

Surfers Beach Restoration Project

Post-Construction Report and As-Built Documentation

Prepared by Brad Damitz, consultant to San Mateo County Harbor District. February 10, 2026

1. Introduction and Purpose

This Post-Construction Report has been prepared for the Surfers Beach Pilot Restoration Project (Project) to satisfy post-construction and as-built reporting requirements for all applicable permitting and funding agencies, including the California Coastal Commission (CCC), Greater Farallones National Marine Sanctuary (GFNMS), and the San Francisco Bay Regional Water Quality Control Board (RWQCB), and to support grant reporting obligations to Ocean Protection Council (OPC). This consolidated report is intended to serve as the required as-built report for post-construction documentation to agencies.

The purpose of this report is to document how the Project was constructed, describe the construction activities conducted within the various Project areas, and confirm that the work was completed in substantial conformance with approved plans and permit conditions. The report also provides a clear, consolidated record of the completed Project for regulatory review and future reference, including as-built plans, maps, photographs, and summaries of construction activities and outcomes.

2. Executive Summary

The Surfers Beach Pilot Restoration Project was implemented by the San Mateo County Harbor District (District) to address chronic harbor shoaling and accelerated coastal erosion at Surfer's Beach, adjacent to Pillar Point Harbor. These conditions are largely attributable to the construction of the East Breakwater approximately 60 years ago, which disrupted natural sediment transport processes along this shoreline.

The Project beneficially reused clean dredged sand from within Pillar Point Harbor to restore beach width and coastal resilience along approximately 1,300 feet of shoreline at Surfers Beach. The Project also implemented eelgrass mitigation activities within the harbor to offset impacts associated with dredging and to improve habitat conditions for marine species. The Project was funded through the Harbor District's Capital Improvement Program and supported by an approximately \$3 million grant from the Ocean Protection Council's SB 1 Track 2 Grant Program.

Construction commenced on July 28, 2025, following mobilization by the District's contractor, Vortex Marine Construction, Inc., and was completed on October 22, 2025. All construction and staging areas were restored to pre-project conditions, and all equipment was fully demobilized by the end of October 2025.

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The Project was constructed in substantial conformance with all required permit conditions. Construction proceeded without spills, releases, or incidents requiring agency notification. No deviations from the approved Project occurred that would affect coastal resources, public access, or surf conditions.

This report summarizes the construction process and identifies the as-built plans and photographic documentation that establish a baseline for future monitoring and evaluation of beach evolution, sediment behavior, and surf conditions at Surfers Beach.

Final constructed conditions are documented in the certified as-built plans (see Attachment B) and associated photographic documentation (see Attachment E), which establish the baseline for future monitoring and evaluation of beach evolution, sediment transport, and surf conditions.

3. Project Overview

3.1 Location

The Project is located within and adjacent to Pillar Point Harbor in Half Moon Bay, San Mateo County, California. Construction activities occurred within designated dredge areas inside the harbor and along a portion of the Surfer's Beach shoreline south of the harbor.

3.2 Project Objectives

The goal of the project is to study the potential benefits and impacts of implementing a pilot project that beneficially reuses approximately 75,000 to 100,000 cubic yards of sand dredged from Pillar Point Harbor and placed at Surfer's Beach. Project Objectives include:

- Prevent or mitigate beach erosion and sea cliff retreat
- Improve protection of Highway 1 and other structures
- Increase quality and quantity of public access and recreation
- Reduce the need for coastal armoring
- Improve biological habitat
- Improve operations of the boat launch ramp in PPH by removing sediments that interfere with the boat launch activities
- Improve navigation and anchorage in the East Basin by deepening significant shoaling areas
- Develop and implement a monitoring program that will be used to measure the project benefits and impacts, including physical and ecological considerations

3.3 Project Team

- **Project Proponent:** San Mateo County Harbor District
- **Construction Contractor:** Vortex Marine Construction, Inc.
- **Project Management:** Brad Damitz, Coastal Management Consultant

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- **Engineering and Design:** Environmental Science Associates (ESA)
- **Construction Management:** Joe Hill Consulting and Engineering Corporation (JHCE)
- **Eelgrass Mitigation Subcontractor:** Marine Taxonomic Resources, Ltd. (MTS)

4. Construction Summary

4.1 Mobilization and Site Preparation

Vortex Marine Construction, Inc. was given Notice to Proceed by the Harbor District on May 29, 2025, with mobilization of construction equipment and materials beginning on June 27, 2025. Mobilization included assembly of dredging equipment, installation of temporary pipelines, and establishment of staging areas in accordance with approved permits and plans.

Construction officially began on July 28, 2025. All construction activities were conducted during daylight hours. Temporary facilities and pipelines were installed and managed to maintain public safety and access along the shoreline and adjacent pedestrian corridors.

Project implementation followed the sequence of activities outlined below, with work phases coordinated as needed to accommodate site conditions and operational requirements, and biological timing constraints, including the need to complete eelgrass salvage and transplant activities within the appropriate growing season to support successful establishment prior to seasonal dormancy.:

1. Contractor mobilization and site preparation.
2. Dredging near the boat launch ramps and construction of the eelgrass mitigation area.
3. Completion of sediment placement at the eelgrass mitigation area and allowing placed sediment to settle.
4. Eelgrass salvage and transplant activities.
5. Dredging and hydraulic placement of sand at Surfers Beach, followed by final grading.
6. Contractor closeout, site restoration, and demobilization.

4.2 In-Harbor Dredging and Eelgrass Mitigation

Initial dredging activities focused on Dredge Areas 1B, and 1C, near the boat launch ramps in the east outer harbor of Pillar Point Harbor. Hydraulic suction dredging methods were used to remove clean sediment from designated dredge areas. The locations and extents of all approved dredge areas are shown on the certified as-built plans (see Attachment B).

During this initial phase of dredging, approximately 16,000 cubic yards of sediment was dredged from 1A and 1C and hydraulically pumped to the designated Eelgrass Mitigation Area site located in the west basin of the harbor near the west outer breakwater.

Prior to commencement of Phase 1 dredging, Marine Taxonomic Resources, Ltd. (MTS) conducted a small-scale preliminary eelgrass salvage and transplant effort. Eelgrass plants were salvaged from Dredge Areas 1A–1C and transplanted into suitable areas within the west basin

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of the harbor, adjacent to but outside the formal Eelgrass Mitigation Area, where sediment and depth conditions were optimal.

Following completion of sediment placement at the mitigation site (August 26, 2025) and an appropriate settlement period (through September 1, 2025), a second, larger-scale eelgrass salvage and transplant effort was conducted between September 1 and September 12, 2025. During this phase, eelgrass plants were salvaged from Dredge Area 2 and transplanted within the newly constructed Eelgrass Mitigation Area in the west basin. The final configuration and footprint of the Eelgrass Mitigation Area are depicted in the as-built plans (see Attachment B).

Dredging operations were conducted using up to two dredges operating concurrently in approved dredge areas, including areas near the boat launch ramps and along the east breakwater, to efficiently complete dredging and placement activities. Approximately 80,000 cubic yards of sand was dredged from Pillar Point Harbor and placed on Surfer's Beach

4.3 Sand Placement at Surfer's Beach

Following completion of in-harbor sediment placement and eelgrass mitigation activities, dredge pipelines were disassembled and reconfigured to deliver sand to Surfers Beach.

Dredging resumed in Dredge Area 1A, and sediment was hydraulically pumped to the northern end of the Surfers Beach placement area. During this initial phase of beach placement, approximately 10,000 cubic yards of sand were discharged directly onto the northern portion of the project area.

A second, larger dredge was mobilized to operate in Dredge Area 2, with a separate pipeline assembled to Surfers Beach. Following initial placement at the northern end, both pipelines were extended to the southern extent of the approximately 1,300-foot-long shoreline placement area. The final sand placement footprint and contours are shown on the certified as-built plans (see Attachment B).

In total, approximately 80,000 cubic yards of clean dredged sand was hydraulically pumped to Surfers Beach. Sand placement was accomplished through controlled slurry discharge and grading to achieve the approved design intent while accommodating site-specific conditions. Placement techniques included direct slurry discharge, temporary containment and ponding, and dozer contouring to facilitate effective distribution of sand and formation of the restored beach profile. Representative construction photographs illustrating placement methodologies are provided in Attachment E.

Dredging and sand placement operations at Surfers Beach were completed on October 22, 2025. Post-construction shoreline conditions from upcoast, downcoast, inland, and seaward viewpoints are included in Attachment E.

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4.4 Public Access Management

Public access was maintained throughout construction to the maximum extent feasible. Temporary interruptions associated with pipeline installation, pipeline crossings, and construction of a temporary beach access ramp were managed through active coordination with pedestrians and cyclists. Where temporary detours were necessary, construction crews worked to maintain safe passage and minimize disruptions.

4.5 Demobilization and Site Restoration

Upon completion of dredging and sand placement activities, all temporary construction facilities, pipelines, and staging areas were removed. All disturbed staging areas were restored to pre-project conditions. Vortex Marine Construction fully demobilized equipment by the end of October 2025.

4.6 Construction Summary Metrics

- Construction Start Date: July 28, 2025
- Completion of Dredging and Sand Placement: October 22, 2025
- Completion of Final Beach Grading: October 29, 2025
- Total Volume Dredged: 96,000 CY
- Volume Placed at Surfers Beach: 80,000 CY

5. Regulatory Compliance Summary

The Project was constructed in substantial conformance with all associated permit conditions. A detailed permit compliance matrix summarizing compliance with applicable conditions from the CCC, RWQCB, U.S. Army Corps of Engineers, and National Marine Sanctuaries is included as Attachment A. Areas of construction activity within waters of the State and along the shoreline are identified on the as-built plans (Attachment B) and in the accompanying photo documentation (Attachment E).

Public access along Surfers Beach and adjacent shoreline areas was maintained throughout construction. No spills, releases, or incidents requiring agency notification occurred. No deviations from the approved Project affecting coastal resources, shoreline processes, or surf conditions were identified.

6. As-Built Plans and Photographic Documentation

As-built plans have been prepared to document the final constructed condition of the Project. The as-built plans are substantially consistent with the approved Project and include vertical and horizontal references to inland surveyed benchmarks for use in future monitoring efforts.

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Color photographic documentation is provided to clearly show the as-built Project condition. Photographs include views from upcoast, downcoast, seaward, and inland vantage points, as well as additional viewpoints necessary to provide complete photographic coverage of the Project area. A site plan identifying the location, date, and time of each photographic viewpoint is included.

The as-built plans are submitted with certification by a licensed civil engineer with experience in coastal structures and processes, verifying that the Project was constructed in conformance with the approved plans and permit conditions.

This report and its attachments are intended to satisfy the RWQCB and CCC as-built report requirement and support submission of the required Notice of Project Construction Completion. The as-built documentation includes:

- Final certified construction plans marked to reflect field conditions (Attachment B);
- Post-construction photographs and viewpoint map (Attachment E);
- Identification of construction areas and in-water work locations; and
- A summary of the dates of initial disturbance and final completion of construction activities.

7. Post-Construction Condition and Monitoring Context

The Project is anticipated to evolve dynamically in response to natural coastal processes. The as-built documentation provided herein establishes a baseline for future monitoring and evaluation of beach profile changes, sediment transport behavior, and surf conditions at Surfers Beach.

The District will transition into a multi-year monitoring program to evaluate Project performance, including beach evolution, nearshore bathymetry, wave and sediment dynamics, and eelgrass mitigation success, consistent with approved monitoring plans.

8. Deviations, Incidents, and Notifications

No deviations from the approved Project requiring agency approval occurred during construction. No spills, hazardous material releases, or other incidents requiring notification to regulatory agencies were reported.

9. Attachments

- **Attachment A:** Permit Compliance Matrix (CCC and Other Agencies)
- **Attachment B:** As-Built Plans – Record Set (Engineer-Certified 02/06/2026)
- **Attachment C:** As-Built Survey
- **Attachment D:** Mobilization and Construction-phase Photographs
- **Attachment E:** As-Built Photopoint Documentation

Attachment A – Permit Compliance Matrix

Surfers Beach Restoration Pilot Project Permit Compliance Matrix

Source	Category	No.	Condition	COMPLIANCE STATUS
California Coastal Commission -- Consolidated Coastal Development Permit - <u>CDP 2-22-0726</u>				
<u>Expiration Date:</u> September 6, 2026 <u>Staff Contact:</u> isobel.cooper@coastal.ca.gov <u>Monitoring Report due:</u> One year and three months from the date of commencement of materials placement.				
CDP	Construction Plan	2	<p>PRIOR TO ISSUANCE: Submit 2 copies of a Construction Plan for review and written approval. Must include: Construction Areas; Construction Methods; Construction Timing; Construction BMPs (CDP includes minimum BMP requirements in 2(d) 1-5); Restoration; Construction Site Documents; Construction Coordinator; Construction Specifications, and; Notification. *See 2(a) - 2(i) in Permit. (a) Construction Areas: The Construction Plan shall identify the specific location of all construction areas, all staging areas, and all construction access corridors in site plan view. All areas within which construction activities and/or staging areas are to take place shall be minimized in size to the maximum extent feasible in order to have the least impact on public access and other coastal resources, including by using, as feasible, inland areas for staging and storing construction equipment and materials. Construction areas shall be sited and designed to minimize impacts to public beach access and public views at Surfers Beach, at the adjacent section of the Coastal Trail, and at Highway 1, including but not limited to public views across the site. (b) Construction Methods: The Construction Plan shall specify the construction methods to be used, including all methods to be used to keep the construction areas separate from public recreational use areas as much as possible (including using unobtrusive temporary fencing or equivalent measures to delineate construction areas), and including verification that equipment operation and equipment and material storage will not, to the maximum extent feasible, significantly degrade public access and public views during construction. The Plan shall limit construction activities to avoid coastal resource impacts as much as feasible, and lighting of the work area is prohibited. (c) Construction Timing: Construction is prohibited during weekends, from the Saturday of Memorial Day through Labor Day inclusive, and during non-daytime hours (i.e., from one-hour after sunset to one-hour before sunrise), unless due to extenuating circumstances the Executive Director authorizes such work. (d) Construction BMPs: (see minimum BMP requirements in 2(d) 1-5)</p>	<p>COMPLETED by Brad Damitz. Submitted: 7/10/2025; Approved: 7/21/2025</p>
CDP	Construction Plan	2(i)	<p>Notification. The Permittee shall notify planning staff of the Coastal Commission's North Central Coast District Office at least three working days in advance of commencement of construction, and immediately upon completion of construction.</p>	<p>COMPLETED by Brad Damitz. Submitted: 7/21/2025</p>
CDP	As-Built Plans	3	<p>Within 3 Months of Completion of Construction the permittee shall submit 2 copies of As-Built Plans to the Executive Director for review and written approval showing all elements of the approved project. The As-Built Plans shall be substantially consistent with the approved project identified in Special Condition 1. The As-Built Plans shall include color photographs (in both color hard copy 8 1/2 x 11 and digital jpg formats) that clearly show the as-built project and that are accompanied by a site plan that notes the location of each photographic viewpoint and the date and time of each photograph. At a minimum, the photographs shall be from upcoast, seaward, inland, and downcoast viewpoints, and from any other viewpoints necessary to provide complete photographic coverage of all project areas. Such photographs shall be at a scale that allows comparisons to be made with the naked eye between photographs taken in different years and from the same vantage points, including those chosen so as to inform potential future projects regarding how the placement of such materials affects surf conditions at Surfers Beach. The As-Built Plans shall include vertical and horizontal references to inland surveyed benchmarks for use in future monitoring efforts. The As-Built Plans shall be submitted with certification by a licensed civil engineer with experience in coastal structures and processes, acceptable to the Executive Director, verifying that the project has been constructed in conformance with the approved project identified in Special Condition 1 and the terms and conditions of this CDP.</p>	<p>Completed by Brad Damitz and ESA</p>

CDP	Monitoring and Reporting	4	The Permittee shall monitor the project and provide a report to the Executive Director that clearly describes both the implementation phase and the outcome of the project with respect to the boat launch area, the eelgrass restoration area, and Surfers Beach, where the intent is to use lessons learned from the project to inform and refine potential additional such projects in the future. At a minimum, the Permittee shall provide color photo documentation (in both color hard copy 8 1/2 x 11 and digital jpg formats, accompanied by a site plan that notes the location of each photographic viewpoint and the date and time of each photograph) of all aspects of the project, including at representative times (and at least weekly) during construction duration, and at the least monthly (at both high and low tides) after that for one year from the date of commencement of materials placement. At a minimum, the photographs shall be from enough viewpoints to provide complete photographic coverage of all project areas and shall include viewpoints chosen so as to inform potential future projects regarding how the placement of such materials affects surf conditions at Surfers Beach. In addition, monitoring efforts must provide a clear assessment of any impacts from sand placement, whether good or bad, on surfing resources, where at the least a narrative assessment of surf conditions shall be provided for each set of photographs (e. g., swell conditions, surf users, etc.) as compared to representative assessment conducted before the project is implemented. Such photographs shall be at a scale that allows comparisons to be made with the naked eye between photographs taken at different times from the same vantage points. Such photos, as well as a narrative describing the project and lessons learned, shall be provided to the Executive Director within one year and three months from the date of commencement of materials placement.	District Consultants 1st report due in ~December 2026
CDP	Other Authorizations	5	PRIOR TO CONSTRUCTION, the Permittee shall provide to the Executive Director written documentation of authorizations from all entities from which such authorization is necessary for the approved project (including at a minimum from San Mateo County, City of Half Moon Bay, California State Lands Commission, California Department of Fish and Wildlife, Monterey Bay National Marine Sanctuary, U. S. Army Corps of Engineers, and NOAA Fisheries) or evidence that no such authorizations are required from each of these entities. The Permittee shall inform the Executive Director of any changes to the project required by any other such authorizations. Any such changes shall not be incorporated into the project until the Permittee obtains a Commission amendment to this CDP, unless the Executive Director determines that no amendment is legally required.	COMPLETED by Brad Damitz. Submitted: 6/24/2025
CDP	Nesting Bird Protections		Nesting Birds Surveys For any construction work that would occur during the avian breeding season (i.e., January 15 to September 15), pre-construction surveys shall be completed by a qualified wildlife biologist with experience in observing reproductive and nesting behavior to identify displays of nesting behavior and/or active nests (i.e., as occupied by eggs or nestlings) in the proposed construction areas. The following shall apply: (a) Surveys must occur no more than 30 days prior to construction and weekly thereafter. [(b)-(e) contain specific requirements and should be reviewed by selected biologist prior to conducting surveys. Also if needed see 3(b) 2 & 3 for Buffers and Disturbance protocols].	District Consultants Surveys are underway and ongoing, completed by Chris Rogers, Wood Biological Consulting
CDP	Nesting Bird Protections		A Nesting Birds Monitoring Report shall be provided to the Executive Director within 90 days of construction completion and shall include: all survey results and associated maps; along with a brief narrative describing the survey methods and observations of the species' tolerances to noise, vibration, and visual disturbance cues. If any incidents have resulted in a need for further consultation with the project biologist and/or the Executive Director, these will also be noted and discussed.	District Consultants, Status - Pending, Wood Biological
CDP	Property Owner/Easement Holder Consent		For any construction activities that may occur on properties (and/or on easements or similar legally defined areas) not owned by the Permittee, including but not limited to construction that requires equipment access on and/or across such other properties, the Permittee shall provide evidence of review, approval and consent from such property owners allowing such activities, where such consent shall only be deemed to have been given if the consent is for development consistent with the terms and conditions of the CDP, including as it affects such properties.	Completed by Brad Damitz, 2024
CDP	Additional Construction Habitat BMPs (Eelgrass)		A pre-construction eelgrass clearance survey for the project area shall be completed no more than 60 days prior to the beginning of construction and shall be valid until the next period of active eelgrass growth (typically April-October).The Permittee shall submit the pre-construction eelgrass survey for review and approval by the Executive Director within five business days of completion of each eelgrass survey and, in any event, no later than 15 business days prior to commencement of any construction activities.	Completed by MTS, June 27-30
CDP	Restoration		All construction debris shall be removed, and all beach area and other public recreational access and use areas and all beach access points impacted by construction activities shall be restored to their pre-construction condition or better within three days of completion of construction. Any native materials impacted shall be appropriately filtered as necessary to remove all construction debris.	Completed by Vortex 11/15/2025

CDP	Construction Site Documents		The Construction Plan shall provide that copies of the signed CDP and the approved Construction Plan be maintained in a conspicuous location at the construction job site at all times , and that such copies are available for public review on request. All persons involved with the construction shall be briefed on the content and meaning of the CDP and the approved Construction Plan, as well as the public review requirements applicable to them, prior to commencement of construction.	Completed by Vortex 7/25/2025
CDP	Construction Coordinator		The Construction Plan shall provide that a construction coordinator be designated to be contacted during construction should questions arise regarding the construction (in case of both regular inquiries and emergencies), and that the construction coordinator's contact information (i.e., address, phone numbers, email, etc.), including, at a minimum, an email address and a telephone number that will be made available 24 hours a day for the duration of construction, is conspicuously posted at the job site where such contact information is readily visible from public viewing areas while still protecting public views as much as possible, along with indication that the construction coordinator should be contacted in the case of questions regarding the construction (in case of both regular inquiries and emergencies). <u>The construction coordinator shall record the name and contact information (i.e., address, email, phone number, etc.) and nature of all complaints received regarding the construction, and shall investigate complaints and take remedial action, if necessary, within 24 hours of receipt of the complaint or inquiry. All complaints and all actions taken in response shall be summarized and provided to the Executive Director on at least a weekly basis.</u>	District Consultants in coordination with Contractor
CDP	Construction Specifications		The construction specifications and materials shall include appropriate control provisions that require remediation for any work done inconsistent with the terms and conditions of this CDP.	Completed by District Consultants
CDP	Minor Adjustments		Minor adjustments to these special condition requirements which do not require a CDP amendment or new CDP (as determined by the Executive Director) may be allowed by the Executive Director if such adjustments: (1) are deemed reasonable and necessary; and (2) do not adversely impact coastal resources.	District Consultants
CDP	Assumption of Risk, Waiver of Liability, and Indemnity.		By acceptance of this CDP, the Permittee acknowledges and agrees, on behalf of itself and all successors and assigns: (a) that the project area is subject to coastal hazards, including but not limited to episodic and long-term shoreline retreat and coastal erosion, high seas, ocean waves, tidal scour, storms, tsunami, coastal flooding, landslide, earth movement, and the interaction of all of these, many of which will worsen with future sea level rise; (b) to assume the risks to the Permittee and the properties that are the subject of this CDP of injury and damage from such hazards in connection with this permitted development; (c) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; (d) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the CDP against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards; and (e) that any adverse effects to people or property caused by the permitted project shall be fully the responsibility of the Permittee.	District Staff

Orange Highlight means ONGOING Monitoring and/or Reporting Requirement

Regional Water Quality Control Board -- CWA Section 401 Water Quality Certification and Waste Dishcharge Requirement - RM:456550				
Expiration Date: November 30, 2030. Tahsa.Sturgis@Waterboards.ca.gov		Monitoring Reports due: January 31, 2027 (yr 1)		Staff Contact:
401 Cert.	Regulatory Compliance and Work Windows	2	The Permittee shall adhere to the conditions of the Project's CWA Section 404 Individual Permit (Corps File No. 2012-00207S), when issued by Army Corps.	Construction Contractor & District Consultants
401 Cert.	Regulatory Compliance and Work Windows	4	Precipitation forecasts shall be considered when planning construction activities. The Permittee shall monitor the 72- hour forecast from the National Weather Service at http://www.nws.noaa.gov . When there is a forecast of more than 40% chance of rain, or at the onset of unanticipated precipitation, the Permittee shall remove all equipment from waters of the State, implement erosion and sediment control measures (e.g., jute, straw, coconut fiber erosion control fabric, coir logs, straw), and cease all Project activities. If any construction activities will occur after October 15, a Winterization Plan shall be submitted to the Executive Officer for review and acceptance.	Construction Contractor & District Consultants

401 Cert.	Regulatory Compliance and Work Windows	5	To work beyond October 31, the Permittee must meet the precipitation and construction planning requirement specified in this Certification (see Condition 4), and the weather requirement listed in the Application's materials	N/A
401 Cert.	General Construction	6	No unauthorized construction-related materials or wastes shall be allowed to enter into or be placed where they may be washed by rainfall or runoff into waters of the State. When construction is completed, any excess material shall be removed from the work area and any areas adjacent to the work area where such material may be discharged to waters of the State.	Construction Contractor
401 Cert.	General Construction	7	No fueling, cleaning, or maintenance of vehicles or equipment shall take place within waters of the State, or within any areas where an accidental discharge to waters of the State may occur; and construction materials and heavy equipment must be stored outside of waters of the State. When work within waters of the State is necessary, best management practices shall be implemented to prevent accidental discharges.	Construction Contractor
401 Cert.	General Construction	8	All work performed within waters of the State shall be completed in a manner that minimizes impacts to beneficial uses and habitat; measures shall be employed to minimize disturbances along waters of the State that will adversely impact the water quality of waters of the State. Disturbance or removal of vegetation shall not exceed the minimum necessary to implement the Project.	Construction Contractor & District Consultants
401 Cert.	Pre-Construction Reporting and Other Requirements	9	PRIOR TO CONSTRUCTION: The Permittee shall input Project information into EcoAtlas no later than 14 days from this Certification's issuance date, consistent with Section 4 herein. The Project information shall be added to the Project Tracker tool in EcoAtlas online at https://ptrack.ecoatlas.org . Instructions are available at https://ptrack.ecoatlas.org/instructions , or by contacting Water Board staff (Tahsa Sturgis (510) 622-2316; tahsa.sturgis@waterboards.ca.gov). The Permittee shall notify the Water Board and submit documentation demonstrating the Project has been successfully added to EcoAtlas via email to RB2-401Reports@waterboards.ca.gov	Completed by Damitz, 6/11/2024
401 Cert.	Pre-Construction Reporting and Other Requirements	10	PRIOR TO CONSTRUCTION: The Permittee shall submit a Start of Construction (SOC) Report acceptable to the Executive Officer. The SOC Report shall be submitted no later than seven days prior to start of initial ground disturbance activities and notify the Water Board at least 48 hours prior to initiating in-water work and any stream diversions in any given Project year. Notification may be via telephone, email, delivered written notice, or other verifiable means. The SOC Report shall be submitted in same timeframe specified herein for multiple construction seasons, if necessary, via email to RB2-401Reports@waterboards.ca.gov , and include SOC_456550_Surfers Beach Pilot Restoration Project .	Completed by Damitz, Submitted: 7/21/2025
401 Cert.	Pre-Construction Reporting and Other Requirements	11	PRIOR TO CONSTRUCTION: Permittee shall establish a minimum of 10 photo-documentation points at each location where Project related impacts to waters of the State occur. The points shall be used to track the Project's construction impacts, the pre- and post-construction condition, and overall Project success. The Permittee shall prepare a site map with the photo- documentation points clearly marked . Prior to and following construction, the Permittee shall photographically document the immediate pre- and post-Project condition at locations where impacts to waters of the State occur, including temporary impacts. These post-construction photographs and map shall be submitted, along with the as-built and construction completion reports (See Conditions 12 and 13).	Completed by ESA, included in final Monitoring and Adaptive Management Plan
401 Cert.	Active Construction and Post-Construction Reporting Requirements	12	The Permittee shall prepare an as-built report acceptable to the Executive Officer. The as-built report shall be submitted to the Water Board no later than 60 days after completing Project construction activities, including revegetation . The report shall include a description of the areas of actual disturbance during Project construction and the photographs and map specified in Condition 11. The report shall clearly identify and illustrate the Project site, and the locations where impacts to waters of the State occurred. The as-built report shall include the 100 percent construction plans marked with the contractor's field notes that clearly depict any deviations made during construction from the designs reviewed by the Water Board. The as-built report shall be sent via email to RB2-401Reports@waterboards.ca.gov , and include As-Built_456550_Surfers Beach Pilot Restoration Project in the email subject line	Completed by Damitz and ESA
401 Cert.	Active Construction and Post-Construction Reporting Requirements	13	The Permittee shall submit a Notice of Project Construction Completion (NOC) acceptable to the Executive Officer to notify the Water Board that the Project has been completed. The Completion Notice shall be submitted to the Water Board no later than 60 days after completing all Project construction activities . The Completion Notice shall include the as-built report, the post-construction photographs, the date of the first Project-related disturbance of waters of the State occurred, and the date construction was completed for each Project activity. The Completion Notice shall be sent via email to RB2-401Reports@waterboards.ca.gov and include NOC_456550_Surfers Beach Pilot Restoration Project in the email subject line	Completed by Damitz

401 Cert.	Mitigation and Monitoring Requirements	14	<p>The Permittee shall monitor the areas temporarily impacted created by the Project for a minimum 5-year period from the time that they are temporarily impacted and until the mitigation requirements specified herein are achieved, as described in the Pillar Point Harbor-Wide Eelgrass Management and Mitigation Plan (Marine Taxonomic Services, December 16, 2023) (Eelgrass Monitoring Plan) and the Surfer’s Beach Pilot Restoration 5 Year Monitoring and Adaptive Management Plan (ESA, October 2023) (MAMP). The Permittee shall submit annual monitoring reports to the Water Board (see Condition 18) to demonstrate the Project’s impacts have been sufficiently and appropriately mitigated and beneficial uses have not been adversely affected. If any signs of instability, inadequate restoration, or insufficient reestablishment are observed at the site, the Permittee shall document these observations in the annual reports and make recommendations for corrective actions, as necessary (see Condition 17). If any adverse impacts to waters of the State are observed during the monitoring period, compensatory mitigation may be required by the Executive Officer, including, but not limited to, extension of the monitoring period;</p>	District Consultants, ESA and MTS to prepare reports, Damitz to Submit, yr 1 report due January 31, 2027
401 Cert.	Mitigation and Monitoring Requirements	15	<p>Performance Criteria. The Permittee shall evaluate the Project’s eelgrass mitigation site and beach nourishment area during the monitoring period by using the annual performance criteria in monitoring years 1 to 4 specified in the Eelgrass Monitoring Plan, MAMP, and as follows:</p> <p>a) Eelgrass Performance Criteria—as specified in the Monitoring Plan, the eelgrass mitigation site be assessed during the monitoring period using the following annual metrics for vegetation cover:</p> <ul style="list-style-type: none"> • Month 0: Full coverage distribution of planting units over the initial mitigation site shall be confirmed. • Month 6: Persistence and growth of eelgrass in the initial mitigation site, and 50 percent survival of initial planting units and well distributed cover. • Month 12: 40 percent eelgrass cover in the initial mitigation site, 20 percent density of adjacent reference areas, and no less than 1.2 times the area of the impact site. • Month 36: 100 percent eelgrass cover in the initial mitigation site, 85 percent density of adjacent reference areas, and no less than 1.2 times the area of the impact site. • Month 48: 100 percent eelgrass cover in the initial mitigation site, 85 percent density of adjacent reference areas, and no less than 1.2 times the area of the impact site. <p>b) Erosion and Effects—as described in the MAMP, the monitoring shall document the Project performance in terms of persistence of the placed sand and apparent effects to coastal resources to support the consideration of future sand placements. During the monitoring period, the Permittee shall assess the following: Erosion Rates: The expected erosion of placed sand within the Project limit and estimated sand transportation patterns and rates shall be documented using topographic and bathymetric data collected during the monitoring period. The changes in sand volume shall be computed, and these data along with geometry changes will be used to infer sand transport directions and rates. During extreme wave and water level events, visual observations shall be conducted to document the changes with standardized forms. Depth Changes: the depth changes within PPH where dredging occurred shall be documented and the shoaling rates shall be estimated. Effects: the effects of the beach nourishment on vertical and horizontal beach access and surfing conditions shall be documented using standardized forms. The formation of scarps that impede access shall be documented, and as necessary, may require adaptive management actions.</p>	District Consultants, ESA and MTS to prepare reports, Damitz to Submit, yr 1 report due January 31, 2027
401 Cert.	Mitigation and Monitoring Requirements	16	<p>Final Success Criteria. The following final success criteria shall be documented in the final monitoring report and referenced in all other monitoring years to evaluate the site using the performance criteria:</p> <p>a) Eelgrass—the revegetation success shall be assessed during the monitoring period using the following: Month 60: 100 percent eelgrass cover in the initial mitigation site, 85 percent density of adjacent reference areas, and no less than 1.2 times the area of the impact site;</p> <p>b) Erosion and Effects—the beach nourishment at Surfers Beach shall be considered successful if the post-Project monitoring described in the MAMP is collected, shared with the regulatory agencies, used to inform future beach nourishment actions, and no adverse effects to waters of the State have otherwise occurred. The Project’s mitigation shall be considered successful if the Executive Officer determines the final success criteria specified in Eelgrass Monitoring Plan, MAMP, and as specified herein, for the fifth and final monitoring year has been met and no adverse impacts to waters of the State have otherwise occurred.</p>	District Consultants
401 Cert.	Mitigation and Monitoring Requirements	17	<p>Corrective Actions: If any signs of instability, excessive erosion, or in adequate eelgrass recovery are observed at the eelgrass mitigation site or along the beach nourishment area, the Permittee shall document these observations in the annual reports and make corrective action/adaptive management recommendations, as necessary. After receipt of an annual monitoring report, if corrective actions/adaptive management actions are determined necessary by the Executive Officer, the Permittee shall be required to re-submit the corresponding annual report to include corrective actions/adaptive management actions, as necessary. The corrective actions/adaptive management actions shall not be implemented until they are approved by the Executive Officer.</p>	District Consultants

401 Cert.	Mitigation and Monitoring Requirements	18	The Permittee shall submit annual monitoring reports, acceptable to the Executive Officer, by January 31 following each monitoring year's completion. The first monitoring year commences in the calendar year after the Project's temporarily impacted areas are restored after their initial disturbance. At the time of this Certification, the Project is anticipated to commence in 2025. Therefore, the first annual monitoring report shall be due on January 31, 2027, unless the Project is completed at a different time. Annual reports shall include, but not be limited to, the following: a) Photographs: photographs taken during the monitoring year from the photo-documentation points specified in Conditions 11 shall be included in each annual monitoring report and updated as appropriate. The photographs shall include captions with respect to the photograph's point of view, direction of flow, when applicable, locations of Project activities, location of the photo-documentation point, and date photographed. b) Activities and Impacts: the Project activities completed in the monitoring year and their respective impacts to waters of the State shall be included in each annual monitoring report. The final monitoring report shall include all Project activities and their impacts for the duration of the Project. The monitoring reports shall also reference the activities and impacts in relation to the limits covered in this Certification. If limits for any Project activity are exceeded, the Permittee may need to submit a report of waste discharge and shall be required to provide compensatory mitigation for the impacts to waters of the State that exceed the limits authorized in this Certification. c) Environmental Drivers: each monitoring report shall describe the precipitation events that occurred at the site during the monitoring year. The effects of the Project and environmental drivers (e.g., precipitation events, drought events) on site conditions shall be described in reference to the monitoring year's precipitation events. d) Cumulative Monitoring: each annual report shall summarize all data from previous monitoring reports in addition to the current year's monitoring data, including the need for, and implementation of, any remedial actions. Monitoring data may include all relevant qualitative and quantitative data necessary to determine whether the site is stable. The final monitoring report shall document whether the temporarily impacted areas were restored to their pre-Project condition.	District Consultants, ESA to prepare, Damitz to Submit, yr 1 report due January 31, 2027
401 Cert.	Mitigation and Monitoring Requirements	19	Notice of Mitigation Monitoring Completion. Within 30 days of successfully completing the required monitoring, the Permittee shall submit, acceptable to the Executive Officer, a Notice of Mitigation Monitoring Completion (NMMC) notifying the Water Board that monitoring has been completed. The Notice shall be submitted via email to RB2-401Reports@waterboards.ca.gov, or by mail to the attention of 401Certifications Reports. This notification shall include the date monitoring was completed, the Project Name, and reference NMMC_456550_Surfers Beach Pilot Restoration Project	
401 Cert.	Administrative and General Compliance	20	The Permittee shall grant Water Board staff or an authorized representative, upon presentation of credentials and other documents as may be required by law, permission to: (1) enter upon the Project site or compensatory mitigation site(s) where a regulated facility or activity is located or conducted, or where records are kept; (2) have access to and copy any records that are kept and are relevant to the Project or the requirements of this Order; (3) inspect any facilities, equipment, practices, or operations regulated or required under this Order; and (4) sample or monitor for the purposes of assuring Order compliance.	Construction Contractor, District Consultants & District Staff
401 Cert.	Administrative and General Compliance	21	A copy of the 401 Certification shall be provided to any consultants, contractors, and subcontractors working on the Project. Copies of this Order shall remain at the Project site for the duration of this Order. The Permittee shall be responsible for work conducted by its consultants, contractors, and any subcontractors.	Completed by Vortex
401 Cert.	Administrative and General Compliance	23	The Permittee shall notify the Water Board of any violations of water quality standards, along with the cause of such violations, as soon as practicable (ideally within 24 hours). Notification may be via telephone, email, delivered written notice, or other verifiable means.	Construction Contractor & District Consultants
401 Cert.	Administrative and General Compliance	24	In accordance with Water Code section 13260, the Permittee shall file with the Water Board a report of any material change or proposed change in the ownership, character, location, or quantity of this waste discharge. Any proposed material change in operation shall be reported to the Executive Officer at least 30 days in advance of the proposed implementation of any change. Changes to discharges include, but are not be limited to, significant new soil disturbances, proposed expansions of development, or any change in drainage characteristics at the Project site. For the purpose of this Order, this includes any proposed change in the boundaries of the area of wetland/waters of the State to be impacted.	District Consultants

401 Cert.	Annual Fees	31	In accordance with 23 CCR section 2200, the Permittee shall pay an annual fee to the Water Board each fiscal year (July 1 – June 30) until Project construction activities are completed and an acceptable Notice of Project Construction Completion is received by the Water Board. If monitoring is required, the Permittee shall pay an annual fee to the Water Board until monitoring activities are completed and an acceptable Notice of Mitigation Monitoring Completion is received by the Water Board (Note: the Annual Post Discharge Monitoring Fee may be changed by the State Water Board; at the time of Certification it was \$399 per year for Category E projects). Annual fees will be automatically invoiced to the Permittee. The Permittee must notify the Water Board at Project and mitigation completion with a final report in order to request to terminate annual billing. Notification shall reference NOT_456550_Surfers Beach Pilot Restoration Project and should be sent to the staff listed at the bottom of this Certification and to RB2-401Reports@waterboards.ca.gov. Water Board staff will verify the conditions of the Certification have been met and may request a site visit at that time to confirm the Project’s status and compliance with the Certification (23 CCR sections 3833(b)(3) and 2200 (a)(3); CWC Section 13267).	District Staff District Consultants
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Orange Highlight means Monitoring and/or Reporting Requirement

Army Corps of Engineers -- CWA Section 404 and RHA Section 10 Permit SPN-2012-00207				
Expiration Date: June 20, 2029.		Monitoring Reports Due : No annual reports required		Staff Contact: Jessica.M.Vargas@usace.army.mil
Source	Category	No.	Condition	Responsible Party(ies)
Permit # SPN-2012-00207	General Conditions	3	If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.	Construction Contractor & District Consultants
Permit # SPN-2012-00207	General Conditions	8	You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the Terms and Conditions of your permit.	Construction Contractor, District Consultants & District Staff
Permit # SPN-2012-00207	Special Conditions	1	This Corps permit does not authorize you to take a threatened or endangered species. In order to remain exempt from the prohibitions of Section 9 of the Endangered Species Act, you must comply with the incidental take authorization for the endangered Black abalone (<i>Haliotis cracherodii</i>) under the enclosed National Marine Fisheries Service (NMFS) Biological Opinion (BO) entitled, “Endangered Species Act Section 7(a)(2) Biological Opinion, and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the Pillar Point Harbor Dredging and Surfer’s Beach Restoration Project (Corps File No. SPN-2012-00207),” dated February 23, 2024. The BO contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that is also specified in the BO. Your authorization under this Corps permit is conditional upon your compliance with all the mandatory terms and conditions associated with incidental take authorized by the attached BO, whose terms and conditions are incorporated by reference in this permit. Failure to comply with the terms and conditions associated with incidental take of the BO, where a take of the listed species occurs, would constitute an unauthorized take and it would also constitute non-compliance with this Corps permit. The NMFS is the appropriate authority to determine compliance with the terms and conditions of its BO and with the ESA.	District Consultants and Construction Contractor
Permit # SPN-2012-00207	Special Conditions	2	The Corps also initiated consultation with the National Marine Fisheries Service (NMFS) to address project related impacts to list species, pursuant to Section 7(a) of the Endangered Species Act of 1973, as amended (16 U.S.C. Section 1531 et seq.). By letter of February 23, 2024, the NMFS concurred with the determination that the project was not likely to adversely affect Central California Coast steelhead DPS (Oncorhynchus mykiss), North American green sturgeon southern DPS (<i>Acipenser medirostris</i>), Leatherback Turtle (<i>Dermochelys coriacea</i>), and their designated critical habitat. Additionally, NMFS concurred with the determination that the proposed for listing species, Sunflower sea star (<i>Pycnopodia helianthoides</i>), was not likely to be adversely affected by the proposed project. This concurrence was premised, in part, on project work restrictions outlined in the concurrence. Any mitigation measures, including survey requirements and/or timing and work restrictions are incorporated as Special Conditions to this authorization to ensure unauthorized incidental take of species and loss of critical habitat does not occur.	Construction Contractor & District Consultants

Permit # SPN- 2012- 00207	Special Conditions	3	The Corps also initiated consultation with the National Marine Fisheries Service (NMFS) to address project related impacts to Essential Fish Habitat (EFH) for Pacific Groundfish, Coastal Pelagic Species, and Pacific Coast Salmon, pursuant to Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act, as amended (16 USC 1531 et seq.; 16 USC 1801, et seq.). NMFS concurred with our determination that the project would adversely affect EFH. Although adverse effects are anticipated as a result of the Project, the proposed minimization and avoidance measures, and best management practices described in the concurrence letter are sufficient to avoid, minimize, and/or mitigate for the anticipated effects. This concurrence was premised, in part, on the eelgrass mitigation plan outlined in the concurrence. The eelgrass mitigation plan, entitled "Pillar Point Harbor-Wide Eelgrass Management and Mitigation Plan," dated July 27, 2020 (Revised December 16, 2023), is incorporated as a Special Condition to this authorization to ensure loss of EFH within Pillar Point Harbor does not occur.	Construction Contractor & District Consultants
Permit # SPN- 2012- 00207	Special Conditions	4	The Corps initiated consultation with the United States Fish and Wildlife Service (USFWS) to address project related impacts to list species, pursuant to Section 7(a) of the Endangered Species Act of 1973, as amended (16 U.S.C. Section 1531 et seq.). By letter of December 28, 2022, the USFWS concurred with the determination that the project was not likely to adversely affect California least tern (<i>Sternula antillarum brownii</i>), short-tailed albatross (<i>Phoebastria albatrus</i>), marbled murrelet (<i>Brachyrampus marmoratus</i>), Pacific Coast Distinct Population Segment of the western snowy plover (western snowy plover) (<i>Charadrius nivosus nivosus</i>), and southern sea otter (<i>Enhydra lutris nereis</i>). This concurrence was premised, in part, on project work restrictions outlined in the concurrence letter entitled, "Informal Consultation on the Pillar Point Harbor Dredging and Surfer's Beach Restoration Project, El Granada, San Mateo County, California (U.S. Army Corps of Engineers File No. SPN-2012-00207)," dated December 28, 2022. The Conservation Measures listed in the concurrence letter, including timing and work restrictions are incorporated as Special Conditions to this authorization to ensure unauthorized incidental take of species and loss of critical habitat does not occur.	Construction Contractor & District Consultants
Permit # SPN- 2012- 00207	Standard DMMO Conditions	1	Your use of the permitted activity must not interfere with the public's right to free navigation on all navigable waters of the United States.	Construction Contractor & District Consultants
Permit # SPN- 2012- 00207	Standard DMMO Conditions	2	You must have a copy of this permit available on the vessel used for the authorized transportation and disposal of dredged material.	Construction Contractor
Permit # SPN- 2012- 00207	Standard DMMO Conditions	3 & 12	You must advise this office as per Special Condition 12, on page 3D, before you start dredging activities under the authorization of this permit. The permittee or dredge contractor shall inform this office when: 1) a dredge episode actually commences, 2) when dredging is suspended (suspension is when the dredge contractor leaves the dredge site for more than 48 hours for reasons other than equipment maintenance), 3) when dredging is restarted, and 4) when dredging is complete. Each notification should include the Corps permit number and dredge episode number. The information can be e-mailed to dll-spn-dmmo@usace.army.mil or via telephone message at (415) 503-6807.	Ongoing, completed by Vortex

Permit # SPN- 2012- 00207	Standard DMMO Conditions	4	<p>PRIOR TO CONSTRUCTION: To provide notification of activities affecting navigation, the permittee shall provide the following information by fax, e-mail or standard mail to the contact listed below at least two weeks before commencing work:</p> <p>a. Name and telephone number of the dredge and or project manager. b. Size and placement of any floating construction equipment. c. Radio telephone frequencies and call signs of any marine equipment. d. Anticipated work start and completion dates.</p> <p>Commander (dpw) 11th Coast Guard District Coast Guard Island, Bldg 50-3 Alameda, California 94501-5100 POC: Local Notice to Mariners Waterways Management Branch PH: 510-437-2980 FAX: 510-437-5836 E-MAIL: D11LNM@uscg.mil</p>	Completed by Vortex 7/17/2025
Permit # SPN- 2012- 00207	Standard DMMO Conditions	5	The Coast Guard Captain of the Port of San Francisco Bay may require modifications to marine construction equipment deployment or mooring systems to safeguard navigation while work is in progress.	Construction Contractor & District Consultants
Permit # SPN- 2012- 00207	Standard DMMO Conditions	7	Placement of dredged material at Surfer's Beach and the eelgrass mitigation site shall be done in accordance with all best management practices (BMP) to ensure pipelines do not create navigation hazards. <u>Pipelines running between dredge area and placement area should be clearly marked if the pipeline is within known navigation zones to avoid boat strikes.</u>	Construction Contractor & District Consultants
Permit # SPN- 2012- 00207	Standard DMMO Conditions	8	All vessels operated for dredging and disposal of dredged material are required to use the Dredging Quality Management (DQM) system unless a waiver has been provided. The DQM system shall be implemented for activities under this permit when the project activity is using dredging equipment. The Permittee's DQM system must have been certified by the National DQM Support Center (DQM Center) within one calendar year prior to the initiation of the dredging/discharge/placement of sediments. The Permittee is responsible for ensuring the DQM system is operational throughout the dredging and that the project data is submitted to the DQM Center in accordance with the specifications provided at the DQM website. Questions regarding codification and/or additional information about L3QM program should be addressed to the DQM Center at (877) 840-8024 and/or https://dqm.usace.army.mil .	Construction Contractor & District Consultants

Permit # SPN- 2012- 00207	Standard DMMO Conditions	9a	<p>Dredge Material Analysis: Submit, for approval, no earlier than 60 days prior to the proposed commencement of any authorized successive dredging episodes, dredge material analysis (Physical, Chemical, and Biological) sampling and testing information. Please include the U.S. Army Corps of Engineers (Corps) permit number and dredge episode number with this submittal. Also submit Regional Water Quality Control Board (RWQCB) water quality certification or waiver for disposal of the material. For each dredging episode, the permittee shall obtain the approval of the District Engineer for formulating specific sediment testing procedures for the Dredged Material Analysis. The testing protocol will be in accordance with the testing guidelines as published in the Corps and U.S. Environmental Protection Agency publication entitled, "Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S. - Testing Manual" (The Inland Testing Manual or ITM, EPA-823-B-98-004), dated February 1998, and subsequent amendments thereto. The permittee shall provide a copy of the Dredged Material Analysis to the U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, National Marine Fisheries Service, and California Department of Fish and Wildlife concurrent with the San Francisco Bay Conservation and Development Commission's RWQCB's, and the Corps' receipt of this information. Agency comments submitted to the Corps within 15 calendar days thereafter will be given full consideration in the decision on dredged material disposal. For 9a-9e, submit to the following address:</p> <p style="text-align: right;">U.S. Army Corps of Engineers, San Francisco District</p> <p>Chief, Operations and Readiness Branch Attn: Debra O'Leary 450 Golden Gate Avenue, 4th Floor, Room 1111 P.O. Box 36152 San Francisco, California 94102-3404</p>	Construction Contractor & District Consultants
Permit # SPN- 2012- 00207	Standard DMMO Conditions	9b	<p>PRIOR TO CONSTRUCTION: Dredge Operation Plan: Submit, for approval by this office, no earlier than 60 calendar days and no later than 20 calendar days before the proposed commencement of dredging, a plan which includes the following: Corps permit number, a copy of the dredging contract or description of the work under which the contractor will do the permitted work; name and telephone numbers of the dredging contractor's representative on site; dredging start and completion dates; names of vessel; dump scow numbers or identification; bin or barge capacities; identification of work as either maintenance dredging or new dredging; discussion of proposed dredging procedures, quantity of material to be removed; dredging design depth and typical cross section including overdepth; and date of last dredging episode and design depth. The Dredge Operational Plan shall also provide the following information: 1. The controls being established to ensure that dredging operations occur within the limits defined by the channel dimensions and typical channel section. The horizontal and vertical positioning systems being utilized must be indicated as noted in 3, below.</p> <p>2. The controls being established to ensure that disposal of the dredged material at the placement site is at the assigned location and depth. The horizontal and vertical positioning systems being utilized must be indicated as noted in 3, below.</p> <p>3. Method of determining electronic positioning of dredge or dump scow during entire dredging operation at dredge site, disposal site and en route to and from placement site.</p>	Completed by Vortex/Damitz, Submitted: 7/14/2025, Approved: 7/16/25
Permit # SPN- 2012- 00207	Standard DMMO Conditions	9c	<p>PRIOR TO CONSTRUCTION: Pre-Dredge Survey: Submit no earlier than 60 calendar days and no later than 20 calendar days before commencement of dredging, a survey with accuracy to one-tenth foot that delineates and labels the following: areas to be dredged with overdepth allowances; existing depths; estimated quantities to be dredged to the design depth; and estimated quantities to the overdepth limit. All surveys shall be signed by the permittee to certify their accuracy. Please include the Corps permit number and dredge episode number.</p>	Completed by Vortex/Damitz, Submitted: 7/14/2025, Approved: 7/16/25
Permit # SPN- 2012- 00207	Standard DMMO Conditions	9d	<p>PRIOR TO CONSTRUCTION: Solid Debris Management Plan: Submit no earlier than 60 calendar days and no later than 20 calendar days before commencement of work, a plan which describes measures to ensure that solid debris generated during any authorized dredging, demolition or construction operation is retained and properly disposed in areas not under Corps jurisdiction. At a minimum, the plan shall include the following: source and expected type of debris; debris retrieval method; Corps permit number and dredge episode number; disposal method and site; schedule of disposal operations; and debris containment method to be used, if floatable debris is involved.</p>	Completed by Vortex/Damitz, Submitted: 7/14/2025, Approved: 7/16/25

Permit # SPN-2012-00207	Standard DMMO Conditions	9e	Post-Dredge Survey: Submit, within 30 days of the last disposal activity ("last" is defined as that activity after which no further activity occurs for 15 calendar days), a survey with accuracy to one-tenth foot that delineates and labels the areas dredged and the dredged depths. Also, include the Corps permit number, dredge episode number, dates of dredging commencement and completion, actual quantities dredged to the design depth, and actual quantities to the overdepth limit. The permittee shall substantiate the total quantity dredged by including calculations used to determine the volume difference. (in cubic yards) between the Pre- and Post-Dredging Surveys and explain any variation in quantities greater than 15% beyond estimated quantities or dredging deeper than is permitted (design plus overdepth allowance). All surveys shall be accomplished by a licensed surveyor and signed by the permittee to certify their accuracy. A copy of the Post-Dredge Survey should be sent to the National Ocean Service for chart updating: Nautical Data Branch N/CS26, SSMC3, Room 7230 1315 East-West Highway Silver Spring, Maryland 20910-3282.	Completed by Damitz, 1/12/26
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Orange Highlight means ONGOING Monitoring and/or Reporting Requirement

MBNMS/GFNMS National Marine Sanctuaries Permit - MBNMS-2022-021

Expiration Date: November 30, 2030.

