminary title report, initial hazardous materials survey report, and other necessary documents. All documents conveying a conservation easement over 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.</p>	ITP Condition # 7.2.4	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of this ITP if Security is provided)	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
18	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.	ITP Conditions # 7.2.5	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of this ITP if Security is provided)	Permittee	
19	Start-up Activities. Provide for the implementation and funding 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 https://www.wildlife.ca.gov/Conservation/Planning/Banking). This plan can be incorporated into the larger Chipps Island land management plan); (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) conducting litter removal; (5) conducting initial habitat enhancement; and (6) installing signage.	ITP Conditions # 7.2.6	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of this ITP if Security is provided)	Permittee	
20	Interim Management (Initial and Capital). Enhancement of the HM lands shall begin in 2024 with site preparation related to preparing and enhancing the site for the translocation and monitoring of the Covered Species. Permittee shall fund and ensure implementation of the interim management on the HM lands. The interim management period shall be a minimum of three years from the date that the Permittee begins the Covered Activities. Interim management period activities shall be those defined as necessary to manage the land and shall include trash removal, site monitoring, vegetation and invasive species management, mowing, and overall site maintenance.	ITP Conditions # 7.2.7	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of this ITP if Security is provided)	Permittee	
21	Covered Species Management and Monitoring. To mitigate habitat impacts associated with the Covered Activities, Permittee shall survey and monitor the status of translocated plants and representative reference occurrences of the Covered Species on Project levees. Permittee shall develop a monitoring and management plan to benefit the Covered Species using management funds as described in Condition of Approval 7.3 and subject to Condition of Approval 7.4.	ITP Conditions # 7.2.8	Before commencing ground- or vegetation-disturbing activities	Permittee	
22	At least 6 months prior to take of the Covered Species, Permittee shall prepare and submit to CDFW for approval a Mason's Ilaeopsis Monitoring and Management Plan (MLMMP), including a baseline assessment, to facilitate management and monitoring of Mason's Ilaeopsis on the Project site. The MLMMP shall include detail adequate to allow efficient implementation by vegetation management contractors under the direction of the Designated Biologist. Management activities may include, but are not limited to, invasive species control, trash removal, and biotechnical bank stabilization measures to abate Project-related erosion of Mason's Ilaeopsis habitat. The MLMMP shall be updated upon the completion of the pre-construction survey for the covered species (as described in Condition of Approval 6.5).	ITP Conditions # 7.2.8.1	At least 6 months prior to take of Covered Species	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
23	As part of the MLMMP, Permittee shall include a translocation plan for Mason's lilaepsis occurrences where Mason's lilaepsis could be permanently impacted by the Covered Activities. This plan shall describe: (1) the location and patch size of the existing occurrences to be transplanted; (2) identify the HM lands where the Mason's lilaepsis will be transplanted. Subject to CDFW approval, this identified area shall become part of the HM lands; (3) the existing habitat conditions of the proposed HM lands; (4) transplanting methods and techniques; (5) a monitoring and maintenance plan for the HM lands; and (6) success criteria for the transplanted Covered Species. The monitoring and maintenance plan reporting shall be incorporated into the Annual Mason's Lilaepsis Monitoring Report (Annual Report) as described below in Condition of Approval 7.2.8.4.	ITP Conditions # 7.2.8.2	At least 6 months prior to take of Covered Species	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
24	<p>In Perpetuity Management Funding: 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. Permittee shall provide long-term management funding for the perpetual management of the HM lands by using revenues derived from the SWP as defined in the October 18, 2010, Agreement between the Department of Water Resources and the Department of Fish and Game (now Department of Fish and Wildlife) Regarding Implementation of a Fish Restoration Program in Satisfaction of Federal Biological Opinions for State Water Project Delta Operations; Section "H. Property Transfer and Management Costs."</p> <p>The Permittee shall enter into a Project-specific agreement with CDFW which will include assurances for sufficient funding through DWR's SWP operations and maintenance budget for perpetual operations and maintenance (O&M) of the restoration project in perpetuity and adjusted for inflation. As shall be further described in terms approved by CDFW in the Project-specific agreement, if funding is no longer available from SWP charges to the SWP Contractors, Permittee shall annually fund in-perpetuity management activities through another funding source, until Permittee has established and fully funded an Endowment. If another funding source is required, it shall be established within six months of identifying that the previous funding source will no longer be available. Additionally, if funding from SWP charges to the SWP Contractors is no longer available, Permittee shall fund an Endowment amount sufficient to fund these activities in perpetuity as established through the Property Analysis Record or Property Analysis Record equivalent analysis (PAR) prepared for this Project pursuant to Condition 7.3.2 of this ITP. Permittee shall fund the Endowment by contributing a minimum of ten percent of the amount required by the PAR (adjusted for present value) annually, commencing the fiscal year that SWP charges to the SWP Contractors funding is no longer available, to a mutually agreed upon account, until the Endowment is fully funded, after which time the activities under the management plan will be funded from interest generated from the Endowment principal.</p> <p>The Endowment as used in this ITP is a sum of money, held in a CDFW-approved fund that provides funds for the perpetual management, maintenance, monitoring, and other activities on the HM lands consistent with the management plans required by Condition of Approval 7.2.6. The Endowment 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 as described above.</p>	ITP Conditions # 7.3	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of this ITP if Security is provided)	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
25	<p>Identify an Endowment Manager. If Endowment establishment is triggered, per Condition of Approval 7.3, 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).</p> <p>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).</p>	ITP Conditions # 7.3.1	If endowment is triggered	Permittee	

<p>26</p>	<p>Calculate the Endowment Funds Deposit. If Endowment establishment is triggered, per Condition of Approval 7.3, and after obtaining CDFW written approval of the HM lands, long-term management plan, and Endowment Manager, Permittee shall prepare a PAR to calculate the amount of funding necessary to ensure the long-term management of the HM lands (Endowment Deposit Amount). If the HM lands have been managed pursuant to a final long-term management plan approved by CDFW for at least five years, the PAR and Endowment shall be based on the actual costs of managing the HM lands. Permittee shall submit to CDFW for review and approval the results of the PAR before transferring funds to the Endowment Manager.</p> <p>Capitalization Rate and Fees. Permittee shall obtain the capitalization rate from the selected Endowment Manager for use in calculating the PAR and adjust for any additional administrative, periodic, or annual fees.</p> <p>Endowment Buffers/Assumptions. Permittee shall include in PAR assumptions the following buffers for endowment establishment and use that will substantially ensure long-term viability and security of the Endowment:</p> <p>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.</p> <p>Three Years Delayed Spending. The endowment shall be established assuming spending will not occur for the first three years after full funding.</p> <p>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.</p> <p>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).</p> <p>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).</p>	<p>ITP Conditions # 7.3.2 – 7.3.2.2.3</p>	<p>If endowment is triggered</p>	<p>Permittee</p>	
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	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
27	Transfer Long-term Endowment Funds. If Endowment establishment is triggered, per Condition of Approval 7.3, the Permittee shall fund the Endowment Deposit Amount over a maximum 10-year period, in annual amount of at least 10 percent of the total Endowment Deposit Amount, adjusted for inflation, as approved by CDFW in writing. 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.	ITP Conditions # 7.3.3	If endowment is triggered	Permittee	
28	<p>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 of 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.</p> <p>Notwithstanding Probate Code sections 18501-18510, the Endowment Manager shall not make any disbursement from 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.</p> <p>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.</p>	ITP Conditions # 7.3.4	If endowment is triggered	Permittee	
29	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, account set-up fees, administrative fees, title and documentation review and related title transactions, costs incurred from other state agency reviews, and overhead related to transfer of HM lands to CDFW.	ITP Conditions # 7.4	Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of this ITP if Security is provided)/During construction/ Post-project	Permittee	

<p>30</p>	<p>Performance and Security: Permittee may proceed with the Covered Activities based on the Security as described below. Permittee is a party to a long-term water supply contract with each of its 29 water supply customers, who are generally referred to as "SWP Contractors." SWP Contractors contract with Permittee to pay for the operation, maintenance, planning, and capital costs of the SWP. Under Water Code section 11651, "any agency which contracts to purchase from the department any water, use of water, water storage, electric power, or other service shall provide for the punctual payment to the department of all amounts which become due under the contract." In accordance with a statutory requirement, each water supply contract between Permittee and an SWP Contractor requires that if that SWP Contractor fails or is unable to raise sufficient funds by other means, the SWP Contractor must levy upon all taxable property in the SWP Contractor's service area a tax or assessment sufficient (with other available moneys) to provide for all payments under the water supply contract. If the SWP Contractor defaults in payment, Permittee may, and under certain conditions is required to, upon six months' notice, suspend water deliveries during the period of default.</p> <p>Permittee will treat the costs of ITP implementation as components of the SWP and address such costs to fulfill those requirements as part of overall SWP costs. Costs, such as routine operation, maintenance, and power (e.g., monitoring of mitigation sites) are not financed, but are instead paid in monthly installments in the calendar year, incurred based upon estimates developed by Permittee and delivered to the SWP Contractors in July of the preceding year.</p> <p>Permittee shall provide Security as follows:</p> <p>Security Amount. Security is assured by Permittee's long-term water supply contracts and applicable state law. Estimated costs to implement acquisition, protection, restoration, and perpetual management of Covered Species HM lands is \$340,000. This amount is based on the cost estimates identified in Condition of Approval 7.1 of this ITP.</p> <p>Mitigation Implementation. Payment of the costs of mitigation projects is assured by Permittee's long-term water supply contracts and applicable state law. All costs of the Project, including the costs of mitigation and monitoring activities required by this ITP shall be paid by Permittee and charged to SWP Contractors.</p> <p>Permittee shall prepare and submit to CDFW within one year of the effective date of this ITP an initial Covered Species mitigation funding strategy for review and approval. The strategy shall include detailed cost estimates regarding: (1) HM lands acquisition and start-up costs and interim management period costs; and (2) long-term management costs for HM lands.</p> <p>Permittee shall submit annual updates to the strategy to CDFW for review and approval. These updates shall include extension of the detailed funding strategy for five years post submission date and shall include a description of expenditures to date for compliance with Conditions of Approval 7.1 and 7.2. To the degree that annual charges to SWP Contractors are relied upon, the funding strategy shall demonstrate that those funds have been or will be charged to SWP Contractors and received by Permittee consistent with SWP Contractor billing practices.</p> <p>Demonstration of Performance. Permittee shall demonstrate to CDFW that Covered Species requirements have been satisfied, as evidenced by:</p>	<p>ITP Conditions # 8-8.3</p>	<p>Before commencing ground- or vegetation-disturbing activities (or within 18 months of issuance of this ITP if Security is provided)</p>	<p>Permittee</p>	
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	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	<ul style="list-style-type: none"> • Within one year of the effective date of this ITP, submission of an initial Covered Species mitigation funding strategy for concurrence by CDFW; • Receipt by CDFW of documentation, acceptable to CDFW, demonstrating that Permittee will treat the mitigation obligations of this ITP as components of SWP and will fulfill these mitigation obligations as part of the overall SWP costs; • Within 18 months of the effective date of this ITP, receipt by CDFW of documentation of the required acquisition and protection of Covered Species HM lands and copies of all recorded and executed conservation easements for HM lands; and • Within 18 months of the effective date of this ITP, receipt by CDFW of the final CDFW-approved management plans for HM lands. <p>Permittee shall demonstrate to CDFW that Covered Species requirements have been satisfied on an ongoing basis, as evidenced by:</p> <ul style="list-style-type: none"> • Timely submission of Covered Species mitigation funding strategy annual updates for HM lands; • Timely submission of all required reports; and • If Endowment establishment is triggered, Condition of Approval 7.3, written confirmation from approved Endowment Manager of its receipt of the full Endowment. <p>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.</p>				
DURING CONSTRUCTION					
31	<p>Construction Monitoring Documentation. The Designated Biologist shall maintain a construction-monitoring notebook on-site 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 notebook is available for review at the Project site upon request by CDFW.</p>	ITP Condition # 4.5	During Construction/ Entire Project	Permittee	
32	<p>Dust Control. Permittee shall implement dust control measures during Covered Activities to facilitate visibility for monitoring of the Covered Species by the Designated Biologist and Biological Monitors. Permittee shall keep the amount of water used to the minimum amount needed and shall not allow water to form puddles.</p>	ITP Condition # 4.7	During Construction/ Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
33	Erosion Control Materials. Permittee shall not use erosion control materials that cover, inhibit, or alter the spread of the Covered Species along levees in the Project Area, except where the Permittee has consulted with and received written approval from CDFW to allow the use of erosion control materials in a specific area of the levees.	ITP Condition # 4.8	During Construction/ Entire Project	Permittee	
34	Project Access. Project-related personnel shall access the Project Area using existing routes, routes identified in the Project Description and shall not cross the Covered Species' habitat outside of or enroute 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 for written approval before carrying out such an activity. Barge access points must be surveyed for the Covered Species prior to use by the Designated Biologist. CDFW may require an amendment to this ITP, among other reasons, if additional take of the Covered Species will occur as a result of the Project modification or access.	ITP Condition # 4.10	During Construction/ Entire Project	Permittee	
35	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 the marked and delineated Covered Species' habitat as described in Condition of Approval 4.9 of this ITP. Staging areas include areas where barges come into contact with the exterior levee and barge loading areas.	ITP Condition # 4.11	During Construction/ Entire Project	Permittee	
36	Vehicle/Equipment Cleaning and Maintenance. Prior to the entry of any vehicle or equipment into the Project site including the staging area, Permittee shall ensure equipment and vehicles are clean of vegetation and not leaking fluids. Any equipment or vehicles driven and/or operated in proximity of sloughs and wetlands shall be maintained in good working order to prevent the release of contaminants that if introduced to water could be deleterious to aquatic life, wildlife, or riparian habitat. If a vehicle is found to be leaking fluids of any kind, Permittee shall take immediate measures to stop and/or contain the leak and then remove the vehicle to an off-site location until properly repaired.	ITP Condition # 4.12	During Construction/ Entire Project	Permittee	
37	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.	ITP Condition # 4.13	During Construction/ Entire Project	Permittee	
38	Refuse Removal. Upon completion of the 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.	ITP Condition # 4.15	During Construction and Post-construction/ Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
39	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.	ITP Condition # 5.2	During Construction/ Entire Project	Permittee	
40	<p>Compliance Monitoring. The Designated Biologist and/or a Biological Monitor shall be on-site daily when the Covered Activities occur. The Designated Biologist and/or Biological Monitor shall conduct compliance inspections to:</p> <ol style="list-style-type: none"> (1) minimize incidental take of the Covered Species; (2) prevent unlawful take of species; (3) check for compliance with all measures of this ITP; (4) check all exclusion zones; and (5) ensure that signs, stakes, and fencing are intact, and that the Covered Activities are only occurring in the Project Area. <p>The Designated Representative or Designated Biologist shall prepare daily written observation and inspection records summarizing oversight activities and compliance inspections, observations of the Covered Species and their sign, survey results, and monitoring activities required by this ITP.</p>	ITP Condition # 5.3	During Construction/ Entire Project	Permittee	
41	Monthly Compliance Report. The Designated Representative or Designated Biologist shall compile the observation and inspection records identified in Compliance Monitoring 5.3 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, by the 5th of each month following the first month of the Covered Activities. 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 Aicha Ougzin (Aicha.Ougzin@wildlife.ca.gov) and Headquarters CESA Program email is 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.	ITP Condition # 5.4	During Construction/ Entire Project	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
42	Annual Status Report. Permittee shall provide CDFW with an Annual Status Report 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 Annual Status Report shall include, at a minimum: (1) a summary of all Monthly Compliance Reports for that year identified in Condition of Approval 5.4; (2) a general description of the status of the Project Area and the 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; (6) an accounting of the number of acres subject to both temporary and permanent disturbance since ITP issuance; and (7) information about other Project impacts on the Covered Species.	ITP Condition # 5.5	During Construction and post-construction until completion of all mitigation/ Entire Project	Permittee	
43	CNDDDB Observations. The Designated Biologist shall submit all observations of the 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.	ITP Condition # 5.6	During Construction and post-construction/ Entire Project	Permittee	
44	Notification of Take or Injury Permittee shall immediately notify the Designated Biologist if the Covered Species is taken, including translocated, or impacted by a Project-related activity, or if the Covered Species is otherwise found dead within the vicinity of the Project. The Designated Biologist or Designated Representative shall provide initial notification to CDFW by calling the Regional Office at (707) 428-2002. The initial notification to CDFW shall include information regarding the location, species, and number of plants (or area of occupied habitat) taken or impacted and the ITP Number. Following initial notification, Permittee shall send CDFW a written report within two calendar days. The report shall include the date and time of the finding or incident, location of the plant, and if possible provide a photograph, explanation as to cause of take or impact, and any other pertinent information.	ITP Condition # 5.8	During Construction/Entire Project	Permittee	
45	Daily Work Restriction. Permittee shall terminate all the Covered Activities at sunset and shall not resume the Covered Activities until sunrise. Permittee shall use sunrise and sunset times established by the U.S. Naval Observatory Astronomical Applications Department for the geographic area (https://www.esrl.noaa.gov/gmd/grad/solcalc/sunrise.html).	ITP Condition # 6.1	During Construction/ Entire Project	Permittee	
46	Precipitation Work Limit. Permittee shall restrict work activities on exterior levees to periods of low rainfall (less than 1/10th of an inch per 24-hour period) and periods of dry weather (with less than a 30 percent chance of rain). Permittee shall initiate all erosion control measures prior to all storm events. Permittee shall monitor the National Weather Service (http://www.nws.noaa.gov) 72-hour forecast for the Project site. No work shall occur during a dry-out period of 24 hours after the above referenced wet weather. Weather forecasts shall be documented upon request by CDFW.	ITP Condition # 6.2	During Construction/ Entire Project	Permittee	

<p>47</p>	<p>Pesticide and Herbicide Use. Integrated pest management solutions that emphasize non-chemical pest management shall be used over chemical pesticides when working within 20 feet of the Covered Species. Herbicides may be used at the Permittee’s discretion with implementation of the following protective measures:</p> <p>All herbicides shall be applied by a certified pesticide applicator or under the supervision of a certified pesticide applicator in accordance with regulations set by the California Department of Pesticide Regulation and according to labeled instructions.</p> <p>Herbicides shall only be applied on calm days with wind speed below 5 miles per hour unless applied directly with a brush or a wick.</p> <p>Permittee shall use caution to apply the least practicable amount of herbicides necessary to effectively control nuisance plants.</p> <p>Permittee shall use the least concentrated formulation of herbicide possible and practicable to accomplish the task.</p> <p>Permittee shall not apply certain herbicides within 60 feet from the edge of salmon-supporting waters (http://www.cdpr.ca.gov/docs/endspec/salmonid.htm).</p> <p>Herbicide mixing sites shall be located on existing roadways or upland locations where they may not enter into streams or wetlands.</p> <p>Permittee shall only apply herbicides after vegetation removal by another method, such as hand trimming or mowing, except during the spot treatment on non-native invasive vegetation.</p> <p>Permittee shall only use herbicides registered with the California Department of Pesticide Regulation (CDPR). Permittee shall consult the Pesticide Regulation’s Endangered Species Custom Realtime Internet Bulletin Engine (PRESCRIBE) to determine specific pesticide use limitations (http://www.cdpr.ca.gov/docs/endspec/precint.htm).</p> <p>Permittee shall only use pesticides for which a “no effect” determination has been issued by the U.S. EPA’s Endangered Species Protection Program (http://www.epa.gov/espp/) for any species likely to occur within the Project site or downstream. Prior to applying pesticides, Permittee shall verify that selected pesticides are not on an endangered species bulletin issued by the U.S. EPA for the Project Area. Bulletins can be accessed using the interactive map, Bulletins Live! Two, at: https://www.epa.gov/endangered-species/bulletins-live-two-view-bulletins.</p> <p>A list of the herbicides intended for use and their labeled instructions shall be made available to CDFW for review prior to an application event.</p> <p>Permittee is responsible for maintaining its herbicide use records for ensuring herbicide use and timing is consistent with any federal, State, or local regulations.</p>	<p>ITP Condition # 6.4</p>	<p>During Construction and Post-construction/ Entire Project</p>	<p>Permittee</p>	
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	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
	<p>Any hazardous or toxic materials that could be deleterious to aquatic life that could be washed into state waters or their tributaries shall be contained in watertight containers or removed from the Project site.</p> <p>Care shall be taken to avoid spraying native vegetation with herbicides. Spraying within 100 feet of existing mitigation sites shall be done by hand.</p> <p>Should any fish or animal kills occur following application of herbicides, such kills shall be reported to CDFW Bay Delta Region within 24 hours.</p> <p>Regardless of the contents of this ITP, Permittee is responsible for any environmental damage caused by the application or use of substances that prove harmful to fish and aquatic wildlife.</p>				
48	Minimize Impacts to Waterside Wetlands. Permittee shall minimize impacts to tidal wetland habitat along levees as this habitat may support the Covered Species. Permittee shall operate construction equipment from the top of levees or from barges to the extent possible.	ITP Condition # 6.7	During Construction/ Entire Project	Permittee	
49	Stockpiles. Permittee shall not stockpile soil or store construction material or debris where it could wash into the waterway or where it would cover the Covered Species habitat. Construction material and debris shall be limited to designated staging areas.	ITP Condition # 6.8	During Construction and Post-construction/ Entire Project	Permittee	
50	Invasive Species. Permittee shall conduct Project activities in a manner that prevents the introduction, transfer, and spread of invasive species, including plants, animals, and microbes (e.g., algae, fungi, parasites, bacteria, etc.), from one project site and/or waterbody to another. Prevention best management practices and guidelines for invasive plants can be found on the California Invasive Plant Council's website at: http://www.cal-ipc.org/ip/prevention/index.php and for invasive mussels and aquatic species can be found at the Stop Aquatic Hitchhikers website: http://www.protectyourwaters.net/ .	ITP Condition # 6.9	During Construction and Post-construction/ Entire Project	Permittee	
51	Permittee shall provide CDFW an Annual Report on the status of the Covered Species located on the Project Area, no later than January 31 of every year beginning with issuance of this ITP and continuing for seven years. Each annual report shall include, at a minimum: (1) names and titles of each survey crew member; (2) survey methods and dates; (3) the size and location of each reference site and translocated occurrence of the Covered Species in the HM lands; (4) the relative habitat condition of each occurrence; (5) the specific habitat conditions in the HM lands, including percent cover of all other plant species in the HM lands; and (6) a brief analysis of the status of translocated Covered Species relative to the other occurrences in the Project Area. Each Annual Report shall also include a summary of any Covered Species management that occurred during the year. The Annual Report information may be included as part of the Fish Restoration Program Annual Chipps Island Report submitted to CDFW and the Fish Agency Strategy Team (FAST).	ITP Condition # 7.2.8.4	During Construction and Post-construction	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
POST-CONSTRUCTION					
52	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 and all ASRs; (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; (4) information about other Project impacts on the Covered Species; (5) beginning and ending dates of the 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 the 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.	ITP Condition # 5.7	Post-construction and after completion of all mitigation	Permittee	
53	Post-Construction Survey for Covered Species. Permittee shall conduct a Post-Project Survey for the Covered Species at each breach location where the Pre-Construction Survey (Condition of Approval 6.5) indicated the Covered Species was present within 100 feet of each side of the breach. This survey shall be conducted within 45 days of completing breaching activities. If within the first 45 days tides are not low enough to expose mud banks (less than +0.64 ft NAVD88 as estimated for the Pittsburg, New York Slough, Suisun Bay, California Tide Station), the survey shall be completed during the first low tide thereafter. The survey shall indicate the relative condition of each population, identify any construction-related impacts (e.g., covered in silt, crushed by equipment, erosion, etc.), and assess the erosion risk to the Covered Species caused by the breach. Permittee shall submit the survey results to CDFW no later than 30 days after completing the Post-Project Survey.	ITP Condition # 6.10	Post-construction	Permittee	
54	Post-Project Breach Stabilization. If bank erosion at a constructed breach will result in the take or foreseeable take of the Covered Species in the upcoming wet season(s), Permittee shall consult with CDFW to discuss bank stabilization measures or other measures to prevent the Covered Species from eroding away. If bank stabilization measures are not feasible, CDFW may require Permittee to transplant and monitor the Covered Species.	ITP Condition # 6.11	Post-construction	Permittee	
55	Permittee shall monitor all transplanted individuals and populations in the vicinity of any breach for potential erosion impacts to Mason's lilaeopsis for a minimum of seven years. HM lands shall be managed and monitored in perpetuity.	ITP Condition # 7.2.8.3	Post-construction	Permittee	
56	After initiating management activities, Permittee or CDFW may determine that an alternative management approach would be more successful in protecting or enhancing Covered Species habitat or is necessary to ensure successful implementation of this mitigation. The MLMMP may be revised accordingly. Permittee shall acquire CDFW's approval of all revisions to the MLMMP at least one month prior to conducting new or modified activities.	ITP Condition # 7.2.8.5	Post-construction	Permittee	