Monitoring Reports due: September 1 (2026-2030). Annual reports due May 31 (2026-2030)
Staff Contact: lilli.ferguson@noaa.gov

Source	Category	No.	Condition	Responsible Party(ies)
Permit# MBNMS-2022-021	Special Terms and Conditions	1, 2, 3	1) No equipment may be discarded in the sanctuaries at any time. In the event that any equipment is damaged or lost due to weather or any other cause, the permittee shall immediately locate and remove that equipment. The permittee must notify GFNMS Permit Coordinator, Lilli Ferguson (Lilli.Ferguson@noaa.gov) at the earliest extent possible if any equipment is lost in the sanctuary. 2) Any plan of recovery for lost equipment that includes contact with the submerged lands would require approval from the sanctuary superintendent before implementation. 3)The permittee may be required to pay any or all expenses associated with the locating of and/or removal by NOAA or its designee of any equipment that is not recovered by the permittee.	Construction Contractor & District Consultants
Permit# MBNMS-2022-021	Special Terms and Conditions	4	No activity associated with this project shall disturb or have adverse impact on any historical resource (refer to 15 CFR 922.11 for definition of "historical resource") within the sanctuary. If historical resources are encountered at any time, the permittees shall cease all further activities under this permit and immediately contact GFNMS Permit Coordinator.	Construction Contractor & District Consultants
Permit# MBNMS-2022-021	Special Terms and Conditions	5	The permittee plans to remove accumulated sand from the pedestrian Coastal Trail pathway adjacent to the beach and deposit it within the sanctuary only once the sand there has accumulated to the point of becoming a nuisance for pedestrians. The permittee plans for this adaptive management activity to be done using a wheeled front-end loader; however other equipment and methods, including non-motorized equipment and tools, such as a wheelbarrows and shovels or brooms, may be used, so long as any that use is of limited duration and frequency.	District Consultants
Permit# MBNMS-2022-021	Special Terms and Conditions	6	PRIOR TO CONSTRUCTION: The permittee shall provide a draft biological monitoring plan for this project as soon as feasible to the individual listed in general term # 1 for review and input by national marine sanctuary staff members. In preparing the draft biological plan, consideration should be given to which species could be best utilized to assess changes from the project, include benthic macro (black abalone) and micro-invertebrates, marine algae, and/or fish species that make use of the inter and subtidal ranges at Surfers Beach and Vallejo Beaches; and to ground dwelling species (such as crabs, shorebirds, and other animals) and plants currently present in supratidal, shoreline, and uplands areas adjacent to the project site in the sanctuary. While the draft plan may cover the overall geographic range of the project, it shall clearly identify which of the activities are planned to take place within the boundaries of the sanctuary, including sampling activities. As appropriate, the permittee shall share with the sanctuary the feedback received on the draft plan.	Completed by Damitz, Submitted: 7/14/2025,

Permit# MBNMS- 2022-021	Special Terms and Conditions	7	<p>PRIOR TO CONSTRUCTION: The permittee shall provide copies, once available, of the final biological baseline conditions report, final biological monitoring plan for the Surfer’s Beach Pilot Restoration Plan, final “Surfer’s Beach Pilot Restoration Project 5 Year Monitoring and Adaptive Management Plan”, and any final information, if not contained within the specified plans, on samples planned for collection within the sanctuary, to the GFNMS Permit Coordinator. While the referenced documents may cover the geographic range of the overall project, they shall clearly identify which of the activities, including sample collection, are planned to take place within the boundary of the sanctuary. Monitoring plans shall cover the duration of the permit period. In addition, physical and biological monitoring plans for within the sanctuary shall include:</p> <p>a) Monitoring goals and objectives, including a description of how the results of monitoring activities will be used to assess sandy beach habitat restoration success. b)Monitoring methods and procedures, including: any activities to avoid or minimize any adverse impacts on sanctuary habitats and resources, monitoring frequency, figures depicting the planned monitoring areas and transects (if appropriate), and who will conduct the monitoring and their qualifications.</p> <p>c) Baseline monitoring (preconstruction), construction monitoring, and post construction monitoring to characterize beach profiles and hard/soft bottom habitats and selected species at the permitted location.</p> <p>Monitoring plans shall be designed to enable the measurement and characterization of physical and biological site conditions and changes in those conditions (to the extent feasible), including sand accretion or loss at the permitted location and shoreward at Surfers Beach and Vallejo Beach and characterization of and changes to the biological resources included in the final biological monitoring plan.</p>	<p>Completed by Damitz, Submitted: 7/31/2025, except for the baseline conditions report.</p>
Permit# MBNMS- 2022-021	Special Terms and Conditions	8	<p>The permittee shall submit annual monitoring reports for the specified Monitoring Periods (MPs) after the end of each MP to the individual listed in general term #1, as follows:</p> <ul style="list-style-type: none"> • Monitoring Period (MP) 1 would commence at the preconstruction survey (spring 2025) and end on May 31, 2026, with the annual monitoring report for this period due by or before September 1, 2026; • MP 2 would be June 1, 2026 - May 31, 2027, with the annual monitoring report for this period due by or before September 1, 2027; • MP 3 would be June 1, 2027 - May 31, 2028; with the annual monitoring report for this period due by or before September 1, 2028; • MP 4 would be June 1, 2028 - May 31, 2029, with the annual monitoring report for this period due by or before September 1, 2029; and • MP 5 would be June 1, 2029 – November 30, 2030, with the annual monitoring report for this period due by or before March 1, 2031. The annual monitoring reports shall clearly identify which of the activities took place within the boundaries of the sanctuary, clearly identify the period of time each report covers, and include: <p>a) baseline, construction and post construction monitoring results;</p> <p>b) information by date on samples collected, including: date(s); location(s) of collection(s) determined using GPS; type of sample; unit of measure of sample collection(s) and total samples collected (pertains to all sediment or biological samples collected as allowed under the permitted activity description);</p> <p>c) a summary of the cumulative changes relative to prior years and the initial monitoring baseline report;</p> <p>d) any monitoring plan deviations (i.e., changes in monitoring activities methods, or other changes to the plan); and</p> <p>e) if monitoring plan objectives are being or have been met.</p> <p>The Year 5 Monitoring Report should also include a summary of the 5-year monitoring efforts and lessons learned.</p>	<p>District Consultants, Damitz to submit. Year 1 report due September 1, 2026</p>

Permit# MBNMS- 2022-021	Special Terms and Conditions	9	The permittee shall submit brief annual summary reports of activities conducted under this permit as soon as feasible after the conclusion of each calendar year, or by or before May 31 each year. Reports covering permitted activities during calendar year 2025 are due by or before May 31, 2026; reports covering calendar year 2026 are due by or before May 31, 2027; reports for calendar year 2027 are due by or before May 31, 2028; reports for calendar year 2028 are due by or before May 31, 2029; and reports for calendar year 2029 are due by or before May 31, 2030. The reports shall be sent to the individual listed in general term #1. The summary reports shall include: a) Log of activities that took place during the report period. b) Final length and width of final overall sand slurry placement area, in a brief summary of the area depicted in the "as built" plans and submittal of those plans (first annual summary report) and total area of windblown sand placement area (in all annual summary reports). c) Quantity/volume of placed material (of sand slurry in first annual summary report, and of windblown sand in all annual summary reports). d) Maps of final sand slurry placement area and windblown sand placement areas which include the sanctuary boundary and habitats at placement areas. e) Changes in the beach profile (before and after placement of the material). f) Log of endangered/threatened species observed, or note none were observed. g) Reports of any disturbances to marine mammals or seabirds. h) Reports of the discovery or disturbance of historical resources within the sanctuary, any problems encountered, equipment lost, etc. If any equipment is lost, the report shall include the date, location and description of any equipment lost and left in the sanctuary with an explanation of efforts made to recover it and why the equipment was not recovered. If no project activities occurred during a given calendar year, that fact shall be noted in the report with an explanation of why that situation occurred.	District Consultants, Damitz to Submit, yr 1 report due May 31, 2026
Permit# MBNMS- 2022-021	Special Terms and Conditions	10	The permittee shall ensure any construction vehicles, equipment, tools, and monitoring and surveying devices used within the sanctuary do not harbor any introduced species and shall prevent any introduced species from being released within or into the sanctuary.	Construction Contractor & District Consultants
		11	The permittee shall provide verbal notification, by calling the GFNMS/CBNMS Emergency Response Coordinator, Max Delaney, at (650) 678-4943, and leaving a message as necessary, of any information relating to noncompliance with this permit or other circumstances that may endanger or have a significant adverse effect on any sanctuary resources, habitats, or water quality, within 24 hours of the time the permittee becomes aware of such circumstances. The permittee shall also inform the GFNMS Permit Coordinator by email as soon as practicable following the initial telephone report. The permittee will subsequently keep the relevant sanctuary contacts informed of the status of, and response to, the reported circumstances.	District Consultants
Orange Highlight means ONGOING Monitoring and/or Reporting Requirement				
National Marine Fisheries Service -- Biological Opinion - <u>WCRO-2024-00086</u>				
Expiration Date: June 20, 2029. reports due May 31 (2026-2030)			Monitoring Reports due: September 1 (2026-2030). Annual Staff Contact: yvette.redler-medina@noaa.gov	
Biologica l Opinion			A pre-construction survey to determine presence of black abalone within the action area will be conducted no sooner than 120 days prior to the start of in-water work on the Project. The survey is intended to focus on rock habitats near Surfer's Beach that may be buried under sediment during the beach nourishment component of the Project. This habitat is within the intertidal/subtidal zones at the northwest end of Surfer's Beach and includes the breakwater/jetty and rocks in just off the breakwater (Figure 3 and Figure 6 in BO). Surveys for black abalone will not be needed elsewhere in the action area as SMCHD agreed that dredging within the Harbor will not occur within 20 feet of rocks on the eastern breakwater and that any sediment placement that occurs in the west Harbor will not occur within 20 feet of rock habitat. Methodology for the black abalone survey will follow NMFS Protected Resources Division (PRD) guidelines, or will be otherwise approved by NMFS. If black abalone are observed during the survey, NMFS will be contacted to coordinate on AMMs before beginning any in-water work that could impact abalone.	Completed by MTS, June 29, 2025
Biologica l Opinion	Terms and Conditions	1(b)	Corps or the applicants will retain qualified Project biologist(s) knowledgeable of the needs of aquatic species, including black abalone. The Project biologist(s) will monitor the construction sites during all in-water activities. Monitoring will be performed daily.	N/A no Black Abalone found during survey

Biological Opinion	Terms and Conditions	1(c) (d)	Mitigation for black abalone impacts - (c) If black abalone are found during the preconstruction survey or during construction activities, the Corps or applicant must contact NMFS to discuss relocation or avoidance procedures. Mitigation measures must be agreed upon by NMFS before in-water Project work can proceed. All relocation activities will be conducted by qualified personnel with the appropriate expertise and experience, to minimize black abalone injury and mortality. The applicant or Corps will provide names and experience of proposed personnel to NMFS for review 30 days before relocation efforts commence. (d) Relocation activities will include a minimum of six-month post-release monitoring to record survival, growth and movement of abalone.	N/A no Black Abalone found during survey
Biological Opinion	Terms and Conditions	1(e)	During black abalone mitigation activities, the Project biologist shall contact NMFS staff at the number below, if injury or mortality of black abalone exceeds fifteen percent of the total collected. If any of these incidental take limits are exceeded, reinitiation of consultation may be needed (see Section 2.11). Tom Wadsworth (707) 243-8318, or Thomas.Wadsworth@noaa.gov	N/A no Black Abalone found during survey
Biological Opinion	Terms and Conditions	2(a)	Black abalone pre-construction survey plan – The Corps or applicants must submit a black abalone pre-construction survey plan to NMFS for review. The survey plan should follow general abalone survey guidelines provided by NMFS, with adaptation as needed for the Project site. This survey plan shall be submitted electronically to NMFS biologist Tom Wadsworth at Thomas.Wadsworth@noaa.gov at least 30 days prior to the planned start of these activities.	Completed by Damitz April, 2025
Biological Opinion	Terms and Conditions	2(b)	Black abalone avoidance and relocation plan - if black abalone are found during the pre-construction survey, a relocation plan must also be submitted that provides general procedures to avoid effects to individuals, or relocate them from the project area. The relocation plan shall be submitted electronically to NMFS biologist Tom Wadsworth at Thomas.Wadsworth@noaa.gov at least 30 days prior to the planned start of these activities.	N/A no Black Abalone found during survey
Biological Opinion	Terms and Conditions	2(c)	Annual Reporting – The Corps or the Applicant must prepare and submit annual reports to NMFS for Project activities as outlined below. Reports for (i) and (ii) below must be submitted by January 15 of the year following completion of relevant in-water Project activities. Report (iii) below, if applicable, should be submitted within six months after monitoring of relocated black abalone is complete. Reports should be submitted electronically to NMFS biologist Tom Wadsworth at Thomas.Wadsworth@noaa.gov. Reports prepared for compliance with other agency requirements that contain the information requested below would be acceptable. Annual reports must contain, at minimum, the following information: Black abalone capture and relocation; Construction related activities; Black abalone post-relocation monitoring (see 2(b)i., ii., and iii of BO for details)	District Consultants, Damitz to submit. Yr 1 report due by Jan 15th.
Biological Opinion			Dredge methodology will be limited to suction dredging below the water line to reduce turbidity and other impacts on marine life; clam shell dredging would be allowed above the water line.	Construction Contractor
			Orange Highlight means Monitoring and/or Reporting Requirement	

Caltrans -- Encroachment Permit - 04-23-N-MC-1901

Staff Contact: Khon D Tram, Khon.Tram@dot.ca.gov

Encroachment Permit	Permit Condition		A minimum of 7 days prior to the start of work under this encroachment permit, notice must be given to State Representative Luis Melendez, 380 Foster City Blvd., Foster City, CA 94404, at luis.melendez@dot.ca.gov or (510) 496-9583, weekdays between 7:00 a.m. and 3:30 p.m., excluding holidays.	Completed by Damitz 7/30/25
Encroachment Permit	Permit Condition		Notwithstanding General Provision 35, lane closures and other activities that may cause a traffic impact requires the permittee to apply for and obtain a closure ID prior to the start of work. Requests must be submitted electronically through the Lane Closure System (LCS).	Construction Contractor
Encroachment Permit	Permit Condition		In addition to the 2023 Standard Specifications and Standard Plans (available at https://dot.ca.gov/programs/design/cc-standard-plans-and-standard-specifications), Encroachment Permit General Provisions (TR-0045) and Storm Water Special Provisions for Minimal or No Impact (TR-0400) (available at https://dot.ca.gov/programs/traffic-operations/ep/ep-manual/), all work permitted herein must comply with the following provisions	Construction Contractor
Encroachment Permit	Permit Condition		Notwithstanding General Provision 4, construction must not begin for the work authorized herein until the "Contractor(s) Authorization Form" (TR-0429) is submitted (available at https://dot.ca.gov/-/media/dot-media/programs/traffic-operations/documents/encroachment-permits/tr-0429-al ly.pdf).	Completed by Damitz 6/17/25

Encroachment Permit	Permit Condition		No lane closure is allowed on the Highway without pre-approvals from the District Traffic Manager's Office	Construction Contractor
Encroachment Permit	Permit Condition		A pre-job meeting with the State Representative is required at least 7 days prior to the start of any work under this permit. Failure to do so may result in permit revocation with no prejudice.	Damitz sent email to caltrans to schedule meeting 7/30/25
Encroachment Permit	Permit Condition		The permittee must provide the stage construction plans, traffic handling plans, work schedule, and a list of all sub- contractors to the State Representative at the time of the pre-job meeting.	Construction Contractor
Encroachment Permit	Permit Condition		Signs, lights, flags, or other protective devices must not obscure the visibility of, nor conflict in intent, meaning, and function of either existing signs, lights and traffic control devices, or any construction area signs.	Construction Contractor
Encroachment Permit	Permit Condition		On conventional highways, permittee's vehicles and equipment not involved in the permitted activities must be legally located off the traveled way and not interfere with free traffic and pedestrian flow.	Construction Contractor
Encroachment Permit	Permit Condition		No vehicle or equipment must be stored overnight within the State highway right-of-way. All vehicles and equipment must be removed immediately at the completion of the day's work. Refueling of vehicle or equipment within the State highway right-of-way is strictly prohibited.	Construction Contractor
Encroachment Permit	Permit Condition		Except for installing, maintaining and removing traffic control devices, any work encroaching within 3 feet of the edge of a travel lane for areas with a posted speed limit below 45mph, or 6 feet of the edge of a travel lane, for areas with a speed limit posted at 45mph or higher, requires closing of that travel lane. Any work encroaching within 6 feet of the edge of the shoulder, requires closing of that shoulder.	Construction Contractor
Encroachment Permit	Permit Condition		Do not reduce an open traffic lane width to less than 11 feet. If traffic cones or delineators are used for temporary edge delineation, the side of the base of the cones or delineators nearest traffic is considered the edge of traveled way.	Construction Contractor
Encroachment Permit	Permit Condition		All traffic control devices must be installed, maintained, and removed by a qualified traffic control contractor.	Construction Contractor
Encroachment Permit	Permit Condition		Traffic control using flagging, must comply with the California MUTCD, Part 6E, "Flagger Control" (available at https://dot.ca.gov/programs/safety-programs/camutcd), and Cal/OSHA Construction Safety Orders, Section 1599, "Flaggers", (available at https://www.dir.ca.gov/title8/1599.html).	Construction Contractor
Encroachment Permit	Permit Condition		Obliterated pavement markings must be replaced in kind.	Construction Contractor
Encroachment Permit	Permit Condition		Time extension requests must be made a minimum 2 weeks prior to permit expiration.	Construction Contractor
Encroachment Permit	Permit Condition		Neither materials nor waste must be stockpiled within the State highway right-of-way.	Construction Contractor
Encroachment Permit	Permit Condition		All mud, dirt, and gravel tracked onto the roadway must be immediately removed.	Construction Contractor
Encroachment Permit	Permit Condition		Any damage to State facilities must be repaired to the same state as before the damage and the cost of repairs must be the responsibility of the permittee.	Construction Contractor

Encroachment Permit	Permit Condition		Upon completion of work authorized by this encroachment permit, the permittee must provide the State Representative with Notice of Completion (TR-0128) (available at: https://forms.dot.ca.gov/v2Forms/servlet/FormRender?frmid=TRO128)	Completed by Damitz 11/24/25
			Yellow Highlight means must be completed Prior to Project Construction	
			Orange Highlight means Monitoring and/or Reporting Requirement	
Mitigation, Monitoring and Reporting Requirements from CEQA Mitigated Negative Declaration (Incorporated by reference in CDP)				
CEQA MMRP	Biological Resources	BIO-GW	At least 15 days prior to any ground disturbing activities, the Harbor District shall submit to the USFW and CDFW for review and approval the qualifications of the proposed biological monitor(s). A qualified biological monitor means any person who has completed at least four years of university training in wildlife biology or a related science and/or has demonstrated field experience in the identification and life history of the listed species.	Completed by Chris Rogers, June 2025
CEQA MMRP	Biological Resources	BIO-GW	Prior to the start of construction, a USFWS- and CDFW-approved biologist will conduct an Environmental Awareness Training. The training will educate all construction personnel regarding habitat, identification of special status species, and required practices before the start of construction. The training will include the general measures that are being implemented to conserve the species as they relate to the Project, the penalties for non-compliance, and the boundaries of the project area. If new construction personnel are added to the project, the contractor will ensure that the personnel receive the mandatory training before starting work. A fact sheet or other supporting materials containing this information will be prepared and distributed to all construction personnel. Upon completion of training, construction personnel will sign a form stating that they attended the training and understand all the conservation and protection measures.	Completed by Chris Rogers, July 30, 2025
CEQA MMRP	Biological Resources	Bio-1a	A qualified biologist (knowledgeable and experienced in snowy plover ecology and identification) shall conduct a pre-construction survey for snowy plovers within 7 days prior to the initiation of construction or equipment use, including pipeline placement and removal, and any beach nourishment activities. A survey report detailing the survey findings shall be prepared and submitted to the biological permitting agencies prior to the start of construction. If disturbance activities are delayed following a survey, then an additional pre-construction survey should be conducted such that no more than one week will have elapsed between the last survey and the commencement of ground disturbance activities at each discrete project location. Prior to the initiation of work, the qualified biologist will conduct Worker Environmental Awareness Training (WEAT) for all personnel conducting work at the project. At a minimum, the training will include written and oral information regarding special status species and habitats that have the potential to occur on the site, a description of the species and their habitat, and the importance of these species. The training will include the general measures that are being implemented to conserve the species as they relate to the project and the penalties for non-compliance. A fact sheet or other supporting materials containing this information will be prepared and distributed to all personnel conducting work at the project. Upon completion of the training, construction personnel will sign a form stating that they have attended the training and understood all of the conservation protection measures. The signed form will be kept onsite at all times and available for agency staff review if requested. Interpretation shall be provided for non-English speaking workers.	Completed by Chris Rogers, August 2025
CEQA MMRP	Biological Resources	Bio-1a	If snowy plovers were found to be located within the Surfers Beach project area, the following measures shall be initiated to reduce the potential impacts to a less than significant level: 1. A biological monitor shall be present during any construction activities in and around Surfers Beach during the first week. If snowy plovers continue to be observed near the construction area, the monitor will advise the work crews on how to avoid or minimize impacts to plover, which may include temporarily halting activities, until the plovers have left the site. The minimization measures shall continue throughout the beach nourishment activities. 2. The qualified biologist will conduct surveys of Surfers Beach and immediate surroundings until the snowy plovers have left the work area. Project work may resume after snowy plovers have left the work area. • During project activities, all trash that may attract predators will be properly contained, removed from the construction area and disposed of regularly. Following construction, all trash and construction debris will be removed from work areas. • Vehicle and equipment refueling, repair, and lubrication will only be permitted in designated areas where accidental spills will be contained.	N/A no Snowy Plovers found during survey

CEQA MMRP	Biological Resources	Bio-1b	Prior to dredging work a qualified biologist (knowledgeable and experienced in pelagic fish species and groundfish identification) shall remove eelgrass from the proposed dredge footprint in order to remove potential habitat prior to dredging activities. The project will create approximately 3.90 acres of eelgrass habitat using the fine sands that will be dredged as part of the project work. As soon as feasible, the harvested eelgrass will be replanted within the newly created habitat. A Worker Environmental Awareness Training (WEAT), as described in Mitigation Measure BIO-1a, will be provided.	Completed by Marine Taxonomic Services
CEQA MMRP	Biological Resources	Bio-1e	<ul style="list-style-type: none"> • A qualified biologist shall complete bloom season surveys for special-status plant species prior to initiation of project activities. The survey shall be completed during the appropriate blooming periods for the above listed species that have the potential to occur on site. These surveys shall be in compliance with all CDFW (2009), USFWS (1996), and CNPS (2001) published survey guidelines. • If the surveys find that there are no special-status plants on the property that would be impacted or within the proposed project site, then there would be no further mitigation and the project may proceed, provided all other applicable permits and authorizations are obtained for the project. • If special-status plant species are found, populations will be mapped and enumerated. If any populations are found within the proposed development area, project development plans shall consider avoidance to the extent practicable. If avoidance is not practicable while otherwise obtaining the project's objectives, then other suitable measures and mitigation shall be implemented as detailed below. If impact to the area is unavoidable all activity in that area shall halt and not proceed until CDFW has been consulted and the follow measures shall be implemented: A. Initially the practicability of avoidance shall be evaluated as noted above. If avoidance is not practicable, a mitigation plan shall be developed and approved by the CDFW for implementation of steps 1 through 3 below prior to site disturbance. 	Completed by Chris Rogers, April - July 2025
CEQA MMRP	General Construction Conservation Measures		No project related activities shall occur outside the delineated work area.	Construction Contractor
CEQA MMRP	General Construction Conservation Measures		No rodenticides, pesticides, or herbicides shall be used as part of the project.	Construction Contractor
CEQA MMRP	General Construction Conservation Measures		Construction Areas: Areas within which construction activities and staging are to take place shall be minimized in size and shall be sited and designed to avoid impacts on coastal waters and marine life, and to the extent feasible, public access to the water and shoreline. Construction (including but not limited to dredging activities, and materials and/or equipment storage) shall be prohibited outside of the defined construction, staging, and storage areas.	Construction Contractor
CEQA MMRP	General Construction Conservation Measures		Construction Methods and Timing: Methods shall be used to keep the construction areas separated from public recreational use areas (including using unobtrusive fencing or equivalent measures to delineate construction areas) to the maximum extent practicable. All vehicle parking shall be restricted to previously determined staging areas or existing roads. Necessary vehicles belonging to the biological monitors and construction supervisors shall be parked at the nearest point on identified existing access roads.	Construction Contractor
CEQA MMRP	Construction BMPs		Construction BMPs shall be installed prior to construction and used during construction to protect coastal water quality, including the following: <ul style="list-style-type: none"> - The fueling and maintenance of vehicles and other equipment shall occur at least 100 feet from any aquatic habitat or water body - All construction equipment shall be inspected and maintained at an off-site location to prevent leaks and spills of hazardous materials at the project site. - The contractor shall ensure that good construction housekeeping controls and procedures are maintained at all times including: clean up all leaks, drips, and other spills immediately; keep materials covered and out of the rain (including covering exposed piles of soil and wastes); dispose of all wastes properly; place trash receptacles on site for that purpose; cover open trash receptacles during wet weather; and remove all construction debris from the site. - All erosion and sediment controls shall be in place prior to the commencement of construction as well as at the end of each workday. - Vehicle and equipment refueling, repair, and lubrication will only be permitted in designated areas where accidental spills will be contained. 	Construction Contractor
CEQA MMRP	BMPs -- Biological Resources		A "soft-start" policy shall be implemented in order to allow wildlife species to vacate the area prior to construction activities. A soft-start (e.g. ramp-up period) shall be used prior to full-power equipment use at the beginning of each day, or following a 30 minute or longer break.	Construction Contractor

CEQA MMRP	BMPs -- Biological Resources		A litter control program shall be instituted at the proposed project area. All construction personnel will ensure that their food scraps, paper wrappers, food containers, cans, bottles, and other trash from the project area are deposited in covered or closed trash containers. The trash containers will be removed from the project area at the end of each working day.	Construction Contractor
CEQA MMRP	BMPs -- Biological Resources		All construction personnel shall participate in an Environmental Awareness Training (provided by a contractor to the Harbor District). The training will educate all construction personnel regarding habitat, identification of special status species, and required practices before the start of construction. The training will include the general measures that are being implemented to conserve the species as they relate to the Project, the penalties for non-compliance, and the boundaries of the project area. If new construction personnel are added to the project, the contractor will ensure that the personnel receive the mandatory training before starting work. A fact sheet or other supporting materials containing this information will be prepared and distributed to all construction personnel. Upon completion of training, construction personnel will sign a form stating that they attended the training and understand all the conservation and protection measures.	Completed by Chris Rogers, July 30, 2025
BMPs from Coastal Commission Permit Conditions (Contractor to include these in Construction Plan)				
CDP	Construction Plan	2	1. Runoff Protection: Silt fences, straw wattles, or equivalent apparatus shall be installed at the perimeter of all construction areas to prevent construction-related runoff and sediment from discharging from the construction area or entering into storm drains or otherwise offsite or towards the beach and ocean. Similar apparatus shall be applied on the beach area for the same purpose when potential runoff is anticipated. Special attention shall be given to appropriate filtering and treating of all runoff, and all drainage points, including storm drains, shall be equipped with appropriate construction-related containment, filtration, and treatment equipment. All erosion and sediment controls shall be in place prior to the commencement of construction as well as at the end of each workday	Included in CCC approved Construction Plan
CDP	Construction Plan	2	2. Equipment BMPs. Equipment washing, refueling, and servicing shall take place at an appropriate off-site and inland location to help prevent leaks and spills of hazardous materials at the project site, at least 50 feet inland from the beach and preferably on an existing hard surface area (e. g., a road) or an area where collection of materials is facilitated. All construction equipment shall also be inspected and maintained at a similarly sited inland location to prevent leaks and spills of hazardous materials at the project site.	Included in CCC approved Construction Plan
CDP	Construction Plan	2	3. Good Housekeeping BMPs. The construction site shall maintain good construction housekeeping controls and procedures at all times (e. g., clean up all leaks, drips, and other spills immediately; keep materials covered and out of the rain, including covering exposed piles of soil and wastes; dispose of all wastes properly, place trash receptacles on site for that purpose, and cover open trash receptacles during wet weather; remove all construction debris from the site; etc.).	Included in CCC approved Construction Plan
CDP	Construction Plan	2	5. Construction Material Storage. All construction materials and equipment placed on the beach during daylight construction hours shall be stored beyond the reach of tidal waters. All construction materials and equipment shall be removed in their entirety from these areas by one-hour after sunset each day that work occurs, except for necessary erosion and sediment controls and construction area boundary fencing where such controls and fencing are placed as far inland as possible and are minimized in their extent.	Included in CCC approved Construction Plan

Attachment B –

As-Built Plans Record Set (Engineer-Certified 02/06/2026)

SURFERS BEACH PILOT RESTORATION PROJECT

△
RECORD SET
FEBRUARY 06, 2026



575 MARKET STREET
SUITE 3700
SAN FRANCISCO, CA 94105
OFFICE - 415.896.5900
WWW.ESASSOC.COM

STAMP



**SURFERS BEACH
PILOT RESTORATION
PROJECT**

SAN MATEO COUNTY HARBOR DISTRICT
504 AVENUE ALHAMBRA, STE 200,
P.O. BOX 1449, EL GRANADA, CA 94018

PROJECT NAME

REVISIONS	#	DATE	DESCRIPTION
	△	07/07/25	PRE-CONSTRUCTION SURVEYS
	△	02/06/26	RECORD SET

DESIGNED	L. WHITE
DRAWN	M.A.
CHECKED	A. BORGONOVO
IN CHARGE	L. WHITE C76509

PROJECT NUMBER D201800631.02

ISSUE DATE 01/19/26

SCALE IS AS SHOWN WHEN PLOTTED TO FULL SIZE (22"x34")

PHASE
RECORD SET

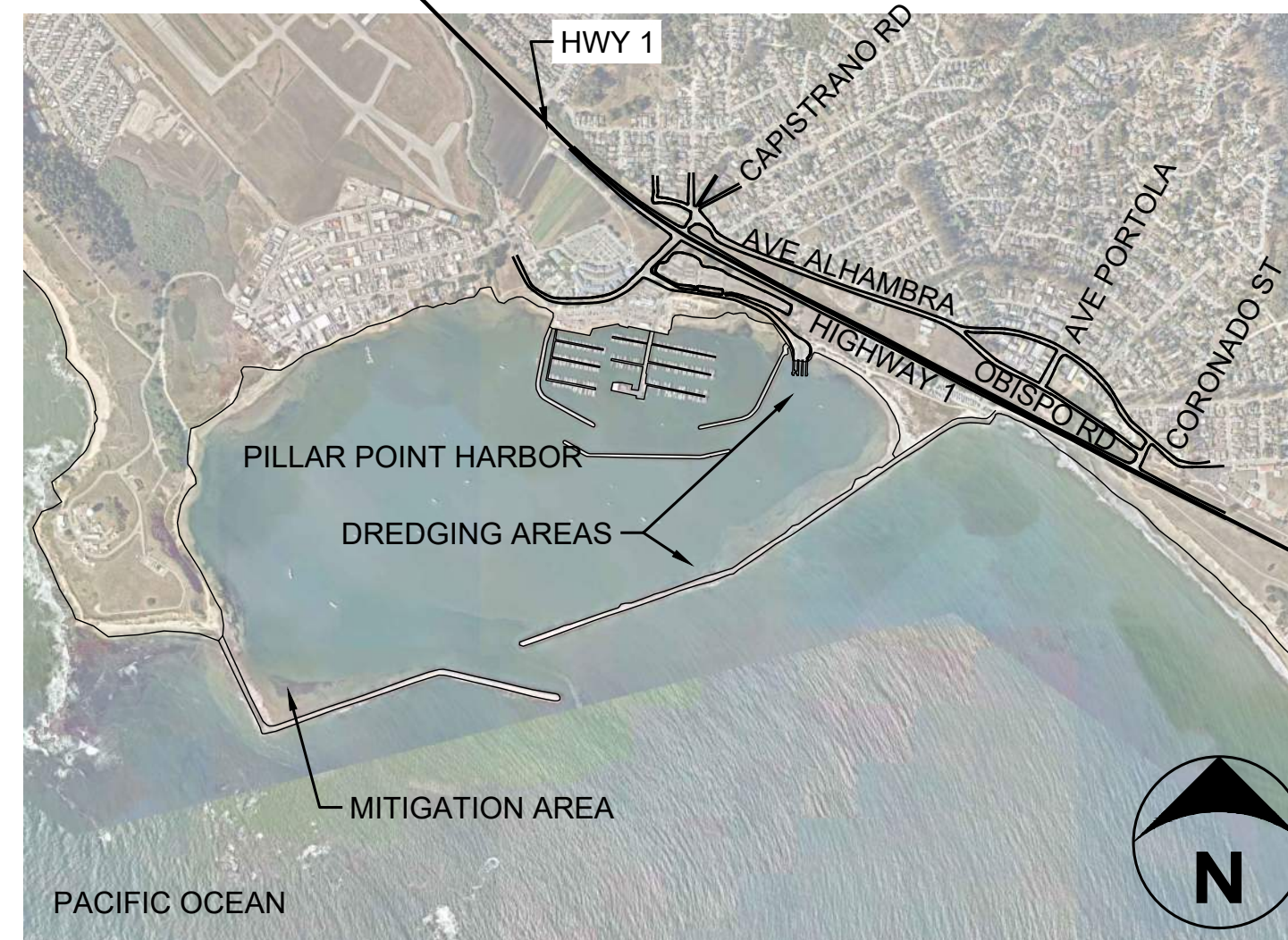
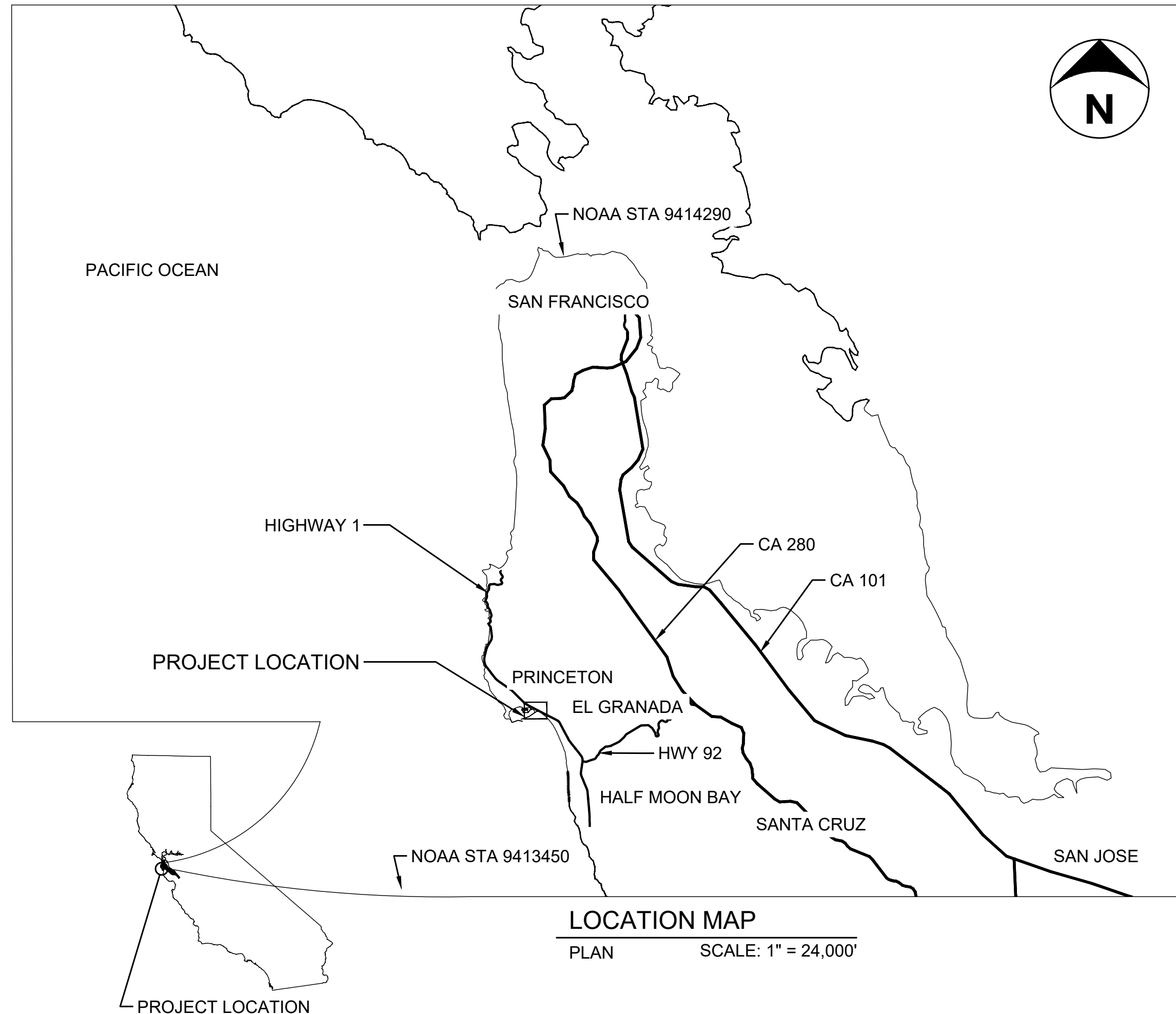
SHEET TITLE

TITLE SHEET

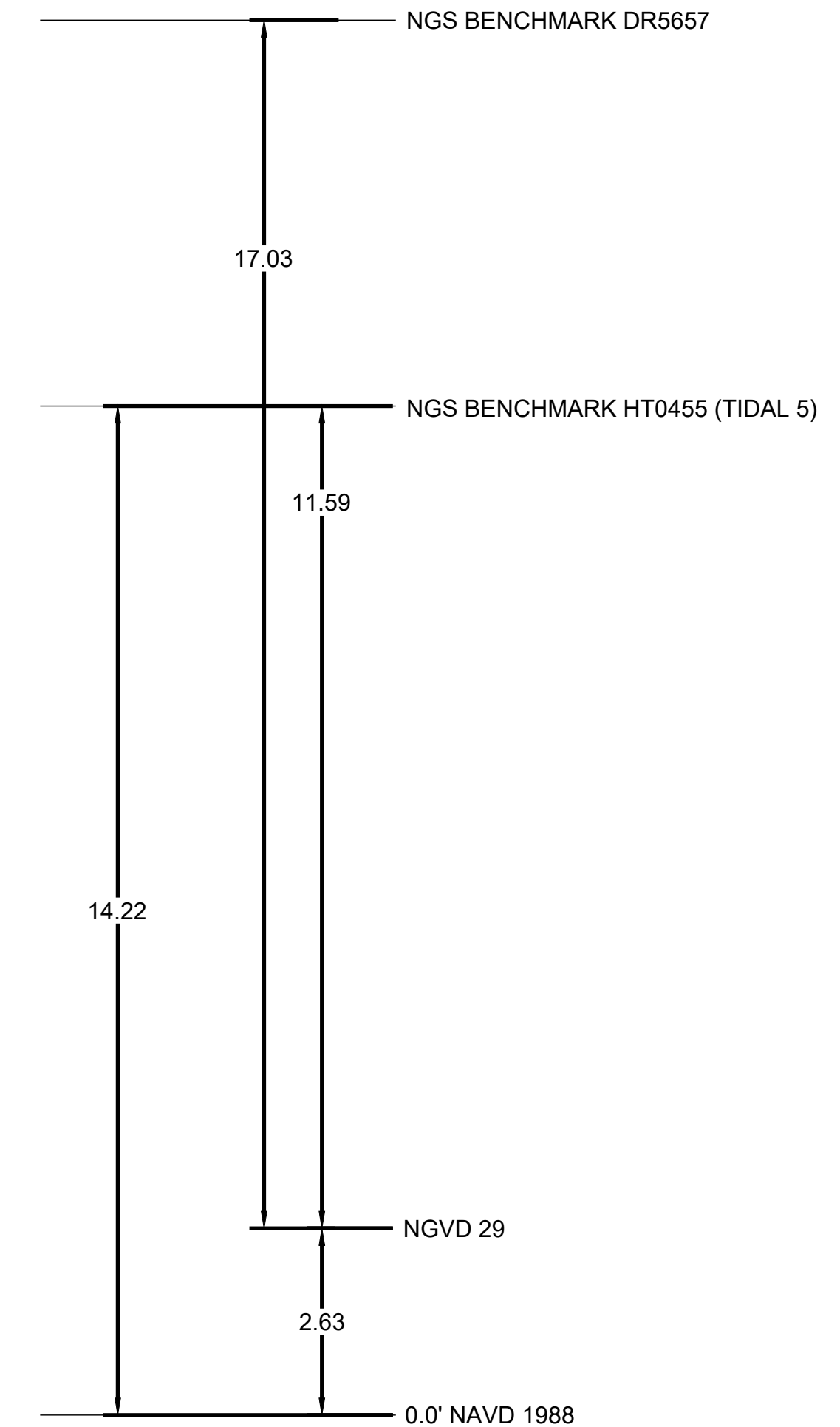
SHEET NUMBER

G-01

SHEET 01 OF 16



VICINITY MAP
PLAN SCALE: 1" = 1,500'



DEFINITIONS

PROJECT OWNER: SAN MATEO COUNTY HARBOR DISTRICT
504 AVENUE ALHAMBRA, STE 200
P.O. BOX 1449, EL GRANADA, CA 94018

CONTACT: JOHN MOREN
PH: (650) 741-9163

PROJECT ENGINEER: ENVIRONMENTAL SCIENCE ASSOCIATES
575 MARKET STREET SUITE 3700
SAN FRANCISCO, CA 94105

CONTACT: LOUIS WHITE, PE
PH: (415) 896-5900

DISCLAIMER FOR RECORD DRAWINGS

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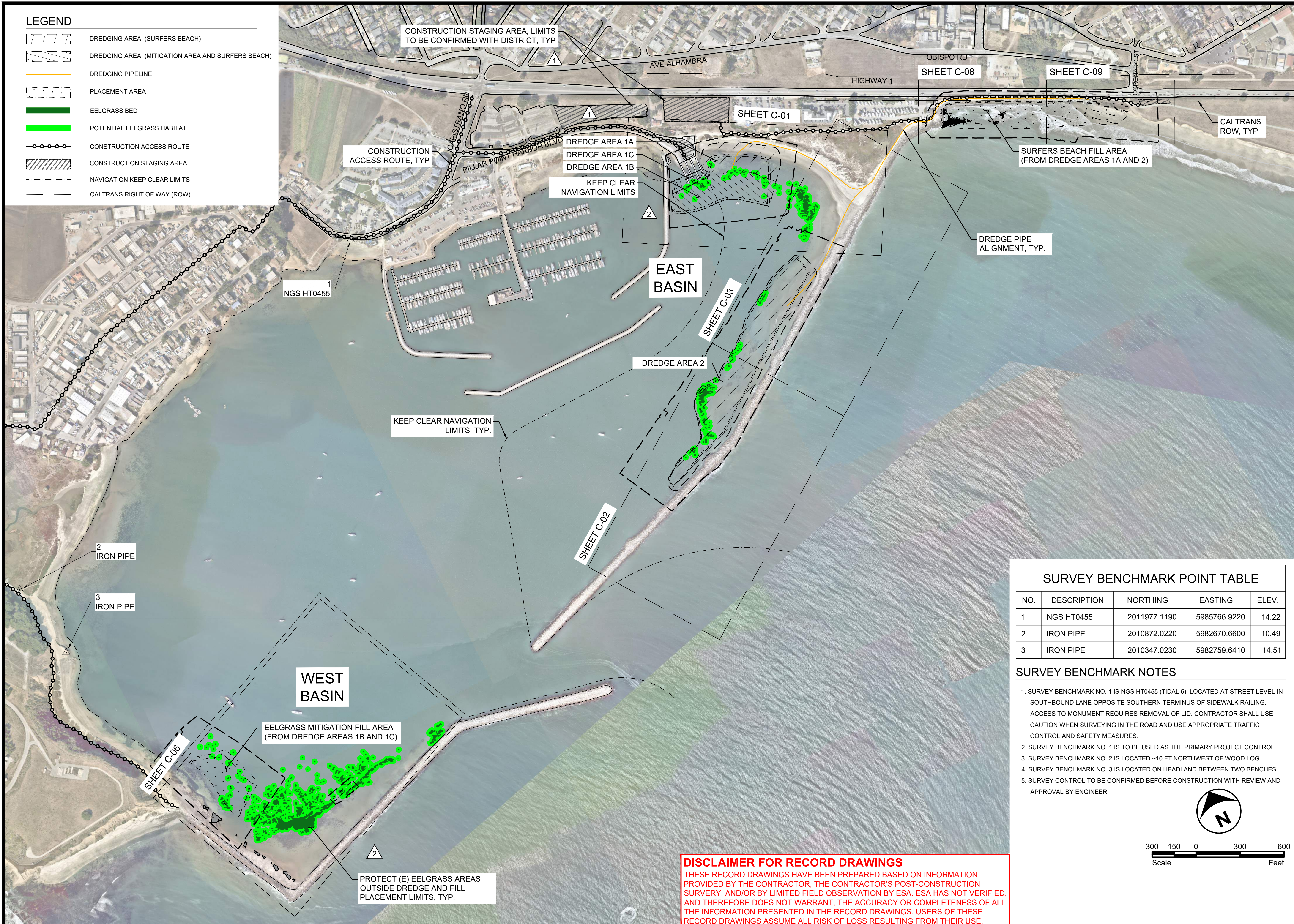
Sheet No.	Sheet Description	Sheet Title
01	G-01	TITLE SHEET
02	G-02	SITE PLAN
03	G-03	GENERAL NOTES LAYOUT LEGEND
04	C-01	EAST BASIN DREDGE PLAN - 1
05	C-02	EAST BASIN DREDGE PLAN - 2A
06	C-03	EAST BASIN DREDGE PLAN - 2B
07	C-04	EAST BASIN DREDGE 1 SECTIONS
08	C-05	EAST BASIN DREDGE 2 SECTIONS
09	C-06	EELGRASS MITIGATION FILL AREA PLAN
10	C-07	EELGRASS MITIGATION FILL AREA SECTIONS
11	C-08	SURFERS BEACH FILL AREA PLAN - 1
12	C-09	SURFERS BEACH FILL AREA PLAN - 2
13	C-10	SURFERS BEACH FILL AREA SECTIONS - 1
14	C-11	SURFERS BEACH FILL AREA SECTIONS - 2
15	C-12	TEMPORARY CONSTRUCTION ACCESS RAMP
16	TP-01	EELGRASS TRANSPLANTING PLAN

FILE: P:\01 CAD\18xxxx\20180631.00 - Surfers Beach Pilot Project\DWG\G01 TITLE SHEET.dwg PLOT DATE: 2/6/2026 1:58:51 PM PLOTTED BY: MARIO ACCORDINO

FILE: P:\01 CAD\18xxxx\2021\80631.00 - Surfers Beach Pilot Project\DWG\02 SITE PLAN.dwg PLOT DATE: 2/6/2026 1:59:12 PM PLOTTED BY: MARIO ACCORDINO

LEGEND

- DREDGING AREA (SURFERS BEACH)
- DREDGING AREA (MITIGATION AREA AND SURFERS BEACH)
- DREDGING PIPELINE
- PLACEMENT AREA
- EELGRASS BED
- POTENTIAL EELGRASS HABITAT
- CONSTRUCTION ACCESS ROUTE
- CONSTRUCTION STAGING AREA
- NAVIGATION KEEP CLEAR LIMITS
- CALTRANS RIGHT OF WAY (ROW)



ESA
 575 MARKET STREET
 SUITE 3700
 SAN FRANCISCO, CA 94105
 OFFICE - 415.896.5900
 WWW.ESASSOC.COM

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PROJECT NAME
**SURFERS BEACH
 PILOT RESTORATION
 PROJECT**
 SAN MATEO COUNTY HARBOR DISTRICT
 504 AVENUE ALHAMBRA, STE 200,
 P.O. BOX 1449, EL GRANADA, CA 94018

REVISIONS

#	DATE	DESCRIPTION
△ 04/23/25		BID ADDENDUM 01
△ 07/07/25		PRE-CONSTRUCTION EELGRASS SURVEY
△ 02/06/26		RECORD SET

DESIGNED	L. WHITE
DRAWN	M.A.
CHECKED	A. BORGONOVO
IN CHARGE	L. WHITE C76509

PROJECT NUMBER D201800631.02
 ISSUE DATE 01/19/26
 SCALE IS AS SHOWN WHEN PLOTTED TO FULL SIZE (22"x34")

PHASE
RECORD SET

SHEET TITLE
SITE PLAN

SHEET NUMBER
G-02

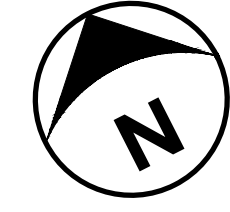
SHEET 02 OF 16

SURVEY BENCHMARK POINT TABLE

NO.	DESCRIPTION	NORTHING	EASTING	ELEV.
1	NGS HT0455	2011977.1190	5985766.9220	14.22
2	IRON PIPE	2010872.0220	5982670.6600	10.49
3	IRON PIPE	2010347.0230	5982759.6410	14.51

SURVEY BENCHMARK NOTES

- SURVEY BENCHMARK NO. 1 IS NGS HT0455 (TIDAL 5), LOCATED AT STREET LEVEL IN SOUTHBOUND LANE OPPOSITE SOUTHERN TERMINUS OF SIDEWALK RAILING. ACCESS TO MONUMENT REQUIRES REMOVAL OF LID. CONTRACTOR SHALL USE CAUTION WHEN SURVEYING IN THE ROAD AND USE APPROPRIATE TRAFFIC CONTROL AND SAFETY MEASURES.
- SURVEY BENCHMARK NO. 1 IS TO BE USED AS THE PRIMARY PROJECT CONTROL
- SURVEY BENCHMARK NO. 2 IS LOCATED ~10 FT NORTHWEST OF WOOD LOG
- SURVEY BENCHMARK NO. 3 IS LOCATED ON HEADLAND BETWEEN TWO BENCHES
- SURVEY CONTROL TO BE CONFIRMED BEFORE CONSTRUCTION WITH REVIEW AND APPROVAL BY ENGINEER.