	Mitigation Measure	Source	Implementation Schedule	Responsible Party	Status / Date / Initials
57	Following completion of the seven-year monitoring period for translocated Mason's lilaeopsis, Permittee shall prepare a summary report describing the success of the translocated plants as specified in the MLMMP. The report shall detail Covered Species monitoring and management approaches used in the Project Area, any management adaptations attempted, the percent invasive species cover in each management area at the end of each management year, a description of the response of Covered Species to management activities over the management period, and any other information that would inform future monitoring and management activities in the Project Area. The report shall be submitted to CDFW staff for review.	ITP Condition # 7.2.8.6	Post-construction	Permittee	
58	CDFW accepts the Final Mitigation Report as complete.		Post-construction and completion of mitigation	CDFW	



Department of Fish and Wildlife

BIOLOGIST RESUME COVER SHEET

Date 06.10.2021

EACH RESUME MUST BE SUBMITTED AS A SEPARATE FILE

Number of Resumes Included in Transmittal: _____

Name	Requested Role(s)¹	Species/Resource(s)

¹ Requested roles correspond to the biological staffing requirements indicated in the Lake and Streambed Alteration (LSA) Agreement or Incidental Take Permit (ITP). Roles may include a “Qualified Biologist” or “Designated Biologist” with the necessary experience to survey for special status species, or a “Biological Monitor” with the necessary experience to monitor construction activities for special status species. An individual may request more than one role.



Department of Fish and Wildlife

BIOLOGIST RESUME FORM

Date 06.10.2021

SECTION 1. NAME AND CONTACT INFORMATION

Name:		Title:	
Company Name & Address:		Phone:	
		Email:	

SECTION 2. EDUCATION

College/University & Degree Type Related to Natural Resource Science:	
Other Relevant Workshops & Training:	

SECTION 3. ROLE(S) AND PERMIT REQUIREMENTS

Requested Role(s):	
Relevant LSA Agreement Measures or ITP Conditions²:	

SECTION 4. SPECIES AND RESOURCE EXPERIENCE – SUMMARY

LSA Agreement/ITP Special Status Species & Other Sensitive Resources				
<i>This section summarizes experience for species and other resource. Use one line for: 1) each species or other resource where surveys or special protections are required in the LSA Agreement/ITP for which the biologist is requesting approval.³ If more space is needed, add rows to this table. Provide details in Section 5.</i>				
Species or Resource	Number of Field Seasons & Hours, Life Stages Observed <i>Provide project details in Section 5</i>	Life History Knowledge <i>Describe formal workshops & training with dates, or informal training details</i>	CDFW SCP, MOU, & USFWS 10a1a Authorization Number & Authorized Activities <i>This form does not fulfill SCP, MOU, & USFWS 10a1a reporting requirements</i>	
Insert Species or Resource 1	Field seasons: Hours: Life Stages:			Issued to: Expiration: Agency contact:
Insert Species or Resource 2	Field seasons: Hours: Life Stages:			Issued to: Expiration: Agency contact:
Insert Species or Resource 3	Field seasons: Hours: Life Stages:			Issued to: Expiration: Agency contact:
Insert Species or Resource 4	Field seasons: Hours: Life Stages:			Issued to: Expiration: Agency contact:

² List all measures and conditions from the LSA Agreement or ITP requiring biological staff (i.e., Qualified Biologist, Designated Biologist, or Biological Monitor).

³ Often LSA Agreements/ITPs require surveys and other protections for multiple species and other resources. Include only those for which the biologist has experience and is requesting approval.

SECTION 5. SPECIES AND RESOURCE EXPERIENCE – DETAILS

This section provides detailed experience from the three most recent and relevant projects for each species and resource identified in Section 4. If more space is needed, attach additional pages in the same table format (i.e., copy/paste format).

Insert Species or Resource 1

Project 1 Name & Location:		Project Start & End Dates:	
LSA Agreement, ITP, or Other Agency Permit Number:		Role(s)⁴:	
Survey Type(s)⁵:		Construction Monitoring⁶:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDDB ⁷ (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDDB, why:			
CDFW and Other Agency Email:			
Project 2 Name & Location:		Project Start & End Dates:	
LSA Agreement, ITP, or Other Agency Permit Number:		Role(s):	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDDB (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDDB, why:			
CDFW and Other Agency Email:			
Project 3 Name & Location:		Project Start & End Dates:	
LSA Agreement, ITP, or Other Agency Permit Number:		Role(s):	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDDB (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDDB, why:			

⁴ Insert the role as described in the associated LSA Agreement, ITP or other agency permit. If these permits were not issued, describe the role based on the duties, e.g., “lead biologist with handling authorization” or “biological monitor.”

⁵ For example, pre-construction survey or description of the protocol or guideline followed.

⁶ Include the number of days and describe the types of activities monitored (e.g., heavy equipment operation).

⁷ CNDDDB is the abbreviation for California Natural Diversity Database.

Project Name:
LSA Agreement/ITP Number(s):

CDFW and Other Agency Email:			
Additional Information:			
Insert Species or Resource 2			
Project 1 Name & Location:		Project Start & End Dates:	
LSA Agreement, ITP, or Other Agency Permit Number:		Role(s):	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDDB (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDDB, why:			
CDFW and Other Agency Email:			
Project 2 Name & Location:		Project Start & End Dates:	
LSA Agreement, ITP, or Other Agency Permit Number:		Role(s):	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDDB (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDDB, why:			
CDFW and Other Agency Email:			
Project 3 Name & Location:		Project Start & End Dates:	
LSA Agreement, ITP, or Other Agency Permit Number:		Role(s):	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDDB (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDDB, why:			
CDFW and Other Agency Email:			
Additional Information:			
Insert Species or Resource 3			
Project 1 Name & Location:		Project Start & End Dates:	

Project Name:
LSA Agreement/ITP Number(s):

LSA Agreement, ITP, or Other Agency Permit Number:		Role(s):	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDDB (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDDB, why:			
CDFW and Other Agency Email:			
Project 2 Name & Location:		Project Start & End Dates:	
LSA Agreement, ITP, or Other Agency Permit Number:		Role(s):	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDDB (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDDB, why:			
CDFW and Other Agency Email:			
Project 3 Name & Location:		Project Start & End Dates:	
LSA Agreement, ITP, or Other Agency Permit Number:		Role(s):	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDDB (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDDB, why:			
CDFW and Other Agency Email:			
Additional Information:			
Insert Species or Resource 4			
Project 1 Name & Location:		Project Start & End Dates:	
LSA Agreement, ITP, or Other Agency Permit Number:		Role(s):	
Survey Type(s):		Construction Monitoring:	Days: Activities:

Project Name:
LSA Agreement/ITP Number(s):

Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDDB (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDDB, why:			
CDFW and Other Agency Email:			
Project 2 Name & Location:		Project Start & End Dates:	
LSA Agreement, ITP, or Other Agency Permit Number:		Role(s):	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDDB (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDDB, why:			
CDFW and Other Agency Email:			
Project 3 Name & Location:		Project Start & End Dates:	
LSA Agreement, ITP, or Other Agency Permit Number::		Role(s):	
Survey Type(s):		Construction Monitoring:	Days: Activities:
Species Life Stages Observed & Handled, Number of Each:	Life Stage: Number Observed: Number Handled: Reported to CNDDDB (Y/N):	Company Name, Professional Reference Name, Phone, Email:	
If <u>not</u> reported to CNDDDB, why:			
CDFW and Other Agency Email:			
Additional Information:			

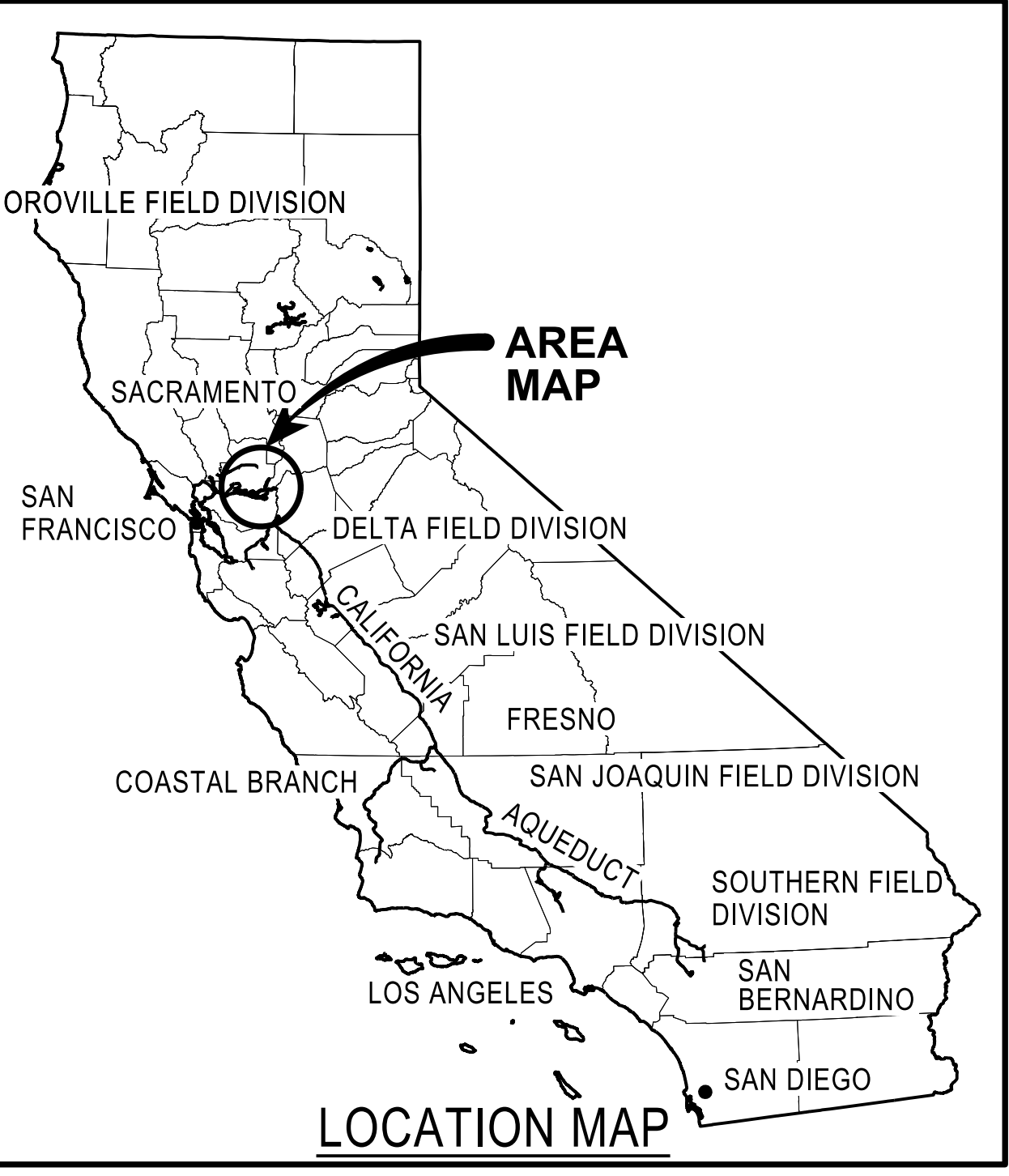
A

B

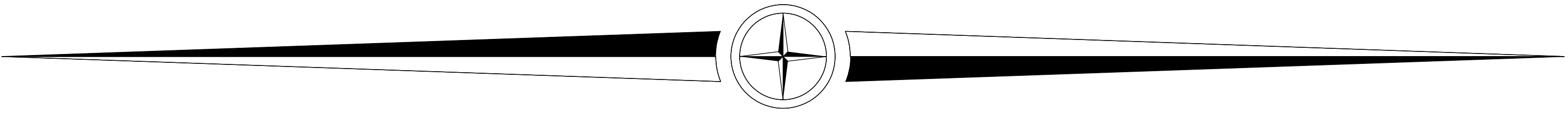
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D

E



STATE OF CALIFORNIA
CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF ENGINEERING



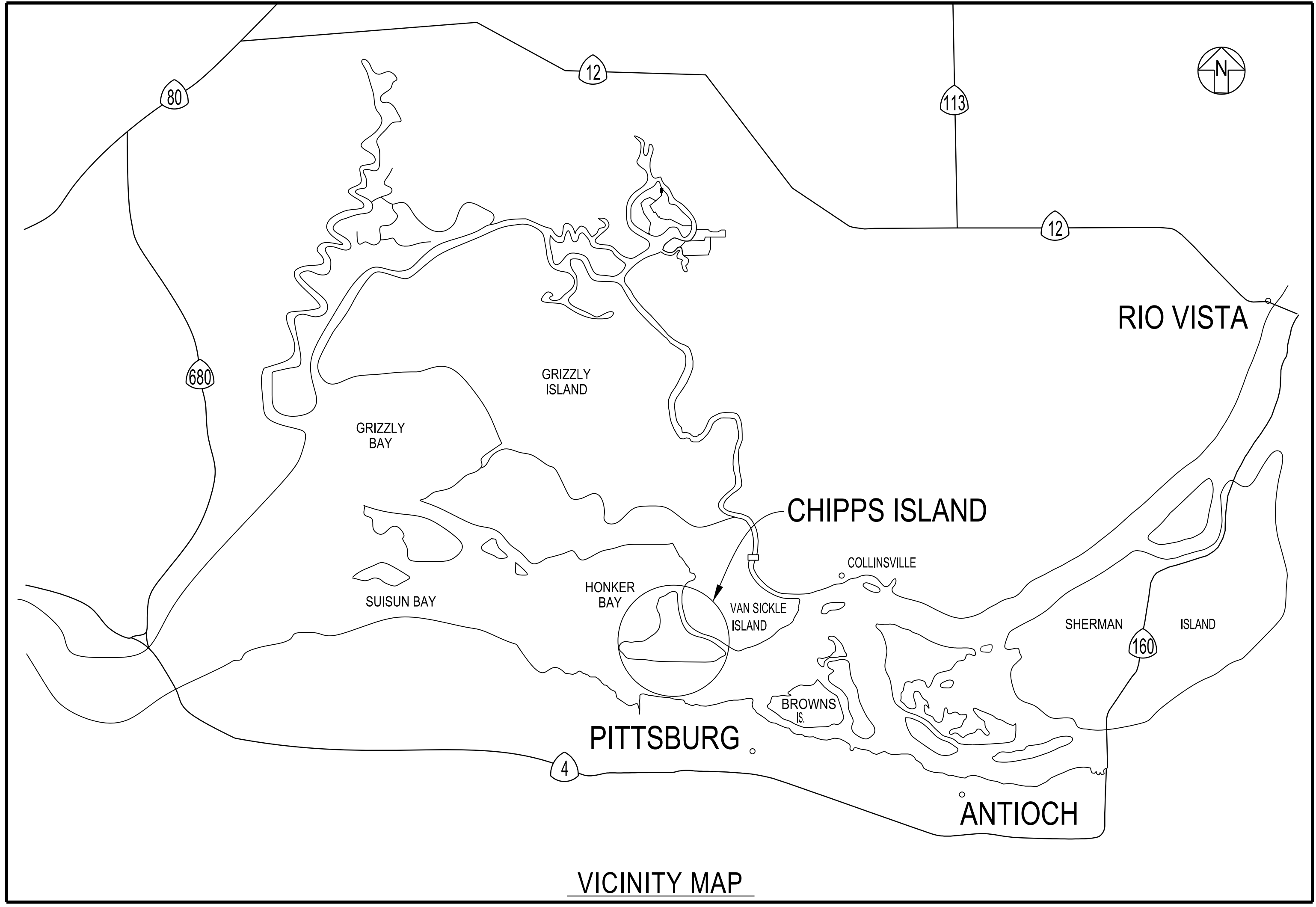
STATE WATER FACILITIES
DIVISION OF INTEGRATED SCIENCE & ENGINEERING
CHIPPS ISLAND
NORTH PARCEL TIDAL HABITAT RESTORATION - PHASE 2C

**THINK SAFETY
ACT SAFELY**

APP.	OSFM #
STATE OF CALIFORNIA CALIFORNIA NATURAL RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING	



SPECIFICATION NO. 24-XX



REV.	DESCRIPTION	SUB. DATE	APP. DATE



APPROVAL RECOMMENDED: DATE:

MANAGER DESIGN APPROVED: DATE:

MANAGER, DIVISION OF ENGINEERING

SPEC. NO. 24-XX	SHEET NO. 001	DRAWING NO. G-101
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PLOT DATE: 4/5/2024

1 2 3 4 5 6 7


LIST OF DRAWINGS

SHEET NO.	DRAWING NO.	DRAWING TITLE
001	G-101	COVER SHEET AND LOCATION MAP
002	G-102	LIST OF DRAWINGS
003	G-103	ABBREVIATIONS AND SYMBOLS
004	C-101	SITE PLAN - FINISHED CONDITION
005	C-102	SITE PLAN - EXISTING CONDITION
006	C-103	CHANNEL NO. 1 - FINISHED CONDITION - PLAN
007	C-104	CHANNEL NO. 1 - EXISTING CONDITION - PLAN
008	C-105	CHANNEL NO. 2 & 3 - FINISHED CONDITION - PLAN
009	C-106	CHANNEL NO. 2 & 3 - EXISTING CONDITION - PLAN
010	C-107	CHANNEL NO. 4 - FINISHED CONDITION - PLAN
011	C-108	CHANNEL NO. 4 - EXISTING CONDITION - PLAN
012	C-109	CHANNEL NO. 5 AND STARTER CHANNELS 5, 6, AND 7 - FINISHED CONDITION - PLAN
013	C-110	CHANNEL NO. 5 AND STARTER CHANNELS 5, 6, AND 7 - EXISTING CONDITION - PLAN
014	C-111	CHANNEL NO. 6 - FINISHED CONDITION - PLAN
015	C-112	CHANNEL NO. 6 - EXISTING CONDITION - PLAN
016	C-113	STARTER CHANNELS NO. 8 & 9 - FINISHED CONDITION - PLAN
017	C-114	STARTER CHANNELS NO. 8 & 9 - EXISTING CONDITION - PLAN
018	C-115	BREACH NO. 2 - FINISHED CONDITION - PLAN
019	C-116	BREACH NO. 2 - EXISTING CONDITION - PLAN
020	C-117	BREACH NO. 4 - FINISHED CONDITION - PLAN
021	C-118	BREACH NO. 4 - EXISTING CONDITION - PLAN
022	C-119	BREACH NO. 8 - FINISHED CONDITION - PLAN
023	C-120	BREACH NO. 8 - EXISTING CONDITION - PLAN
024	C-121	CHANNEL NO. 1, 2 & 3 - SECTIONS
025	C-122	CHANNEL NO. 4, 5, 6 & STARTER CHANNEL - SECTIONS
026	C-123	BREACHES EXCAVATION - SECTIONS
027	C-124	COORDINATES TABLES

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APP.	OSFM #
STATE OF CALIFORNIA CALIFORNIA NATURAL RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING	

REV.	DESCRIPTION	SUB. DATE	APP. DATE

	DESIGNED: KHOI NGUYEN
	DRAWN: KHOI NGUYEN
	CHECKED: DUC TRAN
	REVIEWED: VU THAI
	SUBMITTED:

APPROVAL RECOMMENDED: _____ DATE: _____
 MANAGER, CIVIL 2, REG. CE. NO. _____
 APPROVED: _____ DATE: _____
 MANAGER, BRANCH, REG. C.E. NO. _____

CALIFORNIA NATURAL RESOURCES AGENCY
 DEPARTMENT OF WATER RESOURCES
STATE WATER FACILITIES
 DIV OF INTEGRATED SCI & ENG
CHIPPS ISLAND
 NORTH PARCEL TIDAL HABITAT
 RESTORATION - PHASE 2C