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LEGEND

- DREDGING AREA (SURFERS BEACH)
DREDGING AREA (MITIGATION AREA AND SURFERS BEACH)
PLACEMENT AREA
CONSTRUCTION STAGING AREA
EELGRASS BED
POTENTIAL EELGRASS HABITAT
DREDGING PIPELINE
PEDESTRIAN ACCESS ROUTE
HTL HTL HIGH TIDE LINE: 7.2' NAVD
MHW MHW MEAN HIGH TIDE LINE: 5.0' NAVD
NAVIGATION KEEP CLEAR LIMITS
PROPERTY LINE
PROPERTY BOUNDARY
LIMIT OF GRADING
EXISTING GRADE (PROFILE & SECTION)
DESIGN GRADE (PROFILE & SECTION)
CONSTRUCTION ACCESS ROUTE
CALTRANS RIGHT OF WAY (ROW)
(E) MAJOR CONTOUR LINE
(E) MINOR CONTOUR LINE
(N) MAJOR CONTOUR LINE
(N) MINOR CONTOUR LINE

ABBREVIATIONS

- AB - AGGREGATE BASE
APPROX - APPROXIMATE
CMP - CORRUGATED METAL PIPE
DBH - DIAMETER AT BREST HEIGHT
DEMO - DEMOLISH/DEMOLITION
DG - DESIGN GRADE
DIA - DIAMETER
DS - DOWNSTREAM
(E) - EXISTING
EG - EXISTING GRADE
EL / ELEV - ELEVATION
FL - FLOWLINE
FT - FEET
GB - GRADE BREAK
HOPE - HIGH DENSITY POLYETHYLENE
IE - INVERT ELEVATION
IRR - IRRIGATION
LF - LINEAR FEET
MAX - MAXIMUM
MH - MANHOLE
MIN - MINIMUM
EL. - MISCELLANEOUS
MTL - MEAN TIDE LEVEL
(N) - NEW
NIC - NOT IN CONTRACT
P.I.P. - PROTECT IN PLACE
R.C. - RELATIVE COMPACTION
RCP - REINFORCED CONCRETE PIPE
RWC - RECLAIMED WATER
SD - STORM DRAIN LINE
SS - SEWER PIPE LINE
SPECS - SPECIFICATIONS
TBD - TO BE DETERMINED
TYP. - TYPICAL
US - UPSTREAM
VCP - VITRIFIED CLAY PIPE
V.I.F. - VERIFY IN FIELD
WIN - WITHIN

GENERAL NOTES

GENERAL

- 1. THESE NOTES HIGHLIGHT KEY REQUIREMENTS OF THE SPECIFICATIONS AND PROVIDE ADDITIONAL PROJECT INFORMATION. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS CONTAINED IN THE PLANS, SPECIFICATIONS, AND OTHER CONTRACT DOCUMENTS.
2. THE GENERAL SEQUENCE AND SCHEDULE REQUIREMENTS ARE SUMMARIZED BELOW AND DETAILED IN THE SPECIFICATIONS.

Table with 3 columns: ACTION, REQUIRED PREDECESSOR ACTIVITIES, COMPLETION DATE. Rows include transplant eelgrass from mitigation area and dredge areas 1B, 1C, 1A, and 2.

- 3. THE PROJECT BALANCES ONSITE. NO IMPORT OF FILL IS ALLOWED. NO EXPORT OF DREDGED MATERIAL IS ALLOWED EXCEPT IF DESIGNATED AS DEBRIS BY THE DISTRICT.

DREDGING

- 4. METHODS: AREAS 1B AND 1C MAY BE HYDRAULICALLY OR MECHANICALLY DREDGED, AT CONTRACTOR'S OPTION. AREAS 1A AND 2 SHALL BE HYDRAULICALLY DREDGED.
5. VERTICAL LIMITS:
5.1. FOR DREDGING, THE TARGET VERTICAL LIMIT IS ELEV -8 FT NAVD, AND THE OVER-DREDGE LIMIT IS -10 FT NAVD.
5.2. PAY LIMITS: MATERIAL EXCAVATED TO VERTICAL OVER-DREDGE LIMIT (-10 FT NAVD) WITHIN THE DREDGE AREAS.
5.3. TOLERANCE: PLUS TWO (2) FT AND MINUS ONE (1) FT (+2/-1') FROM OVER-DREDGE LIMIT.
5.4. ANY AREAS DREDGED MORE THAN 1 FT BELOW OVER-DREDGE LIMIT (BELOW ELEV -11 FT NAVD) SHALL BE BACKFILLED.
5.5. NO PAYMENT WILL BE MADE FOR:
5.5.1. DREDGING BELOW OVER-DREDGE LIMIT (BELOW ELEV -10 FT NAVD)
5.5.2. DREDGING OUTSIDE OF HORIZONTAL DREDGE AREA LIMITS
6. DREDGE AREAS 1A, 1B AND 1C TO LIMITS SHOWN ON DRAWINGS.
7. DREDGE AREA 2 ONLY AS NEEDED TO GENERATE SUFFICIENT MATERIAL FOR SURFERS BEACH FILL AREA.
8. STOCKPILE ANY DEBRIS ENCOUNTERED DURING DREDGING ONSITE AS DIRECTED BY THE DISTRICT.

DREDGE VOLUMES

- 9. ESTIMATED VOLUMES FOR DREDGE AND FILL PLACEMENT AREAS ARE AS FOLLOWS:

Table with 6 columns: DREDGE AREA, AREA (AC.), APPROX. OVER-DREDGE VOLUME (CY), FILL PLACEMENT LOCATION, FILL VOLUME (CY), 1.3 X FILL VOLUME (CY). Rows for AREA 1B, AREA 1C, AREA 1A, AREA 2.

- 10. DREDGE VOLUMES ARE BASED ON OVER-DREDGE LIMITS.
11. FILL VOLUMES ARE BASED ON BANK CUBIC YARDS OF DESIGN GRADES SHOWN ON DRAWINGS.
12. THE TOTAL DREDGE VOLUME NEEDED TO ACHIEVE THE DESIGN GRADES OF FILL AREAS WILL EXCEED THE BANK CUBIC YARD VOLUME. THE FILL VOLUME X A FACTOR OF 1.3 IS PROVIDED AS A ROUGH APPROXIMATION OF TOTAL DREDGE VOLUME NEEDED.
13. THE MAXIMUM DREDGE VOLUME ALLOWED PER PROJECT PERMITS IS 114,000 CUBIC YARDS.

FILL PLACEMENT

- 14. METHODS: PLACE FILL AT EELGRASS MITIGATION FILL AREA MECHANICALLY. PLACE FILL AT SURFERS BEACH HYDRAULICALLY.
15. ENVIRONMENTAL CONDITIONS (WAVE, CURRENTS, WINDS, ETC.) ARE EXPECTED TO MOBILIZE SEDIMENTS AFTER PLACEMENT.
16. EMPLOY MEASURES THROUGHOUT CONSTRUCTION TO CONTAIN FILL AND REDUCE TURBIDITY AS REQUIRED BY THE PERMITS AND THE SPECIFICATIONS.
17. AT SURFERS BEACH, CONSTRUCT TEMPORARY SAND CONTAINMENT BERMS AS NEEDED TO LIMIT MIGRATION OF SAND DURING PLACEMENT. CONSTRUCT CONTAINMENT BERMS WITH DREDGED SEDIMENTS, DEWATERED AND CONDITIONED AS NEEDED.
18. AS AN EXCEPTION, AT THE ONSET OF FILL PLACEMENT, UP TO 700 CY OF SAND MAY BE OVER-EXCAVATED FROM THE SOUTHERN END OF SURFERS BEACH FOR AN INITIAL CONTAINMENT BERM. BACKFILL AND GRADE ANY OVER-EXCAVATED AREA WITH DREDGED MATERIALS.
19. OVERFILL AREAS AS NEEDED TO ACCOUNT FOR CONSOLIDATION AND POST-PLACEMENT EROSION.
20. FILL PLACEMENT AREAS MAY BE SHAPED TO ACHIEVE DESIGN GRADES USING SUITABLE LAND-BASED AND/OR AMPHIBIOUS EQUIPMENT.

- 21. EMPLOY MEASURES TO LIMIT WIND-BLOWN SAND AT SURFERS BEACH.
22. DISTRICT MAY REQUIRE CONSTRUCTION CONTRACTOR TO REMOVE SEDIMENT BEYOND TOLERANCES OF THE MITIGATION FILL AREA.
23. THE CONSTRUCTION CONTRACTOR SHALL ENDEAVOR TO AVOID FINER SEDIMENTS PLACED AT SURFERS BEACH BY MONITORING THE DREDGED SEDIMENT AND ADJUSTING DREDGE LOCATIONS ACCORDINGLY.
24. BEDROCK OUTCROPS AND LOOSE ROCKS PROTRUDE INTO THE SURFERS BEACH AREA. THE CONSTRUCTION CONTRACTOR SHALL AVOID DISTURBING ROCK TO THE EXTENT PRACTICABLE.

ACCESS & NAVIGATION

- 25. DREDGING AT THE BOAT LAUNCH RAMP (AREA 1C) IS IN CLOSE PROXIMITY TO THE CONCRETE RAMP AND BOARDING FLOATS. THE CONSTRUCTION CONTRACTOR SHALL 'KNOCK DOWN' THE SEDIMENT TO DEEPER WATER THAT IS ACCESSIBLE TO DREDGING PER SPECIFICATIONS AND PROJECT PERMITS.
26. MARINE NAVIGATION FOR VESSELS, INCLUDING MOORINGS, AND OTHER GOVERNMENT, COMMERCIAL, AND RECREATIONAL ACTIVITIES (E.G. EMERGENCY RESPONSE, SAILING INSTRUCTION, WIND SURFING, SWIMMING) SHALL NOT BE CONSTRAINED BY CONSTRUCTION CONTRACTOR EQUIPMENT AND OPERATIONS EXCEPT AS NEEDED FOR SHORT PERIODS TO MOBILIZE AND MOVE EQUIPMENT AND ONLY TO THE EXTENT APPROVED IN WRITING BY THE DISTRICT AND APPROVAL BY THE COAST GUARD, WITH ADEQUATE NOTICE AND SAFETY PROTOCOLS (SEE SPECIFICATIONS AND PERMITS). PUBLIC ACCESS SHALL NOT BE ALLOWED IN ACTIVE WORK AREAS, BUT SUCH WORK AREAS SHALL NOT INTERFERE WITH NAVIGATION TO AND FROM THE HARBOR AND OPEN WATER.
27. PUBLIC ACCESS TO AND ALONG THE SHORE SHALL NOT BE CONSTRAINED BY THE CONSTRUCTION CONTRACTORS OPERATIONS EXCEPT AS NEEDED FOR SHORT PERIODS TO MOBILIZE AND MOVE EQUIPMENT AND ONLY TO THE EXTENT APPROVED IN WRITING BY THE DISTRICT AND COMPLIANCE WITH PROJECT PERMITS, WITH ADEQUATE NOTICE AND SAFETY PROTOCOLS (SEE SPECIFICATIONS AND PERMITS). PUBLIC ACCESS SHALL NOT BE ALLOWED IN ACTIVE WORK AREAS, BUT SUCH WORK AREAS SHALL NOT PRECLUDE PEDESTRIAN ACCESS ALONG THE COASTAL TRAILS, TO AND ALONG THE BEACH, AND TO-FROM THE SURF. AN ANTICIPATED CORRIDOR FOR THE DREDGE PIPE HAS BEEN IDENTIFIED AND PERMITTED.
28. THE CONTRACTOR SHALL INSTALL A TEMPORARY PERIMETER FENCE AND BUOYS AROUND THE PERIMETER OF THE PROJECT AREA TO MANAGE PUBLIC ACCESS DURING CONSTRUCTION. THE CONTRACTOR SHALL ALSO PROVIDE NOTICES, SIGNS AND FLAG MEN TO INFORM THE PUBLIC.
29. CONSTRUCTION ACCESS IS LIMITED TO THE ROUTES DESIGNATED IN THESE DRAWINGS AND AS DETAILED IN THE CONTRACTOR'S SUBMITTALS APPROVED BY THE DISTRICT (SEE SPECIFICATIONS).

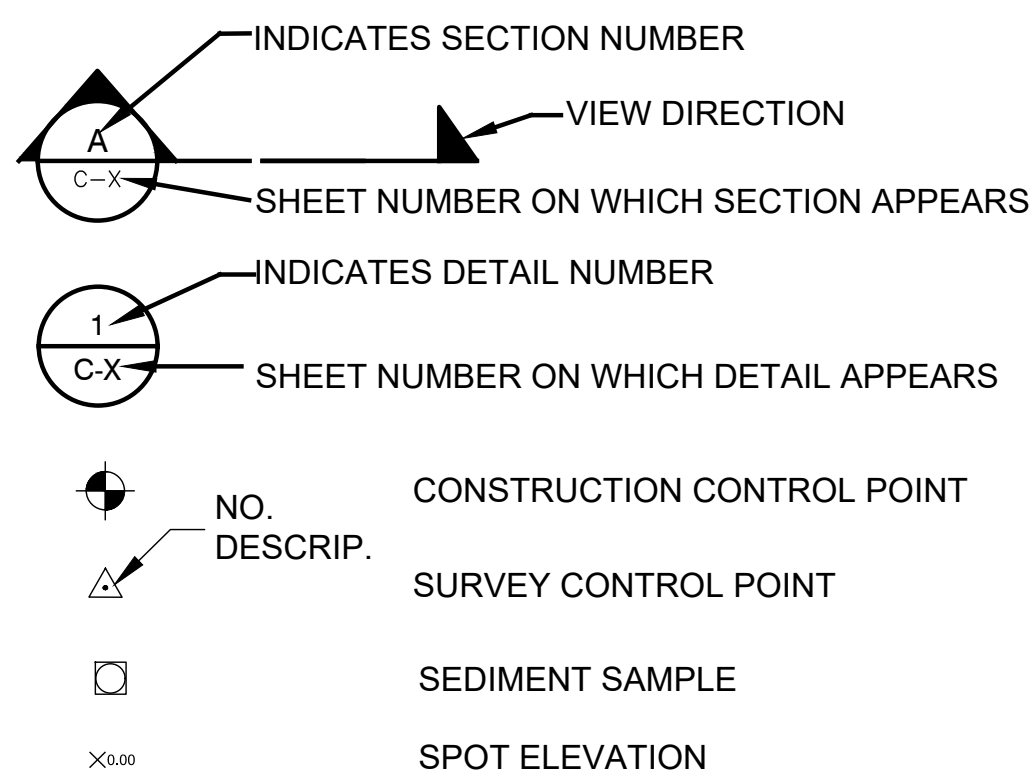
SITE PROTECTION & NOTIFICATIONS

- 30. THE PROJECT DOES NOT ENTAIL ANY DEMOLITION. ALL EXISTING FACILITIES IN THE WORK AREA SHALL BE PROTECTED IN PLACE, OR STORED AND PROTECTED AND REINSTALLED, FROM DAMAGE DUE CONTRACTOR'S OPERATIONS. ANY DAMAGES RESULTING FROM CONTRACTOR'S OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE DISTRICT WITHOUT COMPENSATION.
31. CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (USA) AT 1-800-227-2600 PRIOR TO START OF ANY CONSTRUCTION.
32. CONTRACTOR SHALL NOTIFY ALL PUBLIC OR PRIVATE UTILITY COMPANIES 48 HOURS PRIOR TO COMMENCEMENT OF WORK ADJACENT TO EXISTING UTILITY LINES.
33. CONTRACTOR SHALL NOTIFY CALTRANS AND SAN MATEO COUNTY PRIOR TO MOBILIZING AT SURFERS BEACH PER PROJECT PERMITS.

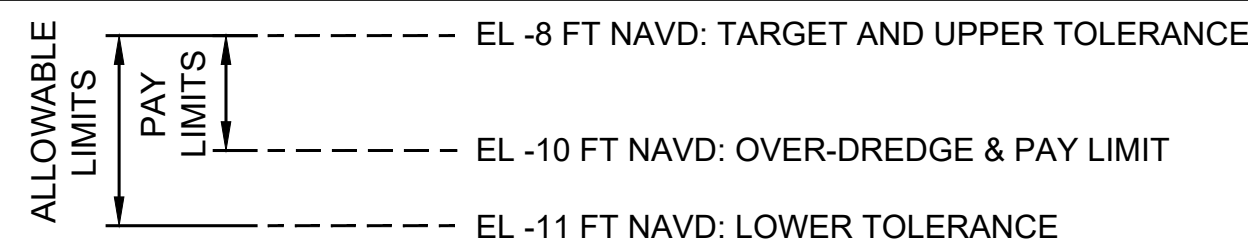
SURVEY NOTES

- 1. THIS SURVEY REPRESENTS GENERAL CONDITIONS AT THE TIME OF THE SURVEY. CONDITIONS LIKELY VARY FROM THOSE SHOWN IN THESE DRAWINGS DUE TO COASTAL PROCESSES AND OTHER PROCESSES SINCE THE DATES OF THE SURVEYS. VERIFY IN FIELD AND WITH PRE-CONSTRUCTION SURVEY.
2. HORIZONTAL DATUM/PROJECTION: NAD83 (2011), SPCS CALIFORNIA ZONE 03 - U.S. SURVEY FEET
3. HORIZONTAL CONTROL: NGS HT0455 TIDAL 5, N 37° 30' 13.27003" W 122° 29' 07.73809"
4. VERTICAL DATUM: NAVD88, U.S. SURVEY FEET
5. VERTICAL CONTROL: NGS HT0455 TIDAL 5, ELEVATION 14.22'
6. FINAL SURFACE IS A MERGE OF ETRAC DATA, SOUNDINGS FROM MARINE TAXONOMIC SIDESCAN DATA, USGS LIDAR DATA AND HYDROGRAPHIC DATA.
7. MULTI-BEAM DATA COLLECTED BY ETRAC ON DECEMBER 05 & 06, 2019. TOPOGRAPHIC DATA WITHIN PILLAR POINT HARBOR COLLECTED ON JANUARY 21ST, 2020
8. POSITIONING AND MOTION DATA WAS COLLECTED BY ETRAC USING AN APPLANIX POS MV V5.
9. SOUNDINGS WERE COLLECTED BY ETRAC USING AN R2SONIC 2020 OPERATING AT 400 KHZ.
10. SOUNDINGS DEPTH NEGATIVE UNLESS INDICATED OTHERWISE.
11. USGS LIDAR DATA COLLECTED BY DEWBERRY, APRIL-MAY 2016.
12. AERIAL PHOTOGRAPHS SOURCED FROM NEARMAP, DATED SEPTEMBER 2022. CONDITIONS LIKELY VARY DUE TO CHANGES SINCE THE DATE OF PHOTOGRAPHY. CONSTRUCTION CONTRACTOR SHALL VERIFY CONDITIONS AS NEEDED TO ACCOMPLISH THE WORK CONSISTENT WITH THE CONTRACT DOCUMENTS.
13. THE DISTRICT WILL PROVIDE PRE-CONSTRUCTION SURVEY AND QUANTITIES REQUIRED PRIOR TO CONSTRUCTION.
14. ELEVATION CONTOURS, SOUNDINGS AND FEATURES ARE APPROXIMATE AND PROVIDED FOR GENERAL REFERENCE ONLY. THE CONTRACTOR SHALL PERFORM SITE INVESTIGATIONS, ESTIMATE QUANTITIES AND INCLUDE SUFFICIENT CONTINGENCY IN ITS BID TO COVER TOPOGRAPHIC AND BATHYMETRIC VARIABILITY.
15. PRE-CONSTRUCTION SURVEY WAS CONDUCTED BY WOOLPERT.
15.1. MULTIBEAM DATA COLLECTED ON JUNE 16 2025; TOPOGRAPHIC DATA WAS COLLECTED ON JUNE 13 2025.
15.2. POSITIONING AND MOTION COLLECTED USING AN APPLANIX POS MV V5.
15.3. SOUNDINGS COLLECTED USING AN R2SONIC 2024 OPERATING AT 200 KHZ.
15.4. TOPOGRAPHIC DATA COLLECTED WITH PHOENIX LIDAR MINIVUX-3.
15.5. PRE-CONSTRUCTION SURFACE DATA WAS INTERPOLATED BY WOOLPERT WHERE DATA GAPS EXIST BETWEEN TOPOGRAPHIC AND BATHYMETRIC SURVEY LIMITS.
16. APPROXIMATE EELGRASS LIMITS BASED ON PRE-CONSTRUCTION SURVEY DATED MAY 27 2025 BY MARINE TAXONOMIC SERVICES.
17. AS-BUILT SURVEY WAS CONDUCTED BY WOOLPERT.
17.1. MULTIBEAM DATA COLLECTED ON OCTOBER 22 2025; SURFERS BEACH TOPOGRAPHIC DATA WAS COLLECTED BETWEEN SEPTEMBER 24 AND OCTOBER 21 2025.
17.2. POSITIONING AND MOTION COLLECTED USING AN APPLANIX POS MV V5.
17.3. SOUNDINGS COLLECTED USING AN R2SONIC 2024 OPERATING AT 200 KHZ.
17.4. TOPOGRAPHIC DATA COLLECTED WITH PHOENIX LIDAR MINIVUX-3.

GRADE TO DRAIN IN INDICATED DIRECTION



VERTICAL DREDGE LIMITS



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STAMP



SURFERS BEACH
PILOT RESTORATION
PROJECT
SAN MATEO COUNTY HARBOR DISTRICT
504 AVENUE ALHAMBRA, STE 200.
P.O. BOX 14491, EL GRANADA, CA 94018

PROJECT NAME

REVISIONS

Table with 3 columns: #, DATE, DESCRIPTION. Shows revision 1 on 07/07/25 and revision 2 on 02/06/26.

Table with 2 columns: DESIGNER, DRAWN, CHECKED, IN CHARGE. Lists L. WHITE, M.A., A. BORGONOVO, L. WHITE C76509.

PROJECT NUMBER D201800631.02

ISSUE DATE 02/06/26

SCALE IS AS SHOWN WHEN PLOTTED TO FULL SIZE (22"x34")

PHASE

RECORD SET

SHEET TITLE

GENERAL NOTES
LAYOUT LEGEND

SHEET NUMBER

G-03

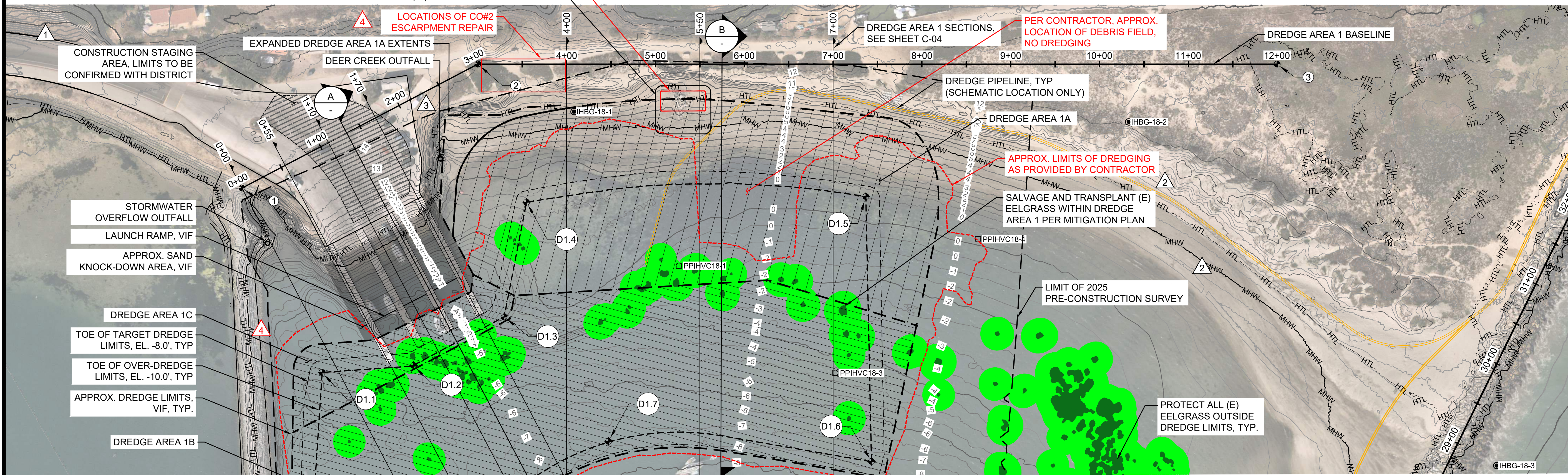
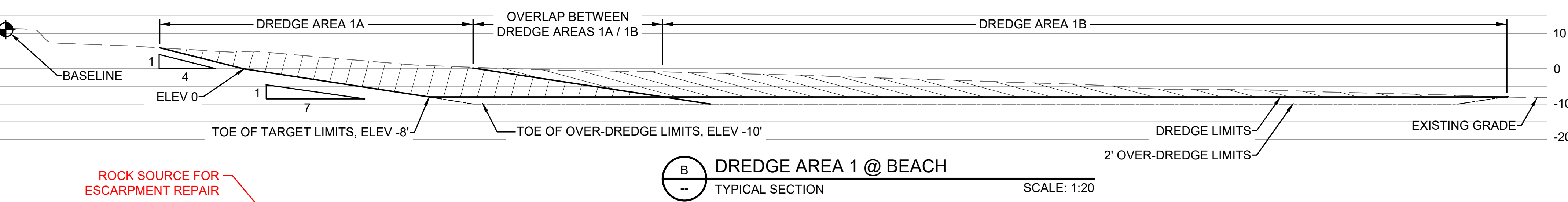
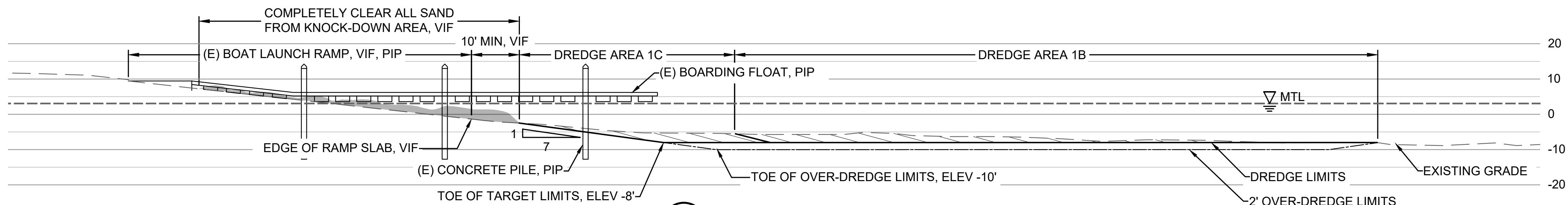
SHEET 03 OF 16

BASELINE CONTROL POINT TABLE

NAME	NORTHING	EASTING	EXISTING GRADE ELEV., FT NAVD
1	2011526.6669	5987951.5021	10.87
2	2011515.0781	5988251.2782	9.78
3	2011065.6073	5989031.0063	6.63

DREDGE AREA 1 EXTENTS

NAME	NORTHING	EASTING	EXISTING GRADE ELEV., FT NAVD	OVER-DREDGE DESIGN GRADE ELEV., FT NAVD
D1.1	2011301.8552	5987925.8632	-5.48	-10.0
D1.2	2011257.1688	5988019.1286	-4.80	-10.0
D1.3	2011253.7146	5988134.8008	-2.25	-10.0
D1.4	2011352.9085	5988221.1386	1.30	-10.0
D1.5	2011167.6676	5988555.2958	0.54	-10.0
D1.6	2010906.0065	5988411.7965	-7.16	-10.0
D1.7	2011073.5178	5988166.5994	-7.36	-10.0
D1.8	2011146.9583	5987822.8267	-7.53	-10.0



SURFERS BEACH PILOT RESTORATION PROJECT
 PROJECT NAME
 SAN MATEO COUNTY HARBOR DISTRICT
 504 AVENUE ALHAMBRA, STE 200,
 P.O. BOX 14491, EL GRANADA, CA 94018

REVISIONS

#	DATE	DESCRIPTION
04/23/25		BID ADDENDUM 01
07/07/25		PRE-CONSTRUCTION SURVEYS DREDGE AREA 1A REFINEMENT
10/01/25		
02/06/26		RECORD SET

DESIGNED L. WHITE
DRAWN M.A.
CHECKED A. BORGONOVO
IN CHARGE L. WHITE
 C76509

PROJECT NUMBER D201800631.02
 ISSUE DATE 02/06/26

SCALE IS AS SHOWN WHEN PLOTTED TO FULL SIZE (22"x34")

PHASE **RECORD SET**

SHEET TITLE

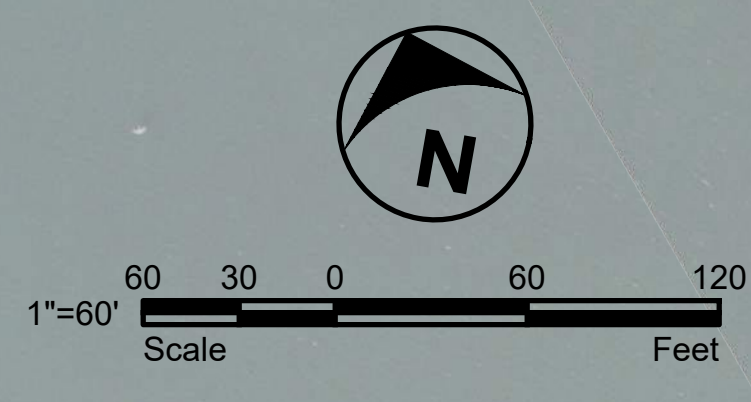
EAST BASIN DREDGE PLAN - 1

SHEET NUMBER

C-01

SHEET 04 OF 16

FILE: P:\01 CAD\18xxxx\2021\80631.00 - Surfers Beach Pilot Project\DWG\EAST BASIN DREDGE.dwg PLOT DATE: 2/6/2026 3:09:56 PM PLOTTED BY: MARIO ACCORDINO



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NOTES

- DREDGE AREAS 1B AND 1C AND PLACE FILL AT EELGRASS MITIGATION FILL AREA.
- AREAS 1B AND 1C MAY BE DREDGED HYDRAULICALLY OR MECHANICALLY AT CONTRACTOR'S OPTION. FILL PLACEMENT AT MITIGATION FILL AREA SHALL BE MECHANICAL METHODS ONLY.
- HYDRAULICALLY DREDGE AREA 1A AND PLACE FILL AT SURFERS BEACH.
- ENDEAVOR TO ADJUST DREDGING LOCATIONS IN AREA 1A TO AVOID FINE SEDIMENTS.
- DREDGE AREAS 1A, 1B AND 1C TO HORIZONTAL AND VERTICAL LIMITS SHOWN ON DRAWINGS.
- BOUNDARIES SHOWN BETWEEN DREDGING AREAS ARE APPROXIMATE. ACTUAL BOUNDARIES BETWEEN DREDGE AREAS MAY ADJUST DURING CONSTRUCTION PER DISTRICT DIRECTION.
- DO NOT BEGIN DREDGING AREAS 1B AND 1C UNTIL EELGRASS HAS BEEN TRANSPLANTED FROM THE EELGRASS MITIGATION FILL AREA.
- SEE SHEET C-04 FOR GRADING SECTIONS.

LEGEND

- DREDGING AREA (SURFERS BEACH)
- DREDGING AREA (MITIGATION AREA AND SURFERS BEACH)
- CONSTRUCTION STAGING AREA
- DREDGING PIPELINE
- EELGRASS BED
- POTENTIAL EELGRASS HABITAT
- SAND KNOCK-DOWN AREA
- HTL - HIGH TIDE LINE: 7.2' NAVD
- MHW - MEAN HIGH TIDE LINE: 5.0' NAVD
- TOE OF OVER-DREDGE LIMITS
- TOE OF TARGET DREDGE LIMITS

STAMP



**SURFERS BEACH
PILOT RESTORATION
PROJECT**

SAN MATEO COUNTY HARBOR DISTRICT
504 AVENUE ALHAMBRA, STE 200,
P.O. BOX 14491, EL GRANADA, CA 94018

PROJECT NAME

REVISIONS #	DATE	DESCRIPTION
△ 02/06/26		RECORD SET

DESIGNED	L. WHITE
DRAWN	M.A.
CHECKED	A. BORGONOVO
IN CHARGE	L. WHITE C76509

PROJECT NUMBER D201800631.02

ISSUE DATE 01/19/26

SCALE IS AS SHOWN WHEN PLOTTED TO FULL SIZE (22"x34")

PHASE
RECORD SET

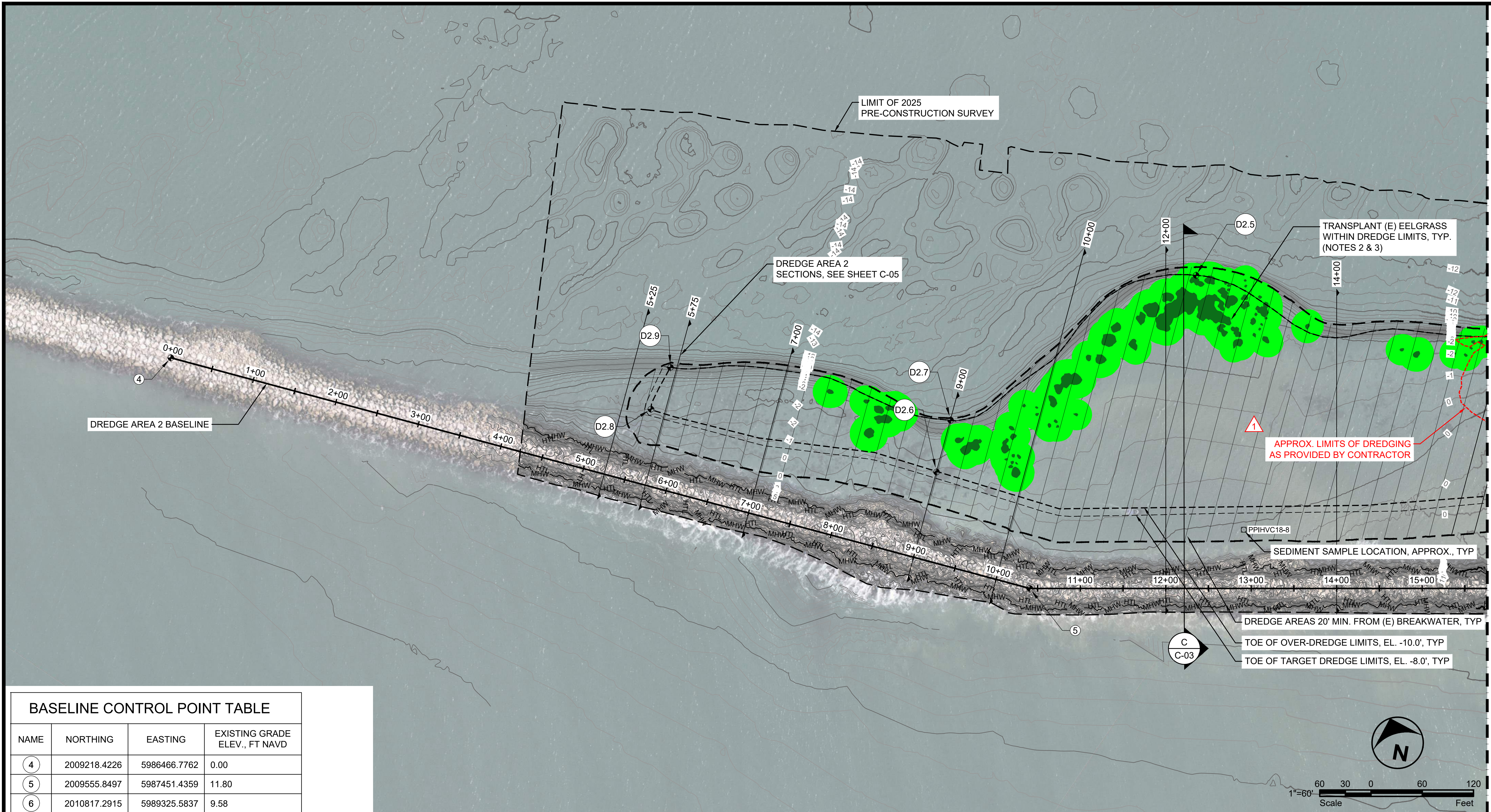
SHEET TITLE

**EAST BASIN
DREDGE PLAN - 2A**

SHEET NUMBER

C-02

SHEET 05 OF 16



MATCHLINE - SEE SHEET C-03

BASELINE CONTROL POINT TABLE

NAME	NORTHING	EASTING	EXISTING GRADE ELEV., FT NAVD
4	2009218.4226	5986466.7762	0.00
5	2009555.8497	5987451.4359	11.80
6	2010817.2915	5989325.5837	9.58

DREDGE AREA 2 EXTENTS

NAME	NORTHING	EASTING	EXISTING GRADE ELEV., FT NAVD	OVER-DREDGE DESIGN GRADE ELEV., FT NAVD
D2.1	2010360.9450	5988445.8427	2.23	-10.0
D2.2	2010493.1305	5988416.5394	-6.10	-10.0
D2.3	2010072.2736	5988019.1914	1.90	-10.0
D2.4	2010240.6884	5987905.6987	-6.03	-10.0
D2.5	2009968.4561	5987408.2901	-4.01	-10.0
D2.6	2009607.8843	5987284.8203	-1.42	-10.0
D2.7	2009667.4067	5987264.5669	-8.80	-10.0
D2.8	2009482.2825	5986966.4270	-2.47	-10.0
D2.9	2009535.5949	5986958.1133	-6.91	-10.0

DISCLAIMER FOR RECORD DRAWINGS
THESE RECORD DRAWINGS HAVE BEEN PREPARED BASED ON INFORMATION PROVIDED BY THE CONTRACTOR, THE CONTRACTOR'S POST-CONSTRUCTION SURVEY, AND/OR BY LIMITED FIELD OBSERVATION BY ESA. ESA HAS NOT VERIFIED, AND THEREFORE DOES NOT WARRANT, THE ACCURACY OR COMPLETENESS OF ALL THE INFORMATION PRESENTED IN THE RECORD DRAWINGS. USERS OF THESE RECORD DRAWINGS ASSUME ALL RISK OF LOSS RESULTING FROM THEIR USE.

NOTES

- HYDRAULICALLY DREDGE AREA 2 AND PLACE FILL AT SURFER'S BEACH.
- DO NOT BEGIN DREDGING AREA 2 UNTIL EELGRASS HAS BEEN TRANSPLANTED TO THE EELGRASS MITIGATION FILL AREA.
- TRANSPLANT EELGRASS IN DREDGE LIMITS TO EELGRASS MITIGATION FILL AREA ACCORDING TO THE SPECIFICATIONS. SEE GENERAL NOTES, SHEET G-03 FOR ALL SEQUENCING REQUIREMENTS.
- DREDGE AREA 2 ONLY AS NEEDED TO GENERATE SUFFICIENT MATERIAL FOR SURFERS BEACH FILL AREA. (DO NOT EXCEED TOTAL PERMITTED DREDGE VOLUME OF 114,000 CY.)
- ENDEAVOR TO ADJUST DREDGING LOCATIONS IN AREA 2 TO AVOID FINE SEDIMENTS.
- SEE SHEET C-05 FOR GRADING SECTIONS.

LEGEND

- DREDGING AREA (SURFERS BEACH)
- DREDGING AREA (MITIGATION AREA AND SURFERS BEACH)
- DREDGING PIPELINE
- EELGRASS BED
- POTENTIAL EELGRASS HABITAT
- HTL - HIGH TIDE LINE: 7.2' NAVD
- MHW - MEAN HIGH TIDE LINE: 5.0' NAVD
- TOE OF OVER-DREDGE LIMITS
- TOE OF TARGET DREDGE LIMITS

STAMP



**SURFERS BEACH
PILOT RESTORATION
PROJECT**

SAN MATEO COUNTY HARBOR DISTRICT
504 AVENUE ALHAMBRA, STE 200,
P. O. BOX 14491, EL GRANADA, CA 94018

PROJECT NAME

REVISIONS	#	DATE	DESCRIPTION
	1	02/06/26	RECORD SET

DESIGNED	L. WHITE
DRAWN	M.A.
CHECKED	A. BORGONOVO
IN CHARGE	L. WHITE C76509

PROJECT NUMBER D201800631.02

ISSUE DATE 01/19/26

SCALE IS AS SHOWN WHEN PLOTTED TO FULL SIZE (22"x34")

PHASE
RECORD SET

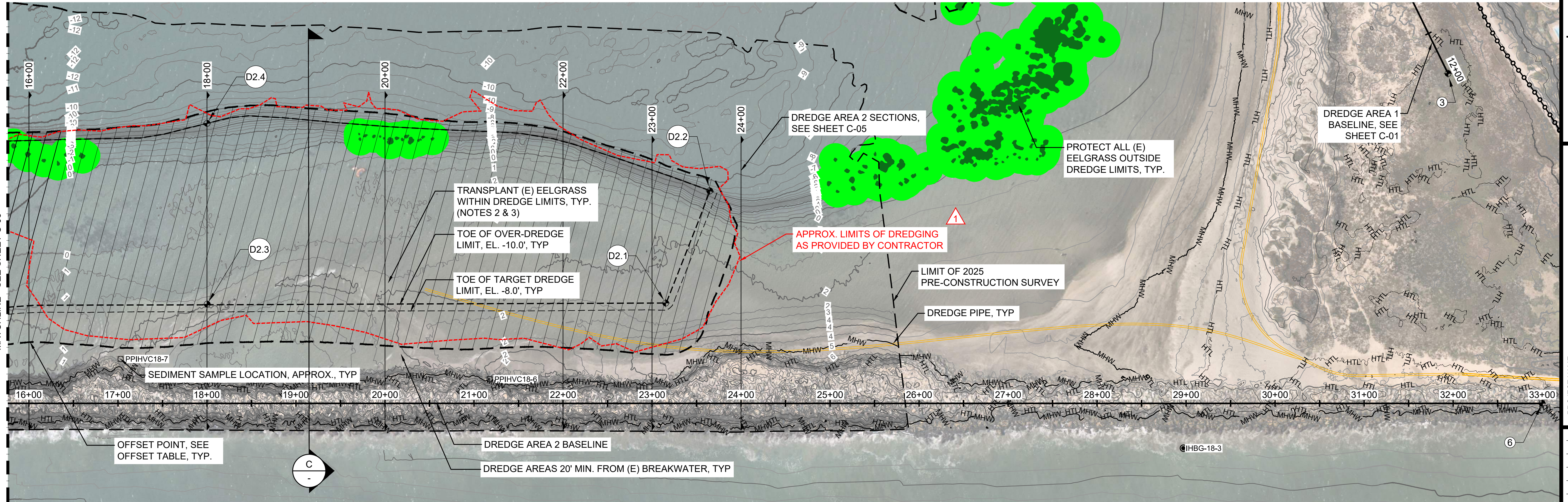
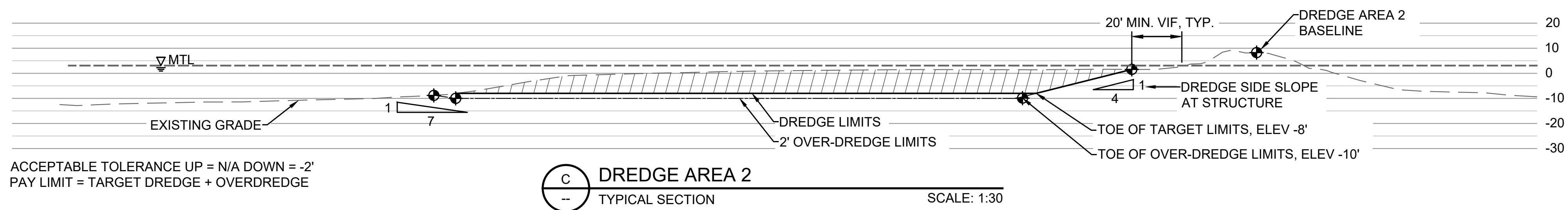
SHEET TITLE

**EAST BASIN
DREDGE PLAN - 2B**

SHEET NUMBER

C-03

SHEET 06 OF 16



BASELINE CONTROL POINT TABLE

NAME	NORTHING	EASTING	EXISTING GRADE ELEV., FT NAVD
4	2009218.4226	5986466.7762	0.00
5	2009555.8497	5987451.4359	11.80
6	2010817.2915	5989325.5837	9.58

DREDGE AREA 2 EXTENTS

NAME	NORTHING	EASTING	EXISTING GRADE ELEV., FT NAVD	OVER-DREDGE DESIGN GRADE ELEV., FT NAVD
D2.1	2010360.9450	5988445.8427	2.23	-10.0
D2.2	2010493.1305	5988416.5394	-6.10	-10.0
D2.3	2010072.2736	5988019.1914	1.90	-10.0
D2.4	2010240.6884	5987905.6987	-6.03	-10.0
D2.5	2009968.4561	5987408.2901	-4.01	-10.0
D2.6	2009607.8843	5987284.8203	-1.42	-10.0
D2.7	2009667.4067	5987264.5669	-8.80	-10.0
D2.8	2009482.2825	5986966.4270	-2.47	-10.0
D2.9	2009535.5949	5986958.1133	-6.91	-10.0

DISCLAIMER FOR RECORD DRAWINGS
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NOTES

1. HYDRAULICALLY DREDGE AREA 2 AND PLACE FILL AT SURFER'S BEACH.
2. DO NOT BEGIN DREDGING AREA 2 UNTIL EELGRASS HAS BEEN TRANSPLANTED TO THE EELGRASS MITIGATION FILL AREA.
3. TRANSPLANT EELGRASS IN DREDGE LIMITS TO EELGRASS MITIGATION FILL AREA ACCORDING TO THE SPECIFICATIONS. SEE GENERAL NOTES, SHEET G-03 FOR ALL SEQUENCING REQUIREMENTS.
4. DREDGE AREA 2 ONLY AS NEEDED TO GENERATE SUFFICIENT MATERIAL FOR SURFERS BEACH FILL AREA. (DO NOT EXCEED TOTAL PERMITTED DREDGE VOLUME OF 114,000 CY.)
5. ENDEAVOR TO ADJUST DREDGING LOCATIONS IN AREA 2 TO AVOID FINE SEDIMENTS.
6. SEE SHEET C-05 FOR GRADING SECTIONS.

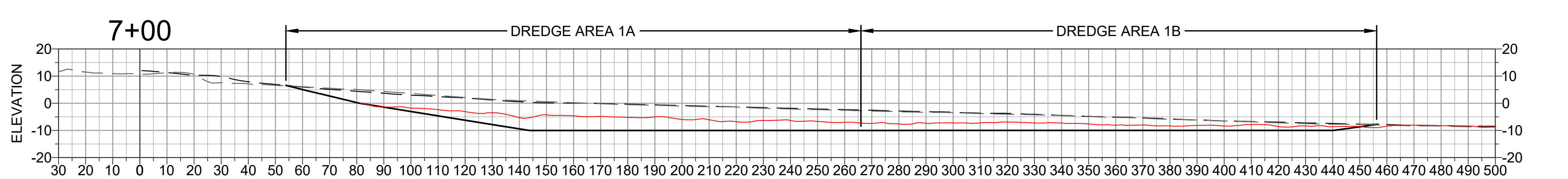
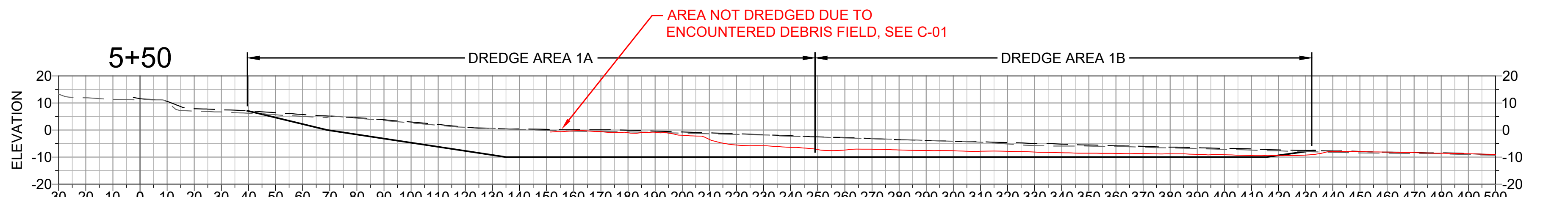
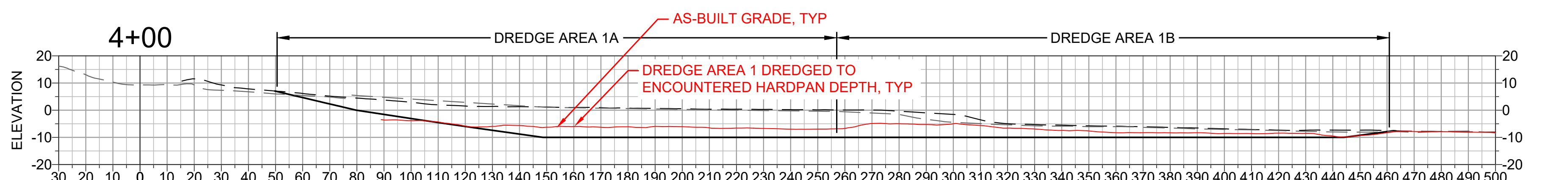
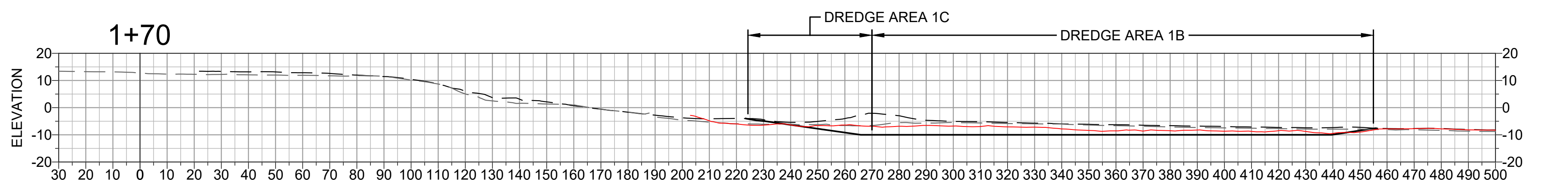
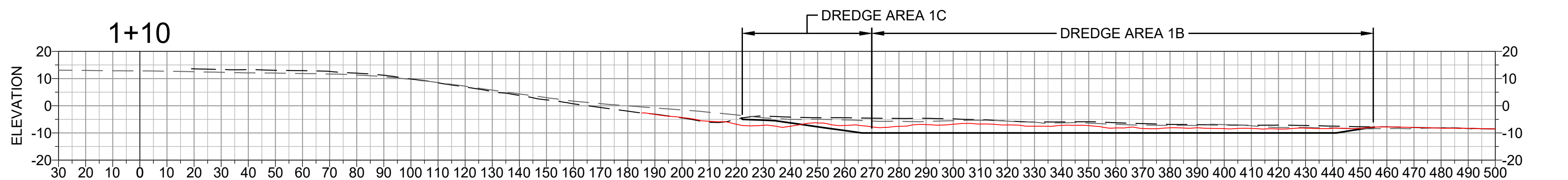
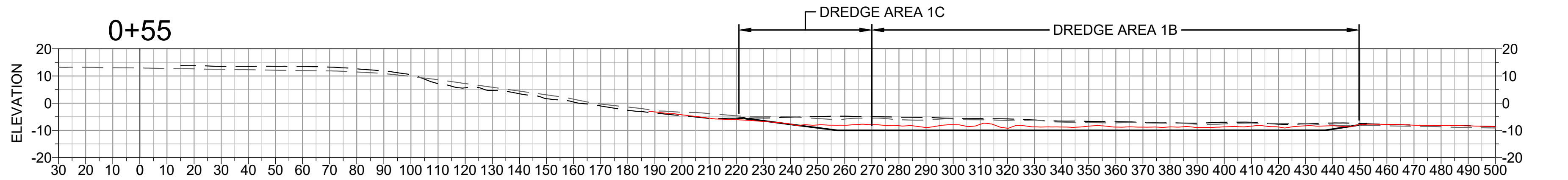
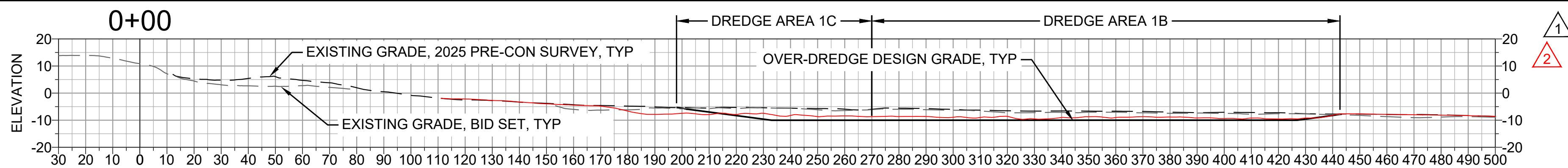
LEGEND

- DREDGING AREA (SURFERS BEACH)
- DREDGING AREA (MITIGATION AREA AND SURFERS BEACH)
- DREDGING PIPELINE
- EELGRASS BED
- POTENTIAL EELGRASS HABITAT
- HTL - HIGH TIDE LINE: 7.2' NAVD
- MHW - MEAN HIGH TIDE LINE: 5.0' NAVD
- TOE OF OVER-DREDGE LIMITS
- TOE OF TARGET DREDGE LIMITS

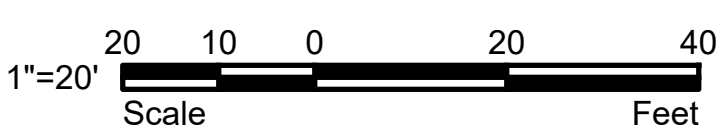
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DISCLAIMER FOR RECORD DRAWINGS

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- NOTES**
- DREDGE SECTIONS SHOW LIMITS OF OVER-DREDGE (EL -10' NAVD) ONLY FOR CLARITY.
 - THE TARGET DREDGE LIMITS ELEVATION OF THE TARGET VERTICAL LIMIT OF DREDGING IS ELEV -8' NAVD (NOT SHOWN).
 - SEE SHEET G-03 AND SPECIFICATIONS FOR ADDITIONAL INFORMATION ON TOLERANCE AND PAY LIMITS.



DREDGE AREA 1 - SECTIONS
SECTION SCALE: 1:30



PROJECT NAME
SURFERS BEACH PILOT RESTORATION PROJECT
SAN MATEO COUNTY HARBOR DISTRICT
504 AVENUE ALHAMBRA, STE 200,
P.O. BOX 14491, EL GRANADA, CA 94018

REVISIONS

#	DATE	DESCRIPTION
1	07/07/25	PRE-CONSTRUCTION TOPOBATHY SURVEY
2	02/06/26	RECORD SET

DESIGNED	L. WHITE
DRAWN	M.A.
CHECKED	A. BORGONOVO
IN CHARGE	L. WHITE C76509

PROJECT NUMBER D201800631.02
ISSUE DATE 01/19/26
SCALE IS AS SHOWN WHEN PLOTTED TO FULL SIZE (22"x34")

PHASE
RECORD SET

SHEET TITLE

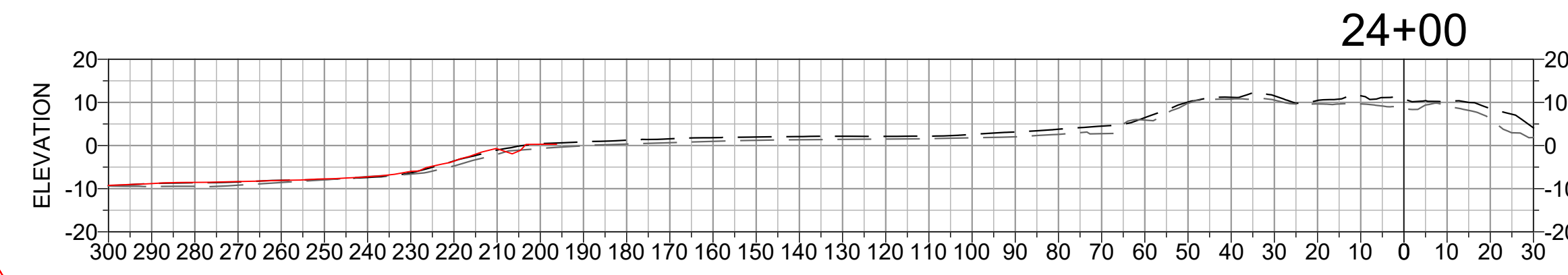
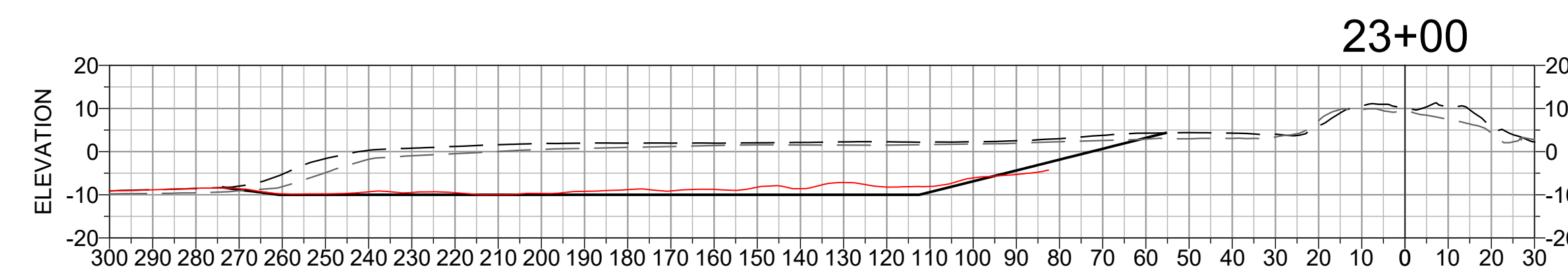
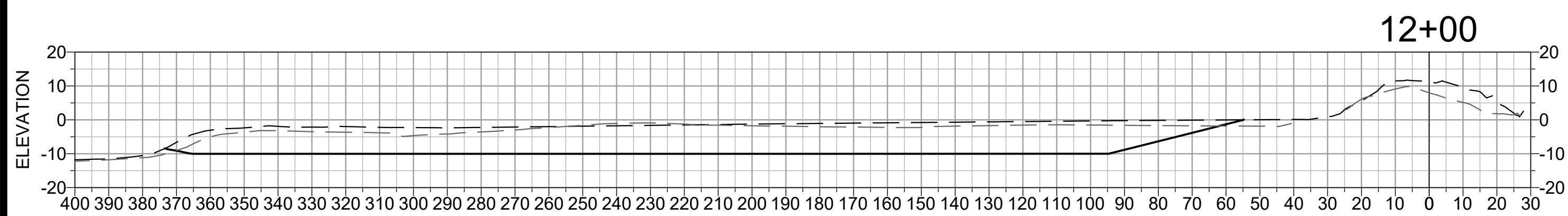
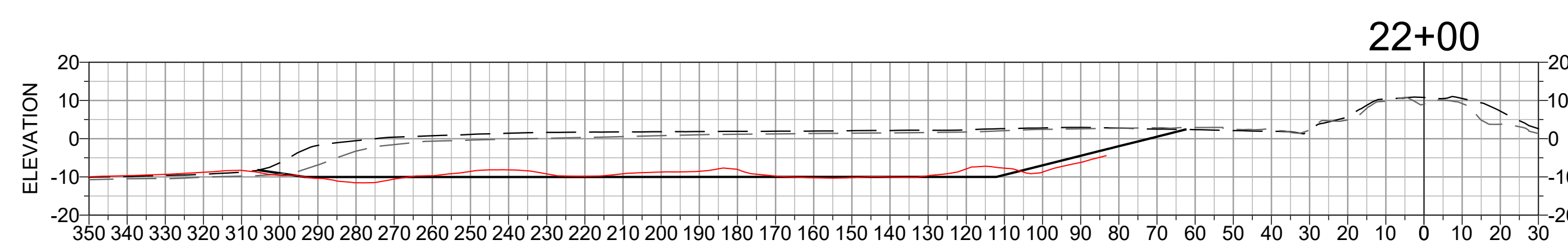
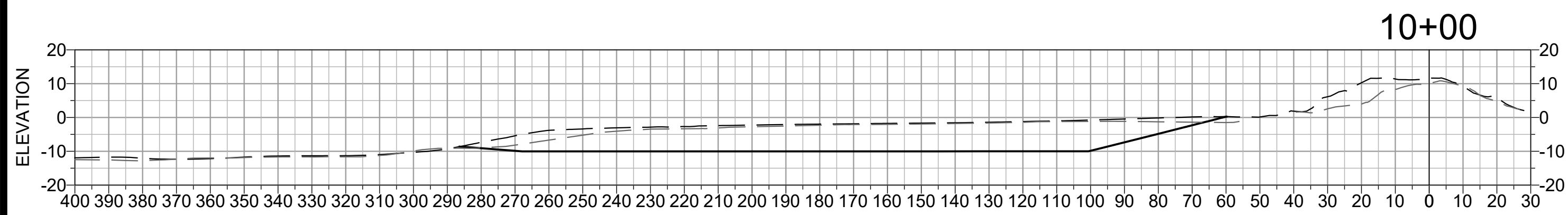
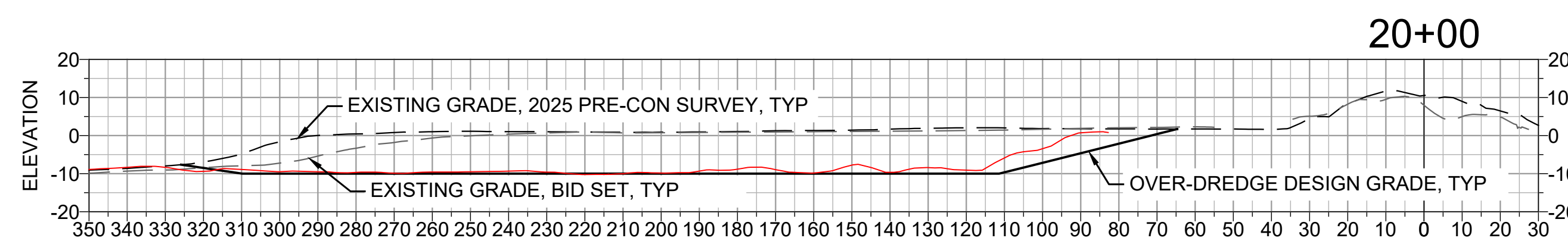
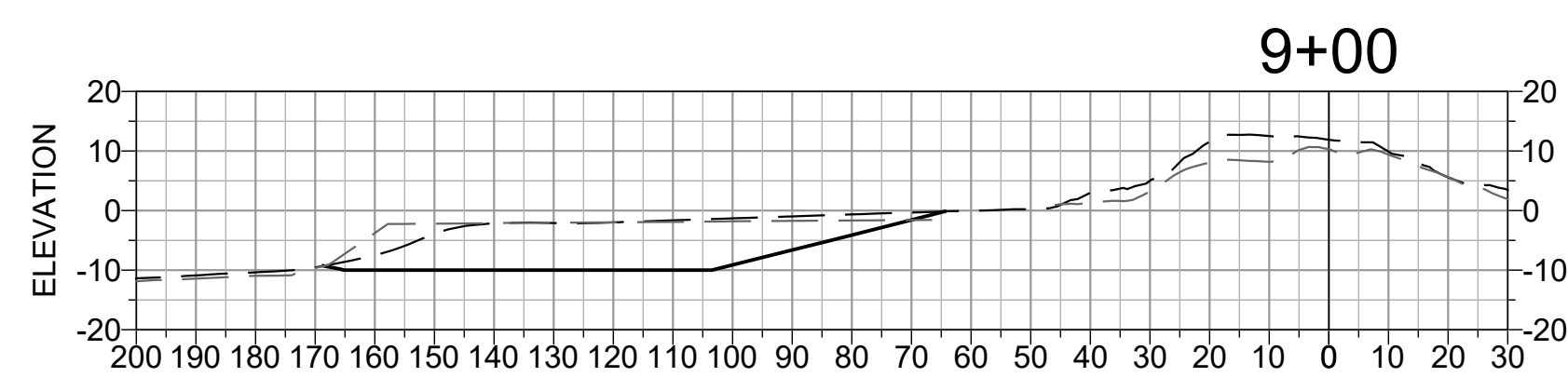
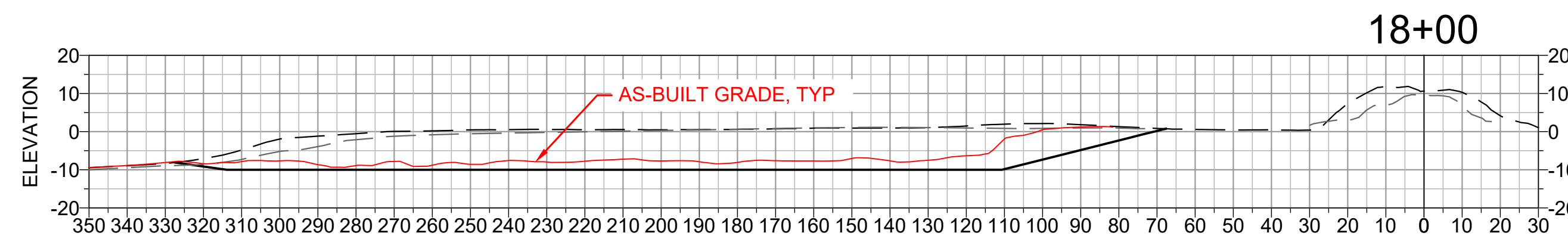
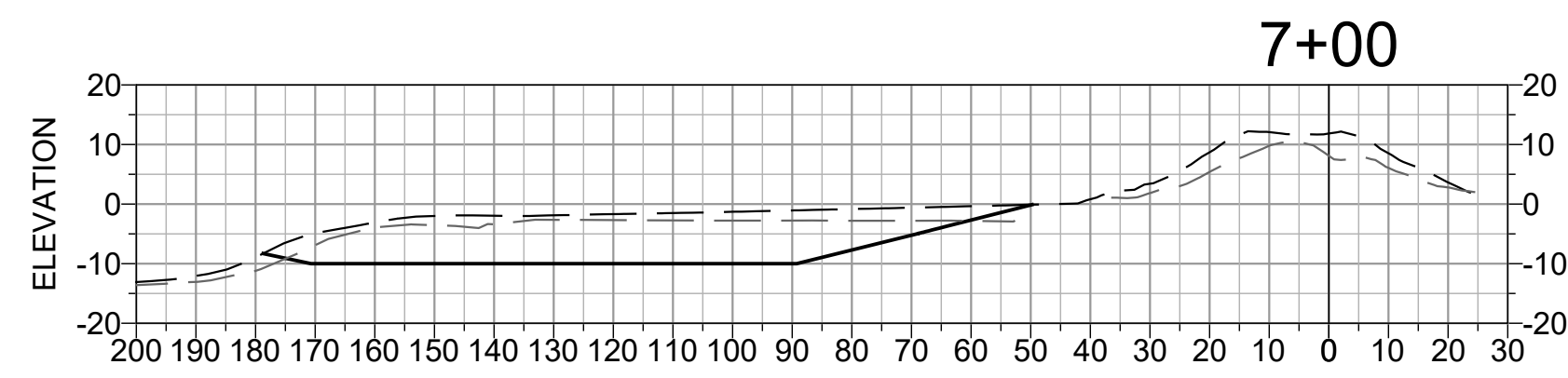
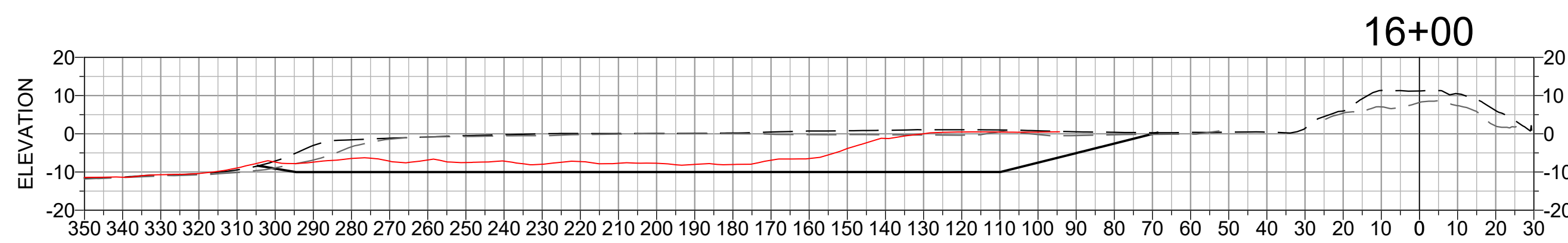
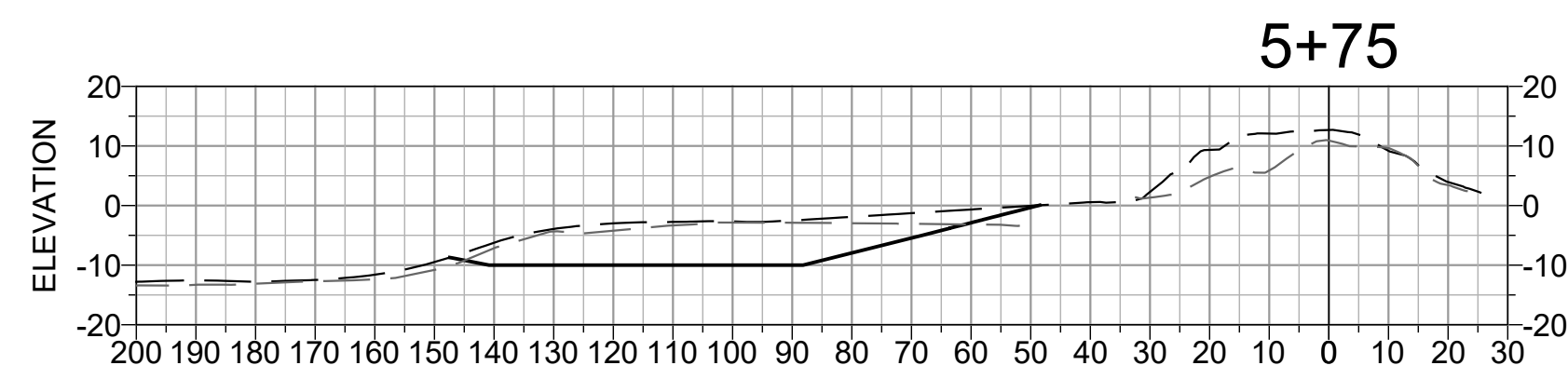
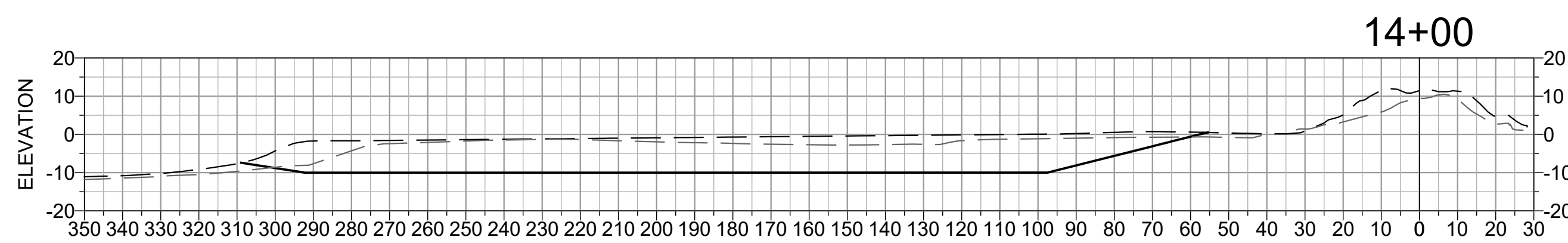
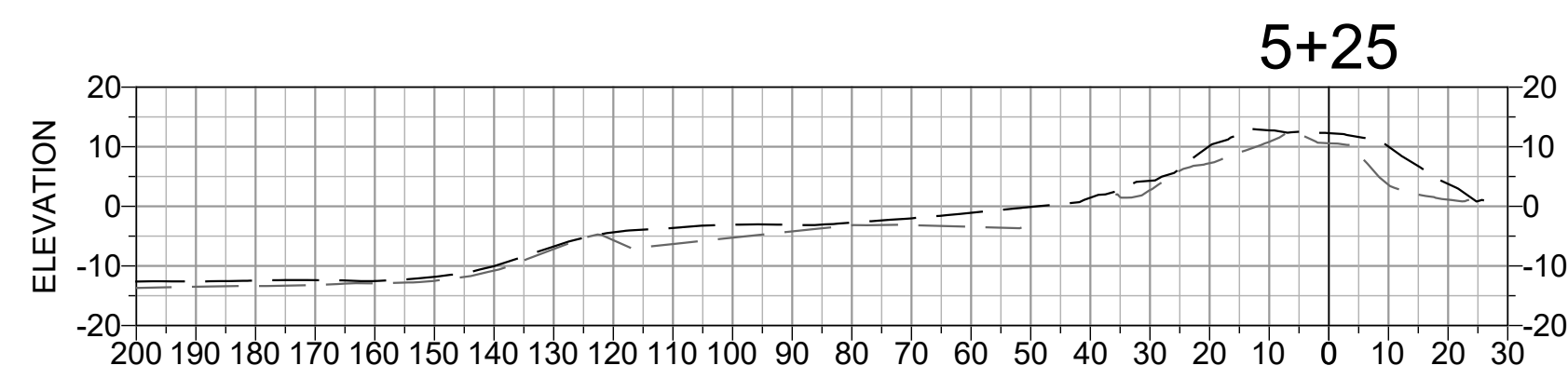
EAST BASIN DREDGE 1 SECTIONS

SHEET NUMBER
C-04

SHEET 07 OF 16

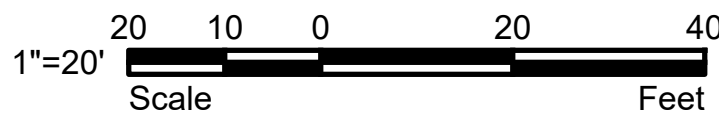
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FILE: P:\01 CAD\18\180631_00 - Surfers Beach Pilot Project\DWG\EAST BASIN DREDGE.dwg PLOT DATE: 2/6/2026 2:00:38 PM PLOTTED BY: MARIO ACCORDINO



NOTES

1. DREDGE SECTIONS SHOW LIMITS OF OVER-DREDGE (EL -10' NAVD) ONLY FOR CLARITY.
2. THE TARGET DREDGE LIMITS ELEVATION OF THE TARGET VERTICAL LIMIT OF DREDGING IS ELEV -8' NAVD (NOT SHOWN).
3. SEE SHEET G-03 AND SPECIFICATIONS FOR ADDITIONAL INFORMATION ON TOLERANCE AND PAY LIMITS.
4. STATIONS 0+00 TO 14+00 NOT DREDGED DURING CONSTRUCTION



DREDGE AREA 2 - SECTIONS

SECTION

SCALE: 1:30

DISCLAIMER FOR RECORD DRAWINGS

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STAMP



**SURFERS BEACH
PILOT RESTORATION
PROJECT**

SAN MATEO COUNTY HARBOR DISTRICT
504 AVENUE ALHAMBRA, STE 200,
P.O. BOX 14491, EL GRANADA, CA 94018

PROJECT NAME

REVISIONS #	DATE	DESCRIPTION
1	02/06/26	RECORD SET

DESIGNED	L. WHITE
DRAWN	M.A.
CHECKED	A. BORGONOVO
IN CHARGE	L. WHITE C76509

PROJECT NUMBER D201800631.02

ISSUE DATE 01/19/26

SCALE IS AS SHOWN WHEN PLOTTED TO FULL SIZE (22"x34")

PHASE
RECORD SET

SHEET TITLE

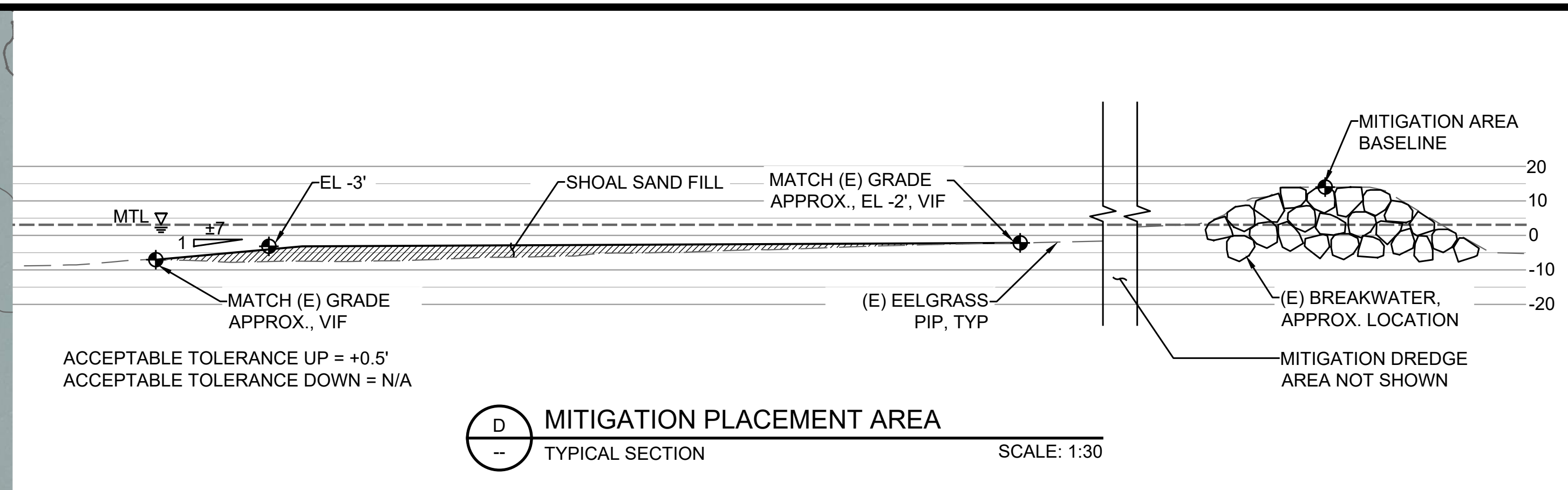
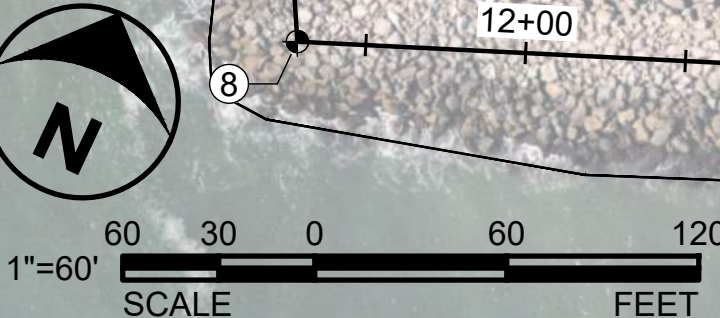
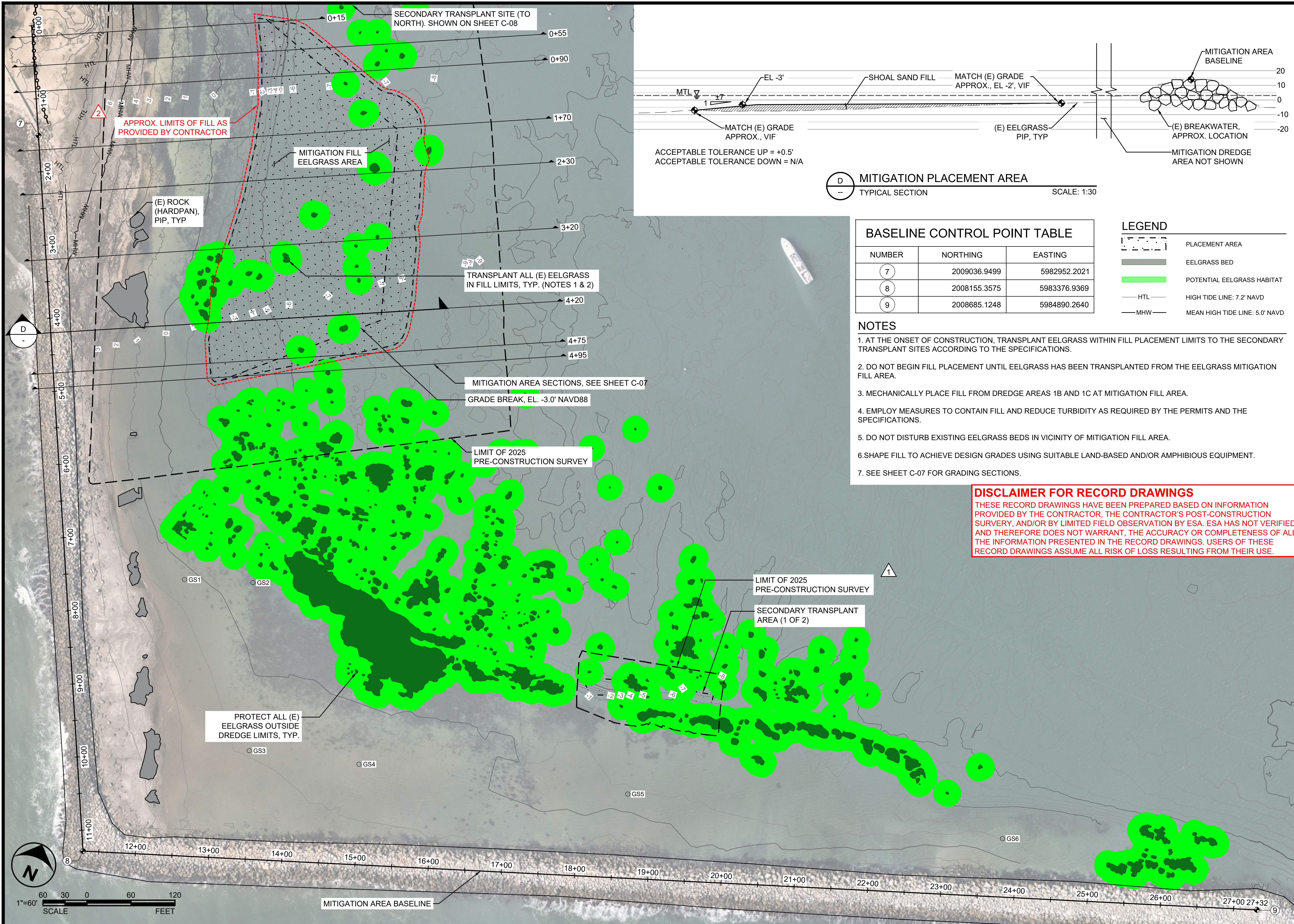
**EAST BASIN
DREDGE 2
SECTIONS**

SHEET NUMBER

C-05

SHEET 08 OF 16

FILE: P:\01 CAD\18xxxx\20180631.00 - Surfers Beach Pilot Project\DWG\PHASE 1 MITIGATION AREA.dwg PLOT DATE: 2/6/2025 3:10:25 PM PLOTTED BY: MARIO ACCORDINO



D MITIGATION PLACEMENT AREA
 -- TYPICAL SECTION SCALE: 1:30

BASELINE CONTROL POINT TABLE

NUMBER	NORTHING	EASTING
7	2009036.9499	5982952.2021
8	2008155.3575	5983376.9369
9	2008685.1248	5984890.2640

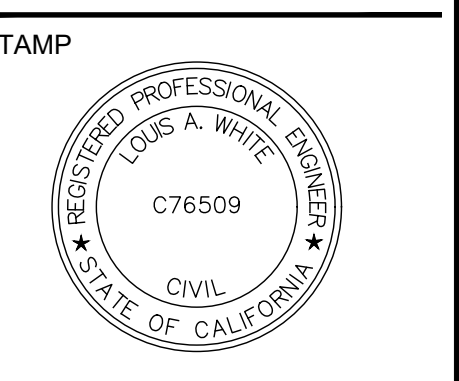
LEGEND

- PLACEMENT AREA
- EELGRASS BED
- POTENTIAL EELGRASS HABITAT
- HTL HIGH TIDE LINE: 7.2' NAVD
- MHW MEAN HIGH TIDE LINE: 5.0' NAVD

NOTES

1. AT THE ONSET OF CONSTRUCTION, TRANSPLANT EELGRASS WITHIN FILL PLACEMENT LIMITS TO THE SECONDARY TRANSPLANT SITES ACCORDING TO THE SPECIFICATIONS.
2. DO NOT BEGIN FILL PLACEMENT UNTIL EELGRASS HAS BEEN TRANSPLANTED FROM THE EELGRASS MITIGATION FILL AREA.
3. MECHANICALLY PLACE FILL FROM DREDGE AREAS 1B AND 1C AT MITIGATION FILL AREA.
4. EMPLOY MEASURES TO CONTAIN FILL AND REDUCE TURBIDITY AS REQUIRED BY THE PERMITS AND THE SPECIFICATIONS.
5. DO NOT DISTURB EXISTING EELGRASS BEDS IN VICINITY OF MITIGATION FILL AREA.
6. SHAPE FILL TO ACHIEVE DESIGN GRADES USING SUITABLE LAND-BASED AND/OR AMPHIBIOUS EQUIPMENT.
7. SEE SHEET C-07 FOR GRADING SECTIONS.

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SURFERS BEACH PILOT RESTORATION PROJECT
 SAN MATEO COUNTY HARBOR DISTRICT
 504 AVENUE ALHAMBRA, STE 200,
 P.O. BOX 14491, EL GRANADA, CA 94018

REVISIONS

#	DATE	DESCRIPTION
1	07/07/25	PRE-CONSTRUCTION SURVEYS
2	02/06/26	RECORD SET

DESIGNED	L. WHITE
DRAWN	M.A.
CHECKED	A. BORGONOVO
IN CHARGE	L. WHITE C76509

PROJECT NUMBER D201800631.02
 ISSUE DATE 02/06/26
 SCALE IS AS SHOWN WHEN PLOTTED TO FULL SIZE (22"x34")

PHASE **RECORD SET**

SHEET TITLE
EELGRASS MITIGATION FILL AREA PLAN

SHEET NUMBER
C-06

SHEET 09 OF 16



575 MARKET STREET
SUITE 3700
SAN FRANCISCO, CA 94105
OFFICE - 415.896.5900
WWW.ESASSOC.COM

STAMP



**SURFERS BEACH
PILOT RESTORATION
PROJECT**

SAN MATEO COUNTY HARBOR DISTRICT
504 AVENUE ALHAMBRA, STE 200,
P.O. BOX 14491, EL GRANADA, CA 94018

PROJECT NAME

REVISIONS	#	DATE	DESCRIPTION
	1	07/07/25	PRE-CONSTRUCTION TOPOBATHY SURVEY
	2	02/06/26	RECORD SET

DESIGNED	L. WHITE
DRAWN	M.A.
CHECKED	A. BORGONOVO
IN CHARGE	L. WHITE C76509

PROJECT NUMBER D201800631.02

ISSUE DATE 02/06/26

SCALE IS AS SHOWN WHEN PLOTTED TO FULL SIZE (22"x34")

PHASE
RECORD SET

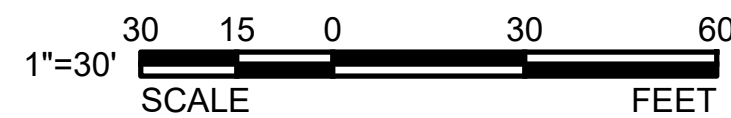
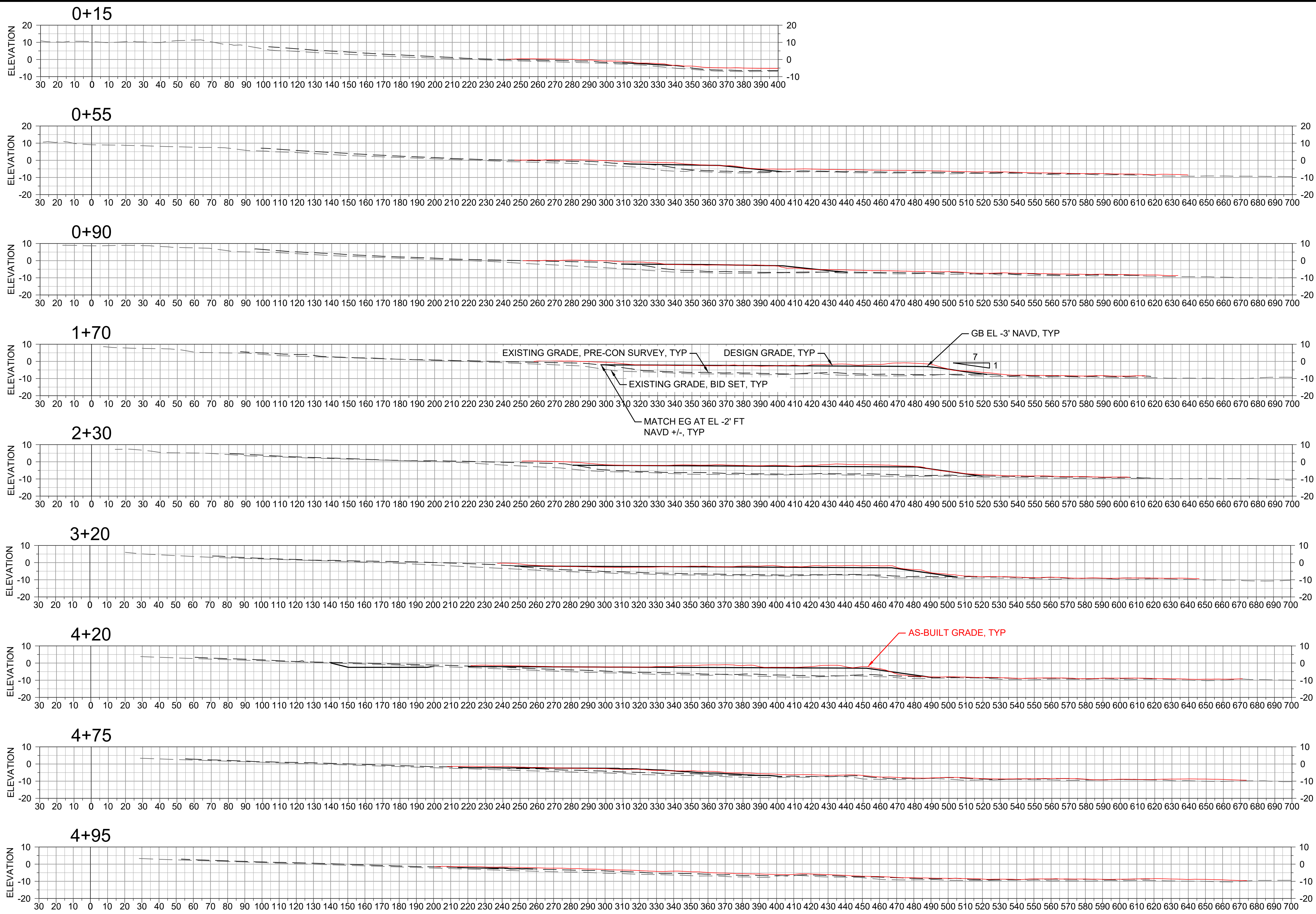
SHEET TITLE

**EELGRASS
MITIGATION FILL
AREA SECTIONS**

SHEET NUMBER

C-07

SHEET 10 OF 16



NOTES

EELGRASS MITIGATION - SECTIONS

SECTION

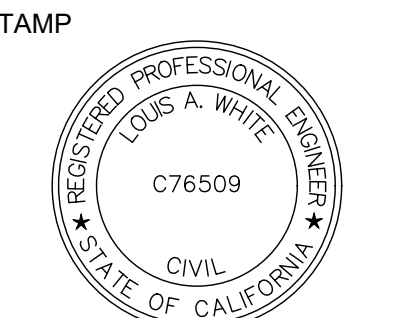
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DISCLAIMER FOR RECORD DRAWINGS

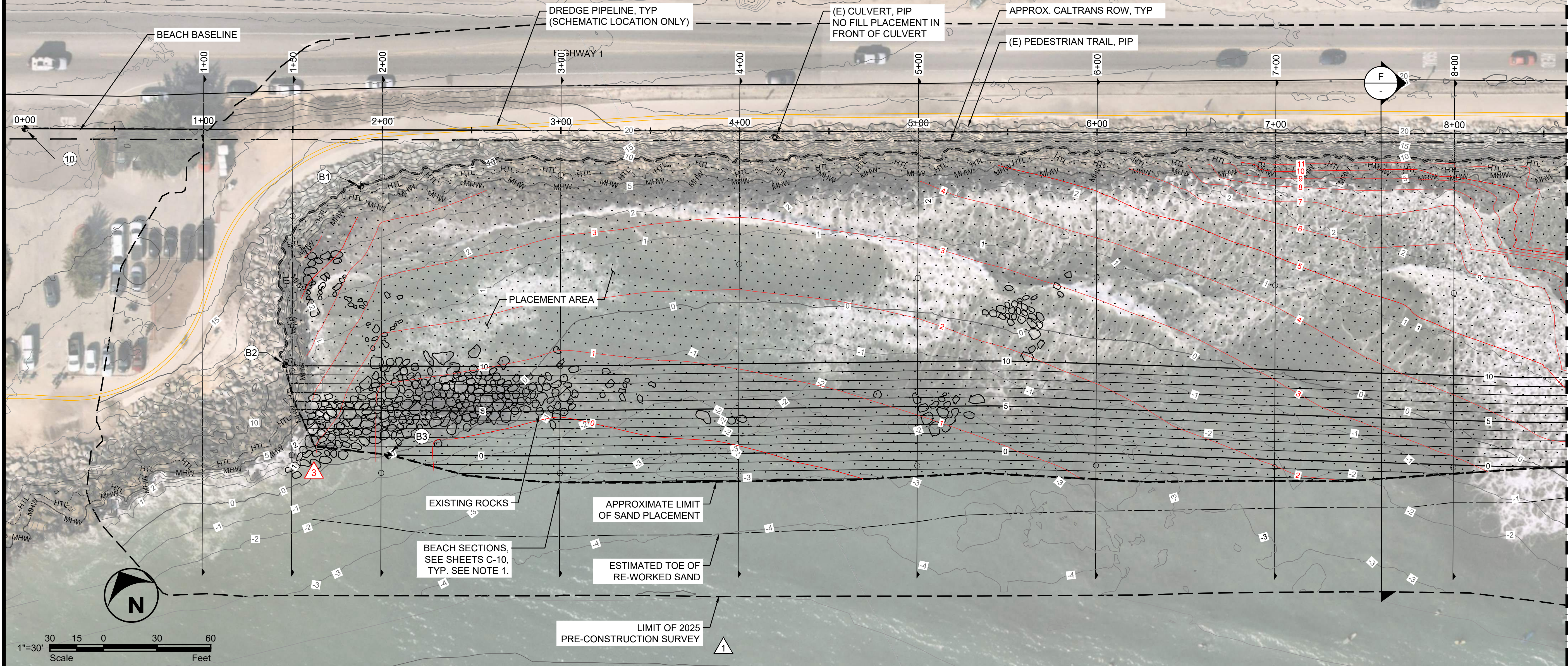
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ESA
 575 MARKET STREET
 SUITE 3700
 SAN FRANCISCO, CA 94105
 OFFICE - 415.896.5900
 WWW.ESASSOC.COM



SURFERS BEACH PILOT RESTORATION PROJECT
 SAN MATEO COUNTY HARBOR DISTRICT
 504 AVENUE ALHAMBRA, STE 200,
 P.O. BOX 1449, EL GRANADA, CA 94018



- LEGEND**
- TEMPORARY CONTAINMENT BERM EXCAVATION AREA
 - DREDGING PIPELINE
 - PLACEMENT AREA
 - CONSTRUCTION STAGING AREA
 - HTL HIGH TIDE LINE: 7.2' NAVD
 - MHW MEAN HIGH TIDE LINE: 5.0' NAVD
 - CALTRANS RIGHT OF WAY (ROW)

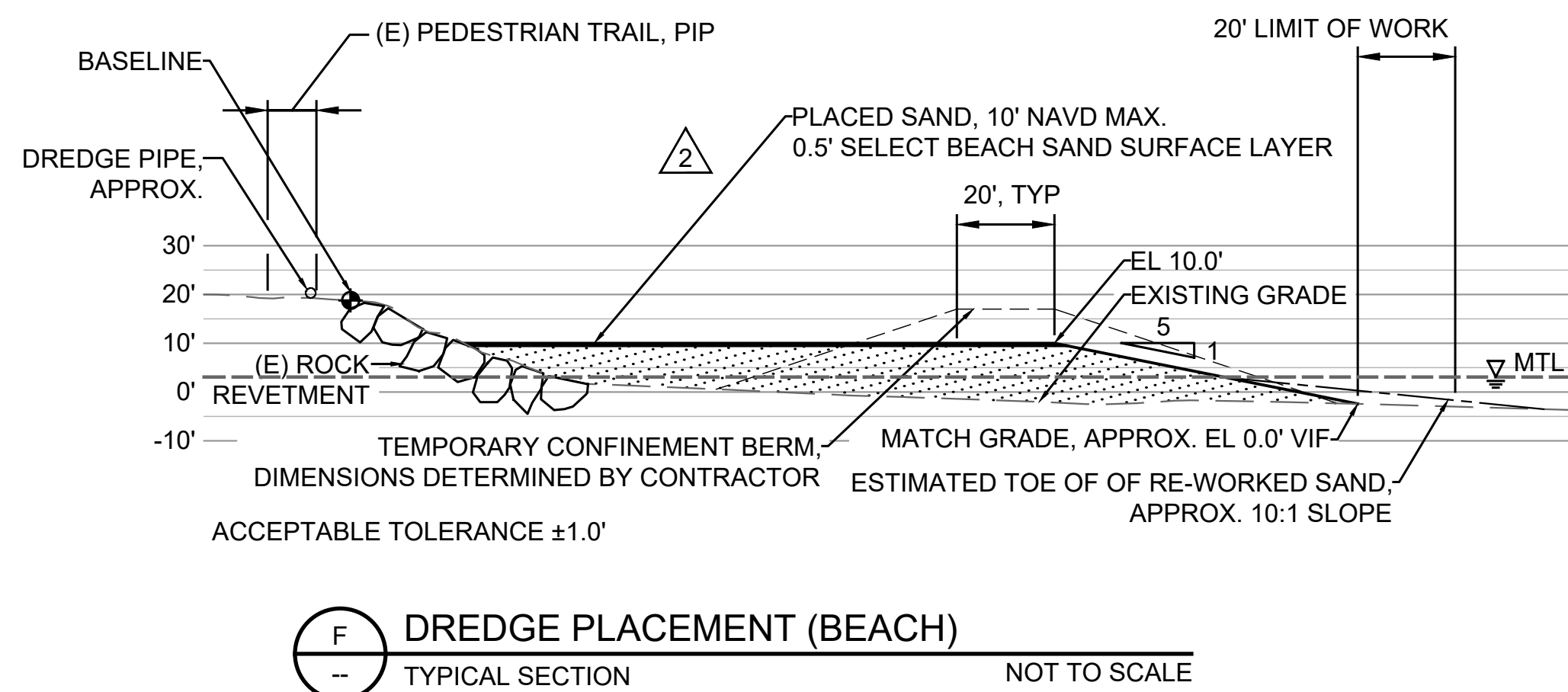
- NOTES**
1. HYDRAULICALLY PLACE FILL AT SURFER'S BEACH FILL AREA FROM DREDGE AREAS 1A AND 2.
 2. EMPLOY MEASURES TO CONTAIN FILL AND REDUCE TURBIDITY AS REQUIRED BY THE PERMITS AND THE SPECIFICATIONS.
 3. CONSTRUCT TEMPORARY SAND CONTAINMENT BERMS AS NEEDED TO LIMIT MIGRATION OF SAND DURING PLACEMENT. CONSTRUCT CONTAINMENT BERMS WITH DREDGED SEDIMENTS, DEWATERED AND CONDITIONED AS NEEDED.
 4. SHAPE FILL AS NEEDED TO ACHIEVE DESIGN GRADES USING SUITABLE LAND-BASED AND/OR AMPHIBIOUS EQUIPMENT.
 5. SEE SHEET C-10 FOR GRADING SECTIONS.
 6. AS-BUILT GRADES SURVEYED AT TIME OF STATION ACCEPTANCE.