LIST OF DRAWINGS

SPEC. NO.	SHEET NO.	DRAWING NO.
24-XX	002	G-102

A
B
C
D
E

1 2 3 4 5 6 7

A	A		F		R	
	AB ----- AGGREGATE BASE ADJ. ----- ADJUSTABLE AGG. ----- AGGREGATE ALUM. ----- ALUMINUM ALT. ----- ALTERNATE A.B. ----- ANCHOR BOLT A.C.I. ----- AMERICAN CONCRETE INSTITUTE A.P.A. ----- AMERICAN PLYWOOD ASSOCIATION A.S.C.E. ----- AMERICAN SOCIETY OF CIVIL ENGINEERS A.S.T.M. ----- AMERICAN SOCIETY FOR TESTING AND MATERIALS A.W.S. ----- AMERICAN WELDING SOCIETY AWWA ----- AMERICAN WATER WORKS ASSOCIATION		FIN. ----- FINISHED FL. OR FLR. ----- FLOOR FT. ----- FEET F.B. ----- FLAT BAR F.D. ----- FLOOR DRAIN F.G. ----- FINISHED GRADE		R ----- RADIUS OR RISER RAD. ----- RADIUS REF. ----- REFERENCE REQ'D. ----- REQUIRED RT. ----- RIGHT R/W ----- RIGHT OF WAY RCCP ----- REINFORCED CONCRETE CYLINDER PIPE RCP ----- REINFORCED CONCRETE PIPE	
	B		G		S	
B	BOT. ----- BOTTOM BRG. ----- BEARING BK ----- BACK BLDG ----- BUILDING B.C. ----- BEGIN CURVE B.O.L. ----- BEGINNING OF LINE B.P. ----- BASE PLATE B.V.C. ----- BEGIN VERTICAL CURVE B.A.B. ----- BOTTOM ALTERNATE BENT		GRD ----- GROUND		S ----- SECTION MODULUS S= ----- SLOPE SPEC'S ----- SPECIFICATIONS SQ. ----- SQUARE SQ. YDS. ----- SQUARE YARDS STA. ----- STATION STD. ----- STANDARD SYMM. ----- SYMMETRICAL	
	C		H		T	
	CFS. ----- CUBIC FEET PER SECOND CU. YDS. ----- CUBIC YARDS		HD. ----- HEAD HEX. ----- HEXAGON HMA ----- HOT MIX ASPHALT HOR. ----- HORIZONTAL HR. ----- HOUR		TYP. ----- TYPICAL	
C	D		I		W	
	DET. ----- DETAIL D OR DIA. ----- DIAMETER DIM. ----- DIMENSION DISE ----- DIVISION OF INTEGRATED SCIENCE AND ENGINEERING DN. ----- DOWN DWG. ----- DRAWING		IN. ----- INCHES INC. ----- INCLUDING INV. ----- INVERT I ----- MOMENT OF INERTIA I.D. ----- INSIDE DIAMETER		W ----- WIDTH W/ ----- WITH WCS ----- WATER CONTROL STRUCTURE W.S. ----- WATER SURFACE	
	E		L		SYMBOLS	
D	EA. ----- EACH ELEV. OR EL. ----- ELEVATION EQ. ----- EQUAL EQUIP. ----- EQUIPMENT EQUIV. ----- EQUIVALENT EXIST. ----- EXISTING		LBS. ----- POUNDS		@ ----- AT ----- CENTERLINE \ ----- DEFLECTION ANGLE ° ----- DEGREE ' ----- MINUTE OR FEET " ----- SECONDS OR INCHES) ----- ROUND, DIAMETER □ ----- SQUARE # ----- NUMBER OR POUND d. ----- PENNYWEIGHT f ----- PLATE ① ----- GRID LINES	
	M		N			
	MATL. ----- MATERIAL MAX. ----- MAXIMUM MIN. ----- MINIMUM MP ----- MILE POST		NO. ----- NUMBER NIC ----- NOT IN CONTRACT NTS ----- NOT TO SCALE			
E	O		P			
	O.D. ----- OUTSIDE DIAMETER O.G. ----- ORIGINAL GROUND O.H. ----- OVERHEAD WIRE O-O ----- OUT - OUT		PSF ----- POUNDS PER SQUARE FOOT PSI ----- POUNDS PER SQUARE INCH PVC ----- POLYVINYL CHLORIDE PVTM ----- PAVEMENT PP ----- POWER POLE			

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APP.	OSFM #
STATE OF CALIFORNIA CALIFORNIA NATURAL RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING	

REV.	DESCRIPTION	SUB. DATE	APP. DATE

DESIGNED: KHOI NGUYEN
DRAWN: KHOI NGUYEN
CHECKED: DUC TRAN
REVIEWED: VU THAI
SUBMITTED:

APPROVAL RECOMMENDED: _____ DATE: _____

MANAGER, CIVIL 2, REG. CE. NO. _____

APPROVED: _____ DATE: _____

MANAGER, BRANCH, REG. C.E. NO. _____

CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
STATE WATER FACILITIES
DIV OF INTEGRATED SCI & ENG

CHIPPS ISLAND
NORTH PARCEL TIDAL HABITAT
RESTORATION - PHASE 2C

ABBREVIATIONS AND SYMBOLS

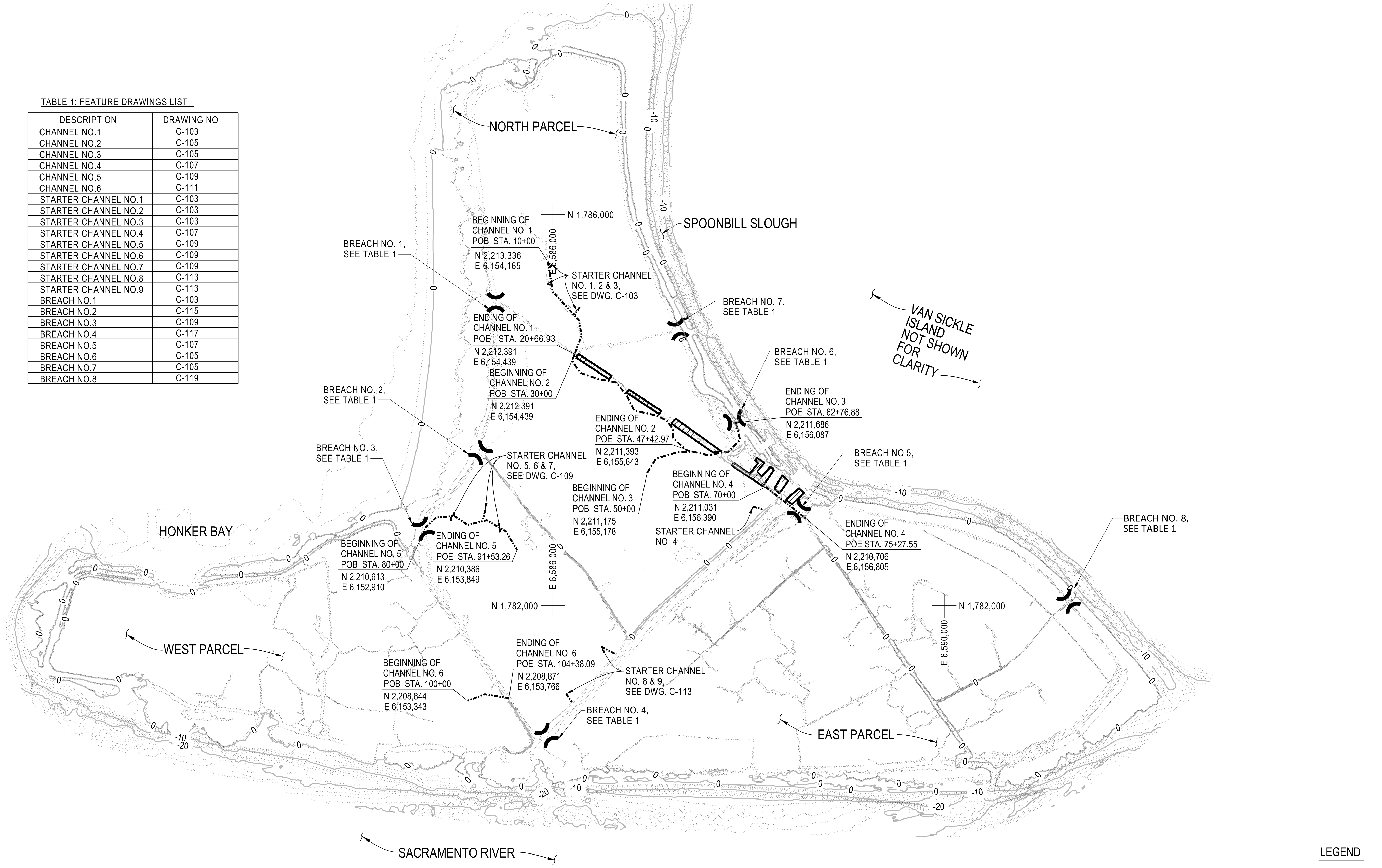
SPEC. NO. 24-XX	SHEET NO. 003	DRAWING NO. G-103
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1 2 3 4 5 6 7

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TABLE 1: FEATURE DRAWINGS LIST

DESCRIPTION	DRAWING NO
CHANNEL NO.1	C-103
CHANNEL NO.2	C-105
CHANNEL NO.3	C-105
CHANNEL NO.4	C-107
CHANNEL NO.5	C-109
CHANNEL NO.6	C-111
STARTER CHANNEL NO.1	C-103
STARTER CHANNEL NO.2	C-103
STARTER CHANNEL NO.3	C-103
STARTER CHANNEL NO.4	C-107
STARTER CHANNEL NO.5	C-109
STARTER CHANNEL NO.6	C-109
STARTER CHANNEL NO.7	C-109
STARTER CHANNEL NO.8	C-113
STARTER CHANNEL NO.9	C-113
BREACH NO.1	C-103
BREACH NO.2	C-115
BREACH NO.3	C-109
BREACH NO.4	C-117
BREACH NO.5	C-107
BREACH NO.6	C-105
BREACH NO.7	C-105
BREACH NO.8	C-119



APP.	OSFM #
STATE OF CALIFORNIA CALIFORNIA NATURAL RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING	

REV.	DESCRIPTION	SUB. DATE	APP. DATE

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DRAWN: KHOI NGUYEN
CHECKED: DUC TRAN
REVIEWED: VU THAI
SUBMITTED:

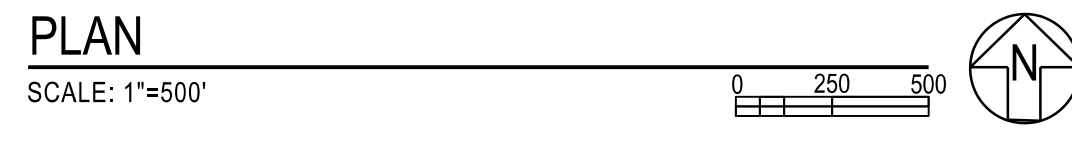
APPROVAL RECOMMENDED:	DATE:
MANAGER, CIVIL 2, REG. CE. NO.	
APPROVED:	DATE:
MANAGER, BRANCH, REG. C.E. NO.	

CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
STATE WATER FACILITIES
DIV OF INTEGRATED SCI & ENG
CHIPPS ISLAND
NORTH PARCEL TIDAL HABITAT
RESTORATION - PHASE 2C

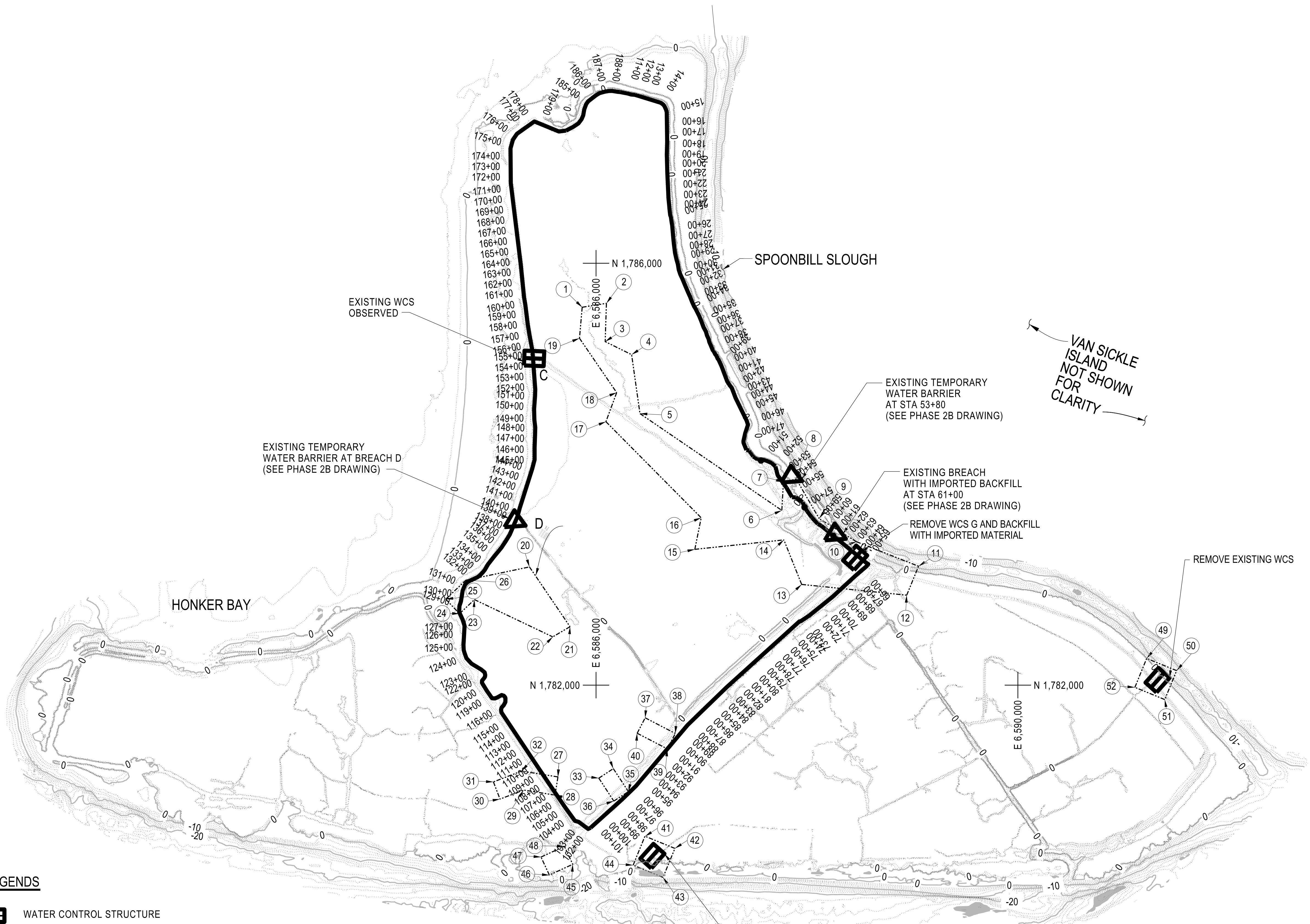
FINISHED CONDITION

SITE PLAN		
SPEC. NO. 24-XX	SHEET NO. 004	DRAWING NO. C-101

1 2 3 4 5 6 7



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LEGENDS

- WATER CONTROL STRUCTURE
- EXISTING BREACH LOCATION
- CLEARING AREA

PLAN
SCALE: 1"=500'

NOTES
1. SEE DWG. C-124 FOR CORNER COORDINATES.

APP.	OSFM #
STATE OF CALIFORNIA CALIFORNIA NATURAL RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING	

REV.	DESCRIPTION	SUB. DATE	APP. DATE

DESIGNED:	KHOI NGUYEN
DRAWN:	KHOI NGUYEN
CHECKED:	DUC TRAN
REVIEWED:	VU THAI
SUBMITTED:	

APPROVAL RECOMMENDED:	DATE:
MANAGER, CIVIL 2, REG. C.E. NO.	
APPROVED:	DATE:
MANAGER, BRANCH, REG. C.E. NO.	

CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
STATE WATER FACILITIES
DIV OF INTEGRATED SCI & ENG
CHIPPS ISLAND
NORTH PARCEL TIDAL HABITAT
RESTORATION - PHASE 2C

EXISTING CONDITION

SITE PLAN		
SPEC. NO.	SHEET NO.	DRAWING NO.
24-XX	005	C-102

1 2 3 4 5 6 7

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APP. OSFM#
STATE OF CALIFORNIA
CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF ENGINEERING

REV.	DESCRIPTION	SUB. DATE	APP. DATE
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DESIGNED: KHOI NGUYEN
DRAWN: KHOI NGUYEN
CHECKED: DUC TRAN
REVIEWED: VU THAI
SUBMITTED:

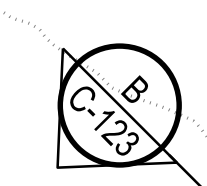
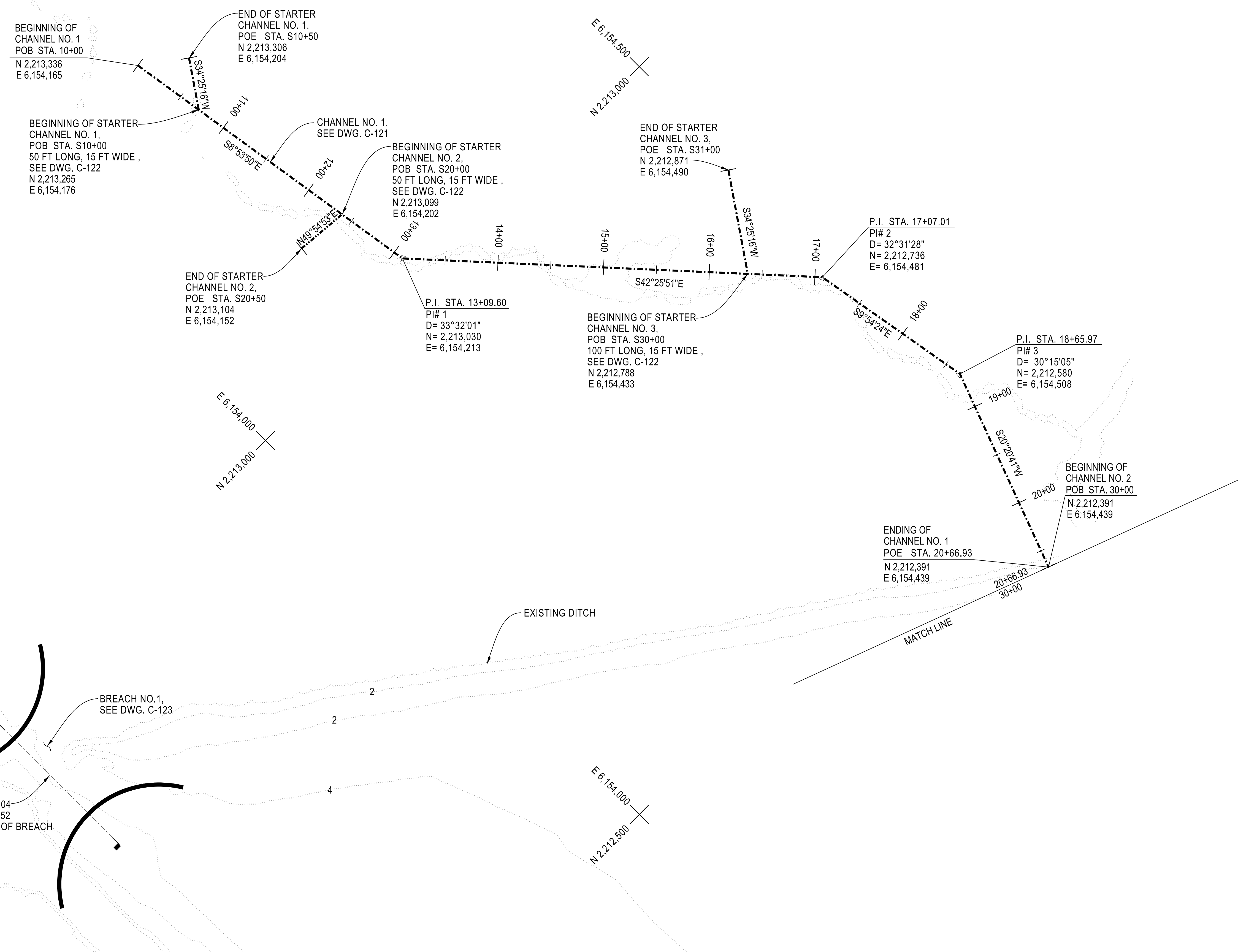
APPROVAL RECOMMENDED: DATE:
MANAGER, CIVIL 2, REG. CE. NO.
APPROVED: DATE:
MANAGER, BRANCH, REG. C.E. NO.

CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
STATE WATER FACILITIES
DIV OF INTEGRATED SCI & ENG
CHIPPS ISLAND
NORTH PARCEL TIDAL HABITAT
RESTORATION - PHASE 2C

CHANNEL NO. 1
FINISHED CONDITION

PLAN
SPEC. NO. SHEET NO. DRAWING NO.
24-XX 006 C-103

PLOT DATE: 4/5/2024



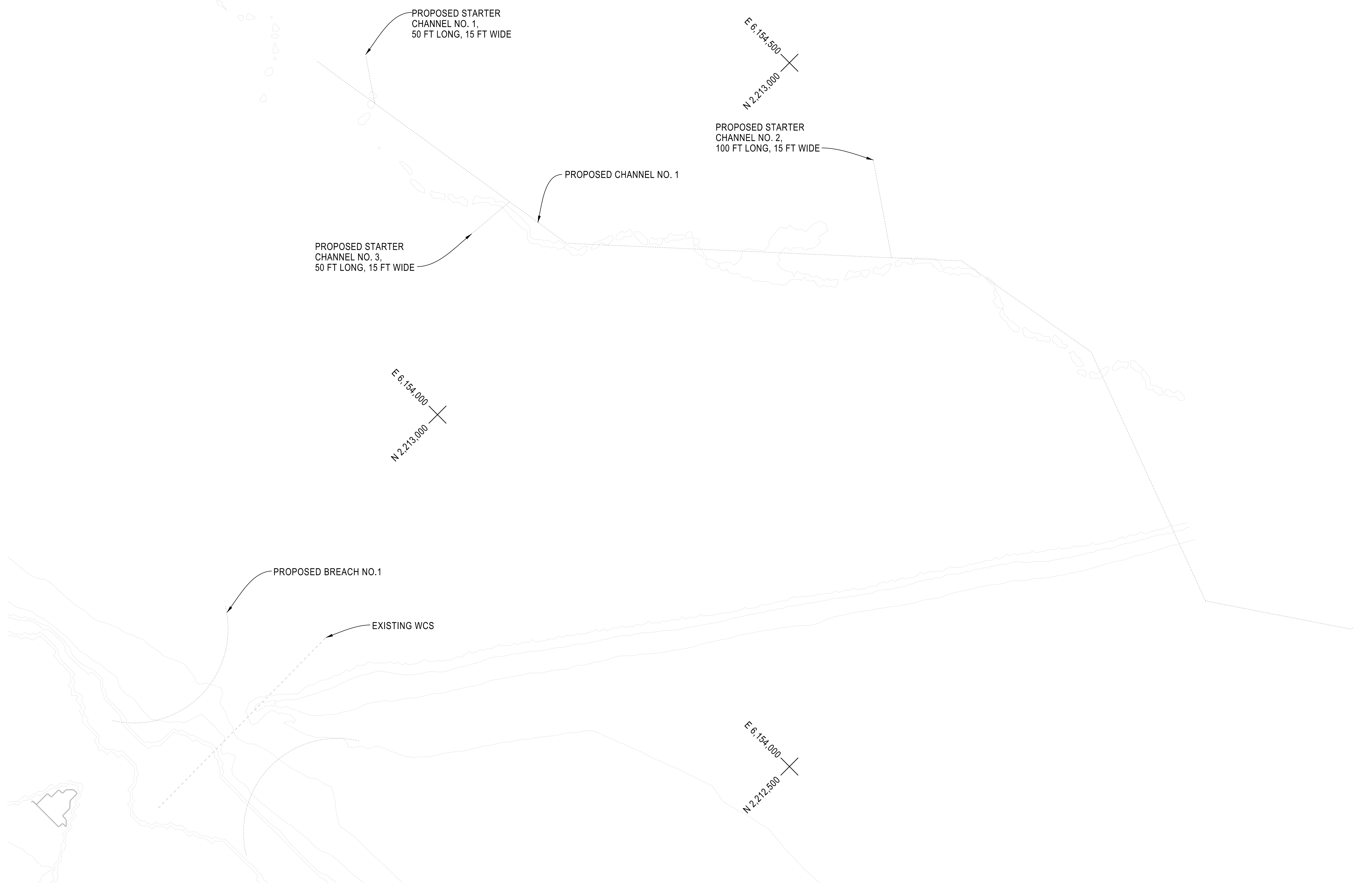
PLAN
SCALE: 1"=50'
DWG. C-101



1 2 3 4 5 6 7

1 2 3 4 5 6 7

THINK SAFETY
ACT SAFELY



APP.	OSFM #
STATE OF CALIFORNIA CALIFORNIA NATURAL RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING	

REV.	DESCRIPTION	SUB. DATE	APP. DATE

	DESIGNED: KHOI NGUYEN
	DRAWN: KHOI NGUYEN
	CHECKED: DUC TRAN
	REVIEWED: VU THAI
	SUBMITTED:

APPROVAL RECOMMENDED:	DATE:
MANAGER, DESIGN	
APPROVED:	DATE:
MANAGER, DIVISION OF ENGINEERING	

CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
STATE WATER FACILITIES
DIV OF INTEGRATED SCI & ENG

CHIPPS ISLAND
NORTH PARCEL TIDAL HABITAT
RESTORATION - PHASE 2C

CHANNEL NO. 1
EXISTING CONDITION

PLAN
SCALE: 1"=50'

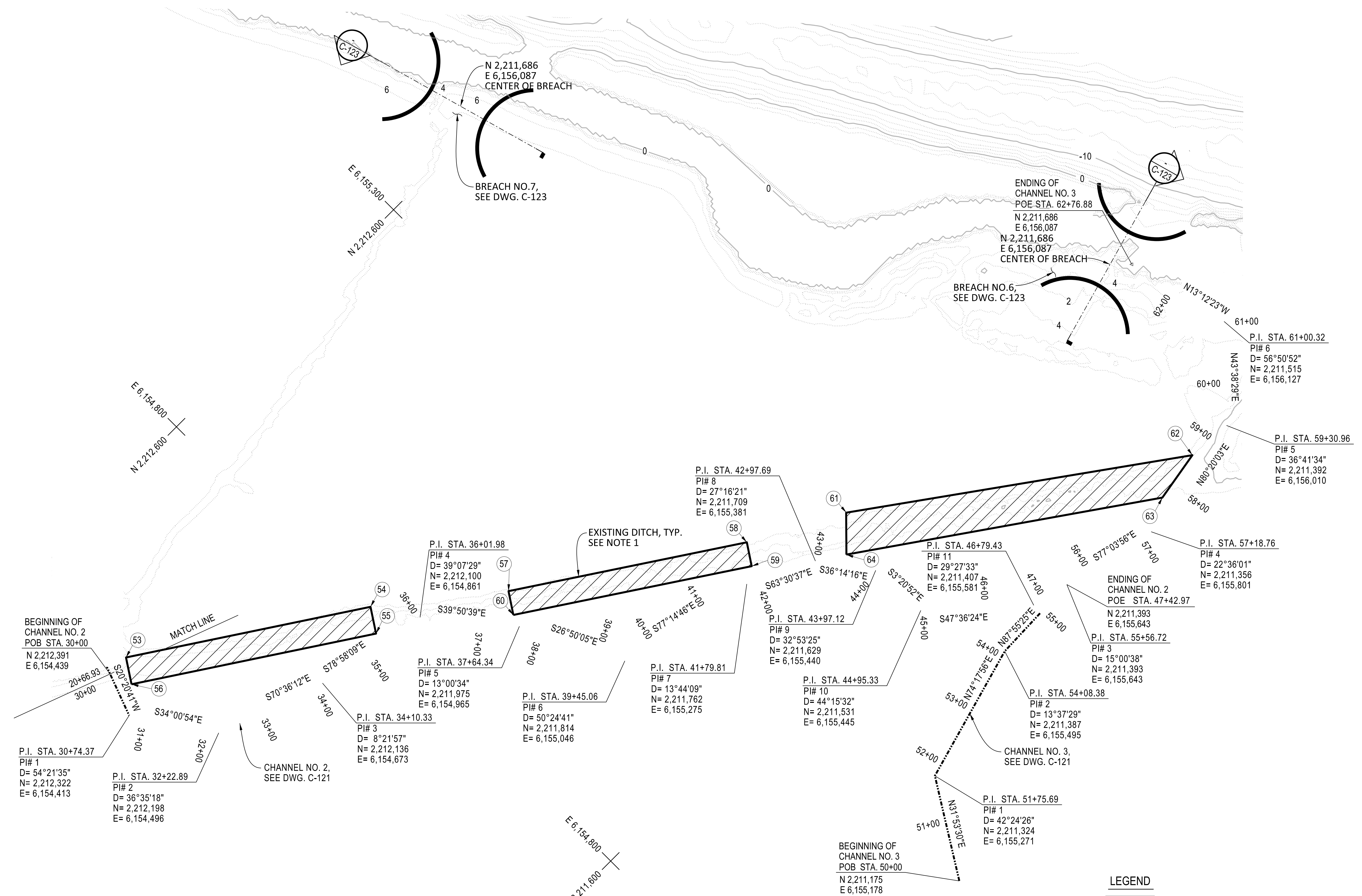
DWG. C-102

SPEC. NO.	SHEET NO.	DRAWING NO.
24-XX	007	C-104

PLOT DATE: 4/5/2024

1 2 3 4 5 6 7

THINK SAFETY
ACT SAFELY



PLAN
SCALE: 1"=80'
DWG. C-101

APP. OSFM #
STATE OF CALIFORNIA
CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF ENGINEERING

REV.	DESCRIPTION	SUB. DATE	APP. DATE

DESIGNED: KHOI NGUYEN
DRAWN: KHOI NGUYEN
CHECKED: DUC TRAN
REVIEWED: VU THAI
SUBMITTED:

APPROVAL RECOMMENDED: DATE:
MANAGER DESIGN
APPROVED: DATE:
MANAGER, DIVISION OF ENGINEERING
CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
STATE WATER FACILITIES
DIV OF INTEGRATED SCI & ENG
CHIPPS ISLAND
NORTH PARCEL TIDAL HABITAT
RESTORATION - PHASE 2C

CHANNEL NO. 2 & 3
FINISHED CONDITION
PLAN
SPEC. NO. 24-XX SHEET NO. 008 DRAWING NO. C-105
PLOT DATE: 4/5/2024

1 2 3 4 5 6 7



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APP.	OSFM #
STATE OF CALIFORNIA CALIFORNIA NATURAL RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING	

REV.	DESCRIPTION	SUB. DATE	APP. DATE

DESIGNED:	KHOI NGUYEN
DRAWN:	KHOI NGUYEN
CHECKED:	DUC TRAN
REVIEWED:	VU THAI
SUBMITTED:	

APPROVAL RECOMMENDED:	DATE:
MANAGER, DESIGN	
APPROVED:	DATE:
MANAGER, DIVISION OF ENGINEERING	

CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
STATE WATER FACILITIES
DIV OF INTEGRATED SCI & ENG

CHIPPS ISLAND
NORTH PARCEL TIDAL HABITAT
RESTORATION - PHASE 2C

CHANNEL NO. 2 & 3
EXISTING CONDITION

PLAN
SCALE: 1"=80'

DWG. C-102

PLAN		
SPEC. NO.	SHEET NO.	DRAWING NO.
24-XX	009	C-106

PLOT DATE: 4/5/2024

1 2 3 4 5 6 7

1 2 3 4 5 6 7

**THINK SAFETY
ACT SAFELY**

APP. OSFM #
STATE OF CALIFORNIA
CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF
WATER RESOURCES
DIVISION OF ENGINEERING

REV.	DESCRIPTION	SUB. DATE	APP. DATE

DESIGNED: KHOI NGUYEN
DRAWN: KHOI NGUYEN
CHECKED: DUC TRAN
REVIEWED: VU THAI
SUBMITTED:

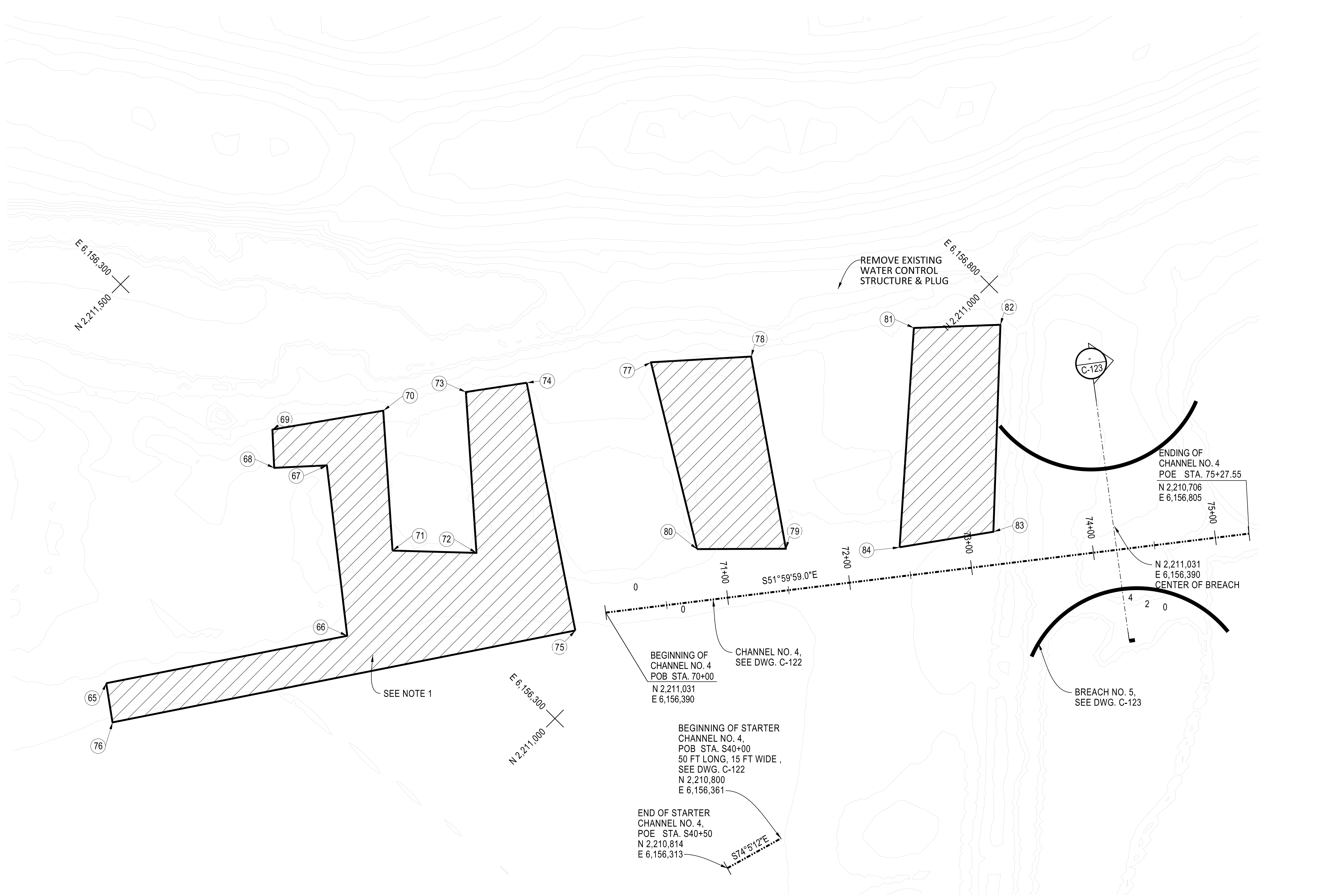
APPROVAL RECOMMENDED:	DATE:
MANAGER, DESIGN	
APPROVED:	DATE:
MANAGER, DIVISION OF ENGINEERING	

CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
STATE WATER FACILITIES
DIV OF INTEGRATED SCI & ENG
CHIPPS ISLAND
NORTH PARCEL TIDAL HABITAT
RESTORATION - PHASE 2C

CHANNEL NO. 4
FINISHED CONDITION

PLAN		
SPEC. NO. 24-XX	SHEET NO. 010	DRAWING NO. C-107

PLOT DATE: 4/5/2024



PLAN
SCALE: 1"=40'
DWG. C-101
0 20 40

1 2 3 4 5 6 7

1 2 3 4 5 6 7

**THINK SAFETY
ACT SAFELY**



PLAN
SCALE: 1"=40'

DWG. C-102

APP.	OSFM #
STATE OF CALIFORNIA CALIFORNIA NATURAL RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING	

REV.	DESCRIPTION	SUB. DATE	APP. DATE

	DESIGNED: KHOI NGUYEN
	DRAWN: KHOI NGUYEN
	CHECKED: DUC TRAN
	REVIEWED: VU THAI
	SUBMITTED:

APPROVAL RECOMMENDED:	DATE:
MANAGER, DESIGN	
APPROVED:	DATE:
MANAGER, DIVISION OF ENGINEERING	

CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
STATE WATER FACILITIES
DIV OF INTEGRATED SCI & ENG

CHIPPS ISLAND
NORTH PARCEL TIDAL HABITAT
RESTORATION - PHASE 2C

CHANNEL NO. 4
EXISTING CONDITION

PLAN		
SPEC. NO. 24-XX	SHEET NO. 011	DRAWING NO. C-108

PLOT DATE: 4/5/2024

1 2 3 4 5 6 7

THINK SAFETY
ACT SAFELY

APP. OSFM #
STATE OF CALIFORNIA
CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF
WATER RESOURCES
DIVISION OF ENGINEERING

REV.	DESCRIPTION	SUB. DATE	APP. DATE

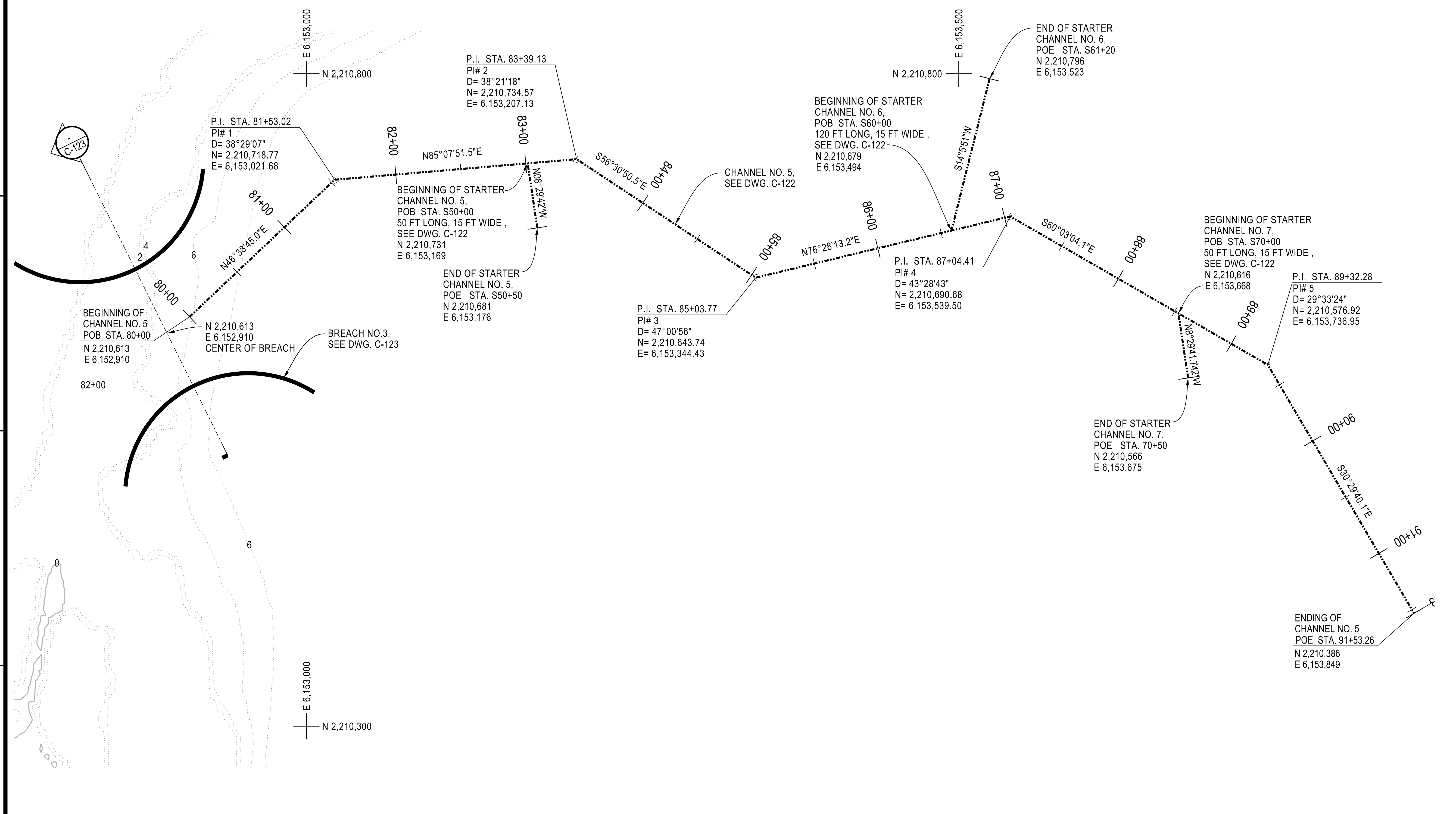
DESIGNED:	KHOI NGUYEN
DRAWN:	KHOI NGUYEN
CHECKED:	DUC TRAN
REVIEWED:	VU THAI
SUBMITTED:	

APPROVAL RECOMMENDED:	DATE:
MANAGER, DESIGN	
APPROVED:	DATE:
MANAGER, DIVISION OF ENGINEERING	

CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
STATE WATER FACILITIES
DIV OF INTEGRATED SCI & ENG
CHIPPS ISLAND
NORTH PARCEL TIDAL HABITAT
RESTORATION - PHASE 2C

CHANNEL NO. 5 AND STARTER
CHANNELS 5, 6, AND 7
FINISHED CONDITION

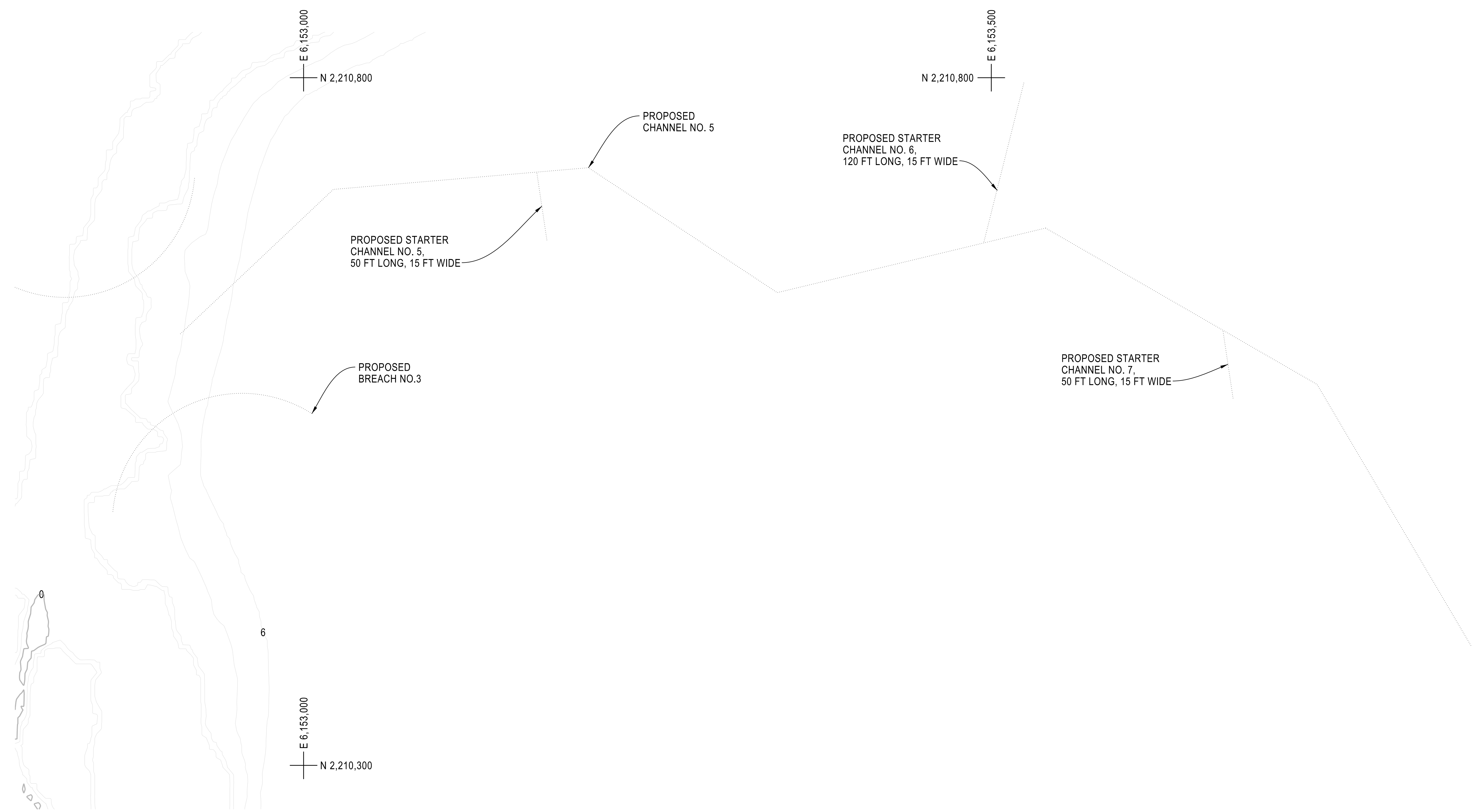
PLAN		
SPEC. NO.	SHEET NO.	DRAWING NO.
24-XX	012	C-109



PLAN
SCALE: 1"=40'
DWG. C-101

1 2 3 4 5 6 7

**THINK SAFETY
ACT SAFELY**



APP.	OSFM #
STATE OF CALIFORNIA CALIFORNIA NATURAL RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING	

REV.	DESCRIPTION	SUB. DATE	APP. DATE

	DESIGNED: KHOI NGUYEN
	DRAWN: KHOI NGUYEN
	CHECKED: DUC TRAN
	REVIEWED: VU THAI
	SUBMITTED:

APPROVAL RECOMMENDED:	DATE:
MANAGER, CIVIL 2, REG. CE. NO.	
APPROVED:	DATE:
MANAGER, BRANCH, REG. C.E. NO.	

CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
STATE WATER FACILITIES
DIV OF INTEGRATED SCI & ENG

CHIPPS ISLAND
NORTH PARCEL TIDAL HABITAT
RESTORATION - PHASE 2C

CHANNEL NO. 5 AND STARTER
CHANNELS 5, 6, AND 7
EXISTING CONDITION

PLAN
SCALE: 1"=40'

DWG. C-102

PLAN		
SPEC. NO. 24-XX	SHEET NO. 013	DRAWING NO. C-110

THINK SAFETY
ACT SAFELY

APP. OSFM #
STATE OF CALIFORNIA
CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF
WATER RESOURCES
DIVISION OF ENGINEERING

REV.	DESCRIPTION	SUB. DATE	APP. DATE

DESIGNED:
KHOI NGUYEN

DRAWN:
KHOI NGUYEN

CHECKED:
DUC TRAN

REVIEWED:
VU THAI

SUBMITTED:

APPROVAL RECOMMENDED: _____ DATE: _____

MANAGER, DESIGN

APPROVED: _____ DATE: _____

MANAGER, DIVISION OF ENGINEERING

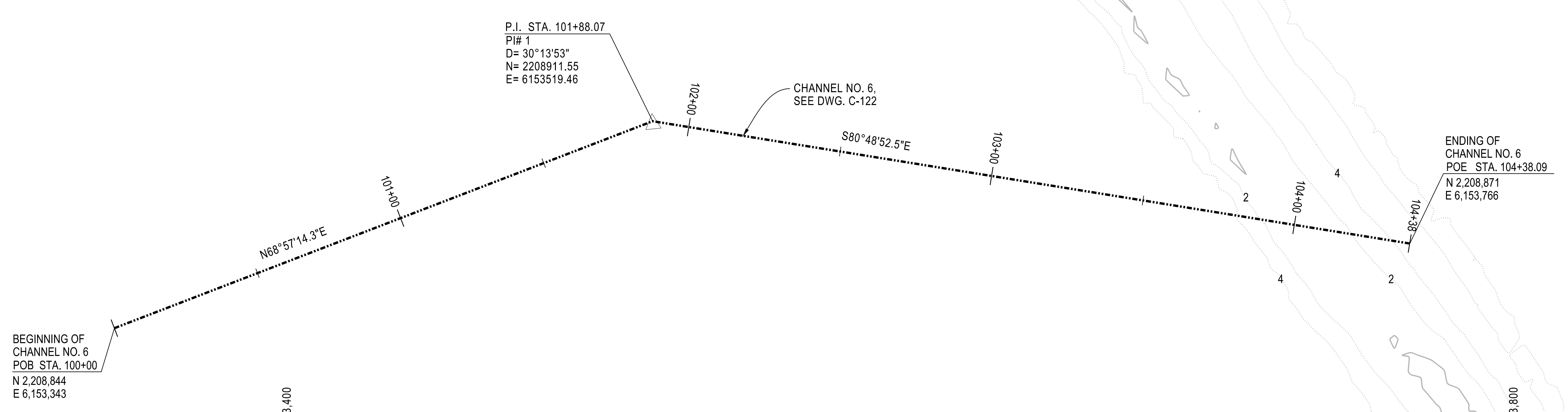
CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
STATE WATER FACILITIES
DIV OF INTEGRATED SCI & ENG

CHIPPS ISLAND
NORTH PARCEL TIDAL HABITAT
RESTORATION - PHASE 2C

CHANNEL NO. 6
FINISHED CONDITION

PLAN

SPEC. NO. 24-XX	SHEET NO. 014	DRAWING NO. C-111
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P.I. STA. 101+88.07
PI# 1
D= 30°13'53"
N= 2208911.55
E= 6153519.46

CHANNEL NO. 6,
SEE DWG. C-122

ENDING OF
CHANNEL NO. 6
POE STA. 104+38.09
N 2,208,871
E 6,153,766

BEGINNING OF
CHANNEL NO. 6
POB STA. 100+00
N 2,208,844
E 6,153,343

E 6,153,400
N 2,208,800

E 6,153,800
N 2,209,000

E 6,153,800
N 2,208,800

PLAN
SCALE: 1"=20'

DWG. C-101

1 2 3 4 5 6 7

**THINK SAFETY
ACT SAFELY**

APP. OSFM #
STATE OF CALIFORNIA
CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF
WATER RESOURCES
DIVISION OF ENGINEERING

REV.	DESCRIPTION	SUB. DATE	APP. DATE

DESIGNED:
KHOI NGUYEN

DRAWN:
KHOI NGUYEN

CHECKED:
DUC TRAN

REVIEWED:
VU THAI

SUBMITTED:

APPROVAL RECOMMENDED: _____ DATE: _____

MANAGER, DESIGN

APPROVED: _____ DATE: _____

MANAGER, DIVISION OF ENGINEERING

CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
**STATE WATER FACILITIES
DIV OF INTEGRATED SCI & ENG**

CHIPPS ISLAND
NORTH PARCEL TIDAL HABITAT
RESTORATION - PHASE 2C

CHANNEL NO. 6
EXISTING CONDITION

PLAN

SPEC. NO. 24-XX	SHEET NO. 015	DRAWING NO. C-112
--------------------	------------------	-----------------------------

PLOT DATE: 4/5/2024

E 6,153,800
N 2,209,000

E 6,153,400
N 2,208,800

E 6,153,800
N 2,208,800

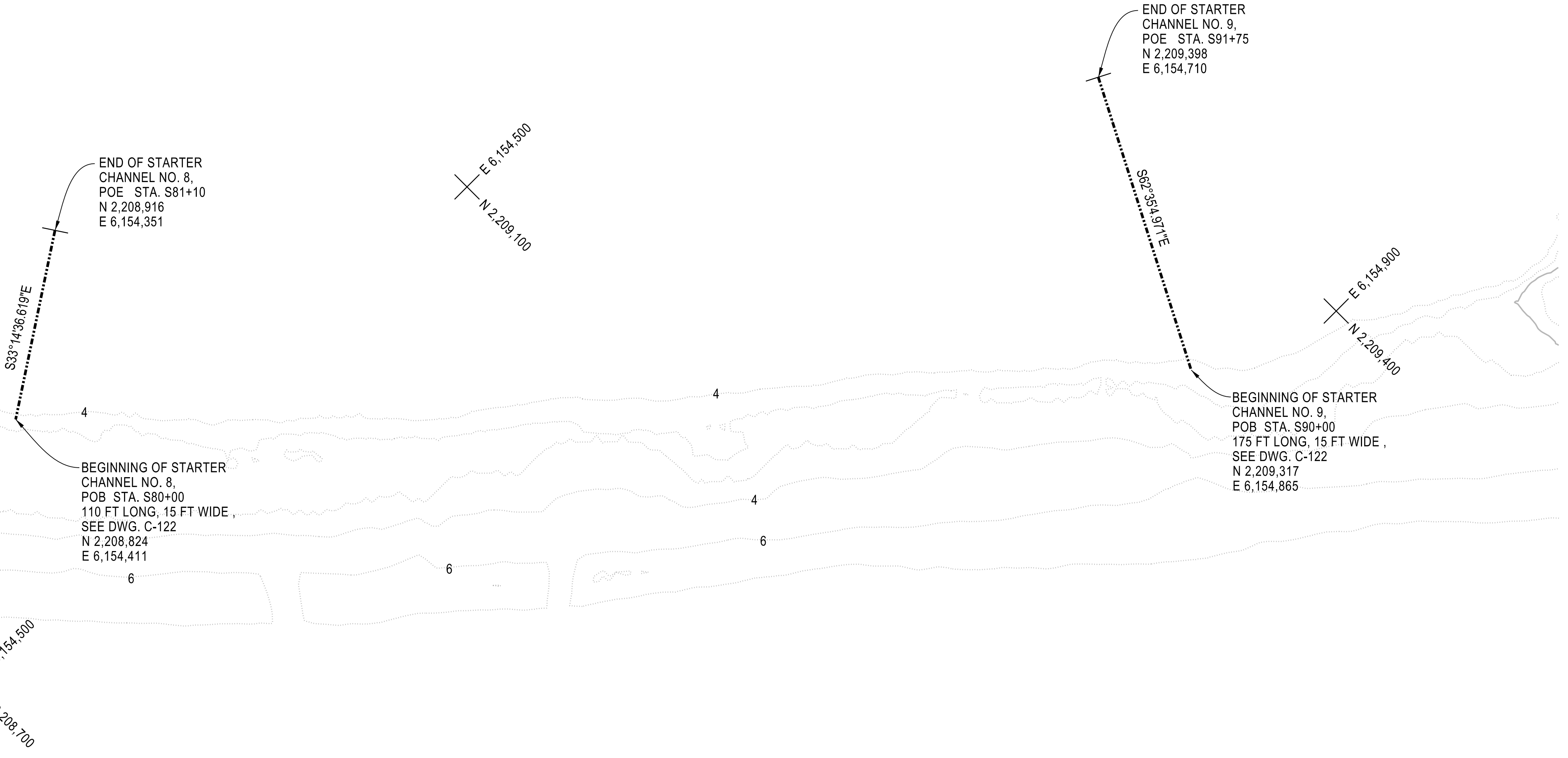
PROPOSED
CHANNEL NO. 6

PLAN
SCALE: 1"=20'

DWG. C-102

1 2 3 4 5 6 7

THINK SAFETY
ACT SAFELY



PLAN
SCALE: 1"=40'

DWG. C-101

APP.	OSFM #
STATE OF CALIFORNIA CALIFORNIA NATURAL RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING	

REV.	DESCRIPTION	SUB. DATE	APP. DATE

DESIGNED: KHOI NGUYEN
DRAWN: KHOI NGUYEN
CHECKED: DUC TRAN
REVIEWED: VU THAI
SUBMITTED:

APPROVAL RECOMMENDED:	DATE:
MANAGER, DESIGN	
APPROVED:	DATE:
MANAGER, DIVISION OF ENGINEERING	

CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
STATE WATER FACILITIES
DIV OF INTEGRATED SCI & ENG

CHIPPS ISLAND
NORTH PARCEL TIDAL HABITAT
RESTORATION - PHASE 2C

STARTER CHANNELS NO. 8 & 9
FINISHED CONDITION

SPEC. NO. 24-XX	SHEET NO. 016	DRAWING NO. C-113
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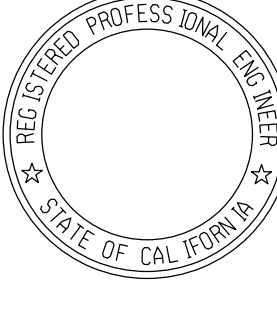
1 2 3 4 5 6 7

THINK SAFETY
ACT SAFELY

APP. OSFM #
STATE OF CALIFORNIA
CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF
WATER RESOURCES
DIVISION OF ENGINEERING

REV.	DESCRIPTION	SUB. DATE	APP. DATE

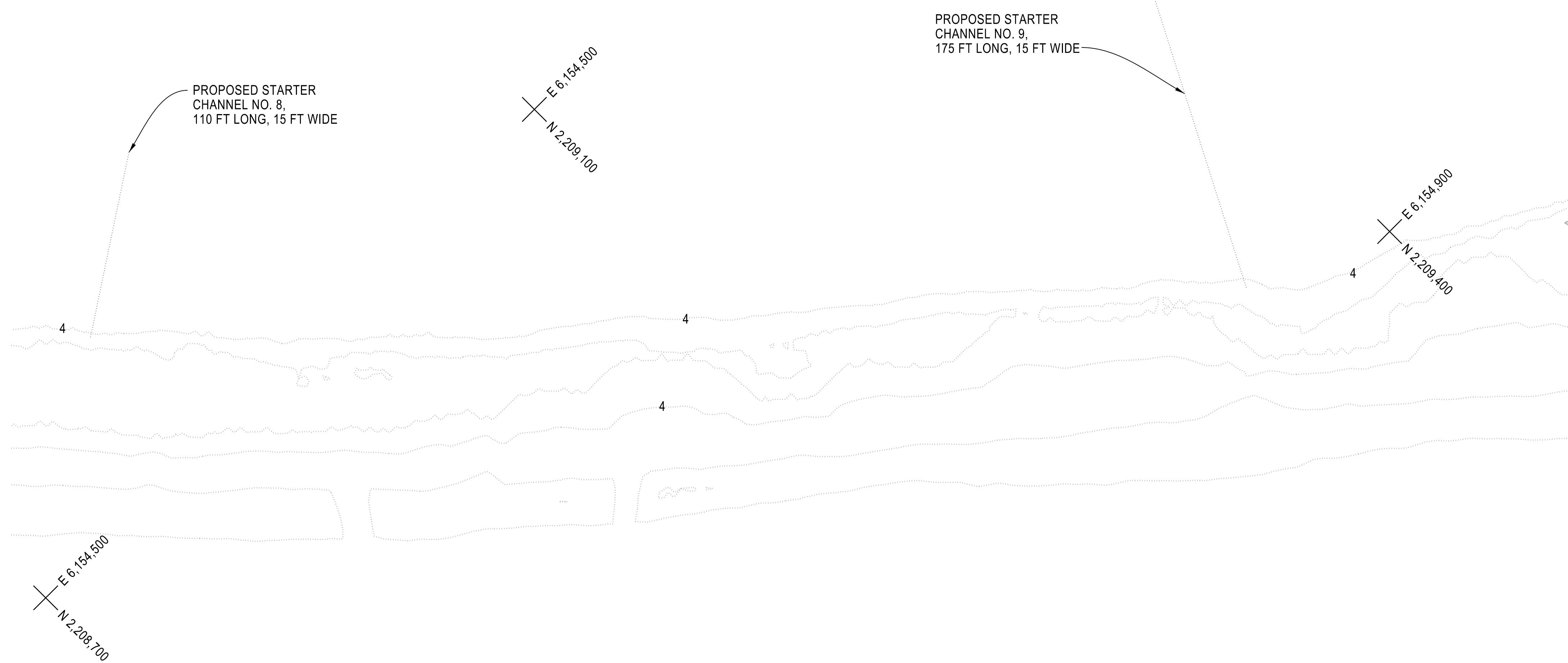
DESIGNED: KHOI NGUYEN
DRAWN: KHOI NGUYEN
CHECKED: DUC TRAN
REVIEWED: VU THAI
SUBMITTED:




APPROVAL RECOMMENDED: DATE:
MANAGER, DESIGN
APPROVED: DATE:
MANAGER, DIVISION OF ENGINEERING
CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
STATE WATER FACILITIES
DIV OF INTEGRATED SCI & ENG
CHIPPS ISLAND
NORTH PARCEL TIDAL HABITAT
RESTORATION - PHASE 2C

STARTER CHANNELS NO. 8 & 9
EXISTING CONDITION

PLAN
SPEC. NO. SHEET NO. DRAWING NO.
24-XX 017 C-114



PLAN
SCALE: 1"=40'
DWG. C-102
0 20 40



1 2 3 4 5 6 7

1 2 3 4 5 6 7



PLAN
SCALE: 1"=10'

C-102

**THINK SAFETY
ACT SAFELY**

APP.	OSFM #
STATE OF CALIFORNIA CALIFORNIA NATURAL RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING	

REV.	DESCRIPTION	SUB. DATE	APP. DATE

	DESIGNED: KHOI NGUYEN
	DRAWN: KHOI NGUYEN
	CHECKED: DUC TRAN
	REVIEWED: VU THAI
	SUBMITTED:

APPROVAL RECOMMENDED: _____ DATE: _____

MANAGER, DESIGN

APPROVED: _____ DATE: _____

MANAGER, DIVISION OF ENGINEERING

CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
STATE WATER FACILITIES
DIV OF INTEGRATED SCI & ENG

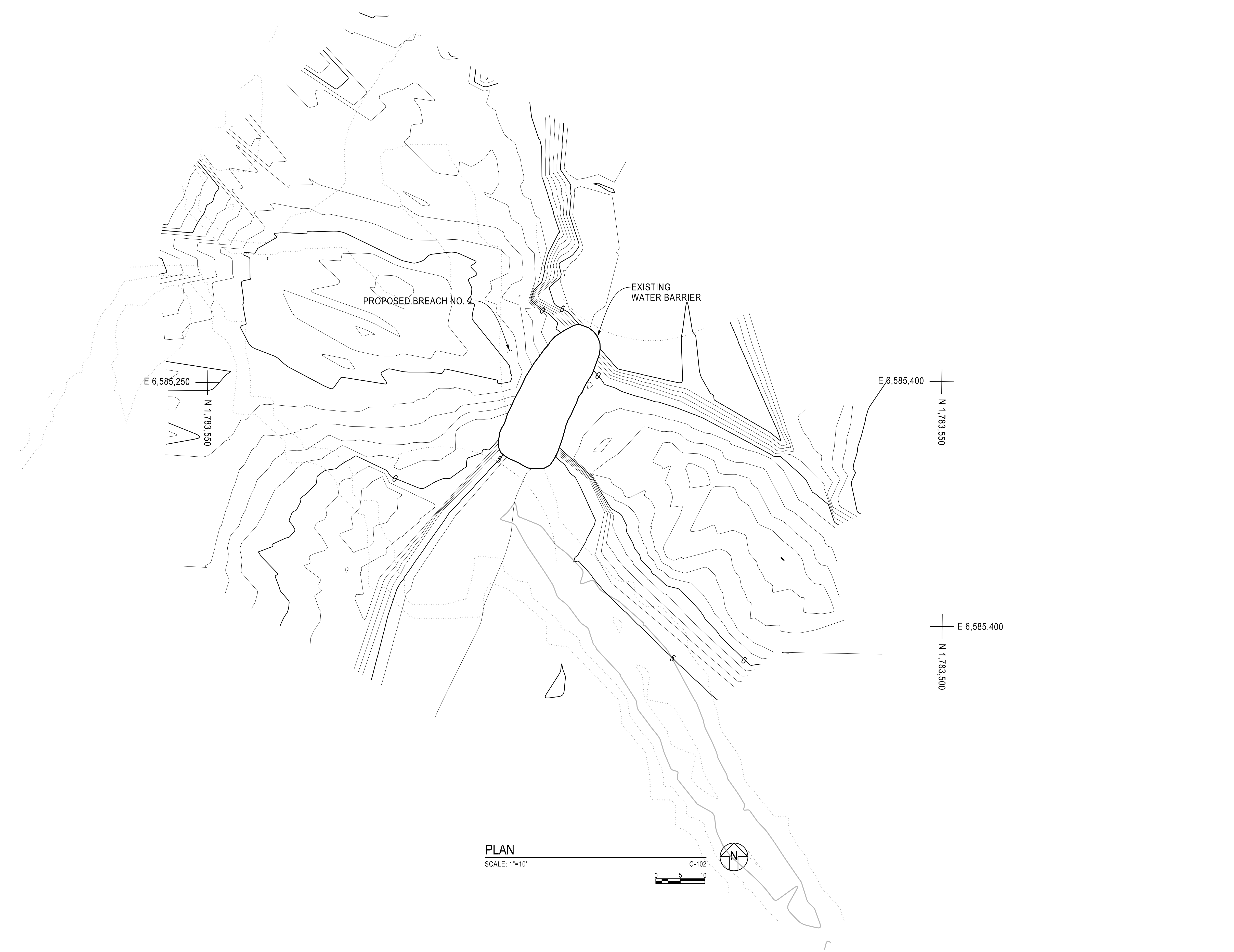
CHIPPS ISLAND
NORTH PARCEL TIDAL HABITAT
RESTORATION - PHASE 2C

**BREACH NO. 2
FINISHED CONDITION**

PLAN		
SPEC. NO. 24-XX	SHEET NO. 018	DRAWING NO. C-115

1 2 3 4 5 6 7

**THINK SAFETY
ACT SAFELY**



PLAN
SCALE: 1"=10'
C-102
0 5 10

APP. OSFM #
STATE OF CALIFORNIA
CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF
WATER RESOURCES
DIVISION OF ENGINEERING