BASELINE CONTROL POINT TABLE

NAME	NORTHING	EASTING	APPROX. EXISTING ELEV., FT NAVD
10	2011065.2411	5989661.2821	19.97
11	2010276.8152	5991195.5603	25.25

BEACH FILL AREA EXTENTS

NUMBER	NORTHING	EASTING	APPROX. EXISTING ELEV., FT NAVD	DESIGN GRADE, FT NAVD
B1	2010951.2632	5989814.0327	10.0	10.0
B2	2010881.2761	5989730.9724	10.0	10.0
B3	2010809.8262	5989759.3722	0.0	0.0
B4	2010573.3331	5990606.6268	10.0	10.0
B5	2010377.7936	5990847.0242	10.0	10.0
B6	2010347.0497	5990888.8043	10.0	10.0



REVISIONS

#	DATE	DESCRIPTION
△	07/07/25	PRE-CONSTRUCTION TOPOBATHY SURVEY
△	09/19/25	RFI 005 RESPONSE
△	02/06/26	RECORD SET

DESIGNED L. WHITE
 DRAWN M.A.
 CHECKED A. BORGONOVO
 IN CHARGE L. WHITE
 C76509

PROJECT NUMBER D201800631.02
 ISSUE DATE 02/06/26
 SCALE IS AS SHOWN WHEN PLOTTED TO FULL SIZE (22"x34")

PHASE **RECORD SET**
 SHEET TITLE

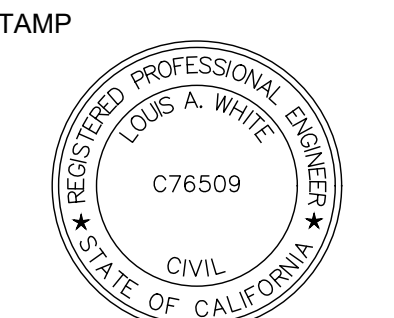
SURFERS BEACH FILL AREA PLAN - 1

SHEET NUMBER **C-08**
 SHEET 11 OF 16

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 THESE RECORD DRAWINGS HAVE BEEN PREPARED BASED ON INFORMATION PROVIDED BY THE CONTRACTOR. THE CONTRACTOR'S POST-CONSTRUCTION SURVEY, AND/OR BY LIMITED FIELD OBSERVATION BY ESA. ESA HAS NOT VERIFIED, AND THEREFORE DOES NOT WARRANT, THE ACCURACY OR COMPLETENESS OF ALL THE INFORMATION PRESENTED IN THE RECORD DRAWINGS. USERS OF THESE RECORD DRAWINGS ASSUME ALL RISK OF LOSS RESULTING FROM THEIR USE.

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SURFERS BEACH PILOT RESTORATION PROJECT
 SAN MATEO COUNTY HARBOR DISTRICT
 504 AVENUE ALHAMBRA, STE 200,
 P.O. BOX 1449, EL GRANADA, CA 94018

REVISIONS

#	DATE	DESCRIPTION
△	07/07/25	PRE-CONSTRUCTION TOPOBATHY SURVEY
△	09/19/25	RFI 005 RESPONSE
△	02/06/26	RECORD SET

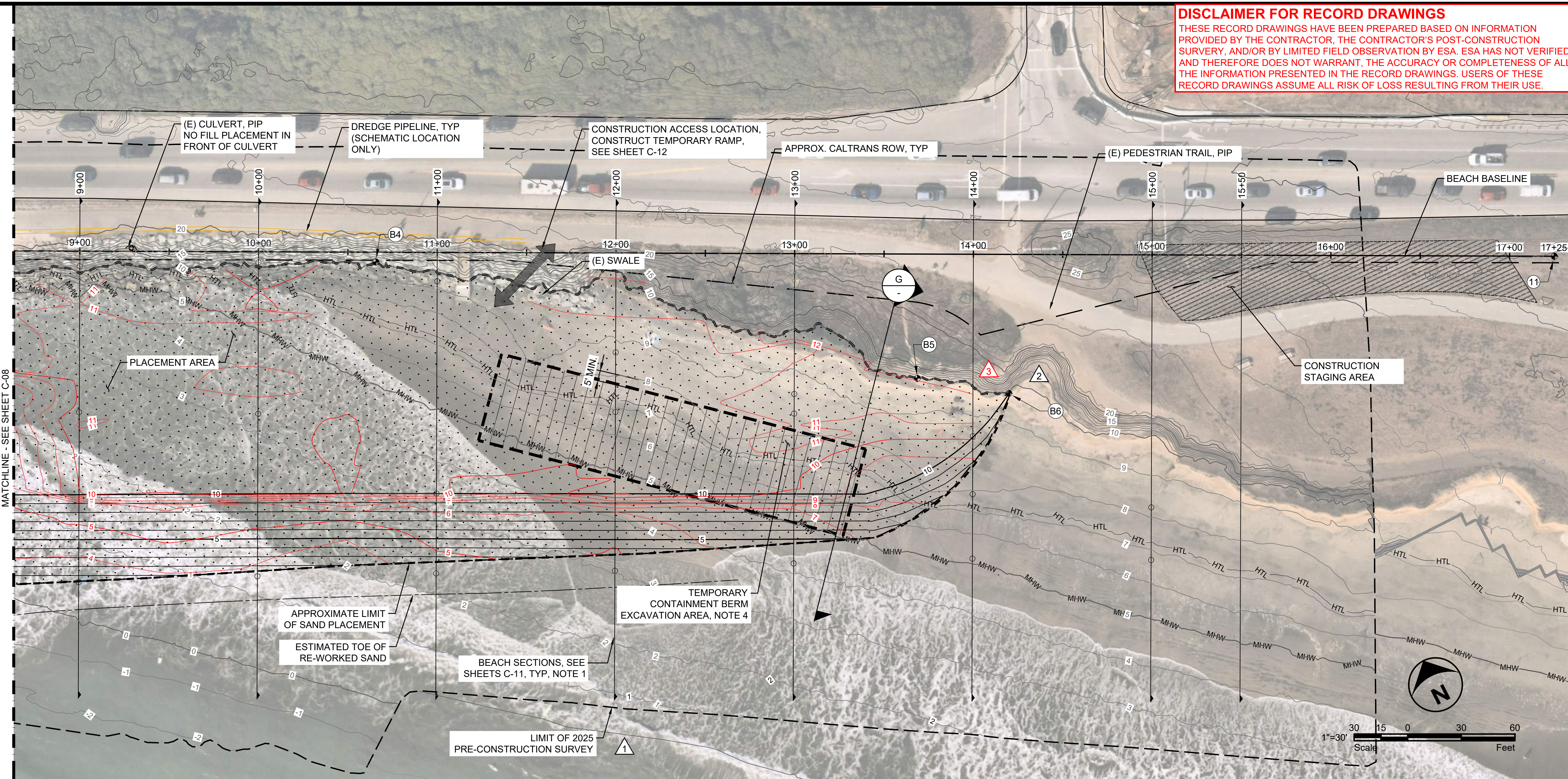
DESIGNED L. WHITE
 DRAWN M.A.
 CHECKED A. BORGONOVO
 IN CHARGE L. WHITE
 C76509

PROJECT NUMBER D201800631.02
 ISSUE DATE 01/19/26
 SCALE IS AS SHOWN WHEN PLOTTED TO FULL SIZE (22"x34")

PHASE
RECORD SET

SHEET TITLE
SURFERS BEACH FILL AREA PLAN - 2

SHEET NUMBER
C-09
 SHEET 12 OF 16



FILE: P:\01_CAD\18xxxx\2021\80631_00 - Surfere Beach Pilot Project\DWG\PHASE 2 SURFERS BEACH FILL AREA.dwg PLOT DATE: 2/6/2026 2:01:52 PM PLOTTED BY: MARIO ACCORDINO

LEGEND

	TEMPORARY CONTAINMENT BERM EXCAVATION AREA
	DREDGING PIPELINE
	PLACEMENT AREA
	CONSTRUCTION STAGING AREA
	HIGH TIDE LINE: 7.2' NAVD
	MEAN HIGH TIDE LINE: 5.0' NAVD
	CALTRANS RIGHT OF WAY (ROW)

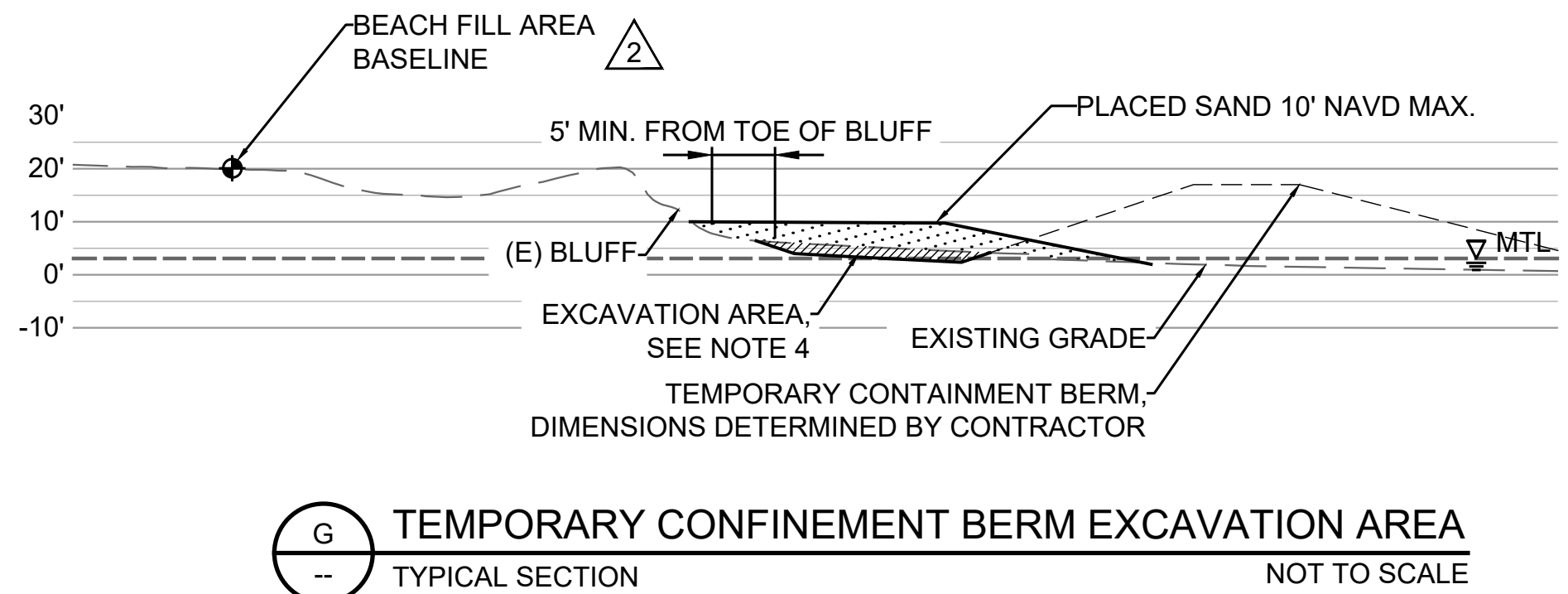
- NOTES**
- HYDRAULICALLY PLACE FILL AT SURFERS BEACH FILL AREA FROM DREDGE AREAS 1A AND 2.
 - EMPLOY MEASURES THROUGHOUT CONSTRUCTION TO CONTAIN FILL AND REDUCE TURBIDITY AS REQUIRED BY THE PERMITS AND THE SPECIFICATIONS.
 - CONSTRUCT TEMPORARY SAND CONTAINMENT BERMS AS NEEDED TO LIMIT MIGRATION OF SAND DURING PLACEMENT. CONSTRUCT CONTAINMENT BERMS WITH DREDGED SEDIMENTS, DEWATERED AND CONDITIONED AS NEEDED.
 - OVER-EXCAVATE UP TO 700 CY (UP TO 2 FT DEPTH OR CONTACT WITH HARD PAN). PROTECT EXISTING BLUFF FROM EROSION. BACKFILL AND GRADE ANY OVER-EXCAVATED AREA WITH DREDGED MATERIALS.
 - SHAPE FILL AS NEEDED TO ACHIEVE DESIGN GRADES USING SUITABLE LAND-BASED AND/OR AMPHIBIOUS EQUIPMENT.
 - SEE SHEET C-11 FOR GRADING SECTIONS.
 - AS-BUILT GRADES SURVEYED AT TIME OF STATION ACCEPTANCE.

BASELINE CONTROL POINT TABLE

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B4	2010573.3331	5990606.6268	10.0	10.0
B5	2010377.7936	5990847.0242	10.0	10.0
B6	2010347.0497	5990888.8043	10.0	10.0



TEMPORARY CONFINEMENT BERM EXCAVATION AREA TYPICAL SECTION
 NOT TO SCALE

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OFFICE - 415.896.5900
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STAMP



PROJECT NAME
**SURFERS BEACH
PILOT RESTORATION
PROJECT**
SAN MATEO COUNTY HARBOR DISTRICT
504 AVENUE ALHAMBRA, STE 200,
P.O. BOX 14491, EL GRANADA, CA 94018

REVISIONS		
#	DATE	DESCRIPTION
△	07/07/25	PRE-CONSTRUCTION TOPOBATHY SURVEY
△	09/19/25	RFI 005 RESPONSE
△	02/06/26	RECORD SET

DESIGNED	L. WHITE
DRAWN	M.A.
CHECKED	A. BORGONOVO
IN CHARGE	L. WHITE C76509

PROJECT NUMBER D201800631.02

ISSUE DATE 01/19/26

SCALE IS AS SHOWN WHEN PLOTTED TO FULL SIZE (22"x34")

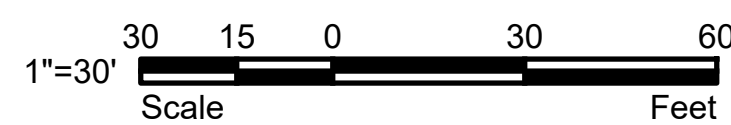
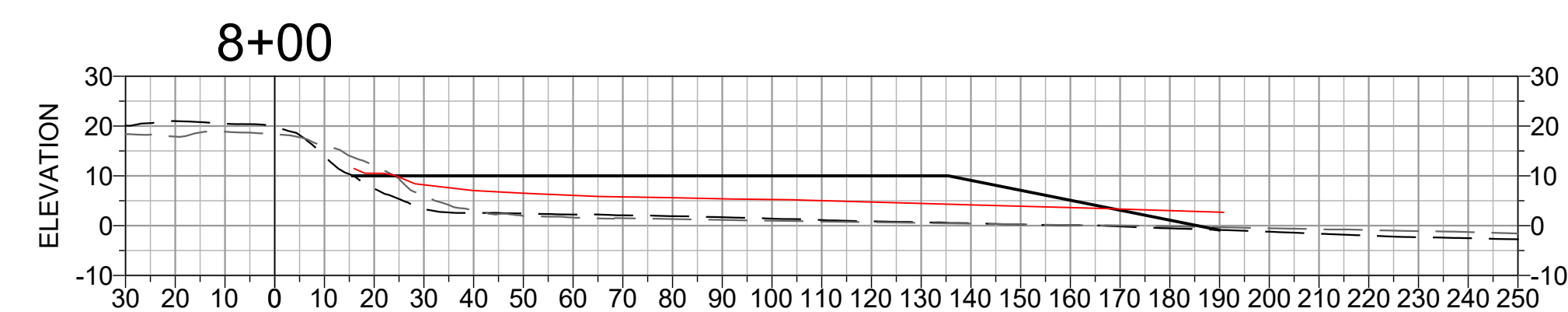
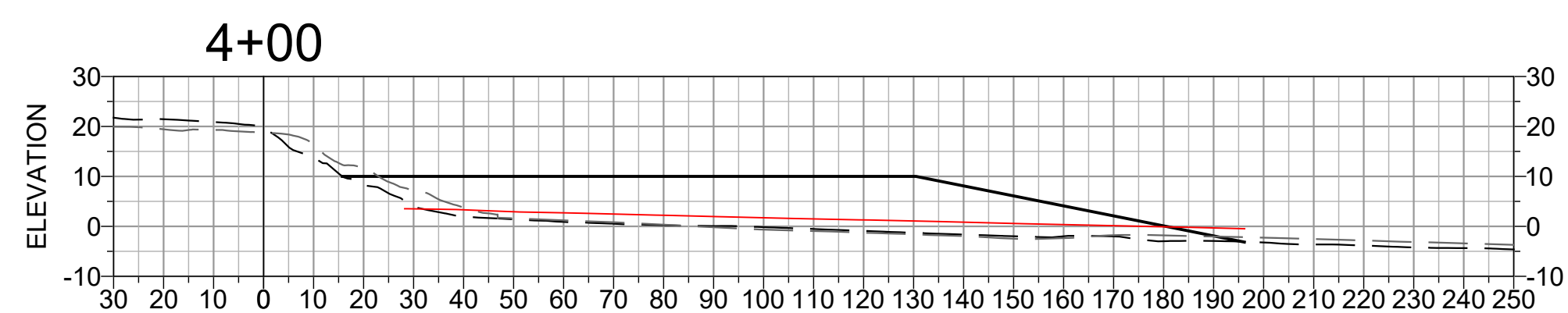
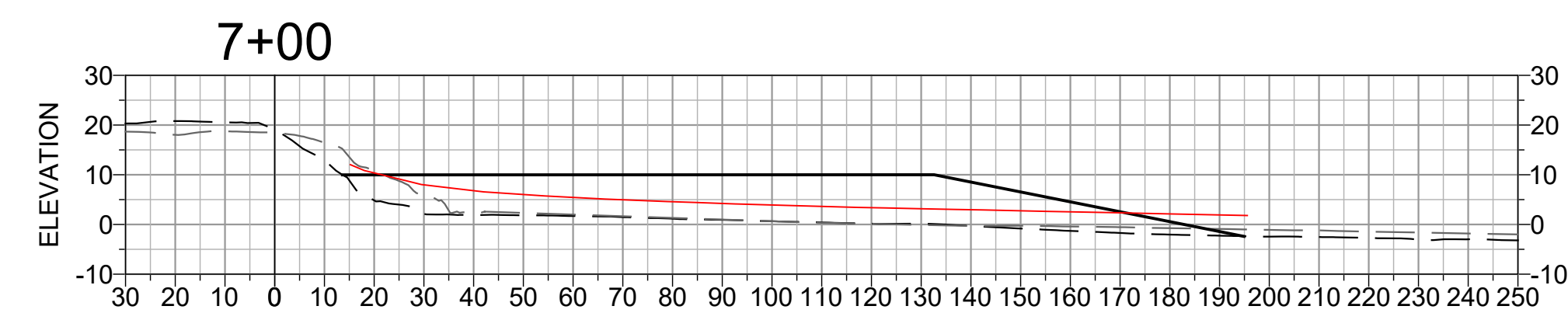
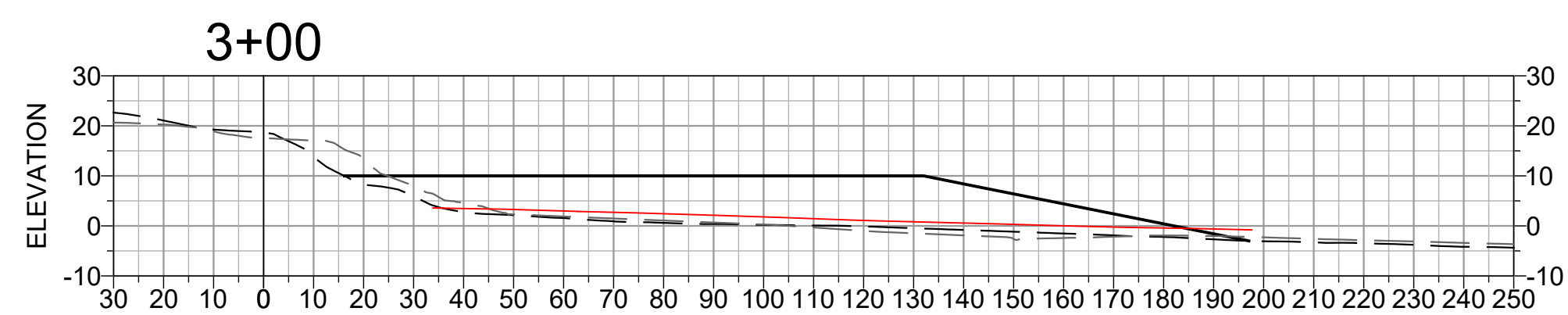
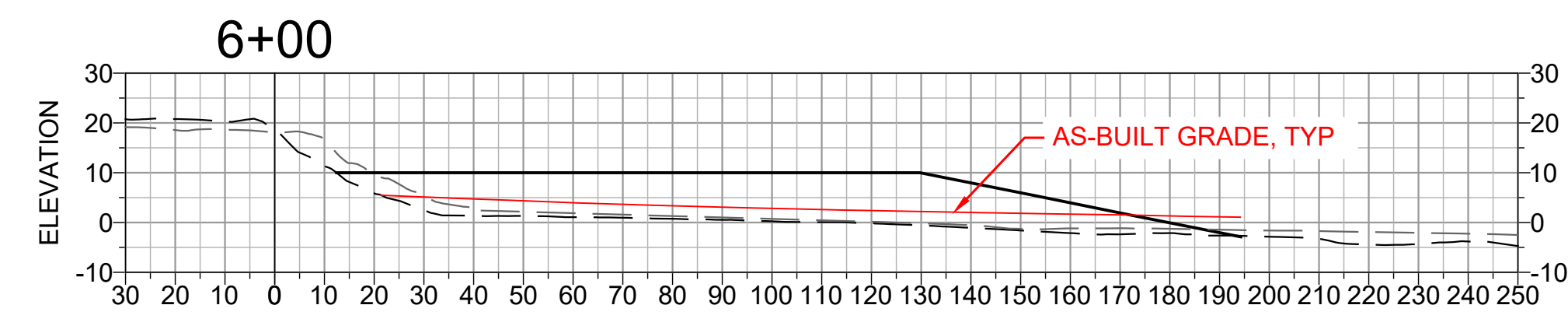
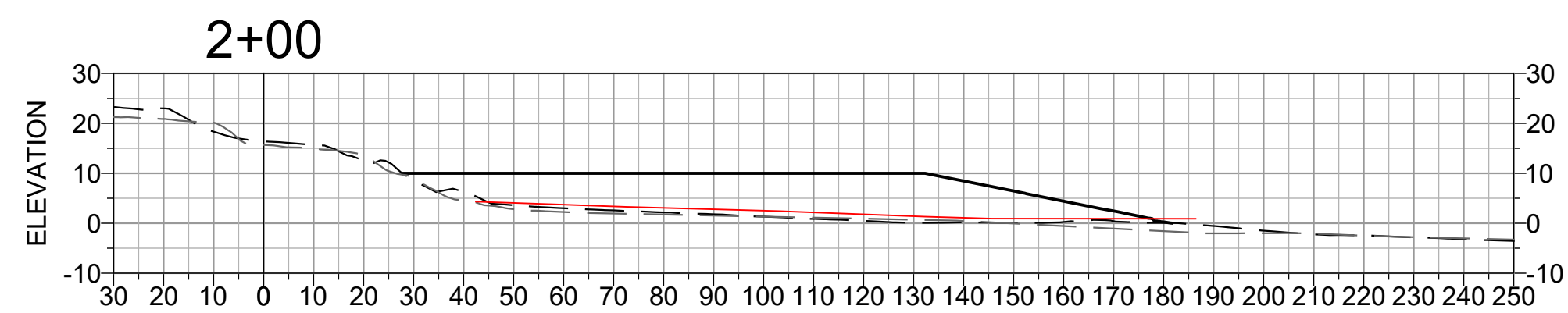
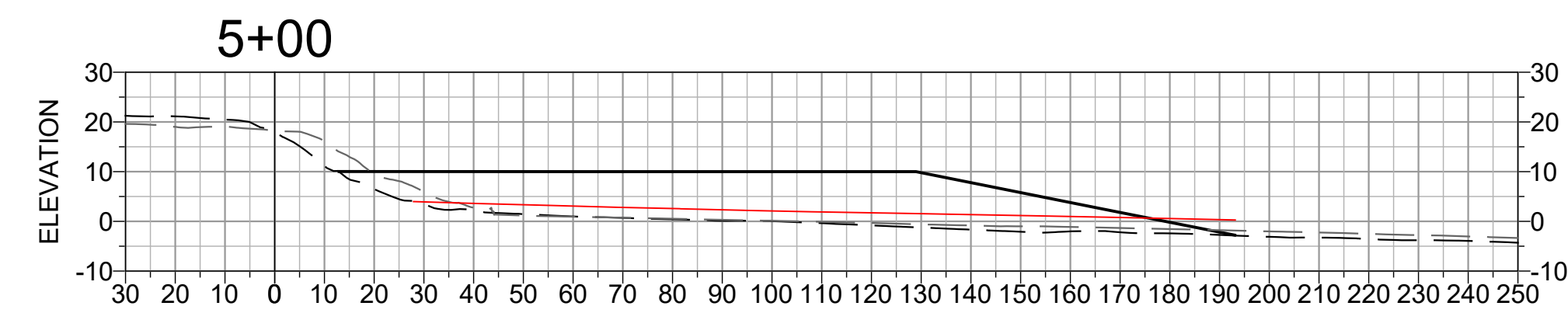
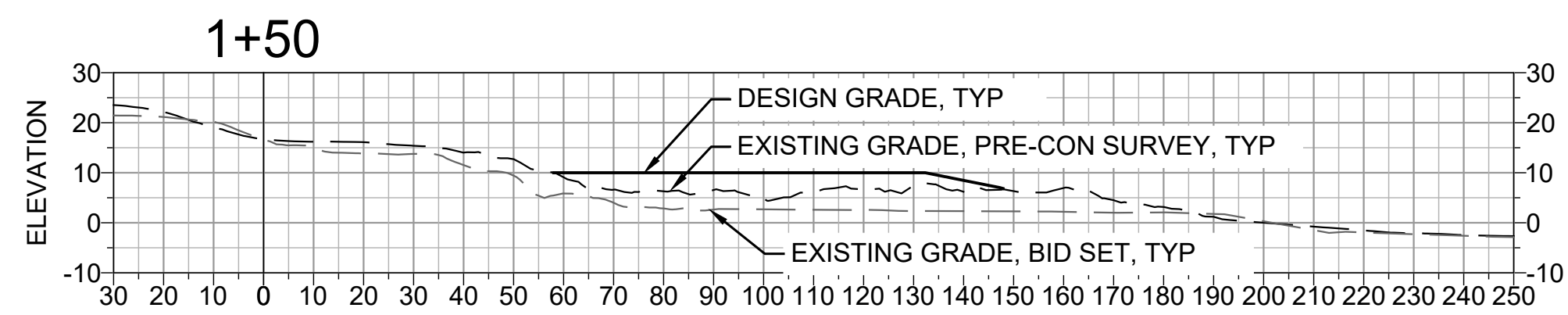
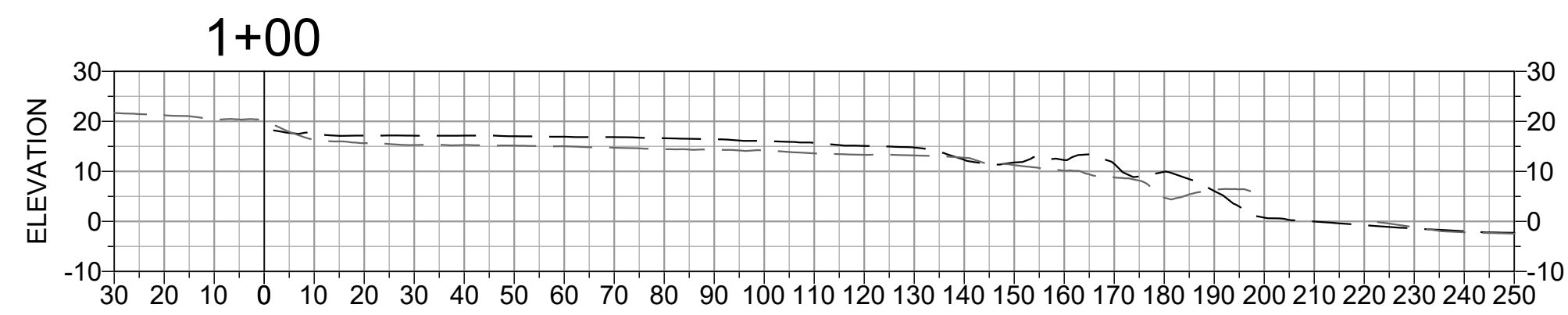
PHASE
RECORD SET

SHEET TITLE
**SURFERS BEACH
FILL AREA
SECTIONS - 1**

SHEET NUMBER
C-10

SHEET 13 OF 16

- 1
- 2
- 3



NOTES

- 1. AS-BUILT GRADES SURVEYED AT TIME OF STATION ACCEPTANCE.

SURFERS BEACH - SECTIONS

SECTION

SCALE: 1:30

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PROJECT NAME
**SURFERS BEACH
PILOT RESTORATION
PROJECT**
SAN MATEO COUNTY HARBOR DISTRICT
504 AVENUE ALHAMBRA, STE 200,
P.O. BOX 14491, EL GRANADA, CA 94018

REVISIONS		
#	DATE	DESCRIPTION
△	07/07/25	PRE-CONSTRUCTION TOPOBATHY SURVEY
△	09/19/25	RFI 005 RESPONSE
△	02/06/26	RECORD SET

DESIGNED	L. WHITE
DRAWN	M.A.
CHECKED	A. BORGONOVO
IN CHARGE	L. WHITE C76509

PROJECT NUMBER D201800631.02

ISSUE DATE 01/19/26

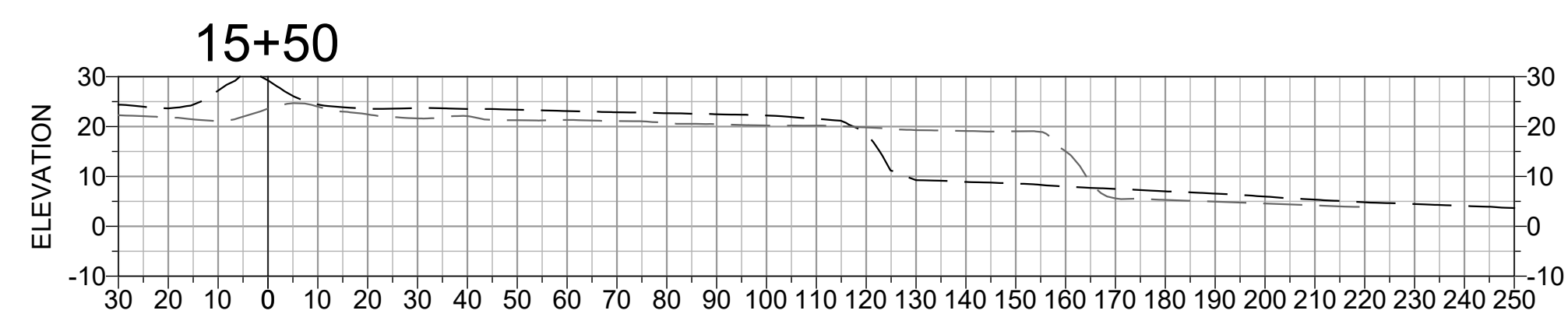
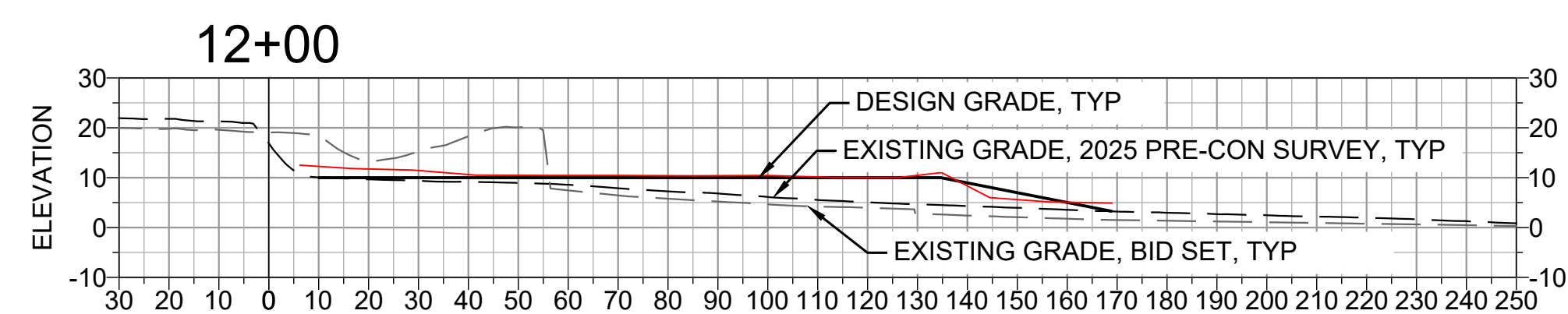
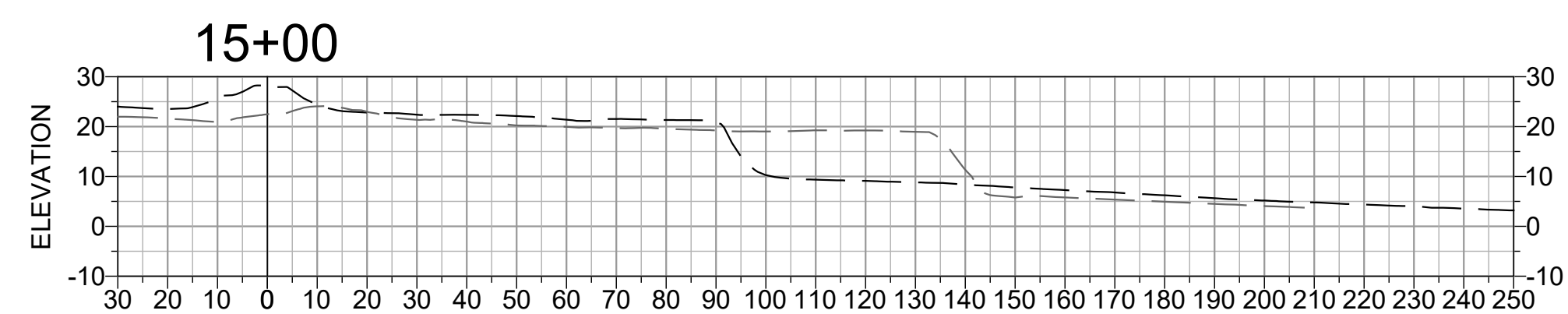
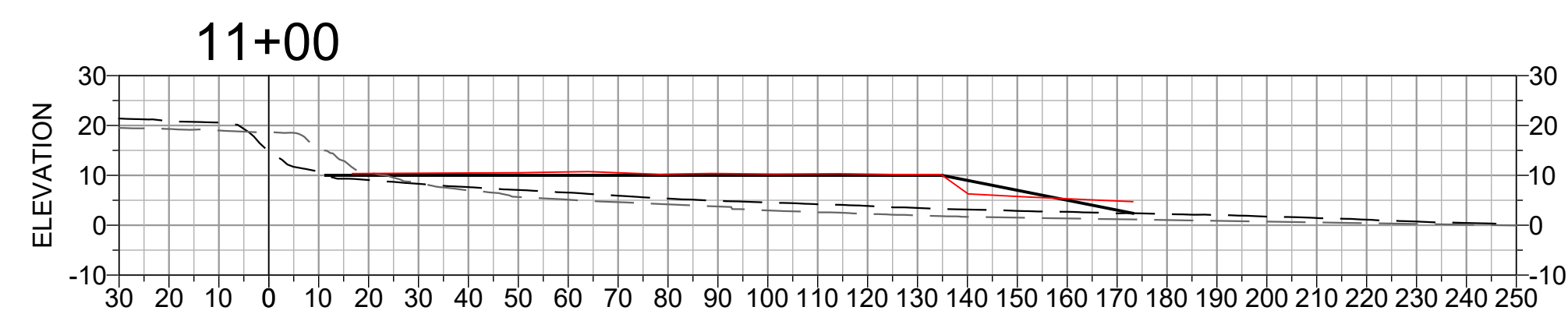
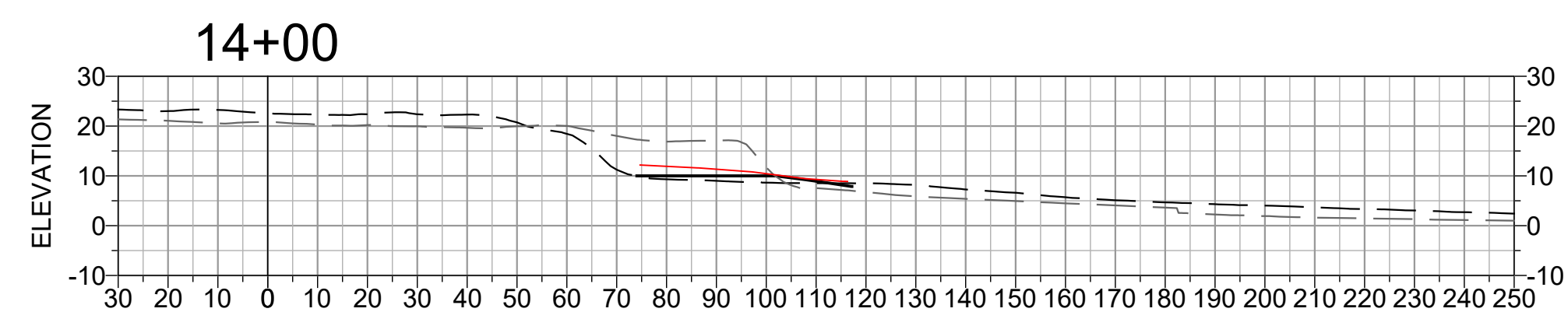
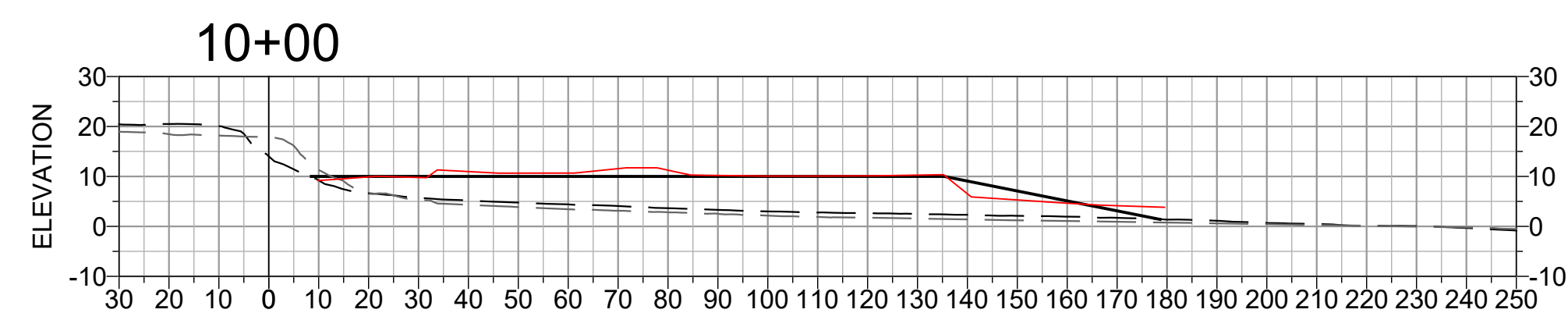
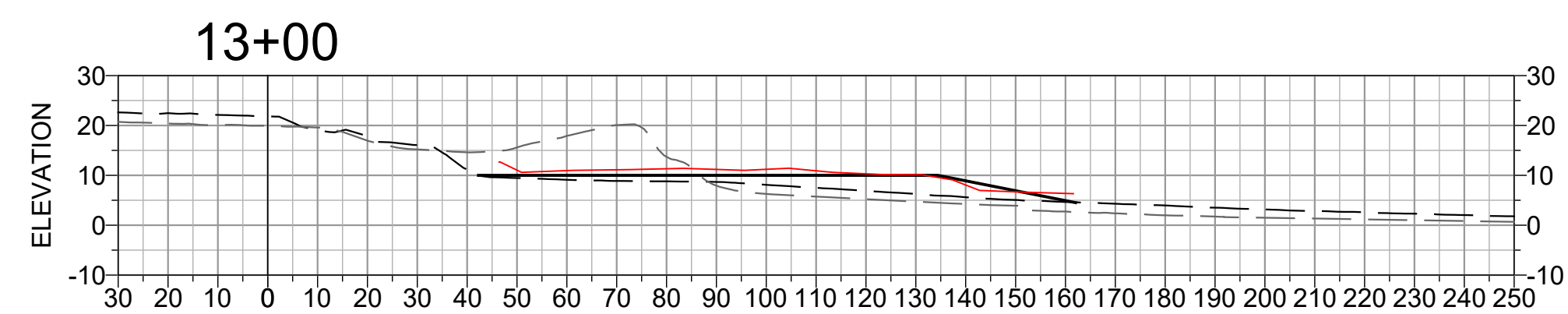
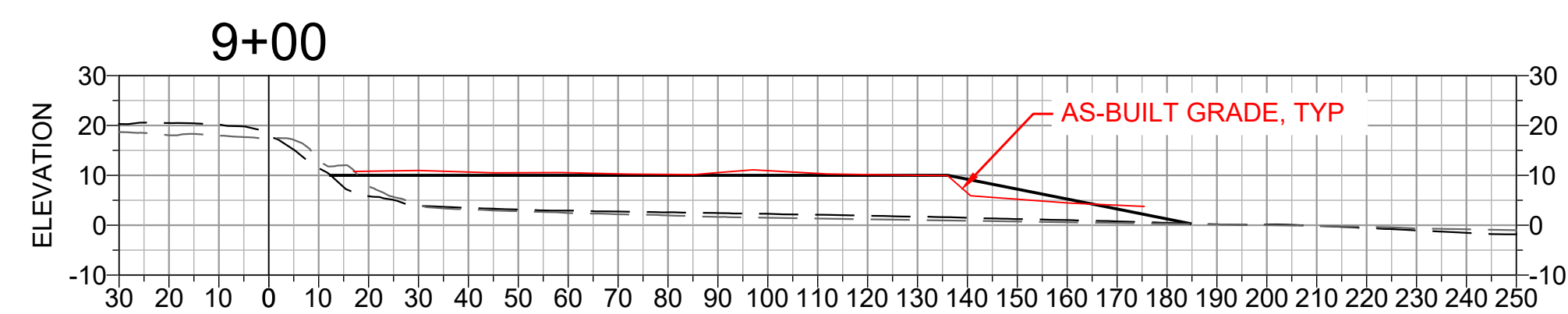
SCALE IS AS SHOWN WHEN PLOTTED TO FULL SIZE (22"x34")

PHASE
RECORD SET

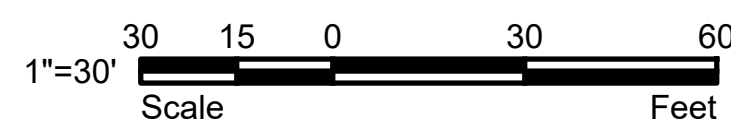
SHEET TITLE
**SURFERS BEACH
FILL AREA
SECTIONS - 2**

SHEET NUMBER
C-11

SHEET 14 OF 16



1
2
3



NOTES

1. AS-BUILT GRADES SURVEYED AT TIME OF STATION ACCEPTANCE.

SURFERS BEACH - SECTIONS

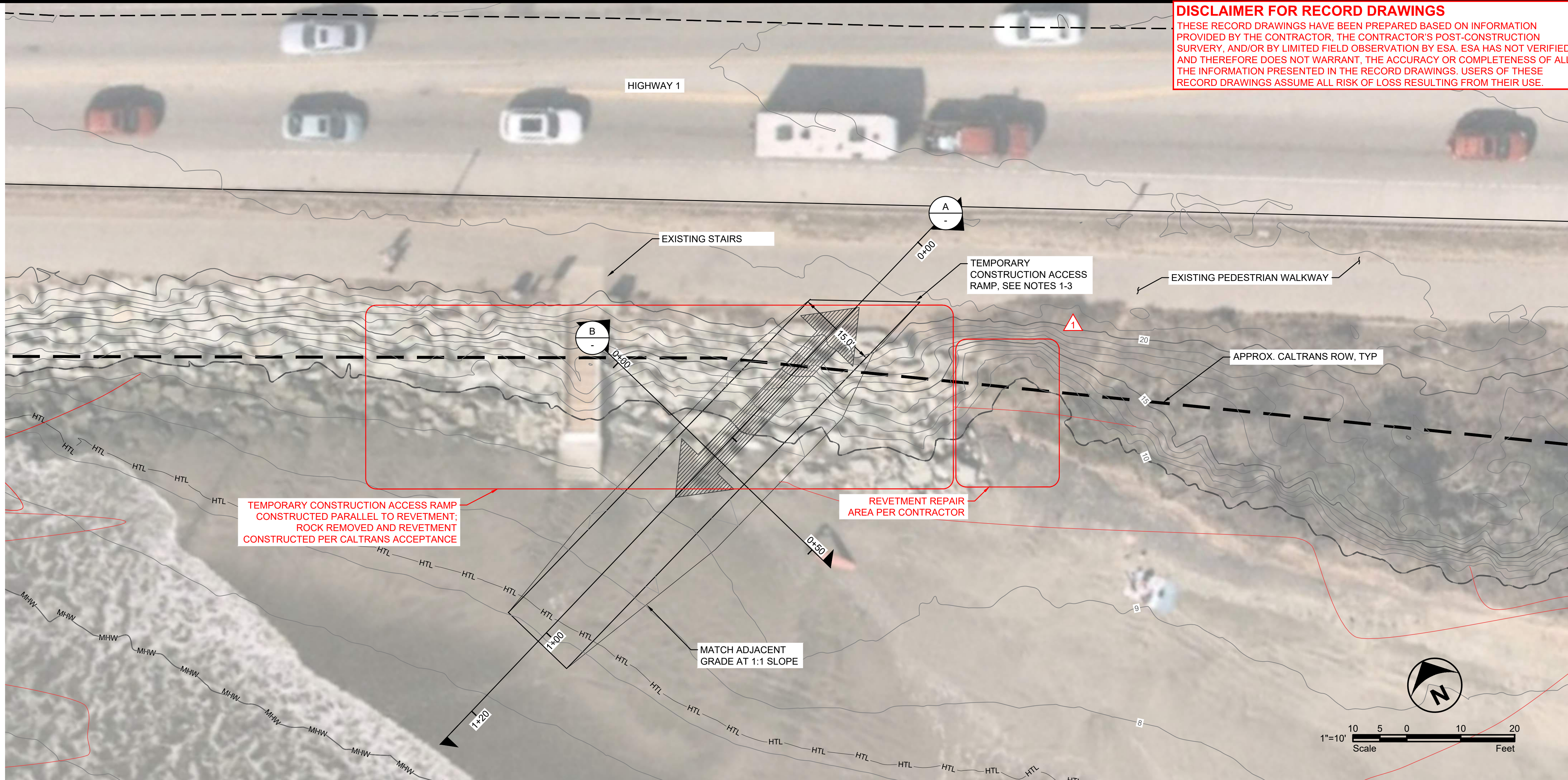
SECTION

SCALE: 1:30

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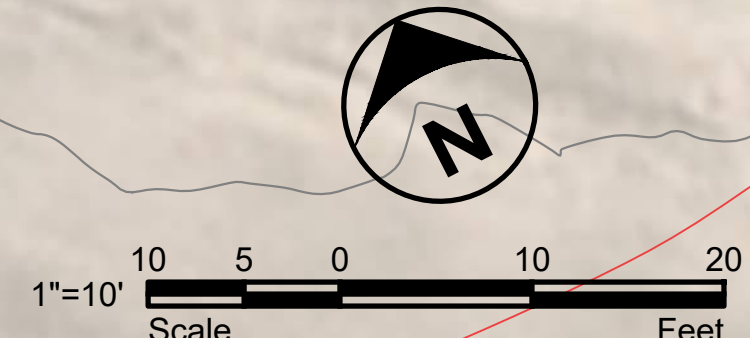
ESA
 575 MARKET STREET
 SUITE 3700
 SAN FRANCISCO, CA 94105
 OFFICE - 415.896.5900
 WWW.ESASSOC.COM



TEMPORARY CONSTRUCTION ACCESS RAMP
 CONSTRUCTED PARALLEL TO REVETMENT;
 ROCK REMOVED AND REVETMENT
 CONSTRUCTED PER CALTRANS ACCEPTANCE

REVETMENT REPAIR
 AREA PER CONTRACTOR

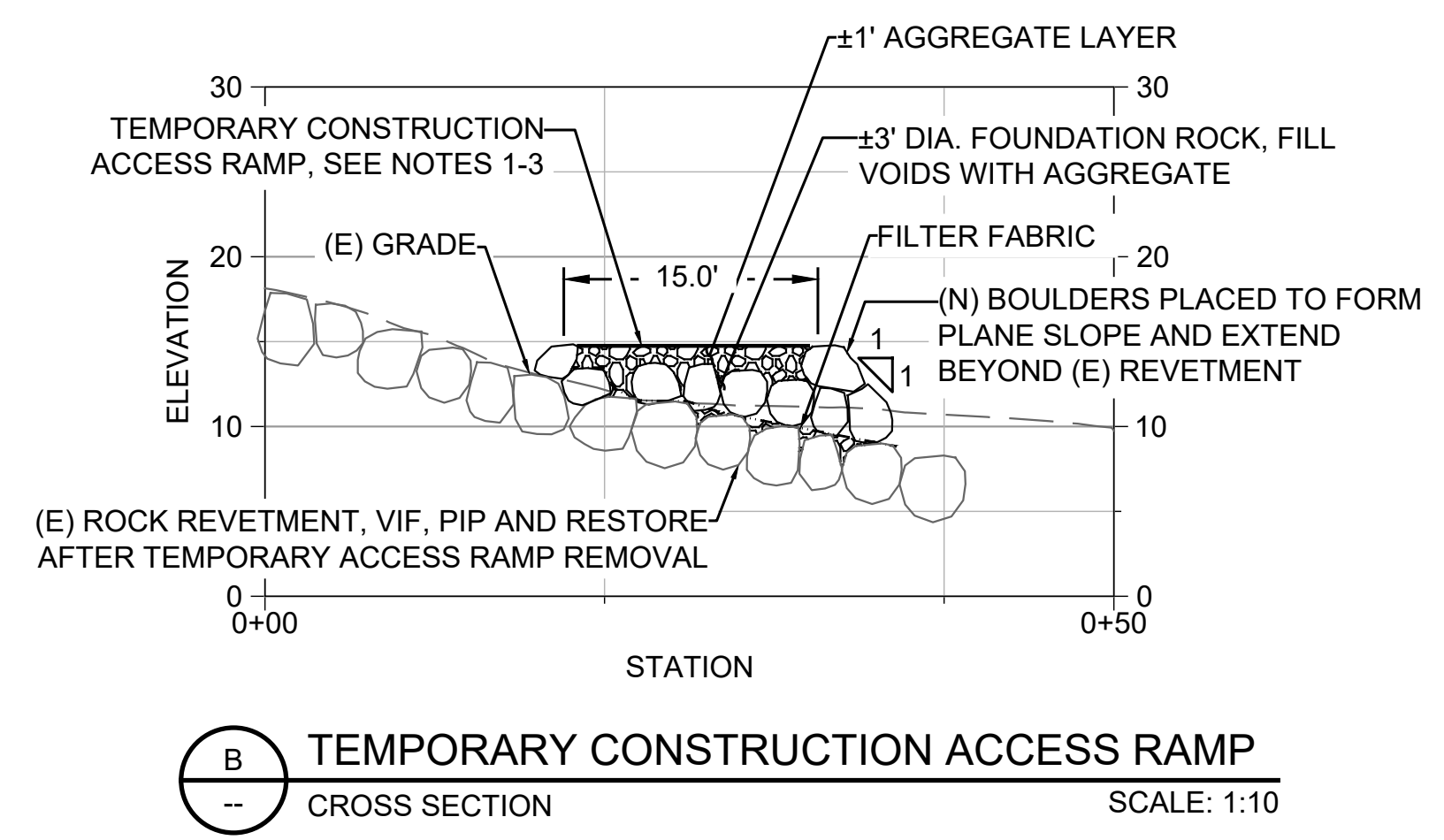
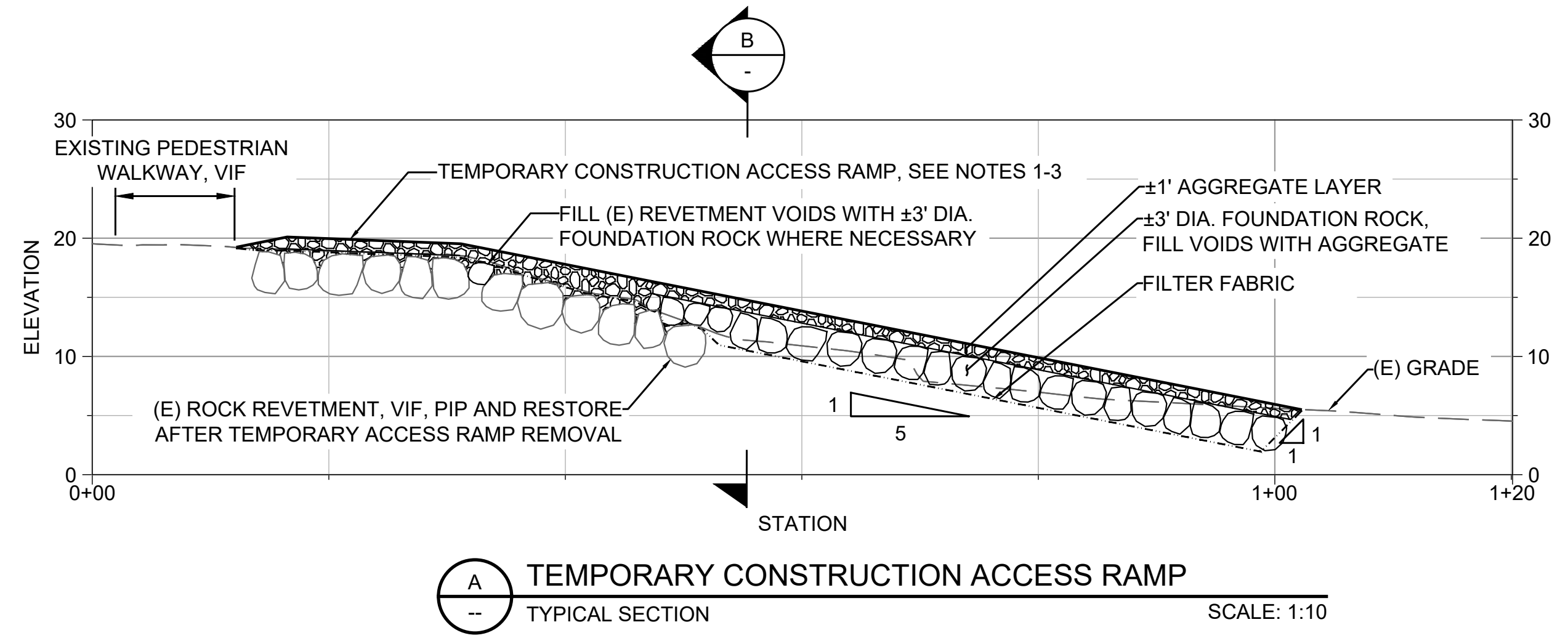
MATCH ADJACENT
 GRADE AT 1:1 SLOPE



LEGEND

HTL	HIGH TIDE LINE: 7.2' NAVD
MHW	MEAN HIGH TIDE LINE: 5.0' NAVD
---	CALTRANS RIGHT OF WAY (ROW)

- NOTES**
- WHEN CONSTRUCTION EQUIPMENT IS UTILIZING THE RAMP, ENSURE THE PRESENCE OF TWO (2) TRAFFIC CONTROL PERSONNEL TO MONITOR AND MANAGE FOOT / BIKE TRAFFIC ON THE PEDESTRIAN WALKWAY
 - WHEN THE RAMP IS NOT IN USE, INSTALL ACCESS BARRICADES AT BOTH ENDS OF THE RAMP
 - WHEN THE PROJECT IS COMPLETED, REMOVE THE RAMP AND REPLACE WITH RIP-RAP TO MATCH PRE-CONSTRUCTION GRADE



PROJECT NAME
**SURFERS BEACH
 PILOT RESTORATION
 PROJECT**
 SAN MATEO COUNTY HARBOR DISTRICT
 504 AVENUE ALHAMBRA, STE 200,
 P.O. BOX 14491, EL GRANADA, CA 94018

REVISIONS

#	DATE	DESCRIPTION
1	02/06/26	RECORD SET

DESIGNED	L. WHITE
DRAWN	M.A.
CHECKED	A. BORGONOVO
IN CHARGE	L. WHITE C76509

PROJECT NUMBER D201800631.02
 ISSUE DATE 01/19/26
 SCALE IS AS SHOWN WHEN PLOTTED TO FULL SIZE (22"x34")

PHASE
RECORD SET

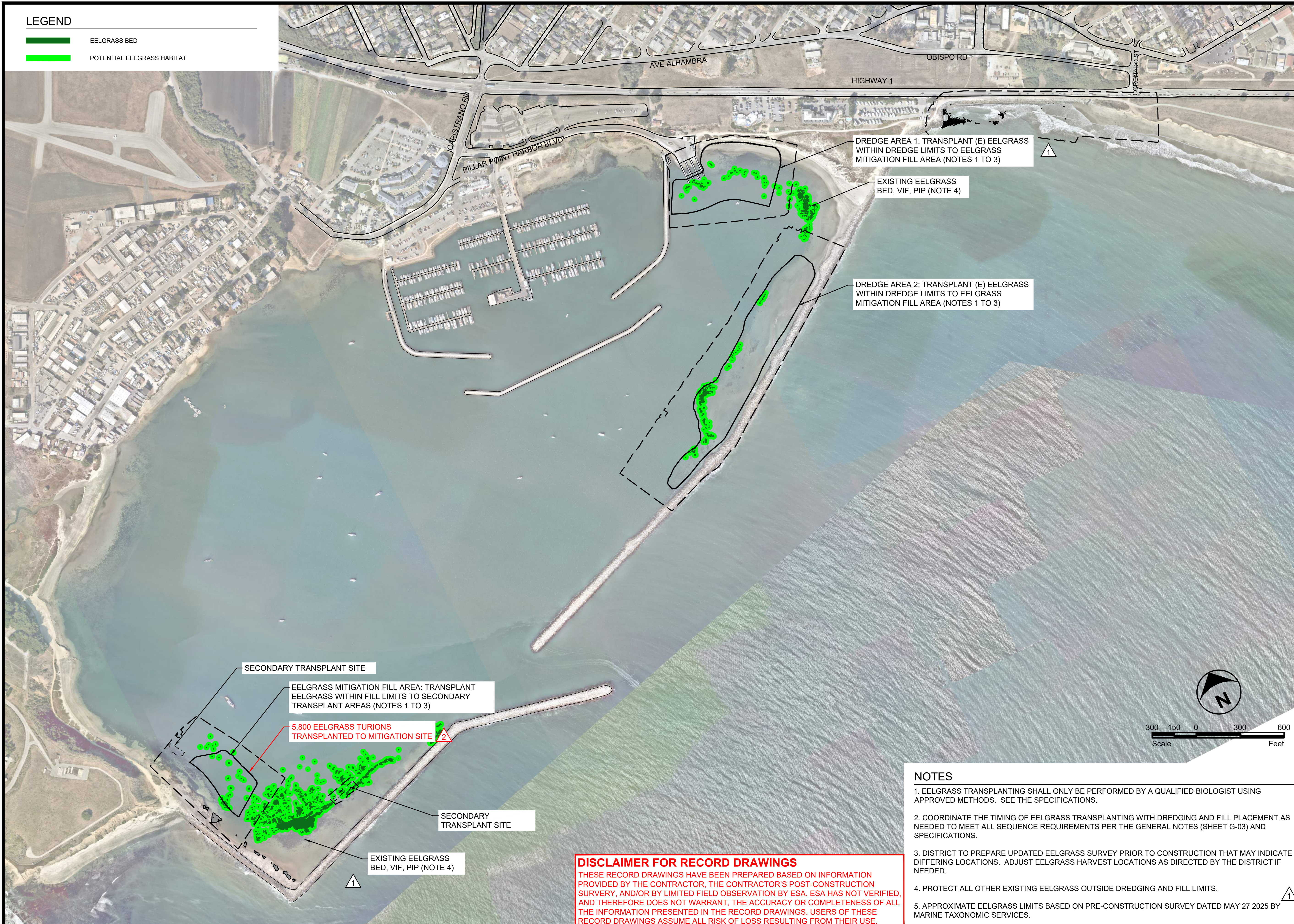
SHEET TITLE
**TEMPORARY
 CONSTRUCTION
 ACCESS RAMP**

SHEET NUMBER
C-12
 SHEET 15 OF 16

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LEGEND

- EELGRASS BED
- POTENTIAL EELGRASS HABITAT



FILE: P:\01 CAD\18xxxx\202180631.00 - Surfers Beach Pilot Project\DWG\02 SITE PLAN.dwg PLOT DATE: 2/6/2026 2:02:34 PM PLOTTED BY: MARIO ACCORDINO



**SURFERS BEACH
PILOT RESTORATION
PROJECT**

SAN MATEO COUNTY HARBOR DISTRICT
504 AVENUE ALHAMBRA, STE 200,
P.O. BOX 1449, EL GRANADA, CA 94018

REVISIONS

#	DATE	DESCRIPTION
△	07/07/25	PRE-CONSTRUCTION EELGRASS SURVEY
△	02/06/26	RECORD SET

DESIGNED	L. WHITE
DRAWN	M.A.
CHECKED	A. BORGONOVO
IN CHARGE	L. WHITE C76509

PROJECT NUMBER D201800631.02

ISSUE DATE 01/19/26

SCALE IS AS SHOWN WHEN PLOTTED TO FULL SIZE (22"x34")

PHASE **RECORD SET**

SHEET TITLE

**EELGRASS
TRANSPLANTING
PLAN**

SHEET NUMBER

TP-01

SHEET 16 OF 16

NOTES

1. EELGRASS TRANSPLANTING SHALL ONLY BE PERFORMED BY A QUALIFIED BIOLOGIST USING APPROVED METHODS. SEE THE SPECIFICATIONS.
2. COORDINATE THE TIMING OF EELGRASS TRANSPLANTING WITH DREDGING AND FILL PLACEMENT AS NEEDED TO MEET ALL SEQUENCE REQUIREMENTS PER THE GENERAL NOTES (SHEET G-03) AND SPECIFICATIONS.
3. DISTRICT TO PREPARE UPDATED EELGRASS SURVEY PRIOR TO CONSTRUCTION THAT MAY INDICATE DIFFERING LOCATIONS. ADJUST EELGRASS HARVEST LOCATIONS AS DIRECTED BY THE DISTRICT IF NEEDED.
4. PROTECT ALL OTHER EXISTING EELGRASS OUTSIDE DREDGING AND FILL LIMITS.
5. APPROXIMATE EELGRASS LIMITS BASED ON PRE-CONSTRUCTION SURVEY DATED MAY 27 2025 BY MARINE TAXONOMIC SERVICES.

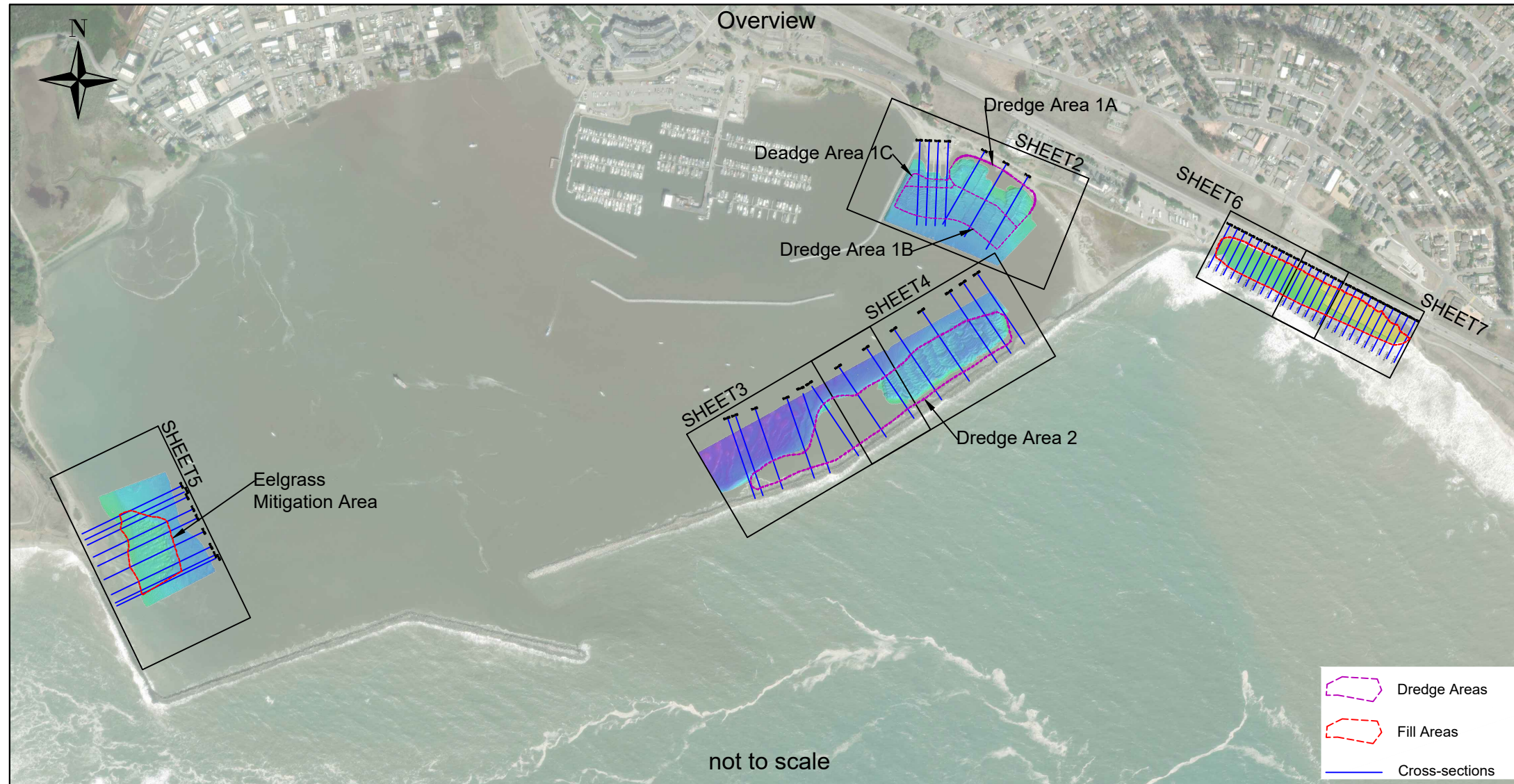
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Attachment C - As-Built Survey

SURFERS BEACH PILOT RESTORATION PROJECT

VORTEX MARINE CONSTRUCTION

POST-DREDGE AND MATERIAL PLACEMENT SURVEYS



SHEET INDEX:

- SHEET 1 - PROJECT INFORMATION
- SHEET 2 - DREDGE AREA 1A, 1B & 1C
- SHEET 3 - DREDGE AREA 2
- SHEET 4 - DREDGE AREA 2
- SHEET 5 - EELGRASS MITIGATION AREA
- SHEET 6 - SURFERS BEACH FILL AREA
- SHEET 7 - SURFERS BEACH FILL AREA
- SHEET 8 - CROSS-SECTIONS DREDGE AREA 1A, 1B & 1C
- SHEET 9 - CROSS-SECTIONS DREDGE AREA 2
- SHEET 10 - CROSS-SECTIONS EELGRASS MITIGATION AREA
- SHEET 11 - CROSS-SECTIONS SURFERS BEACH FILL AREA
- SHEET 12 - CROSS-SECTIONS SURFERS BEACH FILL AREA
- SHEET 13 - CROSS-SECTIONS SURFERS BEACH FILL AREA

GENERAL NOTES:

1. ALL HYDROGRAPHIC SURVEY DATA DISPLAYED COLLECTED ON OCTOBER 22, 2025.
2. ALL TOPOGRAPHIC GPS SURVEY POINTS DISPLAYED FOR THE SURFERS BEACH PLACEMENT AREA COLLECTED BETWEEN NOVEMBER 24 & OCTOBER 21, 2025.
3. HORIZONTAL DATUM/PROJECTION: NAD83 (2011), SPCS CALIFORNIA ZONE 03 - U.S. SURVEY FEET.
4. HORIZONTAL CONTROL: NGS HT0455 TIDAL 5, N 37° 30' 13.27003" W 122° 29' 07.73809".
5. VERTICAL DATUM: NAVD88, U.S. SURVEY FEET
6. VERTICAL CONTROL: NGS HT0455 TIDAL 5, ELEVATION 14.22'.
7. THIS SURVEY REPRESENTS GENERAL CONDITIONS AT THE TIME OF THE SURVEY.
8. POSITIONING AND MOTION DATA WAS COLLECTED USING AN APPLANIX POS MV 5.
9. TOPOGRAPHIC GPS SURVEY POINTS COLLECTED WITH AN TRIMBLE R8 MODEL 4 GNSS RECEIVER.
10. SOUNDINGS WERE COLLECTED USING AN REASON SEABAT T-50R MULTIBEAM ECHOSOUNDER OPERATING AT 200 KHZ.
11. SOUNDINGS DEPTH NEGATIVE UNLESS INDICATED OTHERWISE.

Dredge Area 1 Material Removed										
Volumes Calculated via Hypack 2023 Tin-to-Channel & Tin-to-Tin Methods										
Survey Dates: 08/02/2025- 10/09/2025	Area A Design (yd ³)	Area A Outside of Design (yd ³)	Area A Below 10ft (yd ³)	Area B Design (yd ³)	Area B Outside of Design (yd ³)	Area B Below 10ft (yd ³)	Area C Design (yd ³)	Area C Outside of Design (yd ³)	Area C Below 10ft (yd ³)	Total (yd ³)
Material Removed	17,838	1,599	0	13,678	469	5	1,578	469	0	35,635

Dredge Area 2 Volumes Material Removed				
Volumes Calculated via Hypack 2023 Tin-to-Channel & Tin-to-Tin Methods				
Survey Dates: 09/04/2025- 10/22/2025	Design (yd ³)	Below 10ft (yd ³)	Areas Outside of Design (yd ³)	Total (yd ³)
Material Removed	58,492	827	593	59,912

Eelgrass Mitigation Placement Area				
Volumes Calculated via Hypack 2023 Tin-to-Channel & Tin-to-Tin Methods				
Survey Dates: 08/11/2025- 08/29/2025	Design (yd ³)	Above Flat Terrace (yd ³)	Areas Outside of Design (yd ³)	Total (yd ³)
Material Placed	10,940	1,335	1,209	13,484

Surfers Beach Placement Area			
Volumes Calculated via Hypack 2023 Tin-to-Tin Methods			
Survey Dates: 09/24/2025- 10/21/2025	Stations 1+50 to 9+00 (yd ³)	Stations 9+00 to 14+00 (yd ³)	Total (yd ³)
Material Placed	12,969	10,437	23,406

VORTEX MARINE CONSTRUCTION
1 MARITIME WAY
ANTIOCH, CA 94509
PHONE: 510-261-2400
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637 LINDARO STREET
SUITE 100
SAN RAFAEL, CA 94901
PHONE: 415-462-0421
WOOLPERT.COM/MARITIME

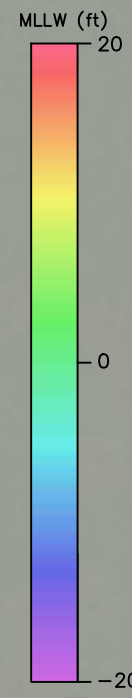
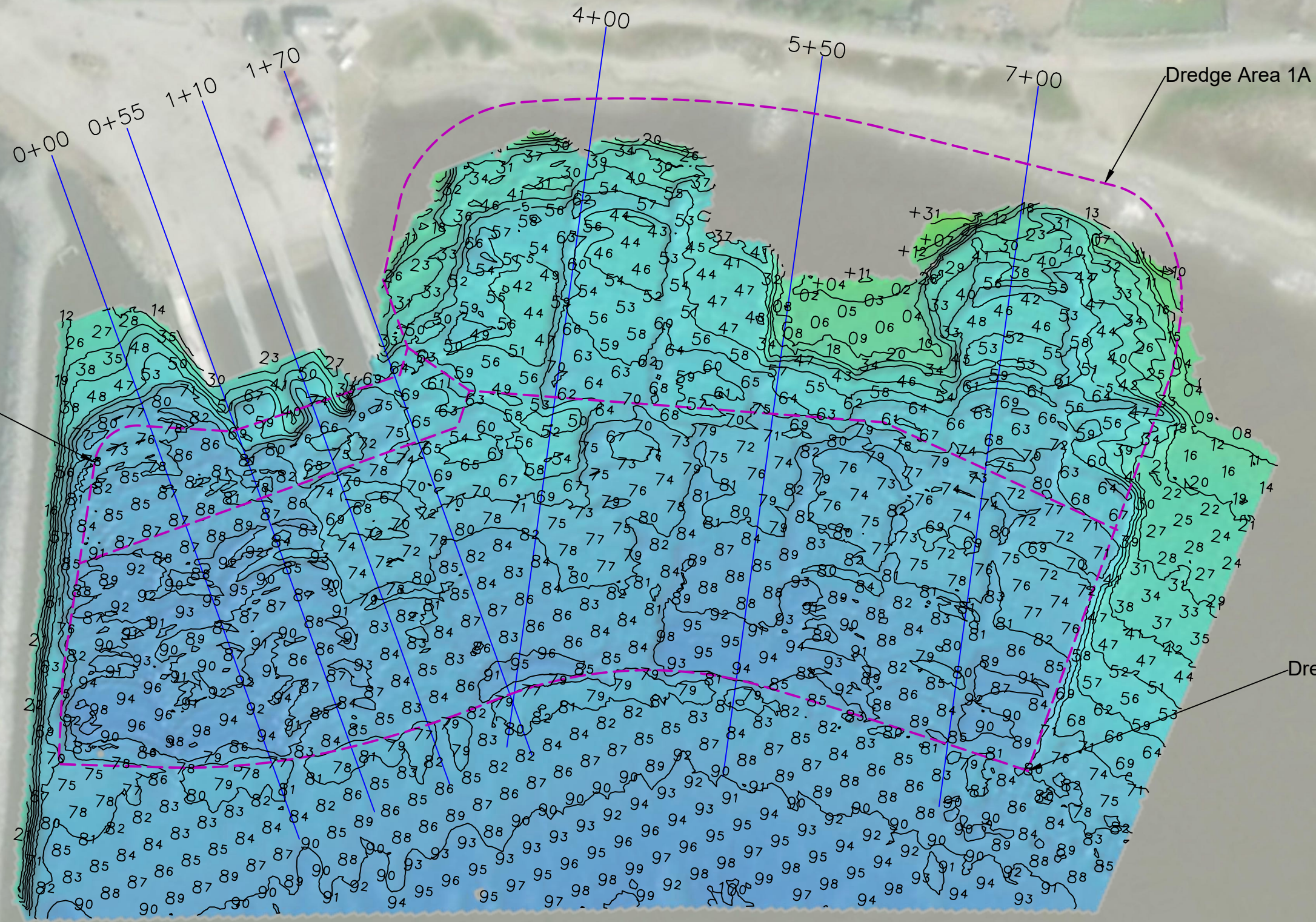
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DESIGNED BY: NB	CHECKED BY: JK
REVISION 0	
FILE NAME: Vortex_20251022_PillarPointHarbor_REV2.dwg	

SURFERS BEACH PILOT RESTORATION PROJECT

PROJECT INFORMATION

Reference Number:

S1



SCALE: 1" = 80'
 0 20 40 80

IF SHEET IS LESS THAN 11"x17"
 IT IS A REDUCED PRINT,
 SCALE ACCORDINGLY

- Dredge Area
- Cross-sections
- 5 Major contour (5' interval)
- Minor contour (1' interval)



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 CONSTRUCTION
 1 MARITIME WAY
 ANTIOCH, CA 94509
 PHONE: 510-261-2400
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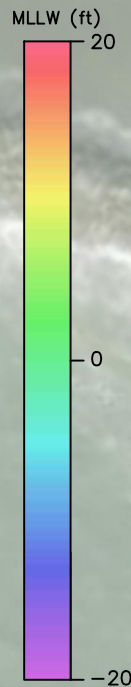
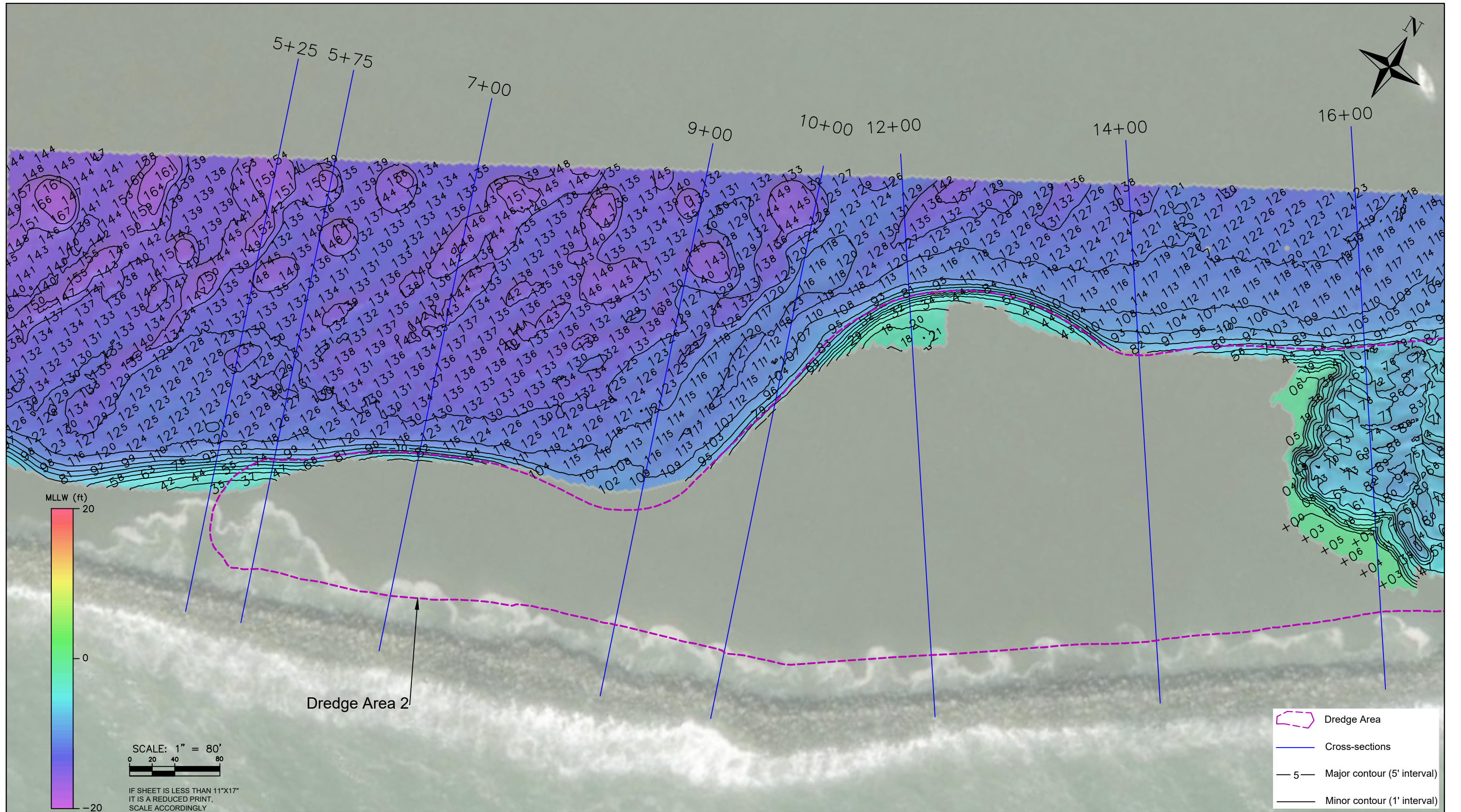
WOOLPERT INC.
 637 LINDARO STREET
 SUITE 100
 SAN RAFAEL, CA 94901
 PHONE: 415-462-0421
 WOOLPERT.COM/MARITIME

SURVEY DATE:
 October 22, 2025
 DESIGNED BY: NB
 REVISION 0
 FILE NAME:
 Vortex_20251022_PillarPointHarbor_REV2.dwg

PLOT DATE:
 December 4, 2025
 CHECKED BY: JK

DREDGE AREA 1A, 1B & 1C
 SOUNDINGS, CONTOURS & DEM

Reference
 Number:
S2



SCALE: 1" = 80'
 0 20 40 80

IF SHEET IS LESS THAN 11"x17"
 IT IS A REDUCED PRINT,
 SCALE ACCORDINGLY

- Dredge Area
- Cross-sections
- 5 Major contour (5' interval)
- Minor contour (1' interval)



VORTEX MARINE
 CONSTRUCTION
 1 MARITIME WAY
 ANTIOCH, CA 94509
 PHONE: 510-261-2400
 VORTEX-SFB.COM



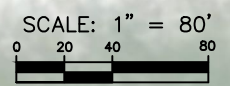
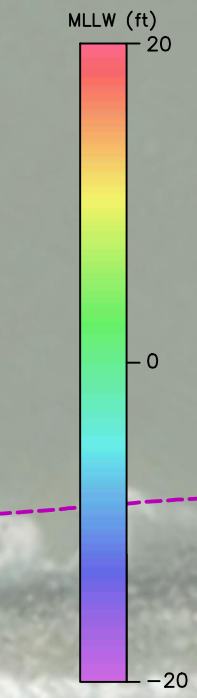
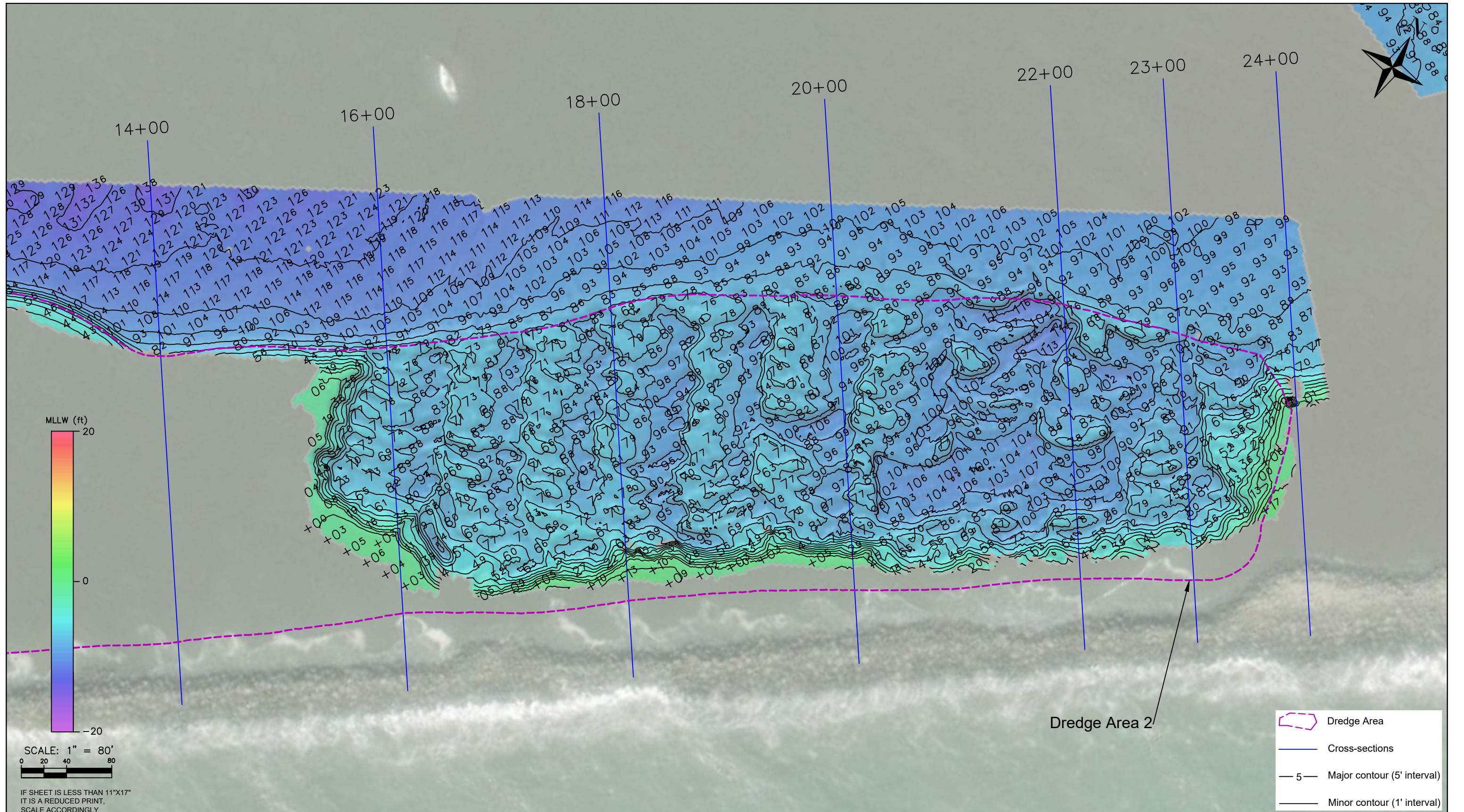
WOOLPERT INC.
 637 LINDARO STREET
 SUITE 100
 SAN RAFAEL, CA 94901
 PHONE: 415-462-0421
 WOOLPERT.COM/MARITIME

SURVEY DATE: October 22, 2025	PLOT DATE: December 4, 2025
DESIGNED BY: NB	CHECKED BY: JK
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FILE NAME: Vortex_20251022_PillarPointHarbor_REV2.dwg	

DREDGE AREA 2

SOUNDINGS, CONTOURS & DEM

Reference
 Number:
S3



IF SHEET IS LESS THAN 11"x17"
IT IS A REDUCED PRINT,
SCALE ACCORDINGLY

- Dredge Area
- Cross-sections
- Major contour (5' interval)
- Minor contour (1' interval)



VORTEX MARINE
CONSTRUCTION
1 MARITIME WAY
ANTIOCH, CA 94509
PHONE: 510-261-2400
VORTEX-SFB.COM



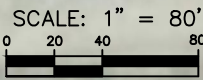
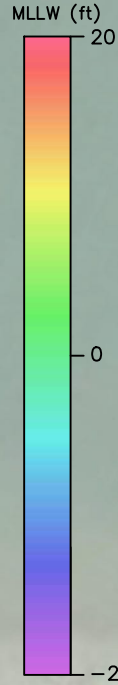
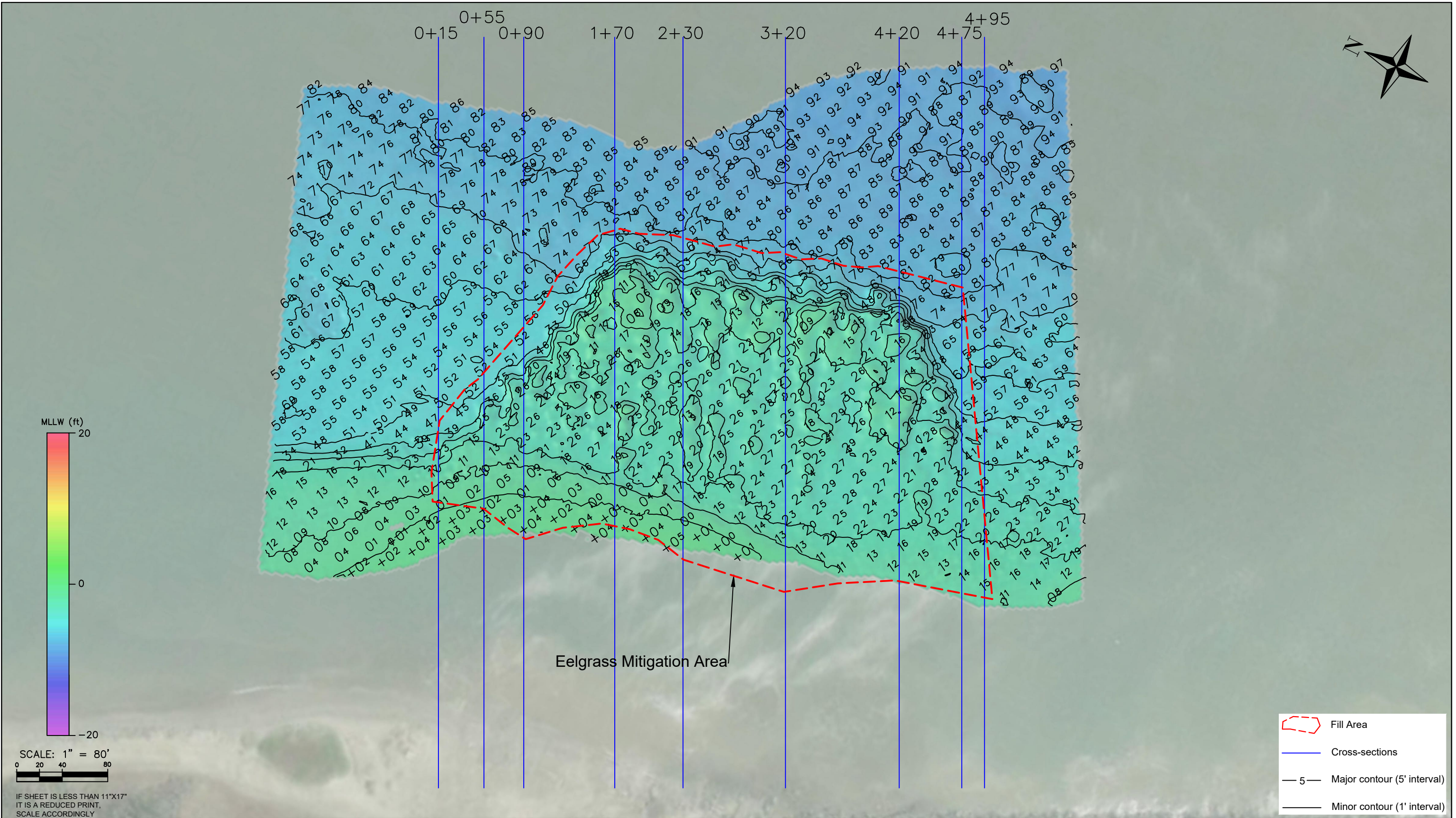
WOOLPERT INC.
637 LINDARO STREET
SUITE 100
SAN RAFAEL, CA 94901
PHONE: 415-462-0421
WOOLPERT.COM/MARITIME

SURVEY DATE: October 22, 2025	PLOT DATE: December 4, 2025
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FILE NAME: Vortex_20251022_PillarPointHarbor_REV2.dwg	

DREDGE AREA 2

SOUNDINGS, CONTOURS & DEM

Reference
Number:
S4



IF SHEET IS LESS THAN 11"X17"
IT IS A REDUCED PRINT,
SCALE ACCORDINGLY

- Fill Area
- Cross-sections
- Major contour (5' interval)
- Minor contour (1' interval)

Eelgrass Mitigation Area



VORTEX MARINE
CONSTRUCTION
1 MARITIME WAY
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PHONE: 510-261-2400
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SUITE 100
SAN RAFAEL, CA 94901
PHONE: 415-462-0421
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SURVEY DATE: October 22, 2025	PLOT DATE: December 4, 2025
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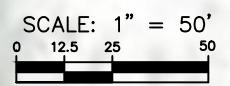
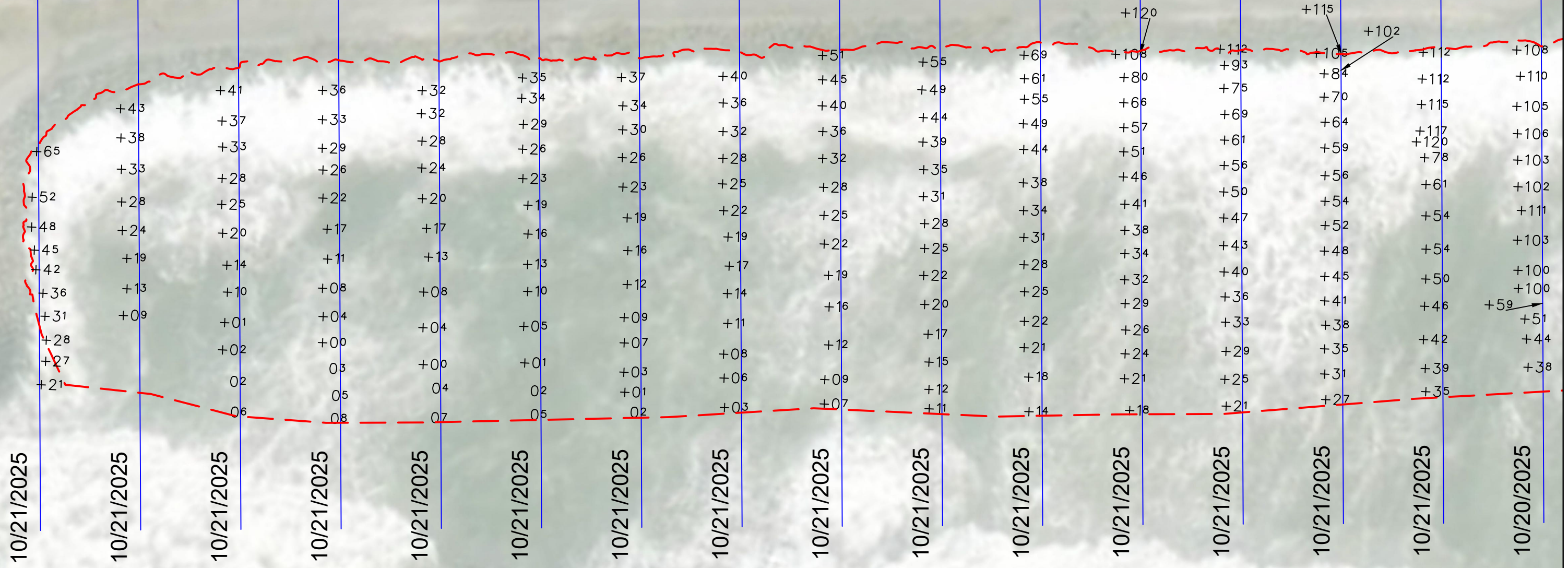
EELGRASS MITIGATION AREA