REV.	DESCRIPTION	SUB. DATE	APP. DATE

DESIGNED:
KHOI NGUYEN
DRAWN:
KHOI NGUYEN
CHECKED:
DUC TRAN
REVIEWED:
VU THAI
SUBMITTED:

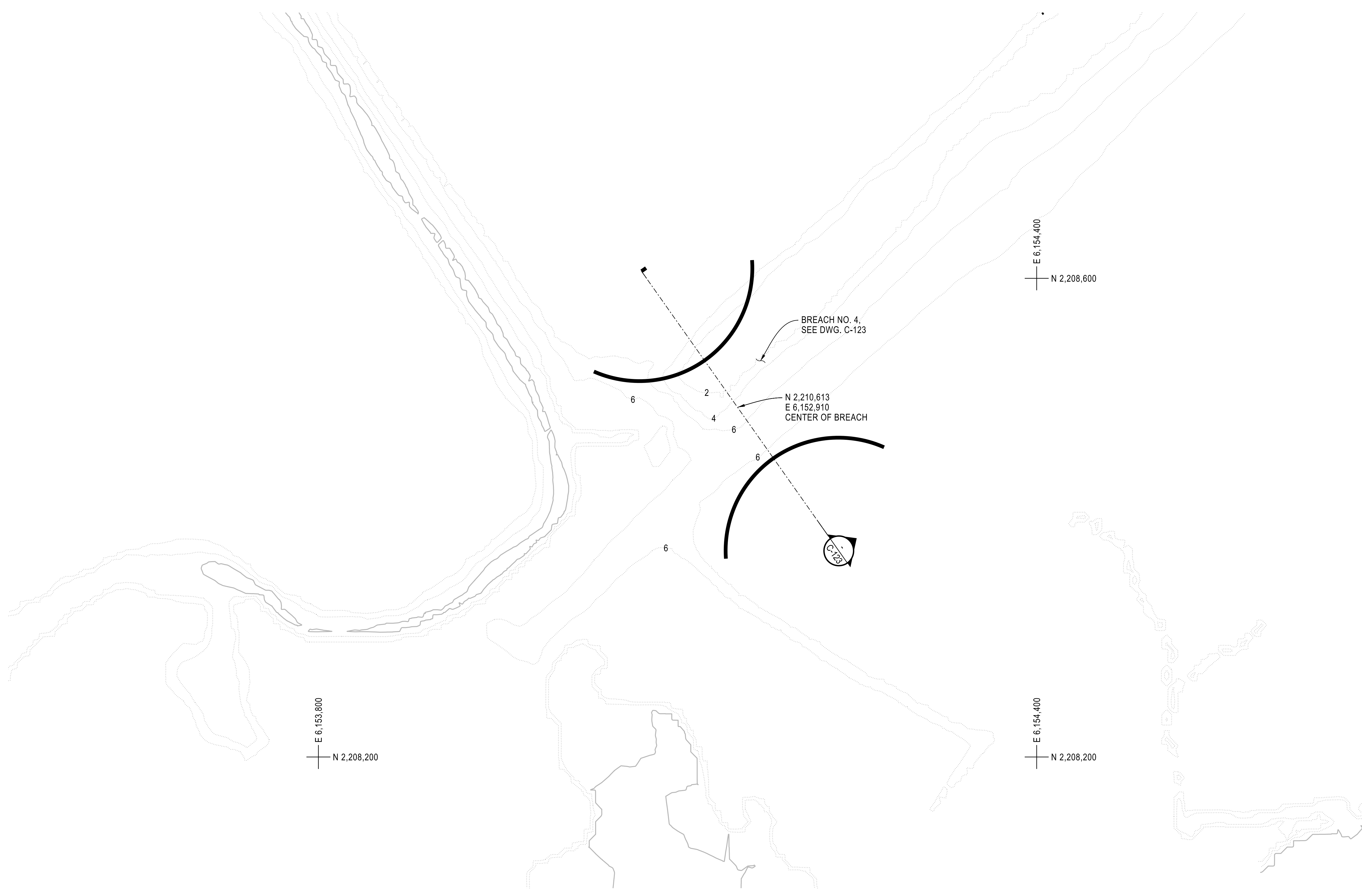
APPROVAL RECOMMENDED: _____ DATE: _____
MANAGER, DESIGN
APPROVED: _____ DATE: _____
MANAGER, DIVISION OF ENGINEERING

CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
STATE WATER FACILITIES
DIV OF INTEGRATED SCI & ENG
CHIPPS ISLAND
NORTH PARCEL TIDAL HABITAT
RESTORATION - PHASE 2C

BREACH NO. 2
EXISTING CONDITION

PLAN
SPEC. NO. SHEET NO. DRAWING NO.
24-XX 019 C-116

1 2 3 4 5 6 7



**THINK SAFETY
ACT SAFELY**

APP.	OSFM #
STATE OF CALIFORNIA CALIFORNIA NATURAL RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING	

REV.	DESCRIPTION	SUB. DATE	APP. DATE
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DESIGNED: KHOI NGUYEN
DRAWN: KHOI NGUYEN
CHECKED: DUC TRAN
REVIEWED: VU THAI
SUBMITTED:

APPROVAL RECOMMENDED:	DATE:
MANAGER, CIVIL 2, REG. CE. NO.	
APPROVED:	DATE:
MANAGER, BRANCH, REG. C.E. NO.	

CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
STATE WATER FACILITIES
DIV OF INTEGRATED SCI & ENG

CHIPPS ISLAND
NORTH PARCEL TIDAL HABITAT
RESTORATION - PHASE 2C

BREACH NO. 4
FINISHED CONDITION

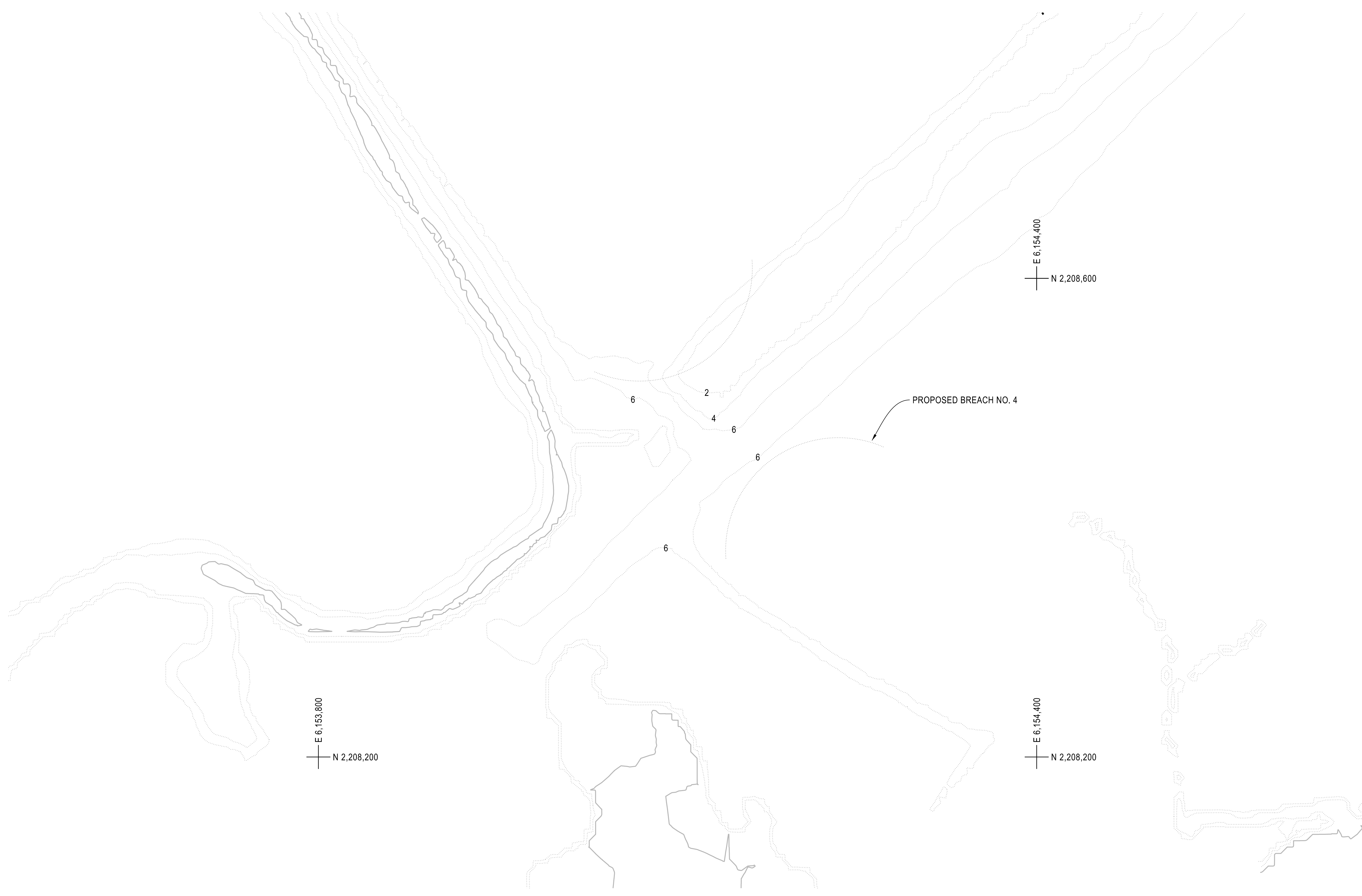
PLAN		
SPEC. NO. 24-XX	SHEET NO. 020	DRAWING NO. C-117

PLAN
SCALE: 1"=40'

DWG. C-101

1 2 3 4 5 6 7

1 2 3 4 5 6 7



**THINK SAFETY
ACT SAFELY**

APP.	OSFM #
STATE OF CALIFORNIA CALIFORNIA NATURAL RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING	

REV.	DESCRIPTION	SUB. DATE	APP. DATE

	DESIGNED: KHOI NGUYEN
	DRAWN: KHOI NGUYEN
	CHECKED: DUC TRAN
	REVIEWED: VU THAI
	SUBMITTED:

APPROVAL RECOMMENDED:	DATE:
MANAGER, CIVIL 2, REG. CE. NO.	
APPROVED:	DATE:
MANAGER, BRANCH, REG. C.E. NO.	

CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
STATE WATER FACILITIES
DIV OF INTEGRATED SCI & ENG

CHIPPS ISLAND
NORTH PARCEL TIDAL HABITAT
RESTORATION - PHASE 2C

BREACH NO. 4
EXISTING CONDITION

PLAN
SCALE: 1"=40'

DWG. C-101

PLAN		
SPEC. NO. 24-XX	SHEET NO. 021	DRAWING NO. C-118

PLOT DATE: 4/5/2024

1 2 3 4 5 6 7


1 2 3 4 5 6 7

**THINK SAFETY
ACT SAFELY**

APP. OSFM #
STATE OF CALIFORNIA
CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF
WATER RESOURCES
DIVISION OF ENGINEERING

REV.	DESCRIPTION	SUB. DATE	APP. DATE

DESIGNED: KHOI NGUYEN
DRAWN: KHOI NGUYEN
CHECKED: DUC TRAN
REVIEWED: VU THAI
SUBMITTED:



APPROVAL RECOMMENDED: DATE:

MANAGER DESIGN

APPROVED: DATE:

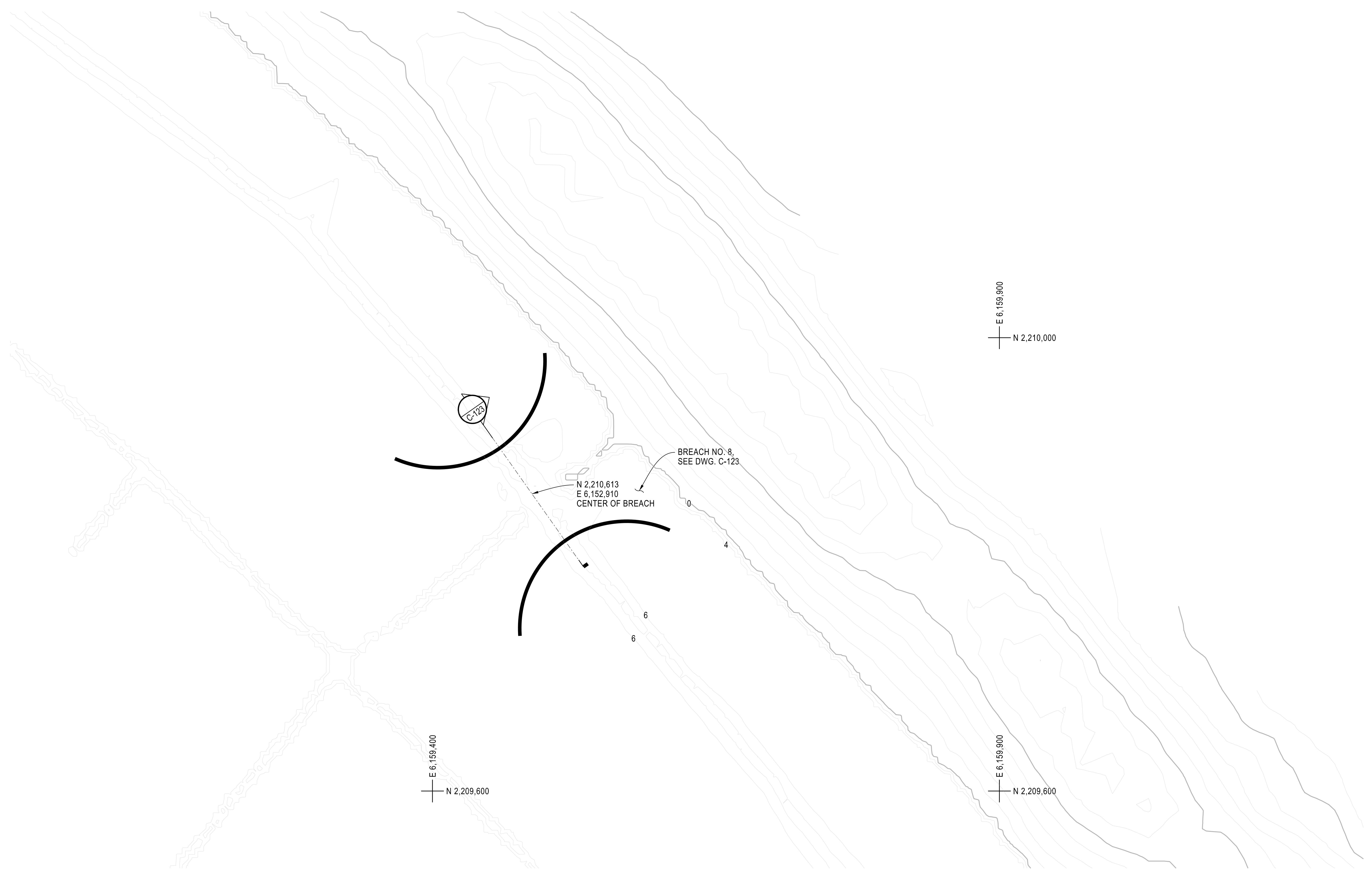
MANAGER, DIVISION OF ENGINEERING

CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
STATE WATER FACILITIES
DIV OF INTEGRATED SCI & ENG
CHIPPS ISLAND
NORTH PARCEL TIDAL HABITAT
RESTORATION - PHASE 2C

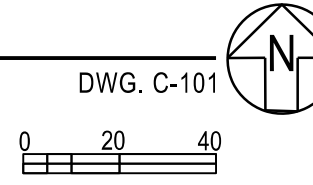
BREACH NO. 8
FINISHED CONDITION

PLAN
SPEC. NO. SHEET NO. DRAWING NO.
24-XX 022 C-119

PLOT DATE: 4/5/2024



PLAN
SCALE: 1"=40'
DWG. C-101



1 2 3 4 5 6 7

1 2 3 4 5 6 7

THINK SAFETY
ACT SAFELY

APP. OSFM #
STATE OF CALIFORNIA
CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF
WATER RESOURCES
DIVISION OF ENGINEERING

REV.	DESCRIPTION	SUB. DATE	APP. DATE

DESIGNED:
KHOI NGUYEN

DRAWN:
KHOI NGUYEN

CHECKED:
DUC TRAN

REVIEWED:
VU THAI

SUBMITTED:

APPROVAL RECOMMENDED: _____ DATE: _____

MANAGER, DESIGN

APPROVED: _____ DATE: _____

MANAGER, DIVISION OF ENGINEERING

CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
STATE WATER FACILITIES
DIV OF INTEGRATED SCI & ENG

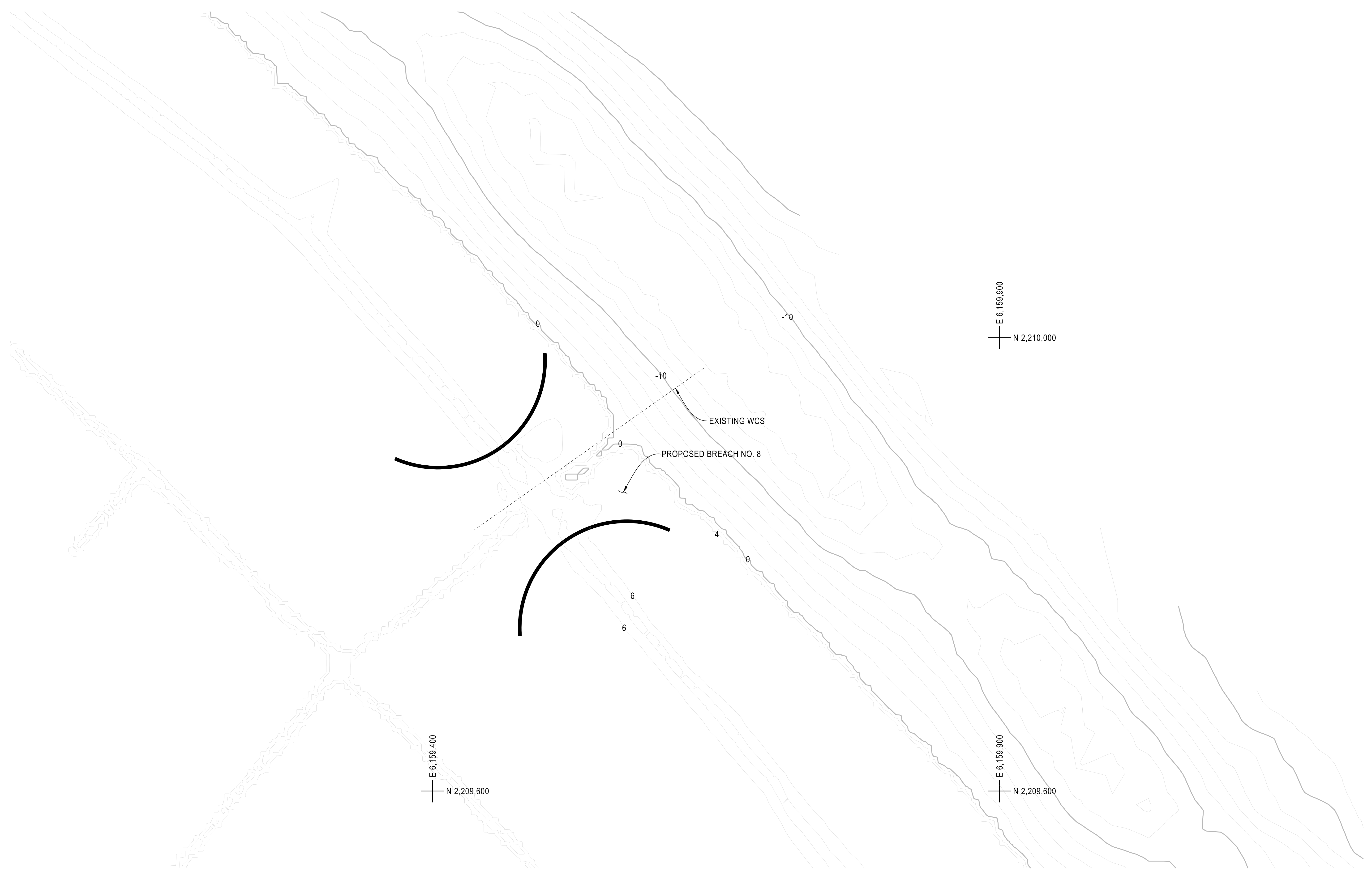
CHIPPS ISLAND
NORTH PARCEL TIDAL HABITAT
RESTORATION - PHASE 2C

BREACH NO. 8
EXISTING CONDITION

PLAN

SPEC. NO. 24-XX	SHEET NO. 023	DRAWING NO. C-120
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PLOT DATE: 4/5/2024