SOUNDINGS, CONTOURS & DEM



Reference
Number:
S5



1+50 2+00 2+50 3+00 3+50 4+00 4+50 5+00 5+50 6+00 6+50 7+00 7+50 8+00 8+50 9+00



IF SHEET IS LESS THAN 11"X17"
IT IS A REDUCED PRINT,
SCALE ACCORDINGLY

 Fill Area
 Cross-sections



VORTEX MARINE
CONSTRUCTION
1 MARITIME WAY
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WOOLPERT INC.
637 LINDARO STREET
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SAN RAFAEL, CA 94901
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SURVEY DATE: October 20 & 21, 2025	PLOT DATE: December 4, 2025
DESIGNED BY: NB	CHECKED BY: JK
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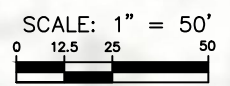
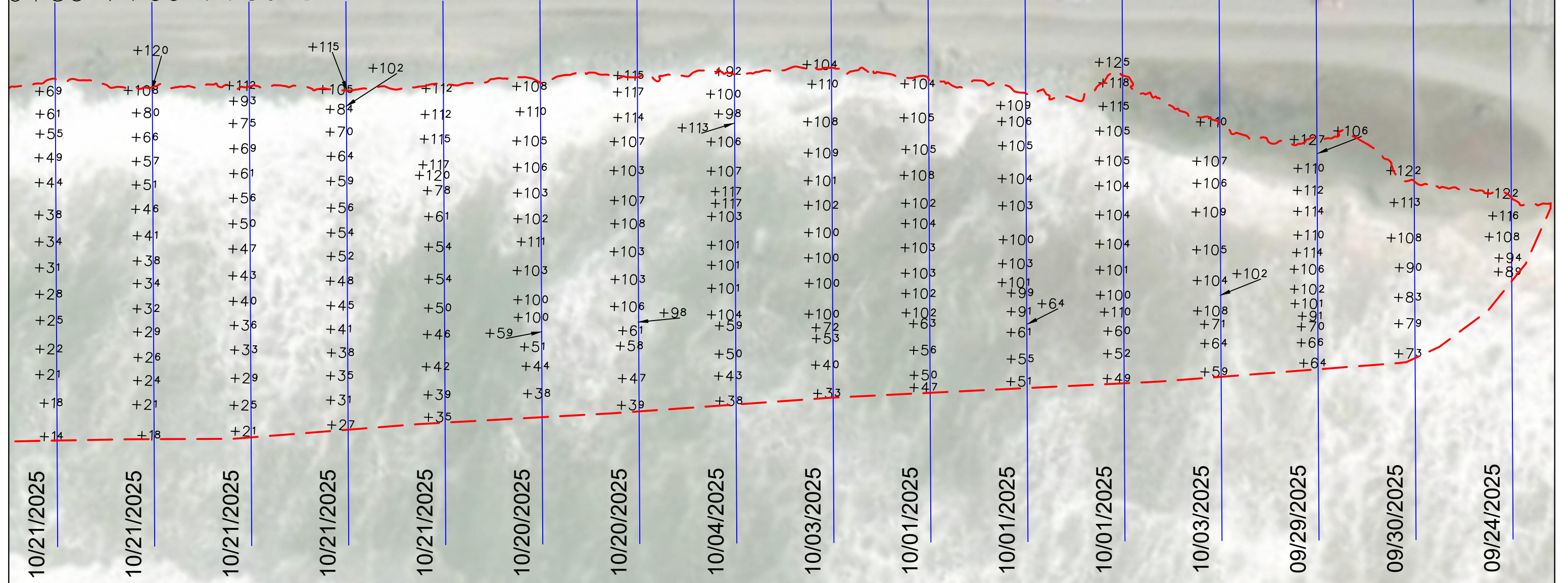
SURFIERS BEACH FILL AREA

TOPOGRAPHIC POINTS

Reference
Number:
S6



6+50 7+00 7+50 8+00 8+50 9+00 9+50 10+00 10+50 11+00 11+50 12+00 12+50 13+00 13+50 14+00



IF SHEET IS LESS THAN 11"X17"
IT IS A REDUCED PRINT,
SCALE ACCORDINGLY

Fill Area
Cross-sections



VORTEX MARINE
CONSTRUCTION
1 MARITIME WAY
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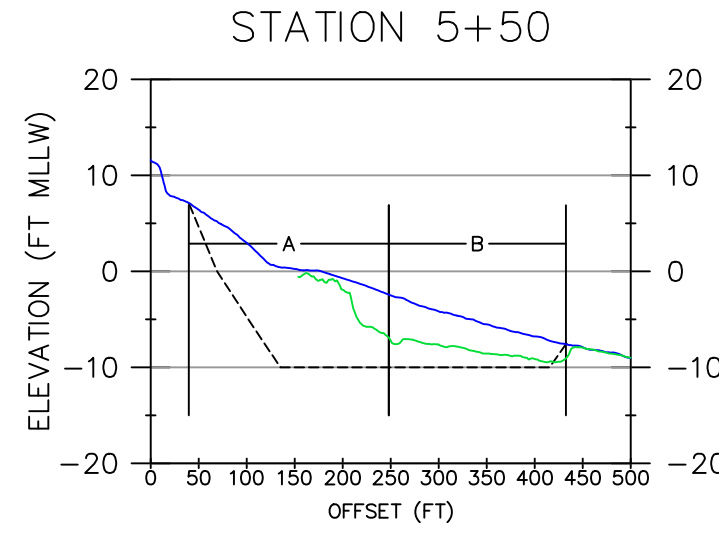
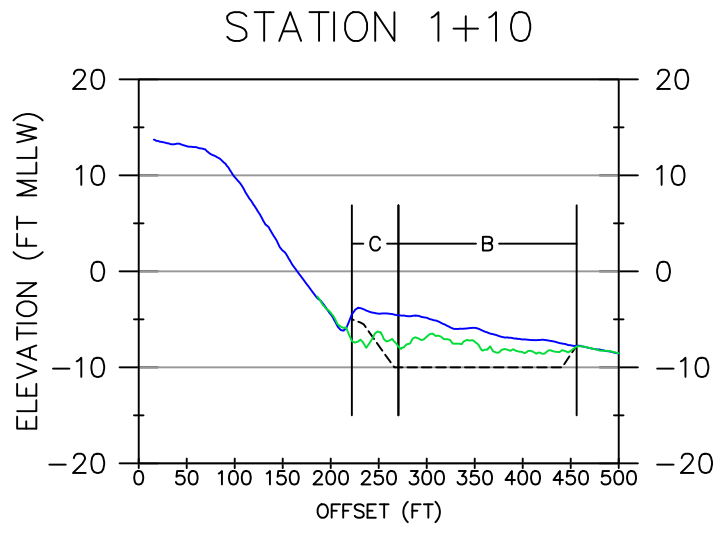
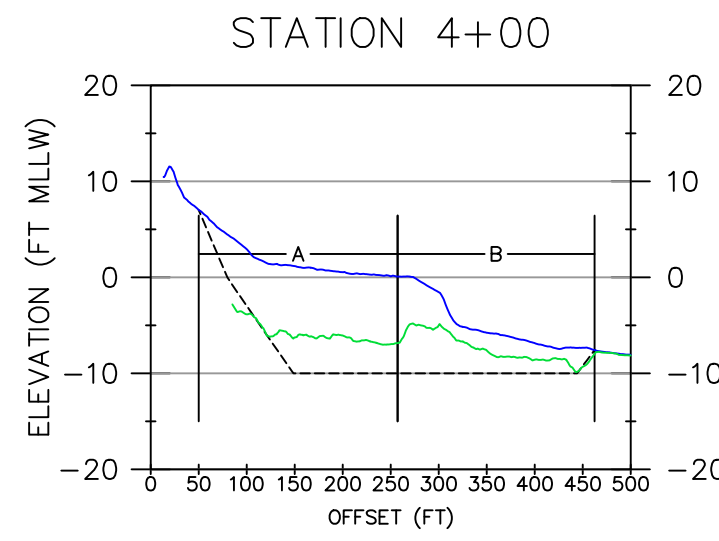
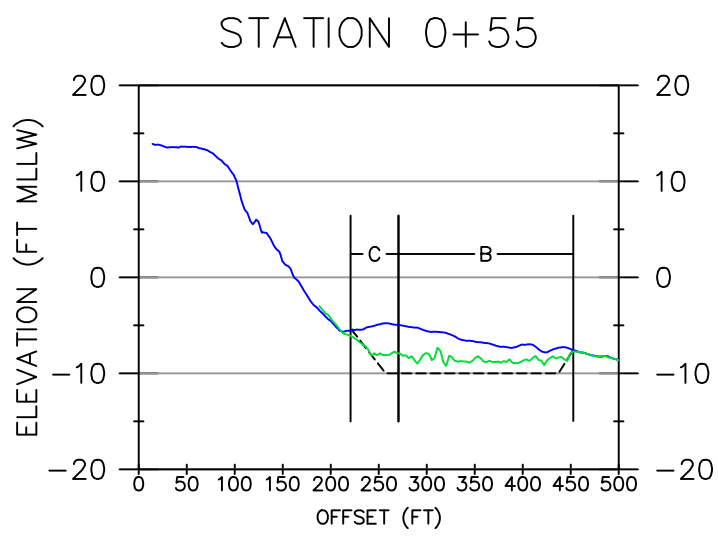
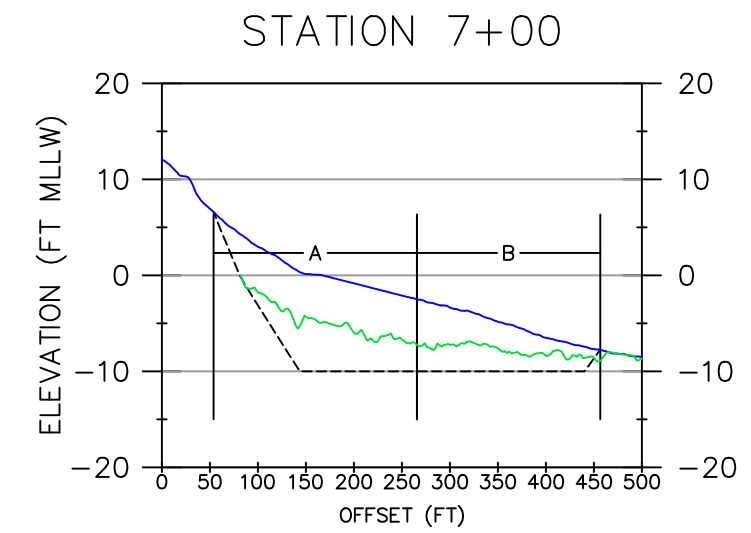
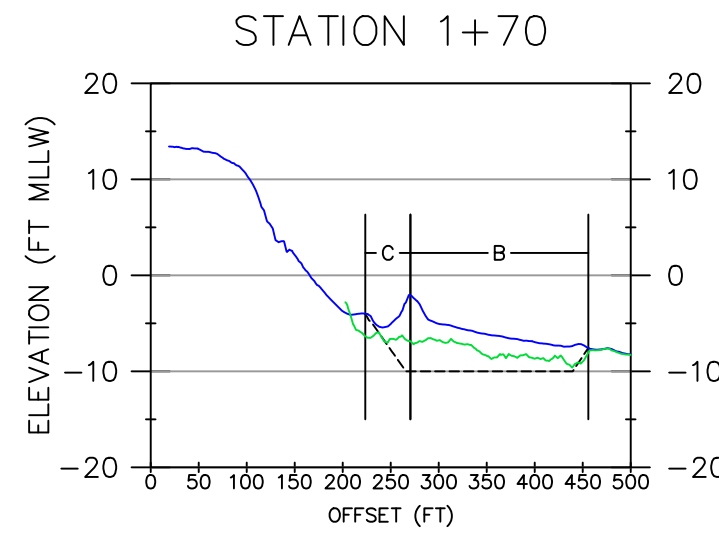
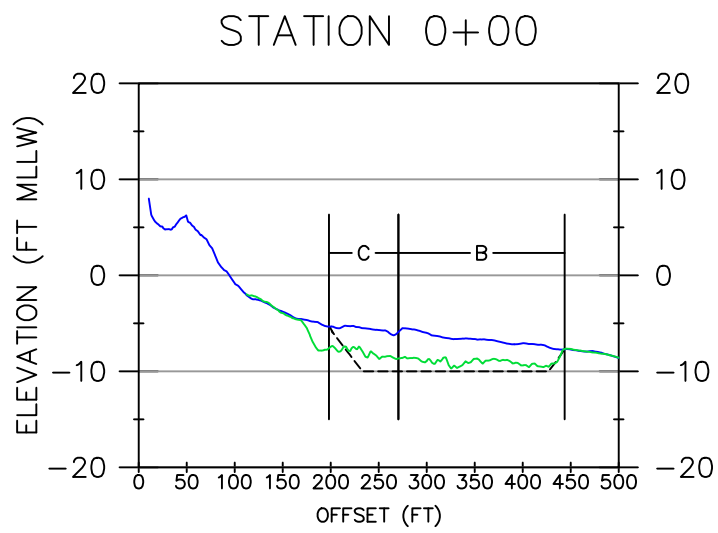


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SUITE 100
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PHONE: 415-462-0421
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SURVEY DATE: Aug 24 - Oct 21, 2025	PLOT DATE: December 4, 2025
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FILE NAME: Vortex_20251022_PillarPointHarbor_REV2.dwg	

SURFERS BEACH FILL AREA
TOPOGRAPHIC POINTS

Reference Number:
S7



H. SCALE: 1" = 200'
 V. SCALE: 1" = 20'

 IF SHEET IS LESS THAN 11"x17"
 IT IS A REDUCED PRINT,
 SCALE ACCORDINGLY

— PRE-DREDGE ELEVATION 6/16/2025
 — POST-DREDGE ELEVATION 10/22/2025
 - - - DREDGE TEMPLATE



VORTEX MARINE
 CONSTRUCTION
 1 MARITIME WAY
 ANTIOCH, CA 94509
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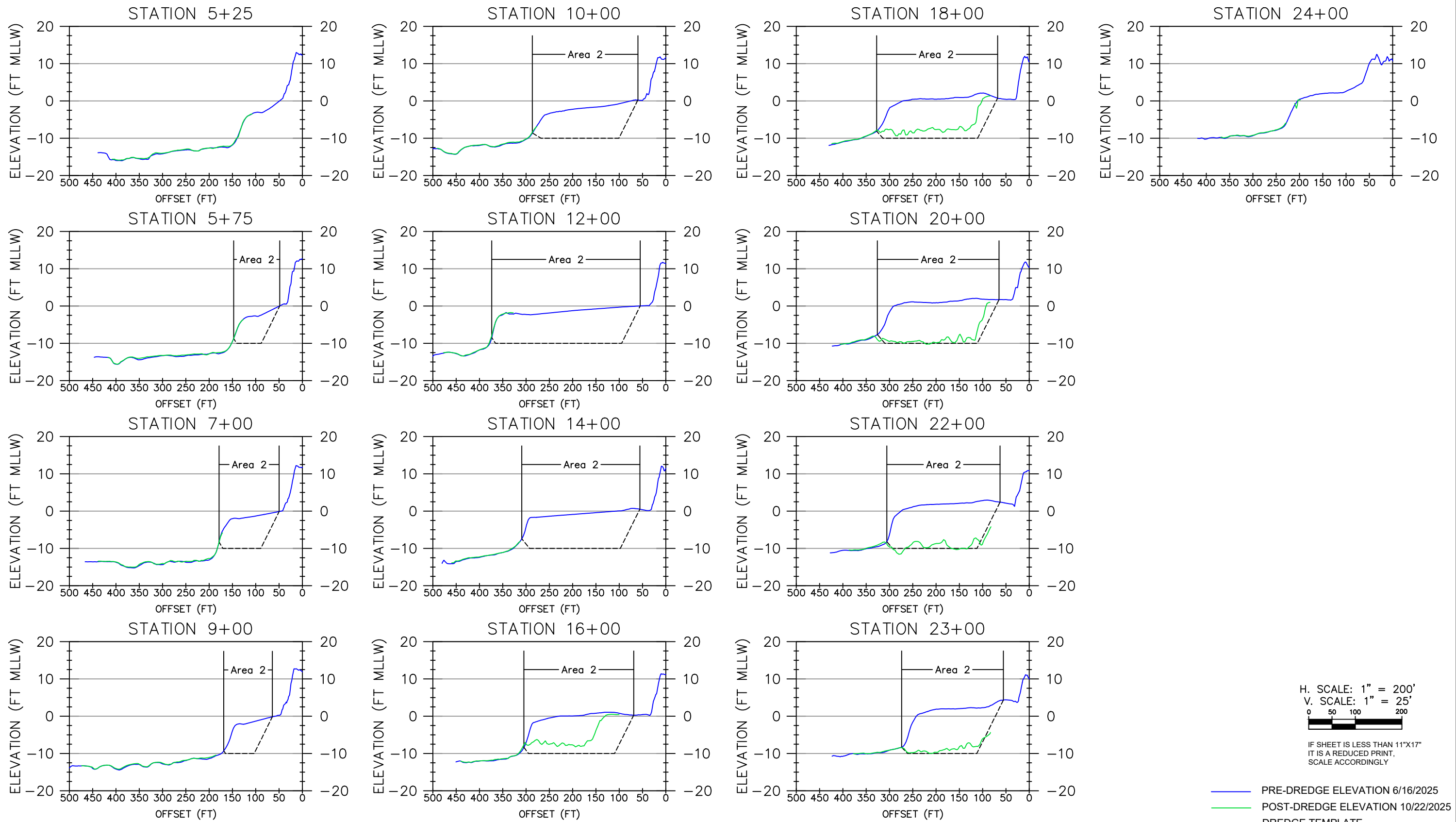
WOOLPERT INC.
 637 LINDARO STREET
 SUITE 100
 SAN RAFAEL, CA 94901
 PHONE: 415-462-0421
 WOOLPERT.COM/MARITIME

SURVEY DATE: June 16 & Oct 22, 2025	PLOT DATE: December 4, 2025
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FILE NAME: Vortex_20251022_PillarPointHarbor_REV2.dwg	

DREDGE AREA 1A, 1B & 1C

CROSS-SECTIONS

Reference
 Number:
S8



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CONSTRUCTION
1 MARITIME WAY
ANTIOCH, CA 94509
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WOOLPERT INC.
637 LINDARO STREET
SUITE 100
SAN RAFAEL, CA 94901
PHONE: 415-462-0421
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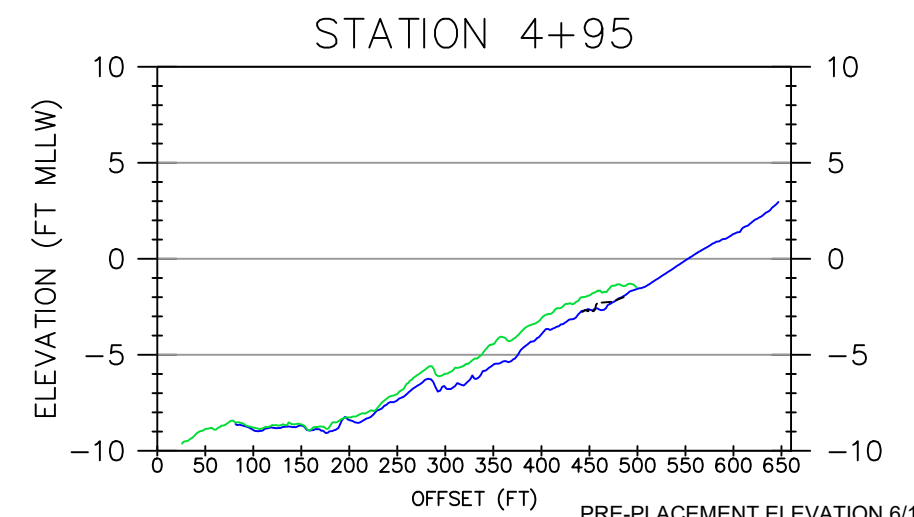
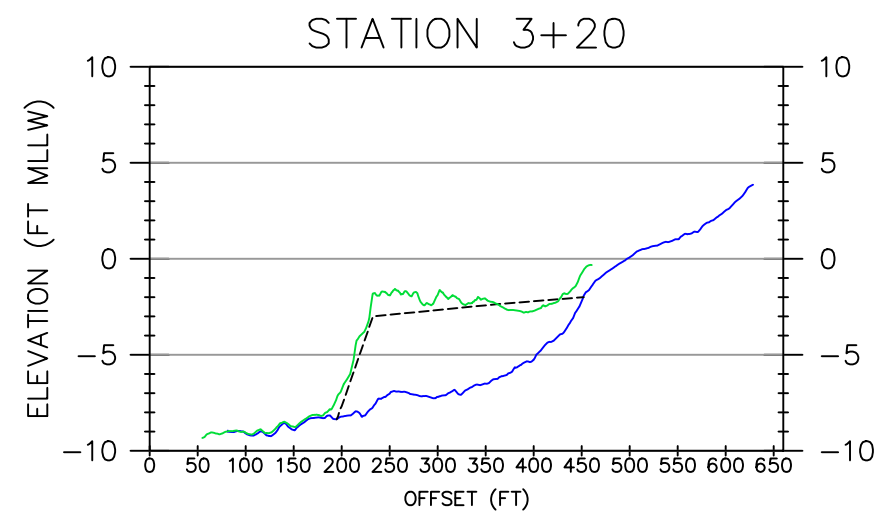
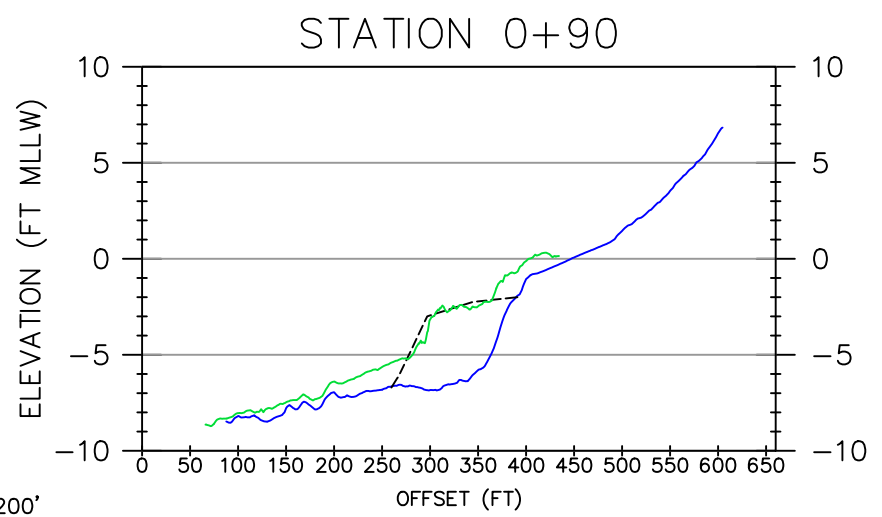
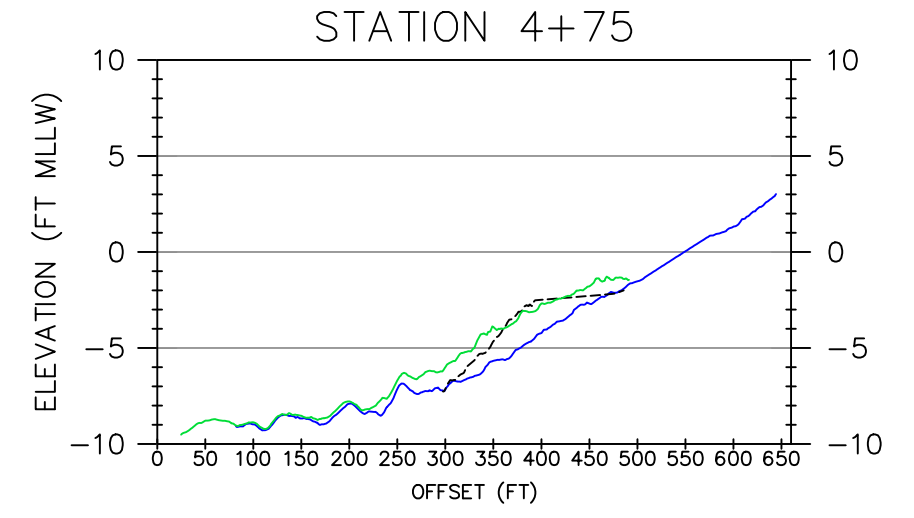
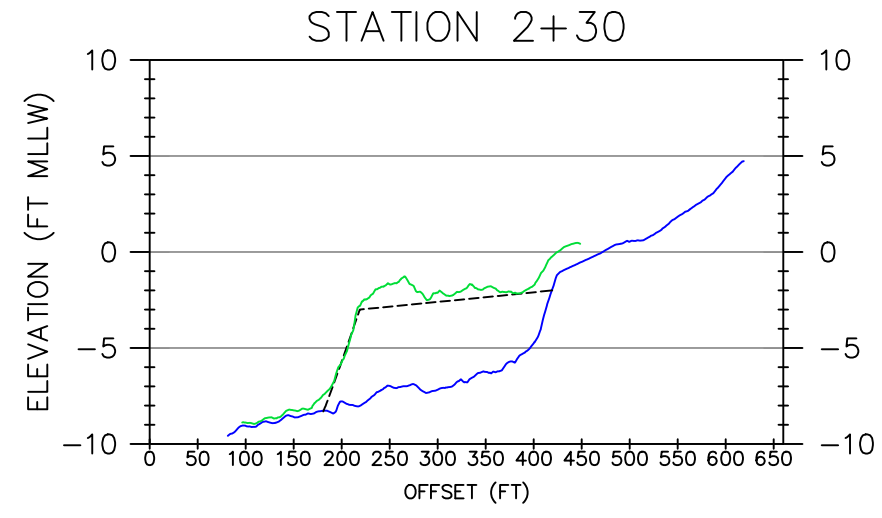
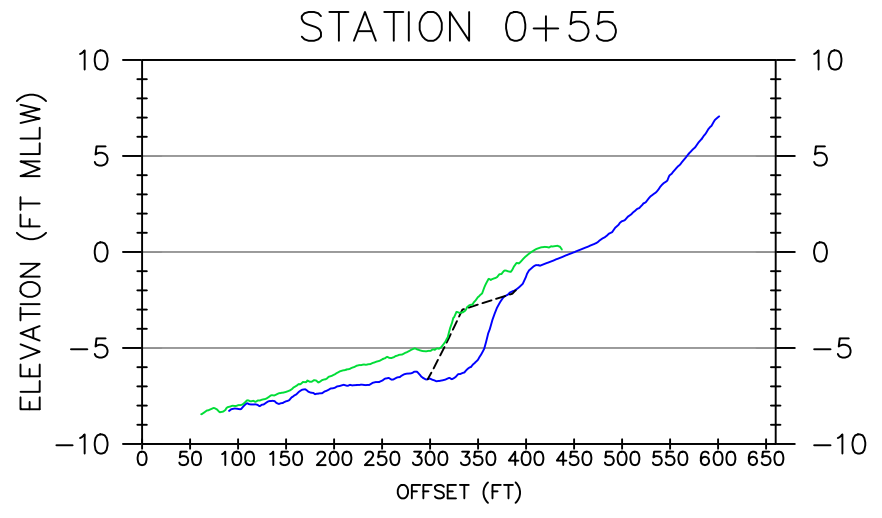
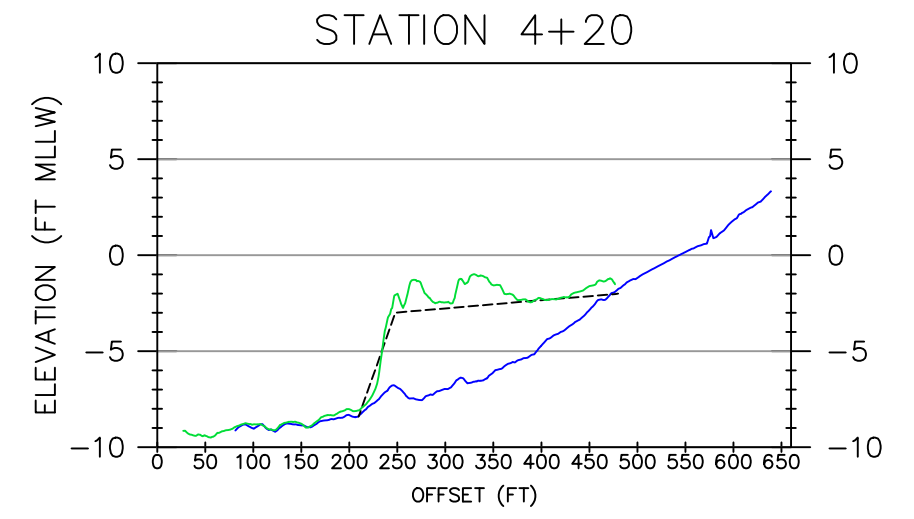
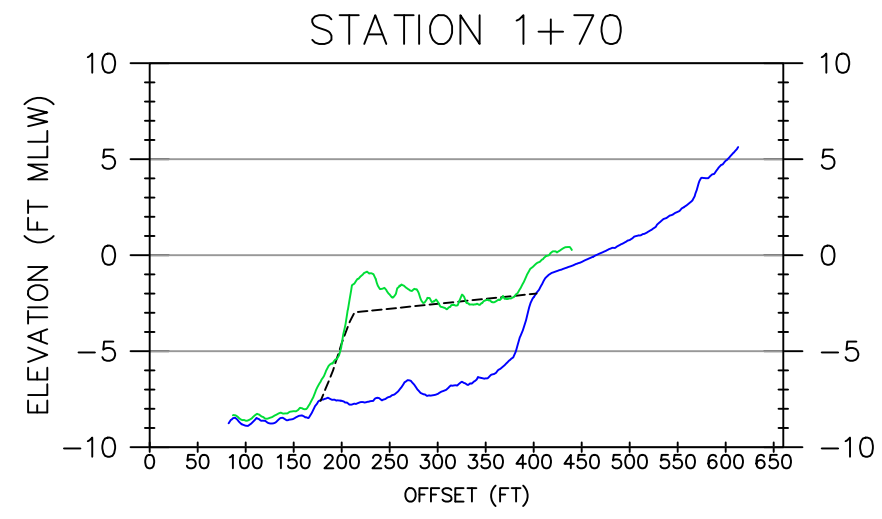
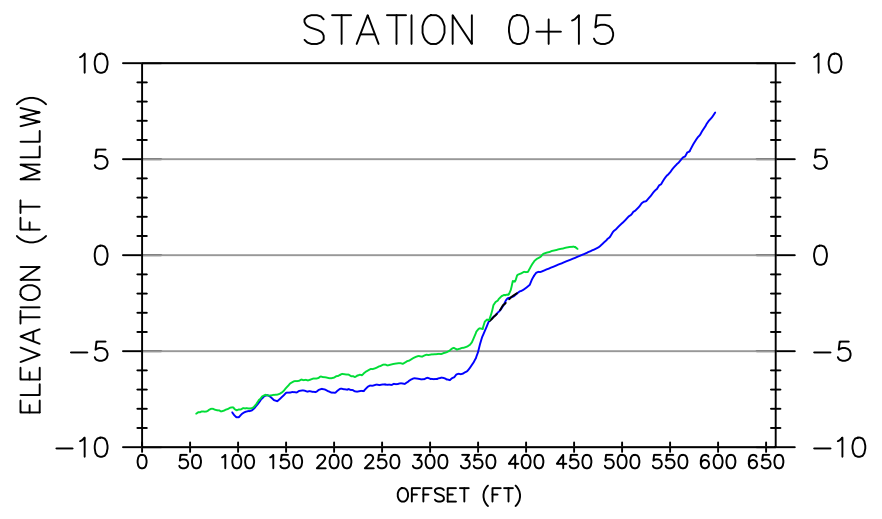
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DESIGNED BY: NB	CHECKED BY: JK
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DREDGE AREA 2

CROSS-SECTIONS

Reference
Number:

S9

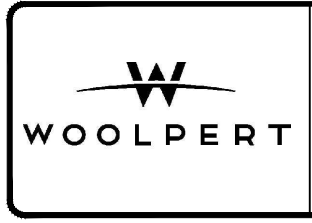


H. SCALE: 1" = 200'
 V. SCALE: 1" = 10'
 0 50 100 200
 IF SHEET IS LESS THAN 11"x17"
 IT IS A REDUCED PRINT,
 SCALE ACCORDINGLY

— PRE-PLACEMENT ELEVATION 6/16/2025
 — POST-PLACEMENT ELEVATION 10/22/2025
 - - - DESIGN TEMPLATE



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 1 MARITIME WAY
 ANTIOCH, CA 94509
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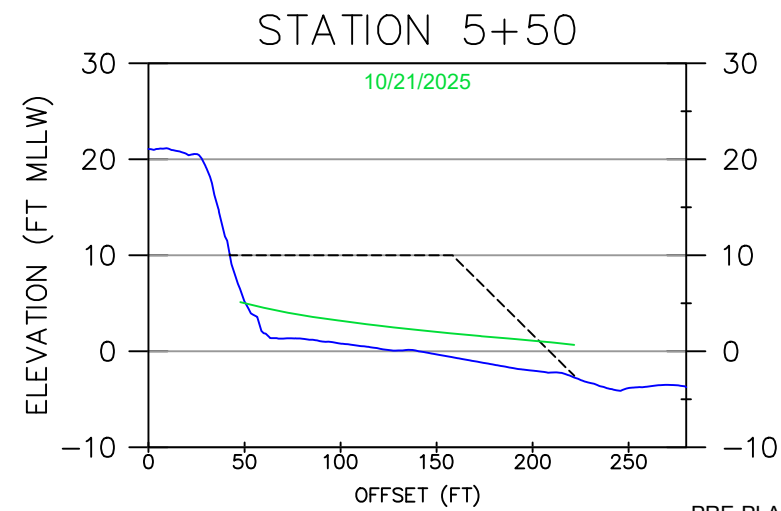
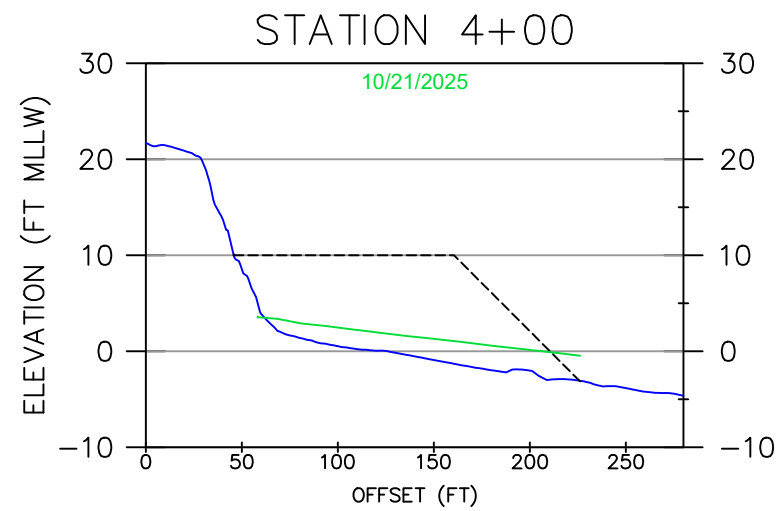
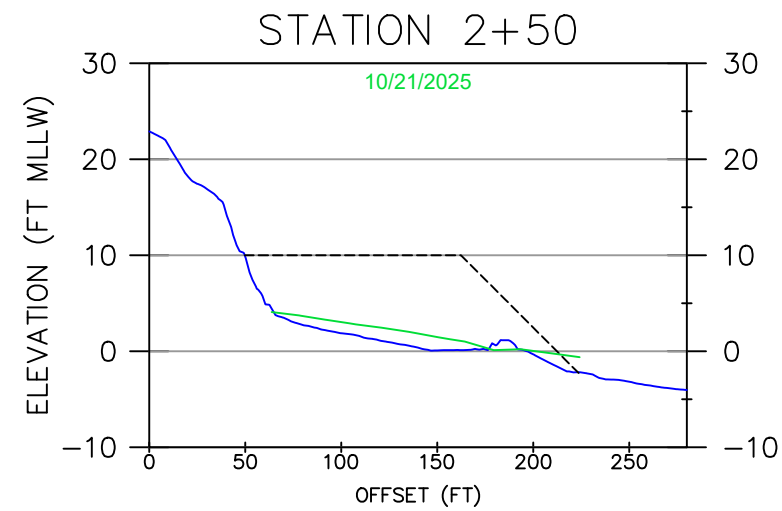
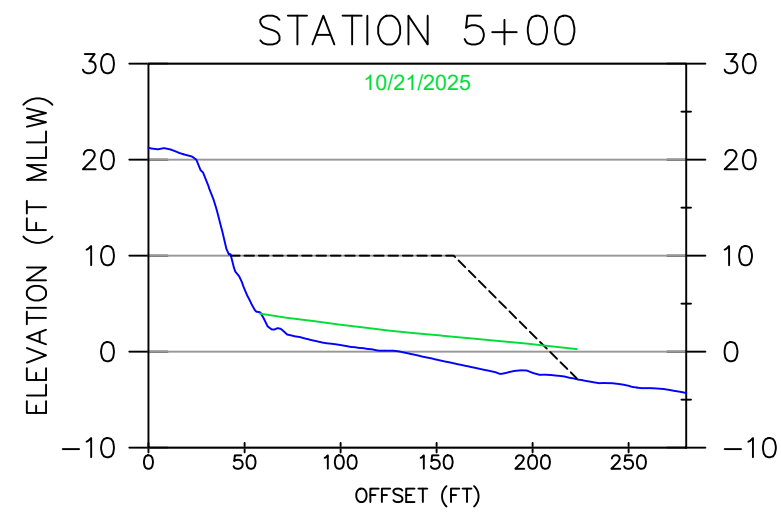
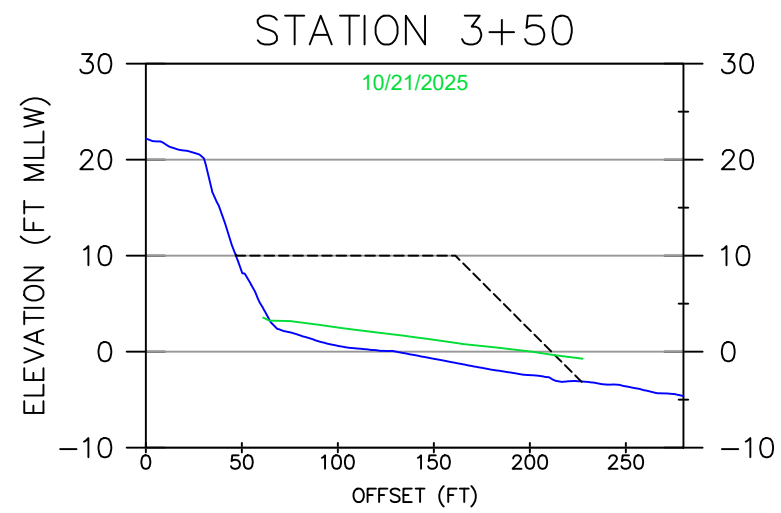
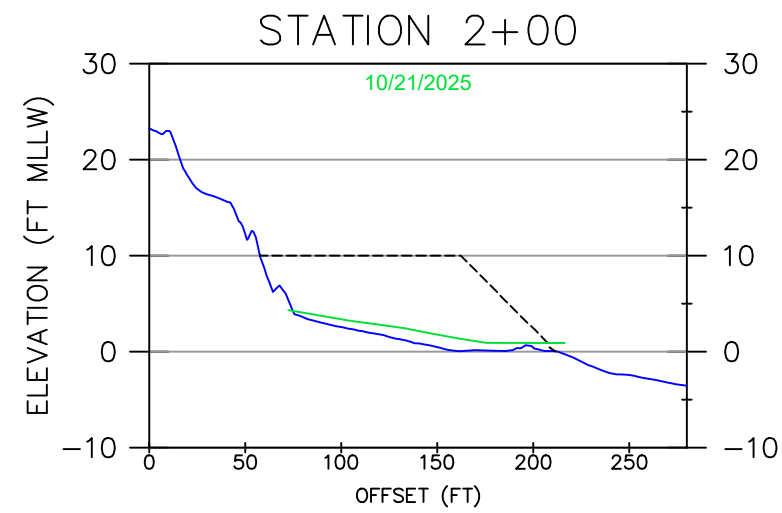
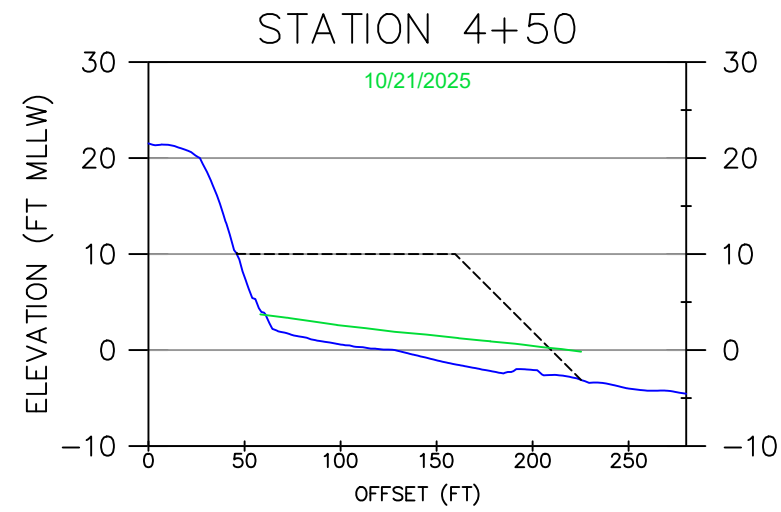
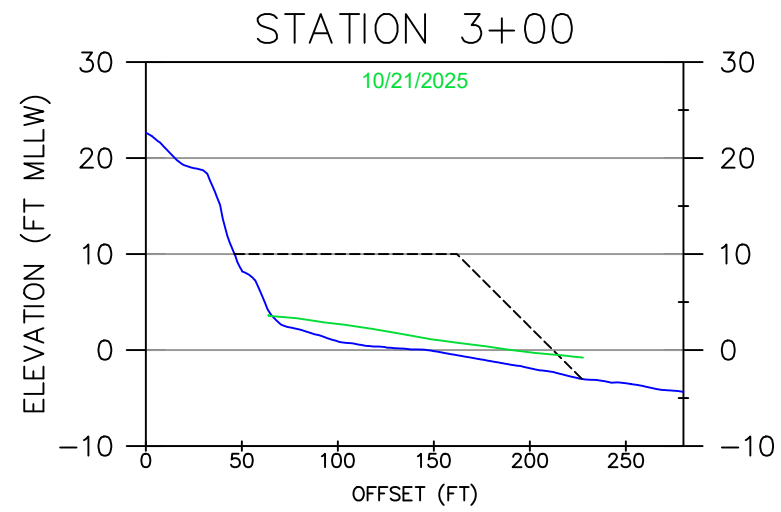
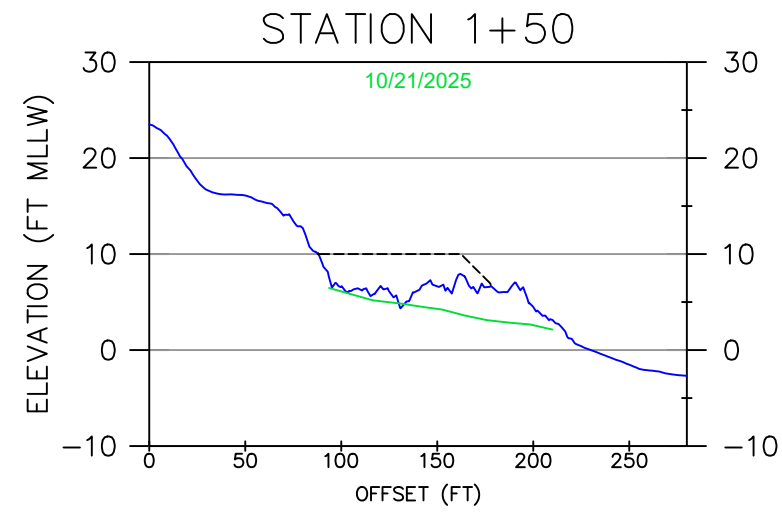
WOOLPERT INC.
 637 LINDARO STREET
 SUITE 100
 SAN RAFAEL, CA 94901
 PHONE: 415-462-0421
 WOOLPERT.COM/MARITIME

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EELGRASS MITIGATION AREA

CROSS-SECTIONS

Reference
 Number:
S10



H. SCALE: 1" = 100'
V. SCALE: 1" = 20'

IF SHEET IS LESS THAN 11"x17"
IT IS A REDUCED PRINT,
SCALE ACCORDINGLY

— PRE-PLACEMENT ELEVATION 6/16/2025
— POST-PLACEMENT ELEVATION
- - - DESIGN TEMPLATE



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1 MARITIME WAY
ANTIOCH, CA 94509
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SUITE 100
SAN RAFAEL, CA 94901
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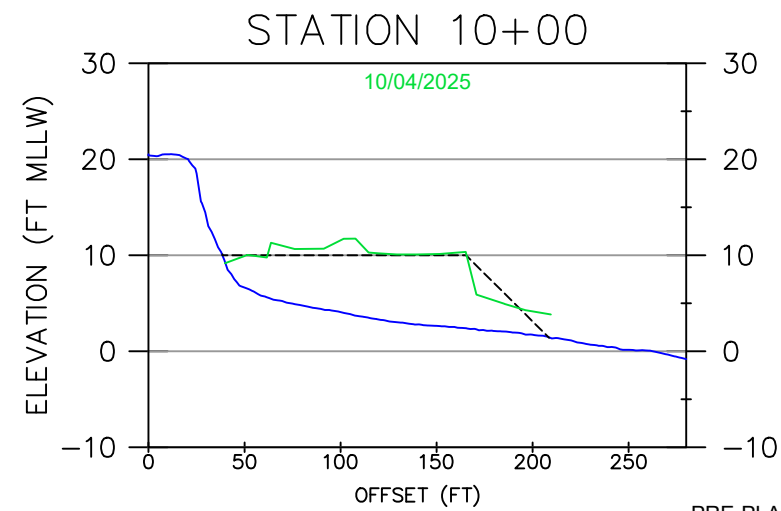
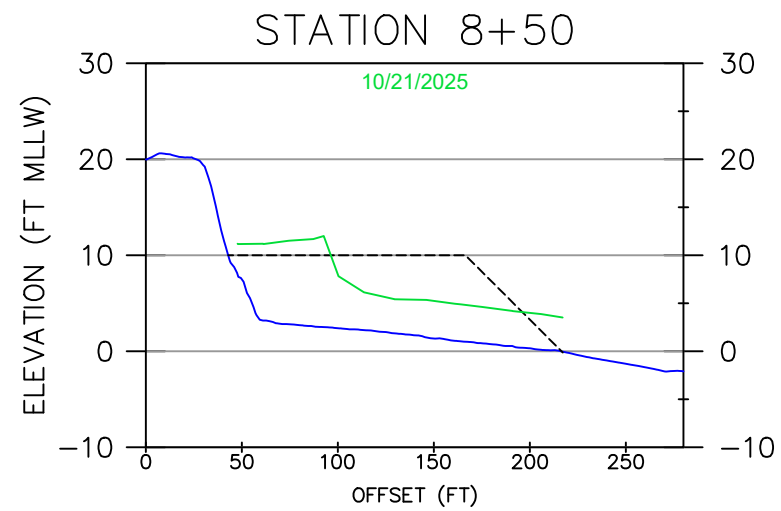
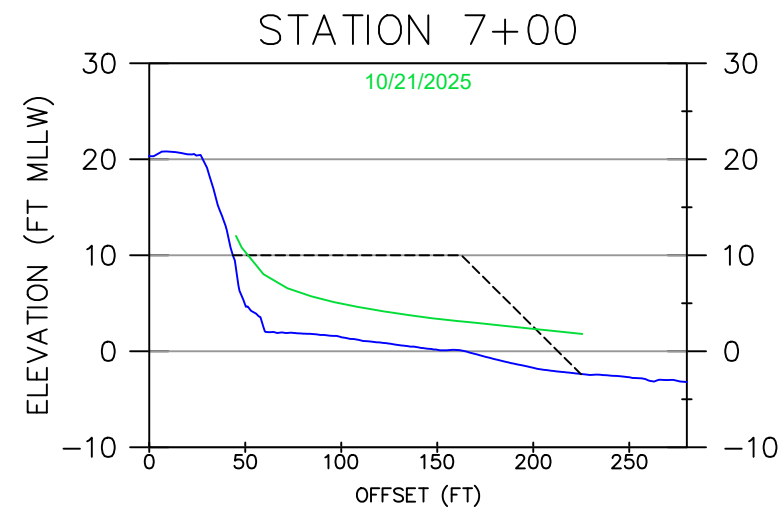
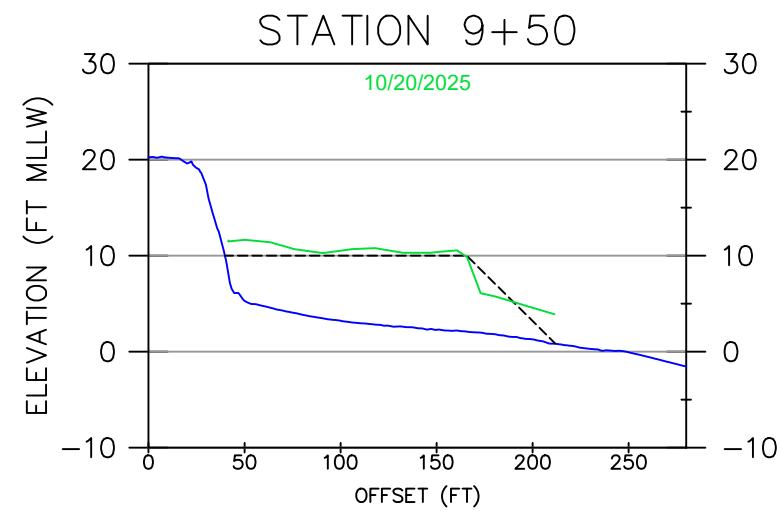
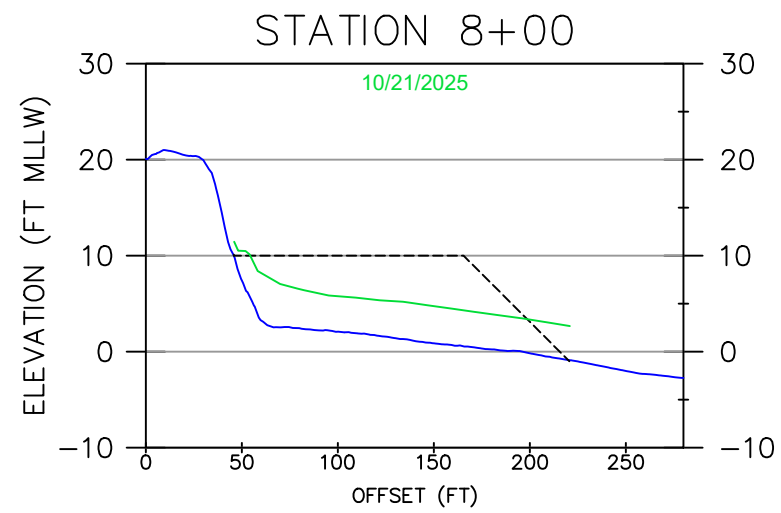
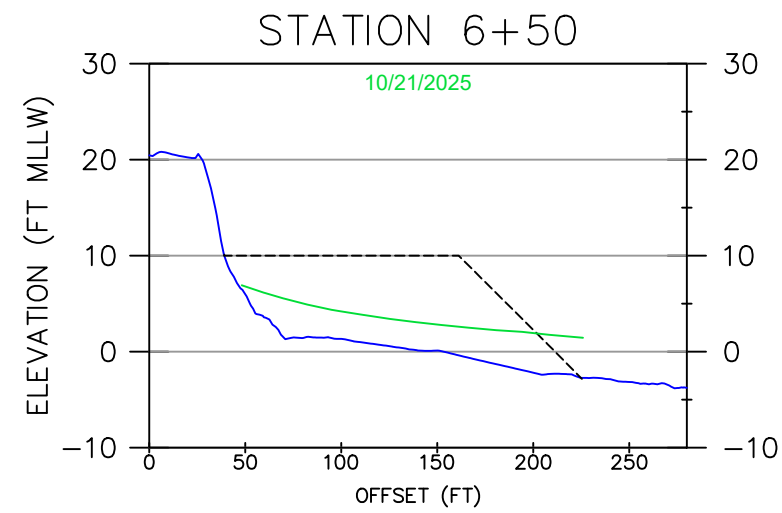
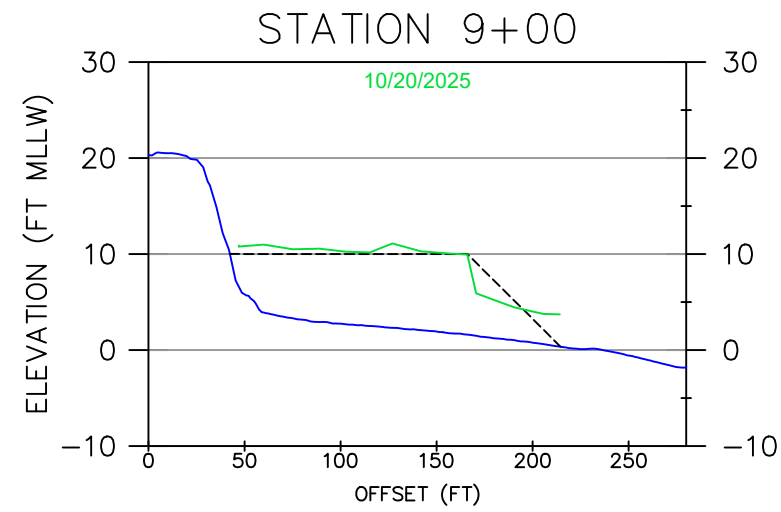
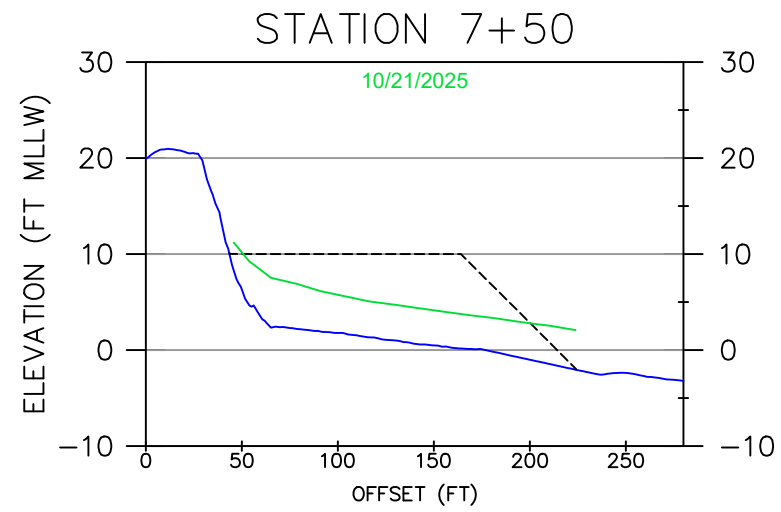
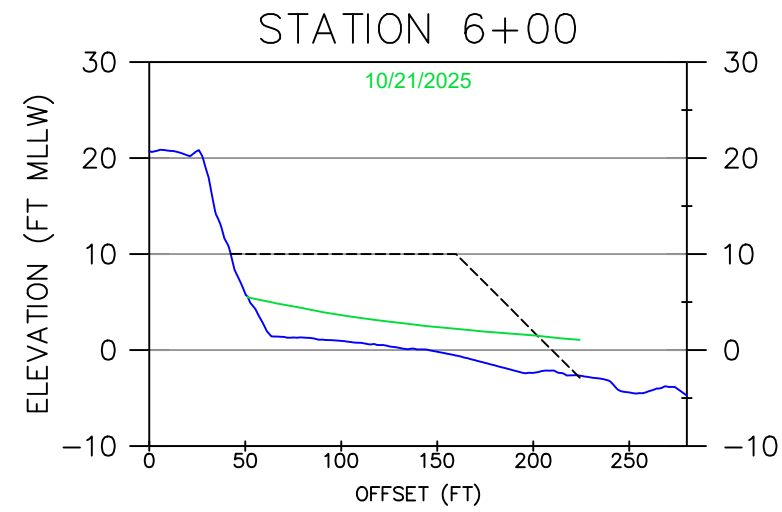
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DESIGNED BY: NB	CHECKED BY: JK
REVISION 0	
FILE NAME: Vortex_20251022_PillarPointHarbor_REV2.dwg	