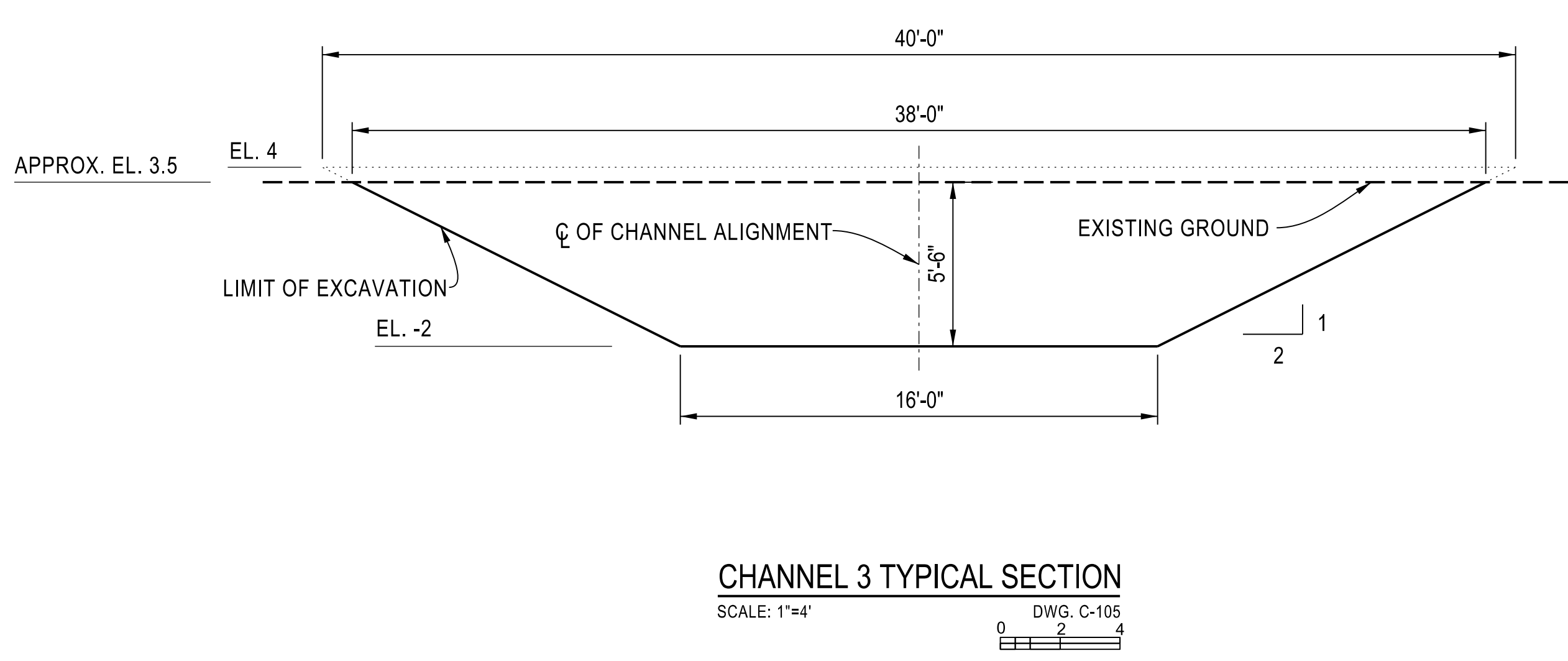
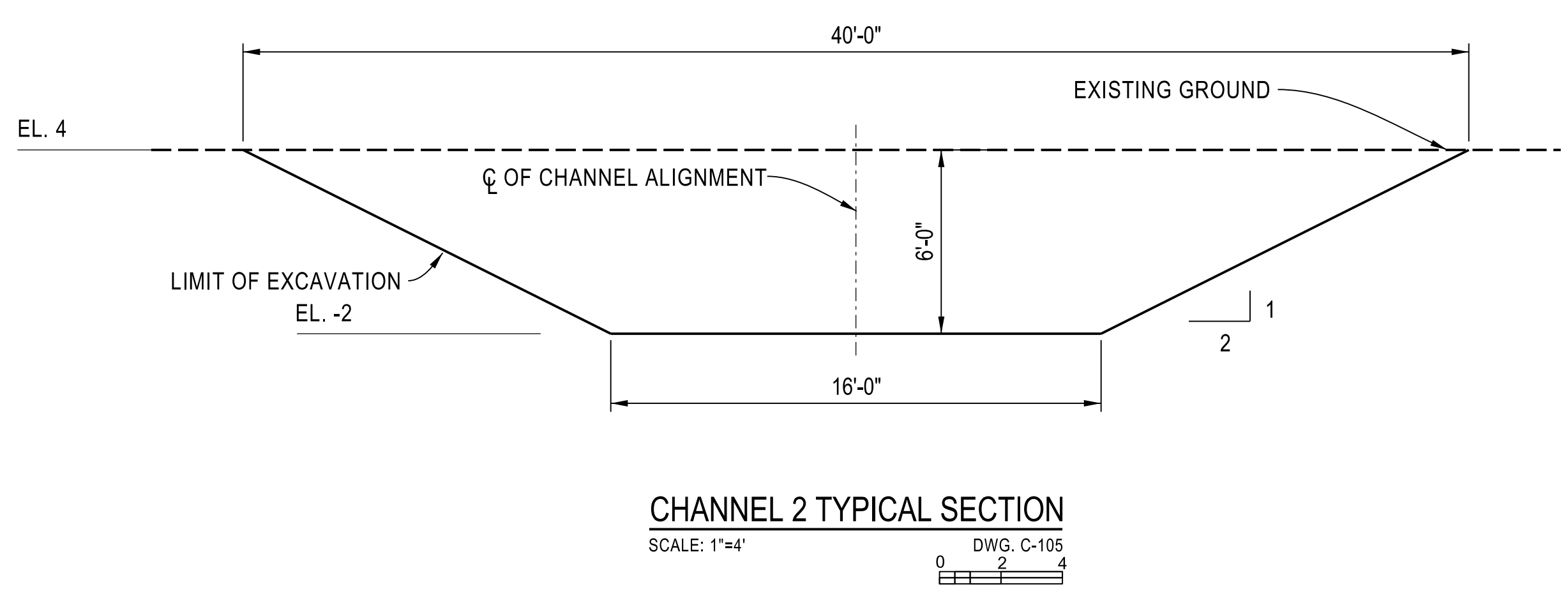
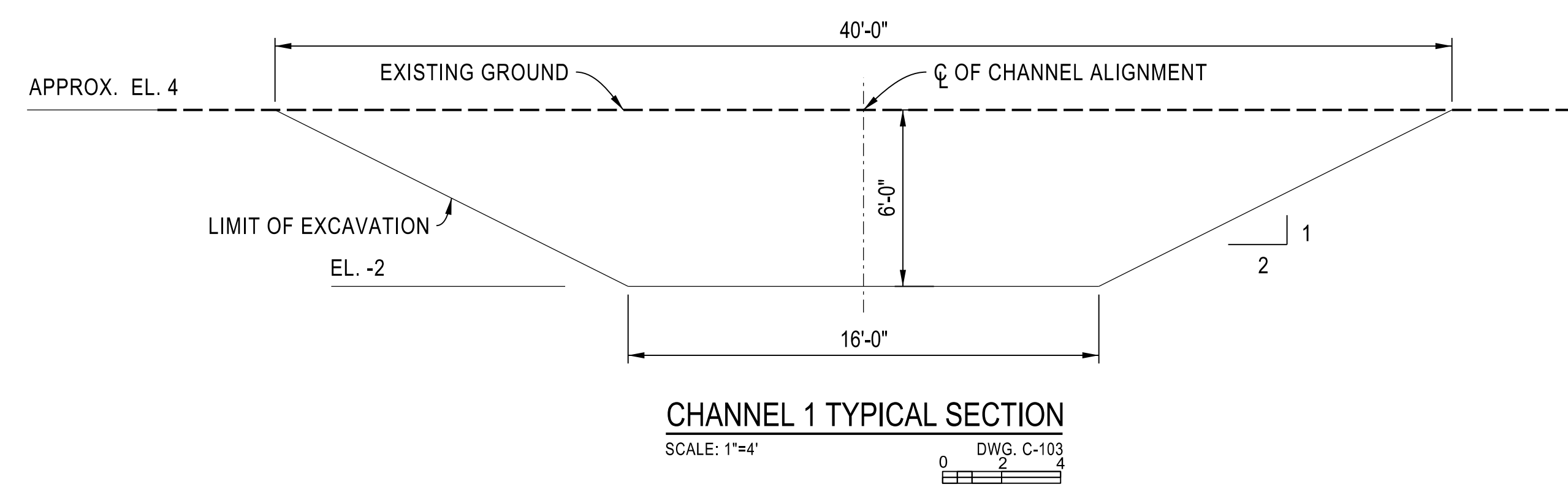


PLAN
SCALE: 1"=40'

DWG. C-101

1 2 3 4 5 6 7

**THINK SAFETY
ACT SAFELY**



LEGEND
..... REFERENCE LINE FOR WIDTH OF CHANNEL AT SPECIFIED ELEVATION

APP.	OSFM #
STATE OF CALIFORNIA CALIFORNIA NATURAL RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING	

REV.	DESCRIPTION	SUB. DATE	APP. DATE

DESIGNED: KHOI NGUYEN
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CHECKED: DUC TRAN
REVIEWED: VU THAI
SUBMITTED:

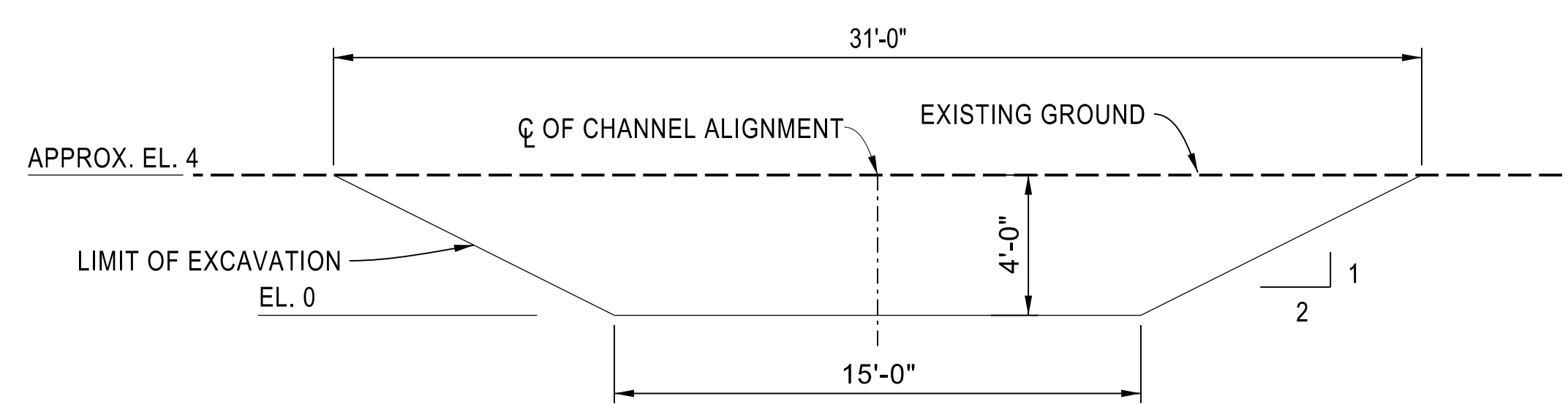
APPROVAL RECOMMENDED:	DATE:
MANAGER, CIVIL 2, REG. CE. NO.	
APPROVED:	DATE:
MANAGER, BRANCH, REG. C.E. NO.	

CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
STATE WATER FACILITIES
DIV OF INTEGRATED SCI & ENG

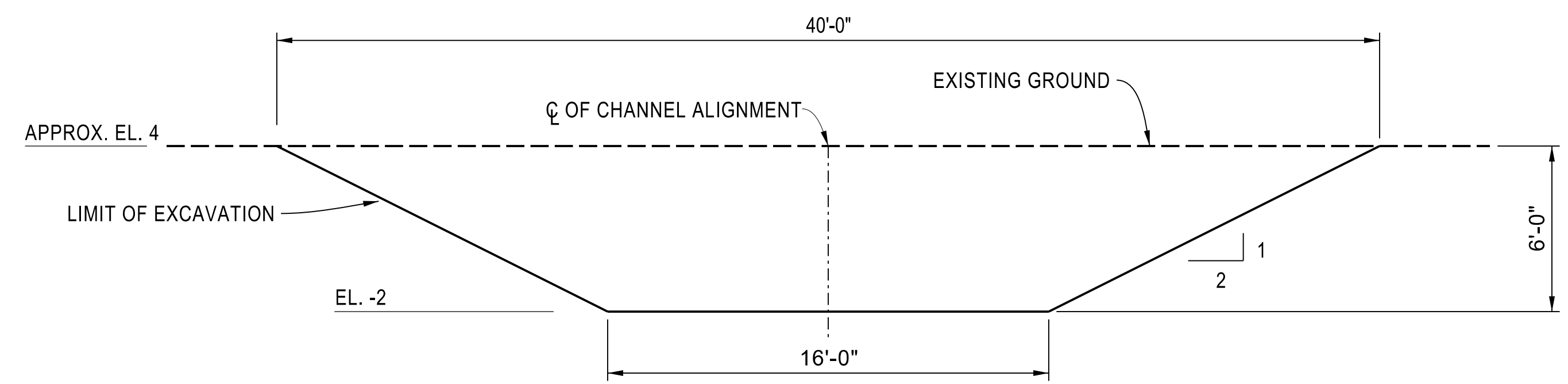
CHIPPS ISLAND
NORTH PARCEL TIDAL HABITAT
RESTORATION - PHASE 2C

CHANNEL NO. 1, 2, & 3		
SECTIONS		
SPEC. NO. 24-XX	SHEET NO. 024	DRAWING NO. C-121

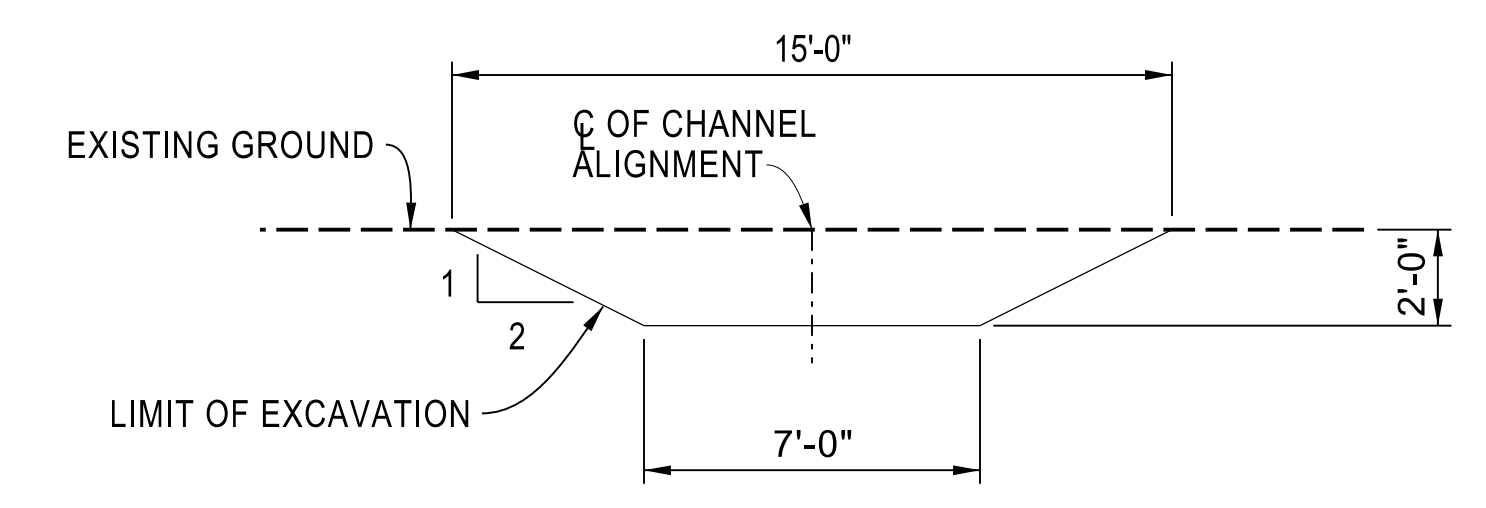
**THINK SAFETY
ACT SAFELY**



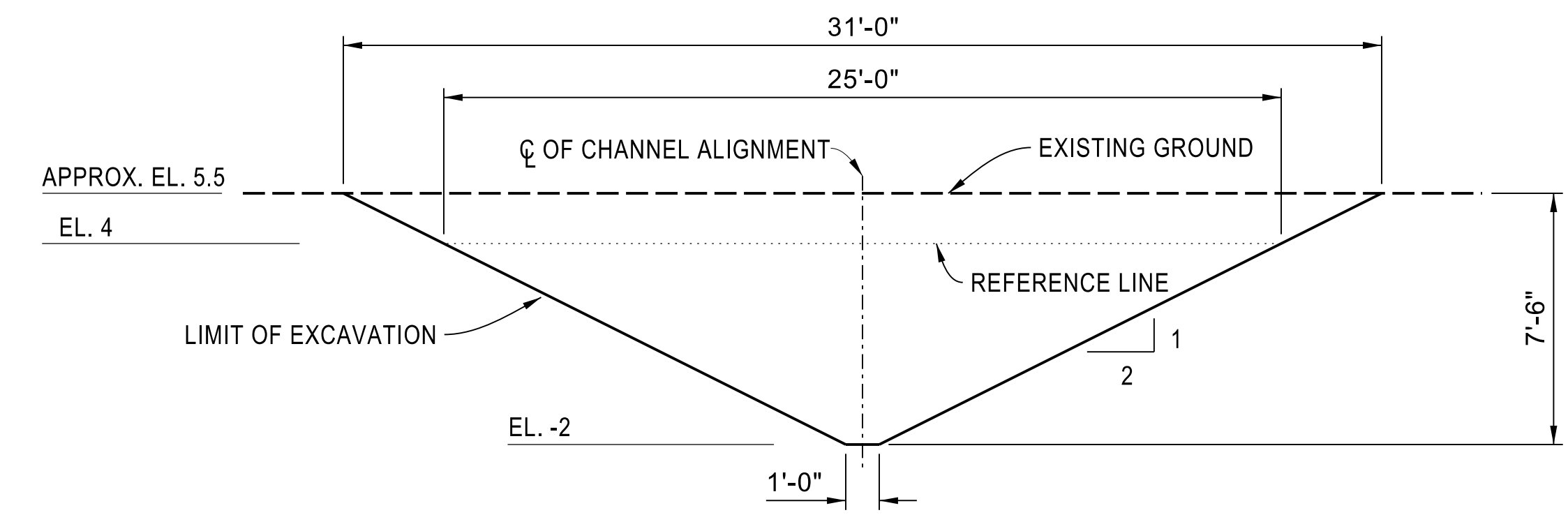
CHANNEL 4 TYPICAL SECTION
SCALE: 1"=4'
DWG. C-107



CHANNEL 5 TYPICAL SECTION
SCALE: 1"=4'
DWG. C-109



STARTER CHANNEL TYPICAL SECTION
SCALE: 1"=4'
DWG. C-103, C-107, C-109, C-113



CHANNEL 6 TYPICAL SECTION
SCALE: 1"=4'
DWG. C-111

LEGEND

..... REFERENCE LINE FOR WIDTH OF BREACH
AT SPECIFIED ELEVATION

APP.	OSFM #
STATE OF CALIFORNIA CALIFORNIA NATURAL RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING	

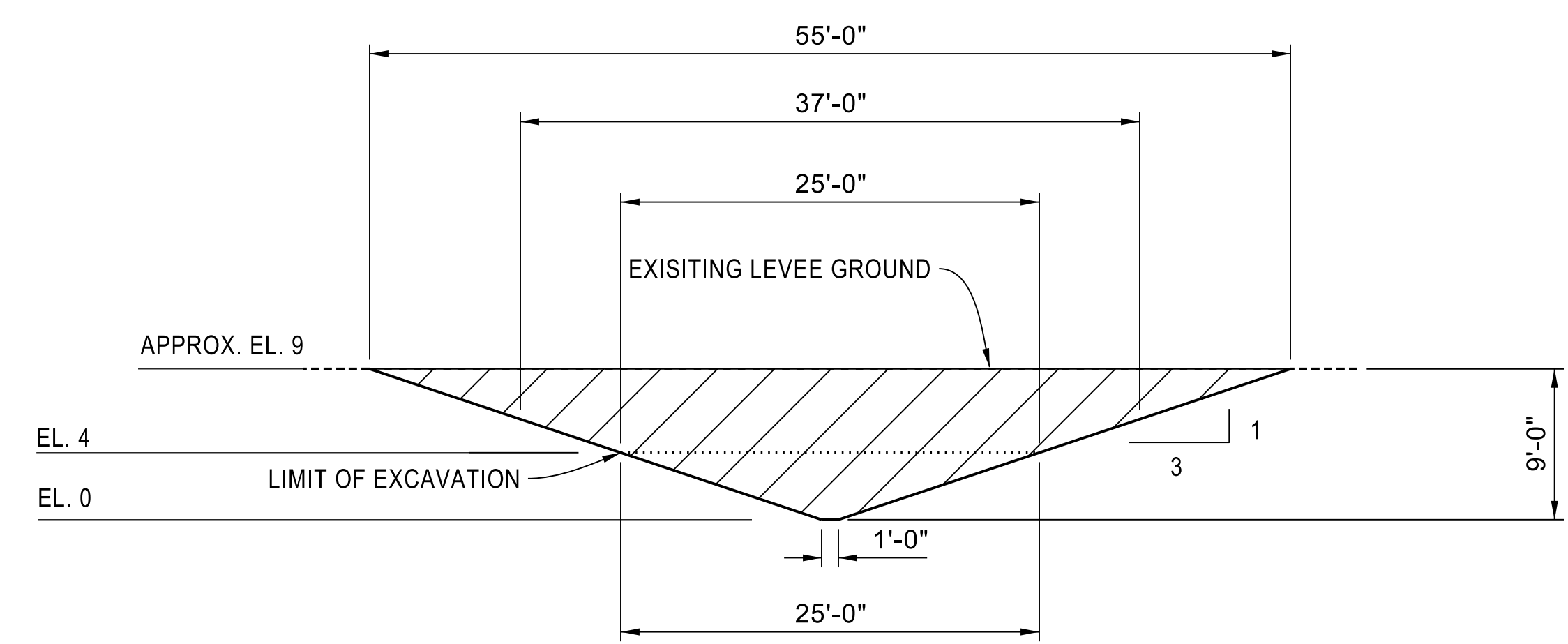
REV.	DESCRIPTION	SUB. DATE	APP. DATE
	DESIGNED: KHOI NGUYEN		
	DRAWN: KHOI NGUYEN		
	CHECKED: DUC TRAN		
	REVIEWED: VU THAI		
	SUBMITTED:		

APPROVAL RECOMMENDED:	DATE:
MANAGER, DESIGN	
APPROVED:	DATE:
MANAGER, DIVISION OF ENGINEERING	
CALIFORNIA NATURAL RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES STATE WATER FACILITIES DIV OF INTEGRATED SCI & ENG	
CHIPPS ISLAND NORTH PARCEL TIDAL HABITAT RESTORATION - PHASE 2C	

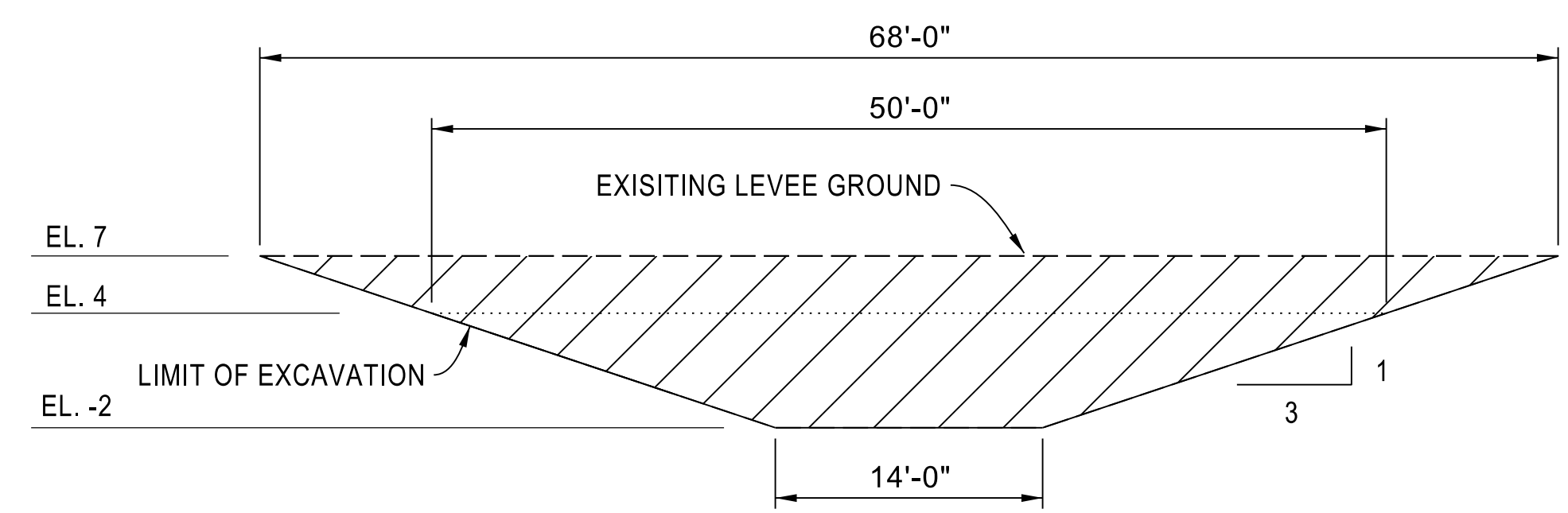
**CHANNEL NO. 4, 5, 6
& STARTER CHANNEL**

SECTION	
SPEC. NO.	DRAWING NO.
24-XX	C-122

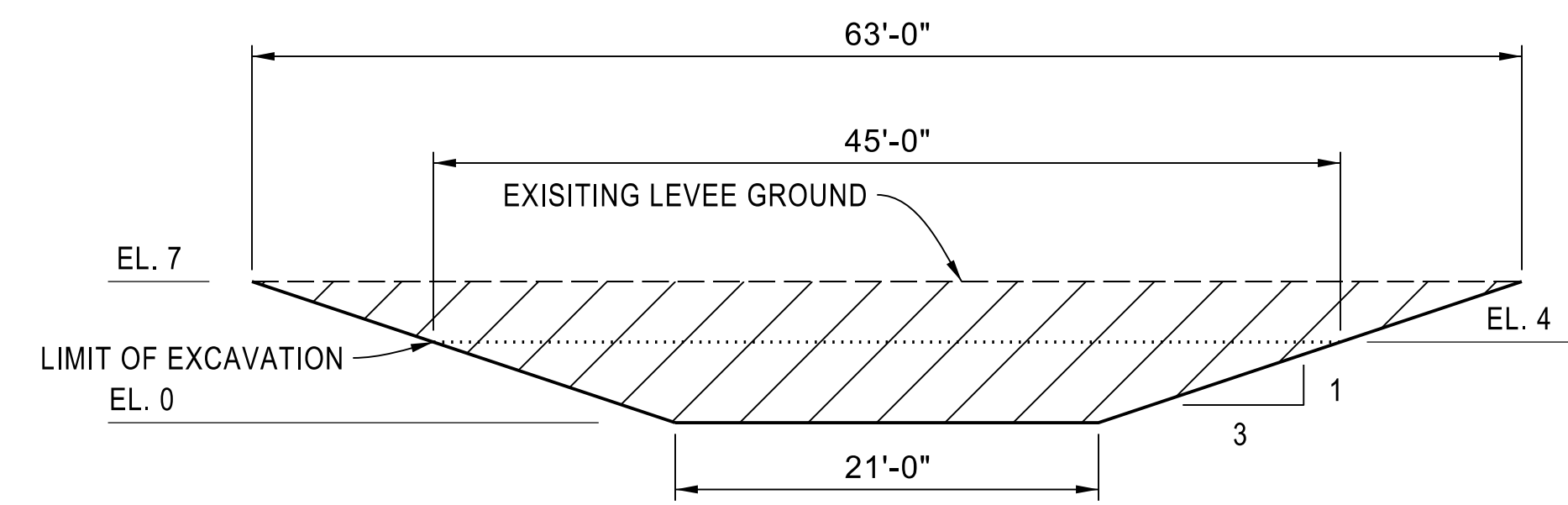
**THINK SAFETY
ACT SAFELY**



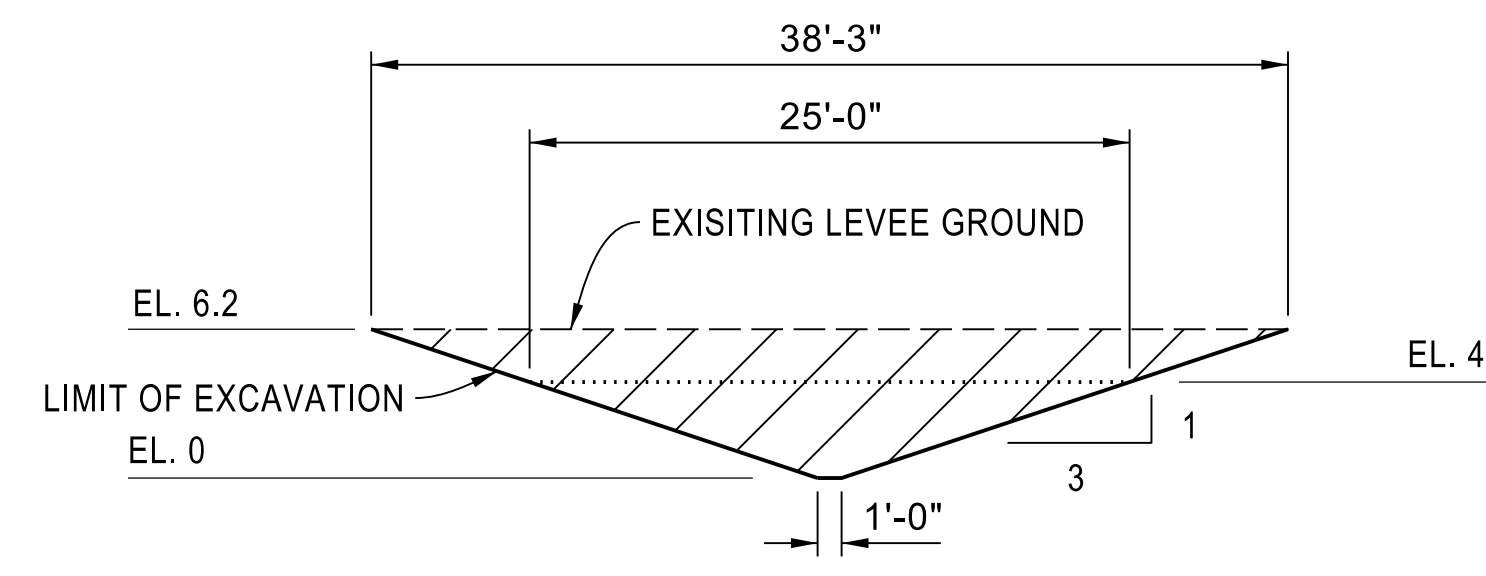
BREACH 1 TYPICAL SECTION
SCALE: 1"=8'
DWG. C-103



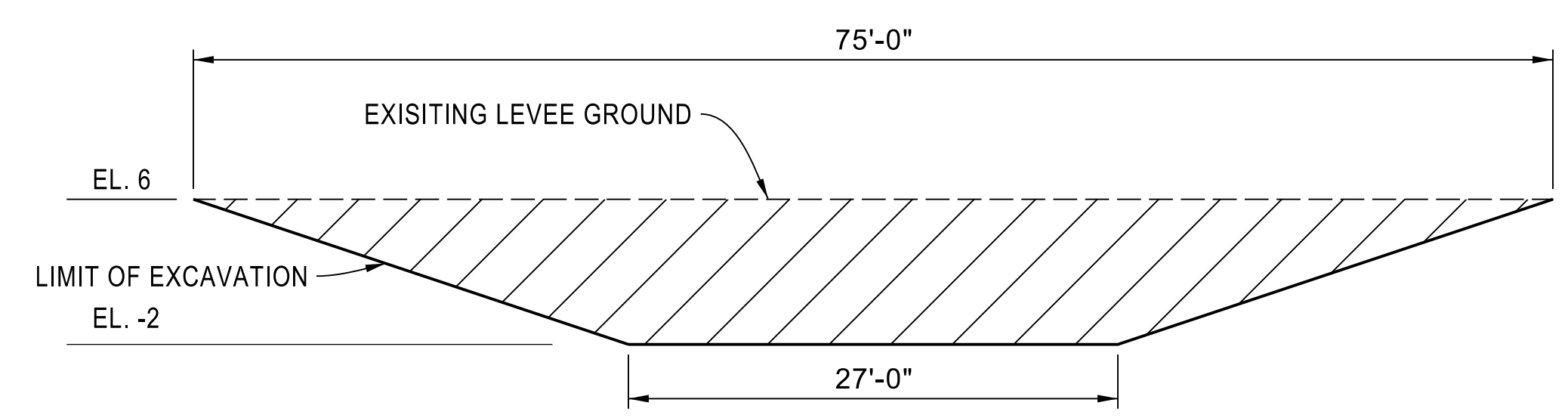
BREACH 3 TYPICAL SECTION
SCALE: 1"=8'
DWG. C-109



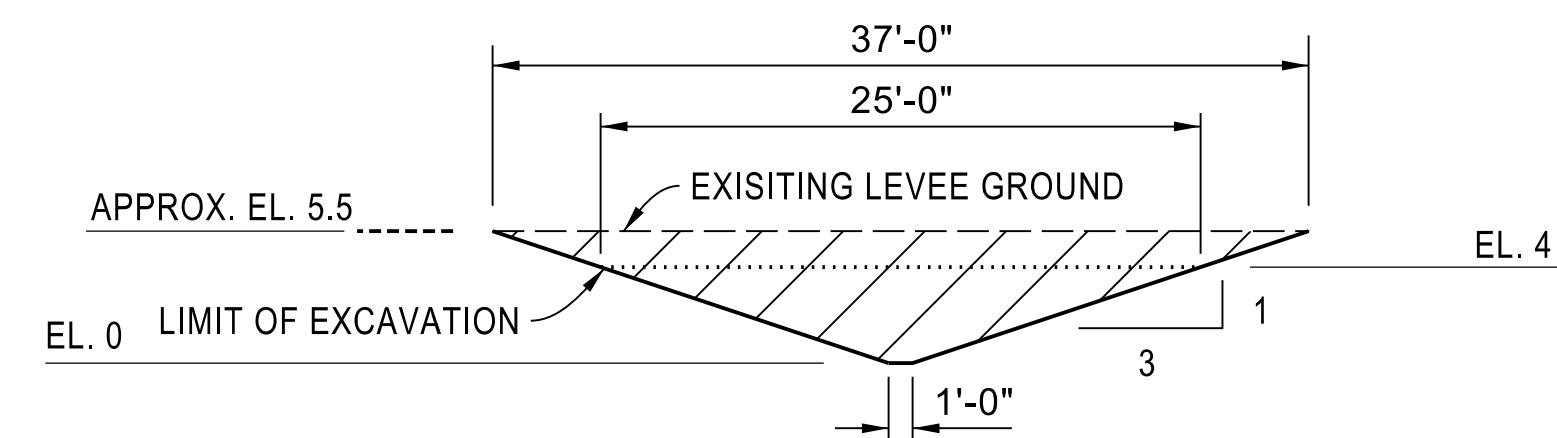
BREACH 4 TYPICAL SECTION
SCALE: 1"=8'
DWG. C-117



BREACH 2, & 7 TYPICAL SECTION
SCALE: 1"=8'
DWG. C-105



BREACH 6 TYPICAL SECTION
SCALE: 1"=8'
DWG. C-105



BREACH 5 & 8 TYPICAL SECTION
SCALE: 1"=8'
DWG. C-107, C-119

LEGEND

- REFERENCE LINE FOR WIDTH OF BREACH AT SPECIFIED ELEVATION
- AREA OF EXCAVATION

APP.	OSFM #
STATE OF CALIFORNIA CALIFORNIA NATURAL RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING	

REV.	DESCRIPTION	SUB. DATE	APP. DATE

DESIGNED:	KHOI NGUYEN
DRAWN:	KHOI NGUYEN
CHECKED:	DUC TRAN
REVIEWED:	VU THAI
SUBMITTED:	

APPROVAL RECOMMENDED:	DATE:
MANAGER, CIVIL 2, REG. CE. NO.	
APPROVED:	DATE:
MANAGER, BRANCH, REG. C.E. NO.	

CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
STATE WATER FACILITIES
DIV OF INTEGRATED SCI & ENG
CHIPPS ISLAND
NORTH PARCEL TIDAL HABITAT
RESTORATION - PHASE 2C

BREACHES EXCAVATION		
SECTIONS		
SPEC. NO.	SHEET NO.	DRAWING NO.
24-XX	026	C-123

FEATURES COORDINATES (DWG. C-102)

PT	EASTING	NORTHING	DESCRIPTION
1	6,154,146	2,213,333	POINT ON CORNER OF CLEARING & BORROW AREA
2	6,154,185	2,213,339	POINT ON CORNER OF CLEARING & BORROW AREA
3	6,154,191	2,213,300	POINT ON CORNER OF CLEARING & BORROW AREA
4	6,154,217	2,213,338	POINT ON CORNER OF CLEARING & BORROW AREA
5	6,154,229	2,213,329	POINT ON CORNER OF CLEARING & BORROW AREA
6	6,154,195	2,213,279	POINT ON CORNER OF CLEARING & BORROW AREA
7	6,154,232	2,213,039	POINT ON CORNER OF CLEARING & BORROW AREA
8	6,154,440	2,212,811	POINT ON CORNER OF CLEARING & BORROW AREA
9	6,154,498	2,212,896	POINT ON CORNER OF CLEARING & BORROW AREA
10	6,154,511	2,212,887	POINT ON CORNER OF CLEARING & BORROW AREA
11	6,154,451	2,212,800	POINT ON CORNER OF CLEARING & BORROW AREA
12	6,154,500	2,212,746	POINT ON CORNER OF CLEARING & BORROW AREA
13	6,154,529	2,212,578	POINT ON CORNER OF CLEARING & BORROW AREA
14	6,154,488	2,212,582	POINT ON CORNER OF CLEARING & BORROW AREA
15	6,154,463	2,212,728	POINT ON CORNER OF CLEARING & BORROW AREA
16	6,154,195	2,213,021	POINT ON CORNER OF CLEARING & BORROW AREA
17	6,154,183	2,213,094	POINT ON CORNER OF CLEARING & BORROW AREA
18	6,154,134	2,213,098	POINT ON CORNER OF CLEARING & BORROW AREA
19	6,154,135	2,213,113	POINT ON CORNER OF CLEARING & BORROW AREA
20	6,154,181	2,213,109	POINT ON CORNER OF CLEARING & BORROW AREA
21	6,154,434	2,212,320	POINT ON CORNER OF CLEARING & BORROW AREA
22	6,154,507	2,212,212	POINT ON CORNER OF CLEARING & BORROW AREA
23	6,154,677	2,212,152	POINT ON CORNER OF CLEARING & BORROW AREA
24	6,154,870	2,212,115	POINT ON CORNER OF CLEARING & BORROW AREA
25	6,154,979	2,211,984	POINT ON CORNER OF CLEARING & BORROW AREA
26	6,155,058	2,211,828	POINT ON CORNER OF CLEARING & BORROW AREA
27	6,155,281	2,211,777	POINT ON CORNER OF CLEARING & BORROW AREA
28	6,155,392	2,211,722	POINT ON CORNER OF CLEARING & BORROW AREA
29	6,155,456	2,211,635	POINT ON CORNER OF CLEARING & BORROW AREA
30	6,155,461	2,211,539	POINT ON CORNER OF CLEARING & BORROW AREA
31	6,155,589	2,211,422	POINT ON CORNER OF CLEARING & BORROW AREA
32	6,155,802	2,211,373	POINT ON CORNER OF CLEARING & BORROW AREA
33	6,156,003	2,211,407	POINT ON CORNER OF CLEARING & BORROW AREA
34	6,156,110	2,211,520	POINT ON CORNER OF CLEARING & BORROW AREA
35	6,156,072	2,211,683	POINT ON CORNER OF CLEARING & BORROW AREA
36	6,156,103	2,211,691	POINT ON CORNER OF CLEARING & BORROW AREA
37	6,156,145	2,211,510	POINT ON CORNER OF CLEARING & BORROW AREA
38	6,156,019	2,211,378	POINT ON CORNER OF CLEARING & BORROW AREA
39	6,155,801	2,211,341	POINT ON CORNER OF CLEARING & BORROW AREA
40	6,155,642	2,211,377	POINT ON CORNER OF CLEARING & BORROW AREA
41	6,155,498	2,211,372	POINT ON CORNER OF CLEARING & BORROW AREA
42	6,155,282	2,211,311	POINT ON CORNER OF CLEARING & BORROW AREA
43	6,155,192	2,211,167	POINT ON CORNER OF CLEARING & BORROW AREA
44	6,155,165	2,211,184	POINT ON CORNER OF CLEARING & BORROW AREA
45	6,155,261	2,211,339	POINT ON CORNER OF CLEARING & BORROW AREA

PT	EASTING	NORTHING	DESCRIPTION
46	6,155,493	2,211,404	POINT ON CORNER OF CHANNEL NO. 3
47	6,155,559	2,211,406	POINT ON CORNER OF CHANNEL NO. 3
48	6,155,430	2,211,524	POINT ON CORNER OF CHANNEL NO. 2
49	6,155,424	2,211,624	POINT ON CORNER OF CHANNEL NO. 2
50	6,155,371	2,211,697	POINT ON CORNER OF CHANNEL NO. 2
51	6,155,270	2,211,747	POINT ON CORNER OF CHANNEL NO. 2
52	6,155,036	2,211,800	POINT ON CORNER OF CHANNEL NO. 2
53	6,154,952	2,211,967	POINT ON CORNER OF CHANNEL NO. 2
54	6,154,853	2,212,085	POINT ON CORNER OF CHANNEL NO. 2
55	6,154,669	2,212,121	POINT ON CORNER OF CHANNEL NO. 2
56	6,154,486	2,212,186	POINT ON CORNER OF CHANNEL NO. 2
57	6,154,393	2,212,324	POINT ON CORNER OF CHANNEL NO. 2
58	6,154,476	2,212,392	POINT ON CORNER OF FILL
59	6,154,816	2,212,169	POINT ON CORNER OF FILL
60	6,154,792	2,212,132	POINT ON CORNER OF FILL
61	6,154,452	2,212,355	POINT ON CORNER OF FILL
62	6,154,993	2,212,028	POINT ON CORNER OF FILL
63	6,155,324	2,211,810	POINT ON CORNER OF FILL
64	6,155,302	2,211,777	POINT ON CORNER OF FILL
65	6,154,971	2,211,995	POINT ON CORNER OF FILL
66	6,155,472	2,211,730	POINT ON CORNER OF FILL
67	6,155,937	2,211,398	POINT ON CORNER OF FILL
68	6,155,854	2,211,383	POINT ON CORNER OF FILL
69	6,155,424	2,211,681	POINT ON CORNER OF FILL
70	6,156,062	2,211,279	POINT ON CORNER OF FILL
71	6,156,228	2,211,167	POINT ON CORNER OF FILL
72	6,156,314	2,211,277	POINT ON CORNER OF FILL
73	6,156,283	2,211,306	POINT ON CORNER OF FILL
74	6,156,304	2,211,329	POINT ON CORNER OF FILL
75	6,156,378	2,211,276	POINT ON CORNER OF FILL
76	6,156,303	2,211,190	POINT ON CORNER OF FILL
77	6,156,350	2,211,140	POINT ON CORNER OF FILL
78	6,156,437	2,211,239	POINT ON CORNER OF FILL
79	6,156,477	2,211,209	POINT ON CORNER OF FILL
80	6,156,362	2,211,039	POINT ON CORNER OF FILL
81	6,156,043	2,211,252	POINT ON CORNER OF FILL
82	6,156,479	2,211,016	POINT ON CORNER OF FILL
83	6,156,560	2,211,150	POINT ON CORNER OF FILL
84	6,156,621	2,211,095	POINT ON CORNER OF FILL
85	6,156,531	2,210,965	POINT ON CORNER OF FILL
86	6,156,597	2,210,900	POINT ON CORNER OF FILL
87	6,156,732	2,211,018	POINT ON CORNER OF FILL
88	6,156,783	2,210,970	POINT ON CORNER OF FILL
89	6,156,660	2,210,855	POINT ON CORNER OF FILL
90	6,156,400	2,211,044	POINT ON CORNER OF CHANNEL NO. 4

THINK SAFETY
ACT SAFELY

APP.	OSFM #		
STATE OF CALIFORNIA CALIFORNIA NATURAL RESOURCES AGENCY DEPARTMENT OF WATER RESOURCES DIVISION OF ENGINEERING			
REV.	DESCRIPTION	SUB. DATE	APP. DATE

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CHIPPS ISLAND
NORTH PARCEL TIDAL HABITAT
RESTORATION - PHASE 2C

COORDINATES TABLES

SPEC. NO.	SHEET NO.	DRAWING NO.
24-XX	027	C-124

PLOT DATE: 4/5/2024