SURFERS BEACH FILL AREA

CROSS-SECTIONS

Reference
Number:

S11



H. SCALE: 1" = 100'
 V. SCALE: 1" = 20'
 0 50 100 200

IF SHEET IS LESS THAN 11"x17"
 IT IS A REDUCED PRINT,
 SCALE ACCORDINGLY

— PRE-PLACEMENT ELEVATION 6/16/2025
 — POST-PLACEMENT ELEVATION
 - - - DESIGN TEMPLATE



VORTEX MARINE
 CONSTRUCTION
 1 MARITIME WAY
 ANTIOCH, CA 94509
 PHONE: 510-261-2400
 VORTEX-SFB.COM



WOOLPERT INC.
 637 LINDARO STREET
 SUITE 100
 SAN RAFAEL, CA 94901
 PHONE: 415-462-0421
 WOOLPERT.COM/MARITIME

SURVEY DATE:
 See Legend
 DESIGNED BY: NB
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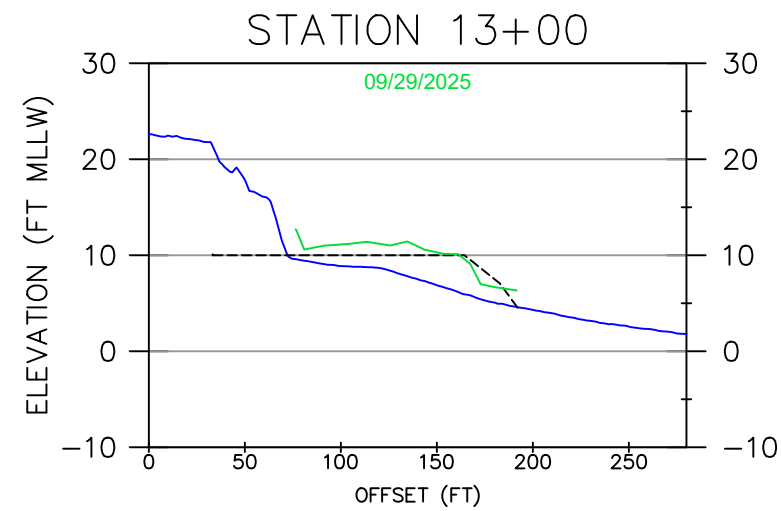
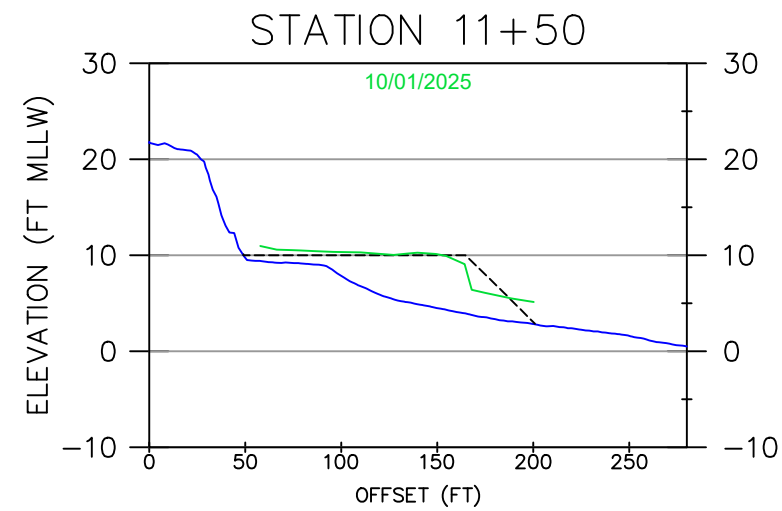
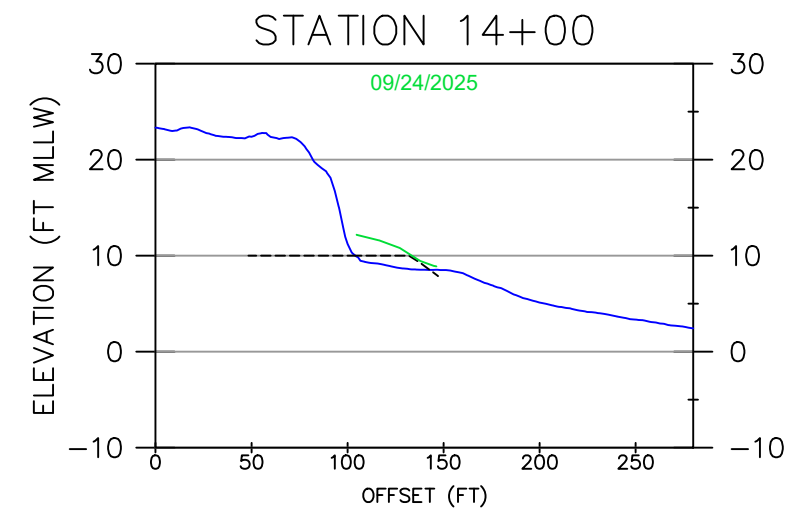
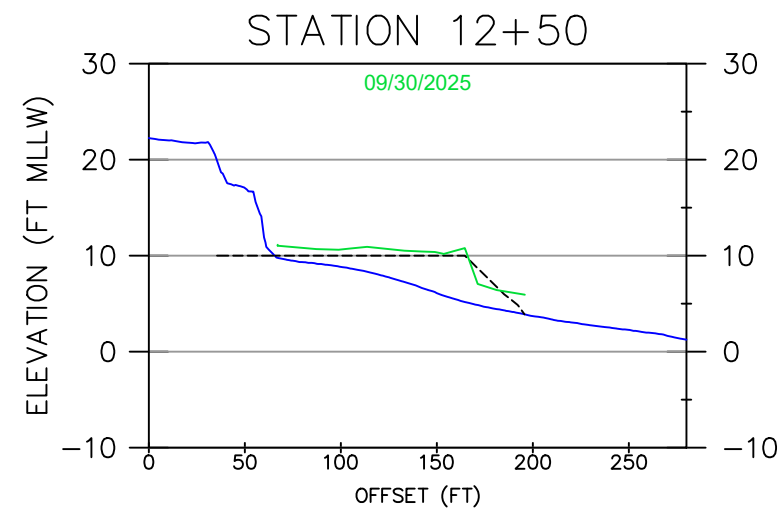
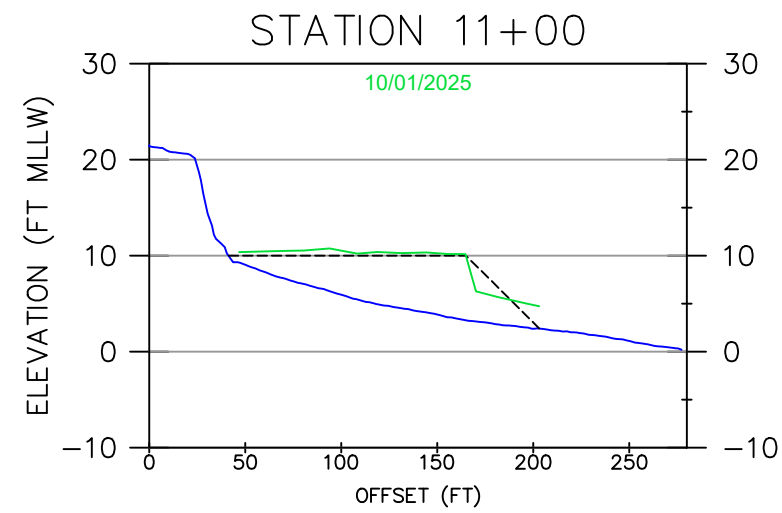
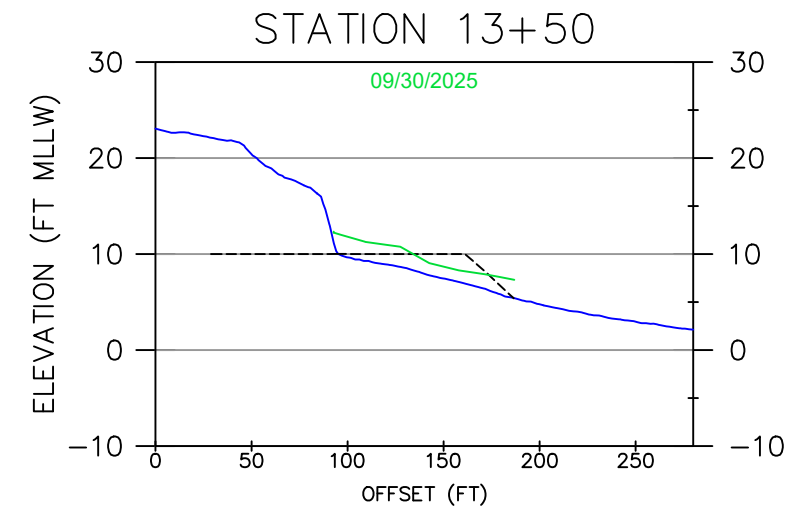
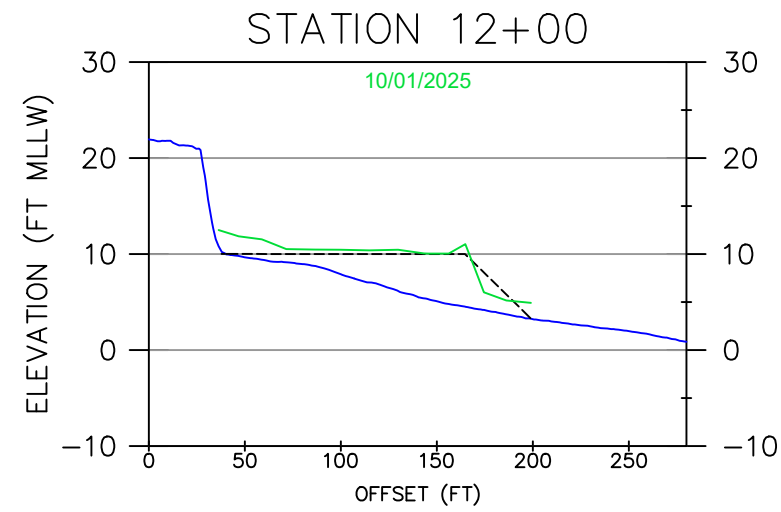
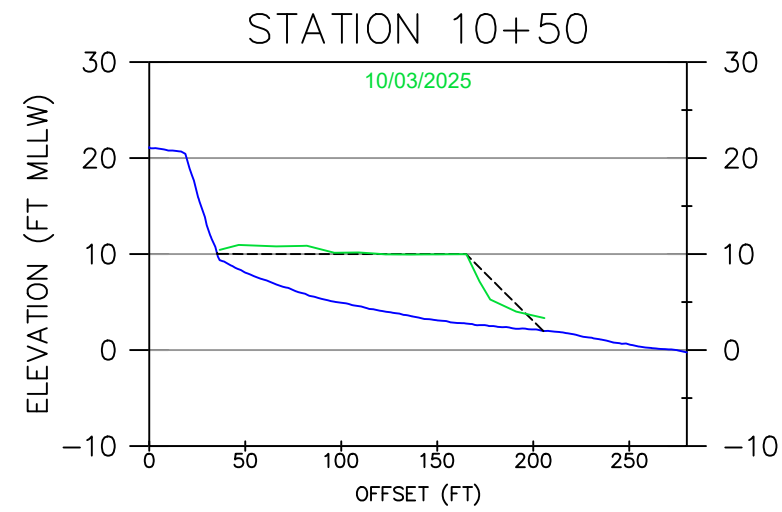
PLOT DATE:
 December 4, 2025
 CHECKED BY: JK

SURFERS BEACH FILL AREA

CROSS-SECTIONS

Reference
 Number:

S12



H. SCALE: 1" = 100'
 V. SCALE: 1" = 20'

IF SHEET IS LESS THAN 11"x17"
 IT IS A REDUCED PRINT,
 SCALE ACCORDINGLY

— PRE-PLACEMENT ELEVATION 6/16/2025
 — POST-PLACEMENT ELEVATION
 - - - DESIGN TEMPLATE



VORTEX MARINE
 CONSTRUCTION
 1 MARITIME WAY
 ANTIOCH, CA 94509
 PHONE: 510-261-2400
 VORTEX-SFB.COM



WOOLPERT INC.
 637 LINDARO STREET
 SUITE 100
 SAN RAFAEL, CA 94901
 PHONE: 415-462-0421
 WOOLPERT.COM/MARITIME

SURVEY DATE: See Legend	PLOT DATE: December 4, 2025
DESIGNED BY: NB	CHECKED BY: JK
REVISION 0	
FILE NAME: Vortex_20251022_PillarPointHarbor_REV2.dwg	

SURFERS BEACH FILL AREA

CROSS-SECTIONS

Reference
 Number:

S13

Attachment D -

Mobilization and Construction-phase Photographs

ATTACHMENT D - Mobilization and Construction-phase Photographs



Dredge Pipeline Assembly



Telehandler for transporting pipe

ATTACHMENT D - Mobilization and Construction-phase Photographs



MTS staff bundling eelgrass turions for transplanting



Dredge pipeline deployment at boat launch ramps

ATTACHMENT D - Mobilization and Construction-phase Photographs



Dredge pipeline deployment at boat launch ramps



Dredging operations began on August 29, 2025

ATTACHMENT D - Mobilization and Construction-phase Photographs



Worker Environmental Awareness Training August 30, 2025



Placement of dredged sediment at eelgrass mitigation site, from placement barge

ATTACHMENT D - Mobilization and Construction-phase Photographs



Placement barge depositing sediment within turbidity curtain at eelgrass mitigation area



Launching of second dredge for placement of dredged sand at Surfers Beach

ATTACHMENT D - Mobilization and Construction-phase Photographs



Debris encountered at Launch ramps while dredging



Temporary Heavy Equipment Access Ramp constructed at Surfers Beach

ATTACHMENT D - Mobilization and Construction-phase Photographs



Cutterhead suction dredge #1



Cutterhead suction dredge #2

ATTACHMENT D - Mobilization and Construction-phase Photographs



Pumping sand to north end began on August 28, 2025. A total of 10,000 cy was placed.



ATTACHMENT D - Mobilization and Construction-phase Photographs

Pipeline alignment at Surfers Beach



Construction of containment berm on beach

ATTACHMENT D - Mobilization and Construction-phase Photographs



Pumping sand into containment berm

ATTACHMENT D - Mobilization and Construction-phase Photographs



Northern containment cell on September 12, 2025

ATTACHMENT D - Mobilization and Construction-phase Photographs



Southern containment cell on September 12, 2025

Attachment E - As-Built Photopoint Documentation

As-Built Photopoint Documentation

Surfers Beach Pilot Project

February 2026

In compliance with the California Coastal Commission’s Consolidated Coastal Development Permit No. 2-22-0726 Special Conditions Requirement No. 3 for the San Mateo County Harbor District’s Surfers Beach Pilot Project, this document presents color images capturing as-built conditions at fourteen pre-determined photopoints throughout the beach fill placement site on November 6, 2025. Three to four images were taken per photopoint, facing approximately north, south, east, and west to provide nearly overlapping coverage of the shore. Each photo includes a timestamp indicating the date and time the photo was taken. Photopoint locations are shown in Figure 0 and will be reoccupied during post-construction monitoring to track the movement of sediment in and surrounding the fill placement area.

ATTACHMENT: Surfers Beach_CDP As-Built Photopoint Pictures—A digital folder containing the JPEG images shown in this document.



Figure 0
Photopoint Monitoring Locations

Date & Time: Thu, Nov 06, 2025 at 14:16:28 PST
Position: +037.501016° / -122.471850° (± 15.4 ft)
Altitude: 3ft (± 11.1 ft)
Datum: WGS-84
Azimuth/Bearing: 098° S82E 1742mils True ($\pm 11^\circ$)
Elevation Angle: +00.1°
Horizon Angle: -00.2°
Zoom: 1.0X



Figure 1.1: Photopoint 1 – Looking East

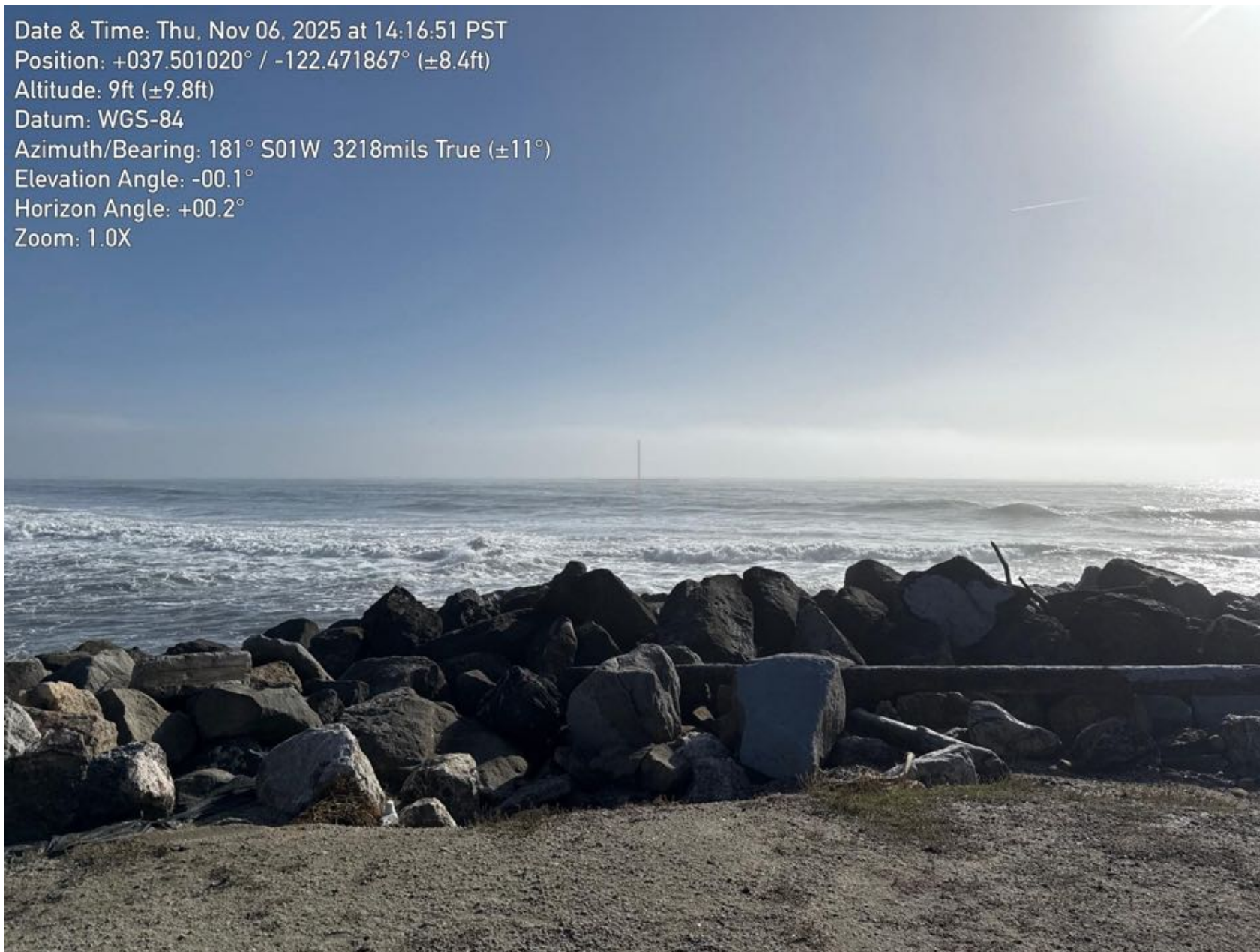


Figure 1.2: Photopoint 1 – Looking South



Figure 1.3: Photopoint 1 – Looking West

Date & Time: Thu, Nov 06, 2025 at 14:13:36 PST
Position: +037.501155° / -122.471351° (± 15.6 ft)
Altitude: 14ft (± 18.6 ft)
Datum: WGS-84
Azimuth/Bearing: 156° S24E 2773mils True ($\pm 11^\circ$)
Elevation Angle: -00.5°
Horizon Angle: -00.1°
Zoom: 1.0X



Figure 2.1: Photopoint 2 – Looking East



Figure 2.2: Photopoint 2 – Looking South



Figure 2.3: Photopoint 2 – Looking West



Figure 3.1: Photopoint 3 – Looking East

Date & Time: Thu, Nov 06, 2025 at 14:10:19 PST
Position: +037.500809° / -122.470293° (± 15.6 ft)
Altitude: 19ft (± 15.7 ft)
Datum: WGS-84
Azimuth/Bearing: 210° S30W 3733mils True ($\pm 11^\circ$)
Elevation Angle: -00.5°
Horizon Angle: -00.0°
Zoom: 1.0X



Figure 3.2: Photopoint 3 – Looking South



Figure 3.3: Photopoint 3 – Looking West



Figure 4.1: Photopoint 4 – Looking East

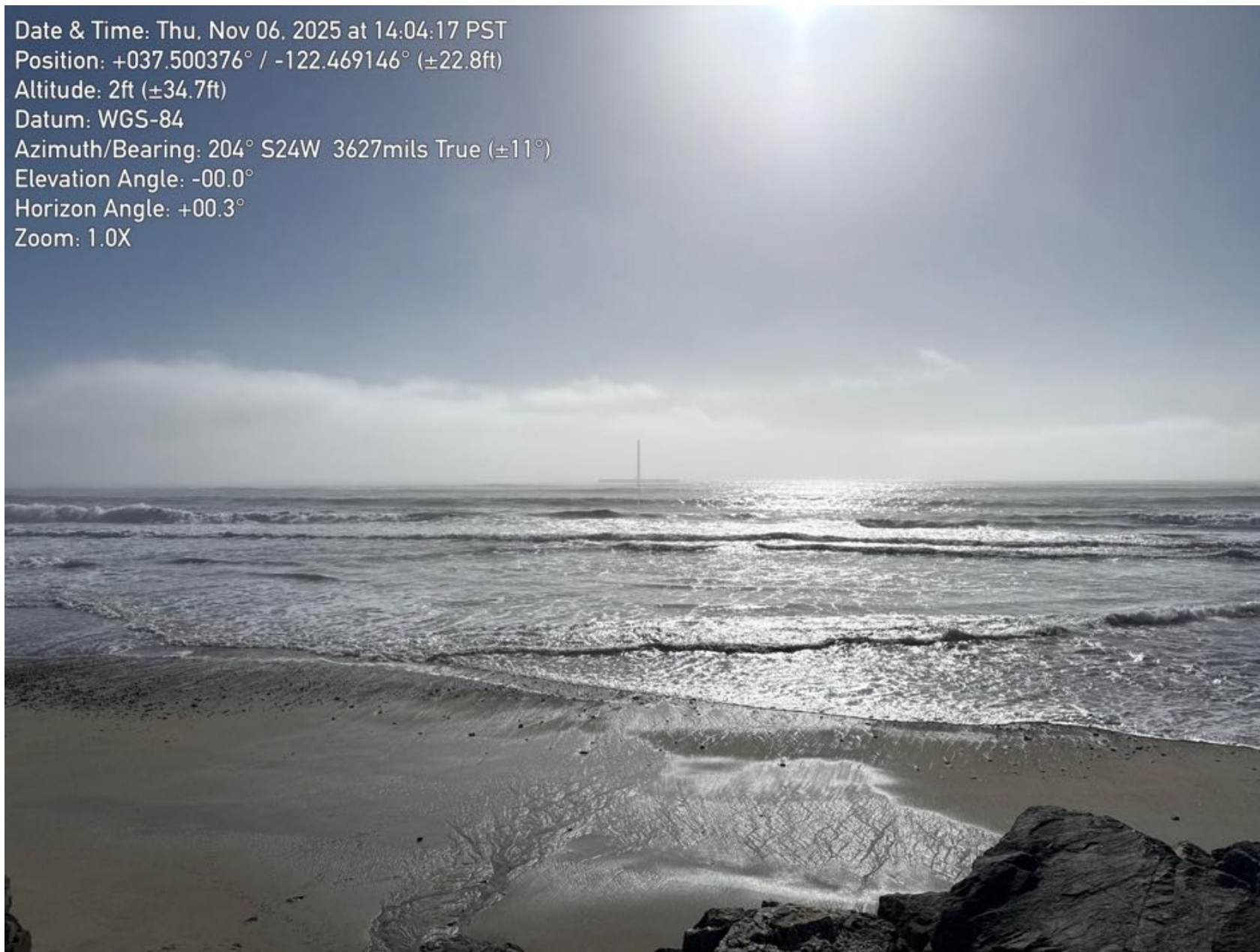


Figure 4.2: Photopoint 4 – Looking South



Figure 4.3: Photopoint 4 – Looking West



Figure 5.1: Photopoint 5 – Looking East



Figure 5.2: Photopoint 5 – Looking South



Figure 5.3: Photopoint 5 – Looking West

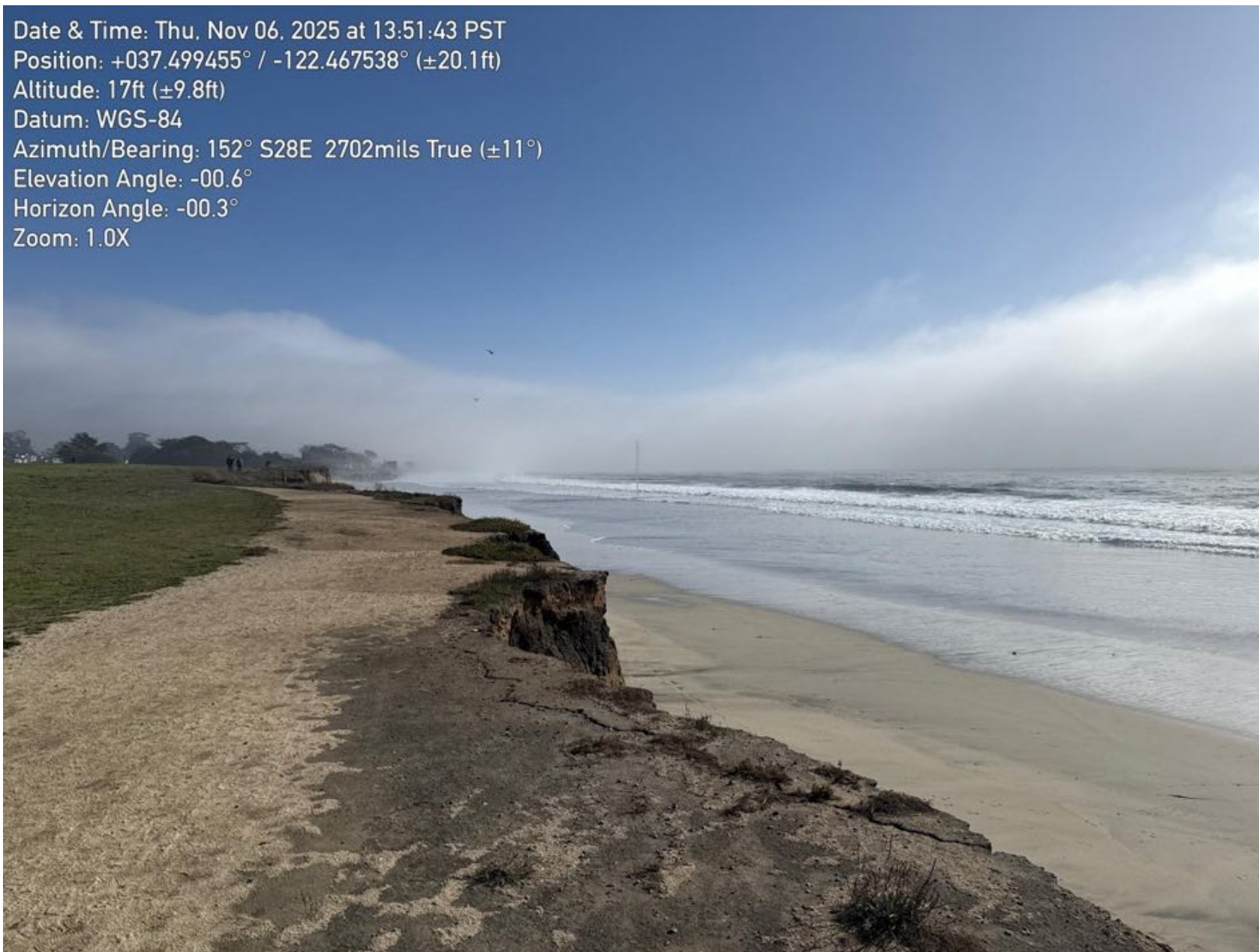


Figure 6.1: Photopoint 6 – Looking East

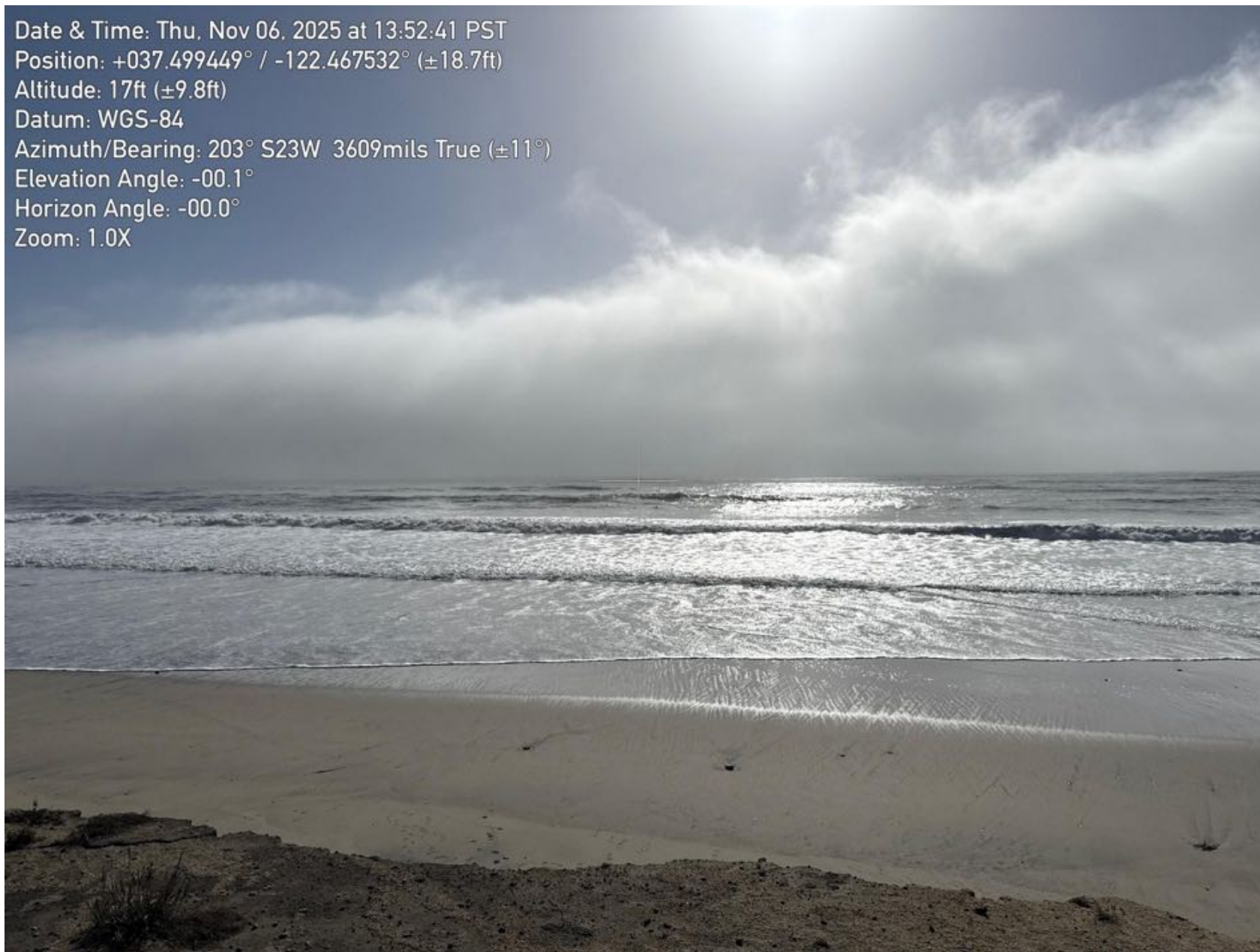


Figure 6.2: Photopoint 6 – Looking South

Date & Time: Thu, Nov 06, 2025 at 13:53:39 PST
Position: +037.499451° / -122.467550° (±15.5ft)
Altitude: 19ft (±11.7ft)
Datum: WGS-84
Azimuth/Bearing: 286° N74W 5084mils True (±11°)
Elevation Angle: -00.3°
Horizon Angle: +00.0°
Zoom: 1.0X



Figure 6.3: Photopoint 6 – Looking West



Figure 7.1: Photopoint 7 – Looking East

Date & Time: Thu, Nov 06, 2025 at 16:36:37 PST
Position: +037.500879° / -122.471140° (± 15.6 ft)
Altitude: -6ft (± 9.8 ft)
Datum: WGS-84
Azimuth/Bearing: 212° S32W 3769mils True ($\pm 12^\circ$)
Elevation Angle: -00.3°
Horizon Angle: -00.9°
Zoom: 1.0X



Figure 7.2: Photopoint 7 – Looking South



Figure 7.3: Photopoint 7 – Looking West



Figure 7.4: Photopoint 7 – Looking North



Figure 8.1: Photopoint 8 – Looking East

Date & Time: Thu, Nov 06, 2025 at 16:58:57 PST
Position: +037.500379° / -122.469924° (± 15.6 ft)
Altitude: 4ft (± 19.9 ft)
Datum: WGS-84
Azimuth/Bearing: 219° S39W 3893mils True ($\pm 12^\circ$)
Elevation Angle: -00.4°
Horizon Angle: -00.3°
Zoom: 1.0X



Figure 8.2: Photopoint 8 – Looking South



Figure 8.3: Photopoint 8 – Looking West



Figure 8.4: Photopoint 8 – Looking North



Figure 9.1: Photopoint 9 – Looking East

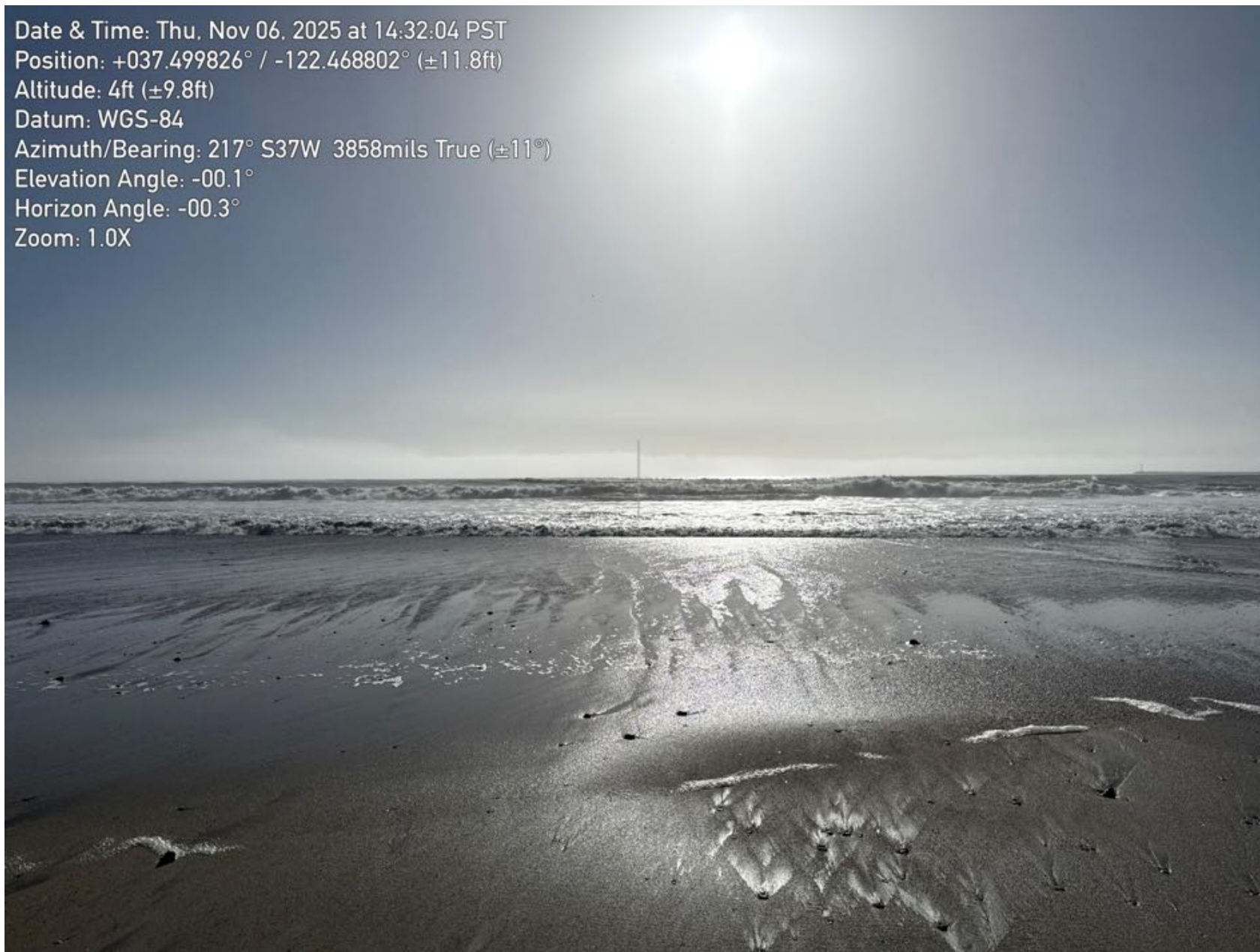


Figure 9.2: Photopoint 9 – Looking South

Date & Time: Thu, Nov 06, 2025 at 14:32:27 PST
Position: +037.499831° / -122.468810° (± 6.7 ft)
Altitude: 3ft (± 9.8 ft)
Datum: WGS-84
Azimuth/Bearing: 297° N63W 5280mils True ($\pm 11^\circ$)
Elevation Angle: -00.1°
Horizon Angle: $+00.2^\circ$
Zoom: 1.0X



Figure 9.3: Photopoint 9 – Looking West



Figure 9.4: Photopoint 9 – Looking North



Figure 10.1: Photopoint 10 – Looking East

Date & Time: Thu, Nov 06, 2025 at 14:38:18 PST
Position: +037.499121° / -122.467561° (± 24.4 ft)
Altitude: -1ft (± 10.3 ft)
Datum: WGS-84
Azimuth/Bearing: 216° S36W 3840mils True ($\pm 11^\circ$)
Elevation Angle: +00.1°
Horizon Angle: -00.0°
Zoom: 1.0X



Figure 10.2: Photopoint 10 – Looking South



Figure 10.3: Photopoint 10 – Looking West



Figure 10.4: Photopoint 10 – Looking North

Date & Time: Thu, Nov 06, 2025 at 13:43:38 PST
Position: +037.498459° / -122.466110° (± 12.7 ft)
Altitude: 22ft (± 9.8 ft)
Datum: WGS-84
Azimuth/Bearing: 144° S36E 2560mils True ($\pm 11^\circ$)
Elevation Angle: -00.2°
Horizon Angle: -00.2°
Zoom: 1.0X



Figure 11.1: Photopoint 11 – Looking East

Date & Time: Thu, Nov 06, 2025 at 13:42:40 PST
Position: +037.498455° / -122.466092° (±14.3ft)
Altitude: 23ft (±9.8ft)
Datum: WGS-84
Azimuth/Bearing: 218° S38W 3876mils True (±11°)
Elevation Angle: -00.4°
Horizon Angle: -00.1°
Zoom: 1.0X



Figure 11.2: Photopoint 11 – Looking South



Figure 11.3: Photopoint 11 – Looking West



Figure 12.1: Photopoint 12 – Looking East



Figure 12.2: Photopoint 12 – Looking South



Figure 12.3: Photopoint 12 – Looking West



Figure 13.1: Photopoint 13 – Looking East

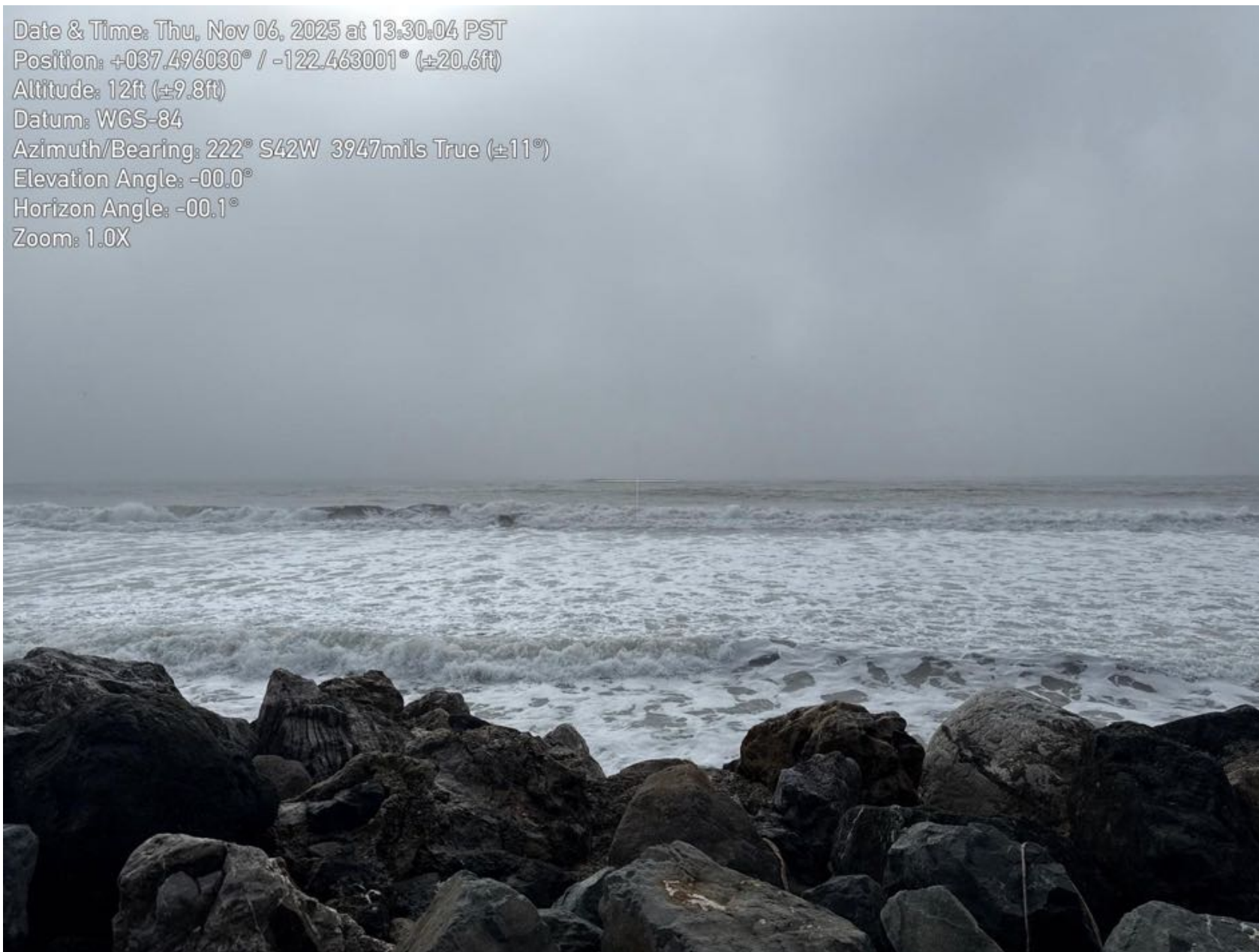


Figure 13.2: Photopoint 13 – Looking South



Figure 13.3: Photopoint 13 – Looking West



Figure 14.1: Photopoint 14 – Looking East

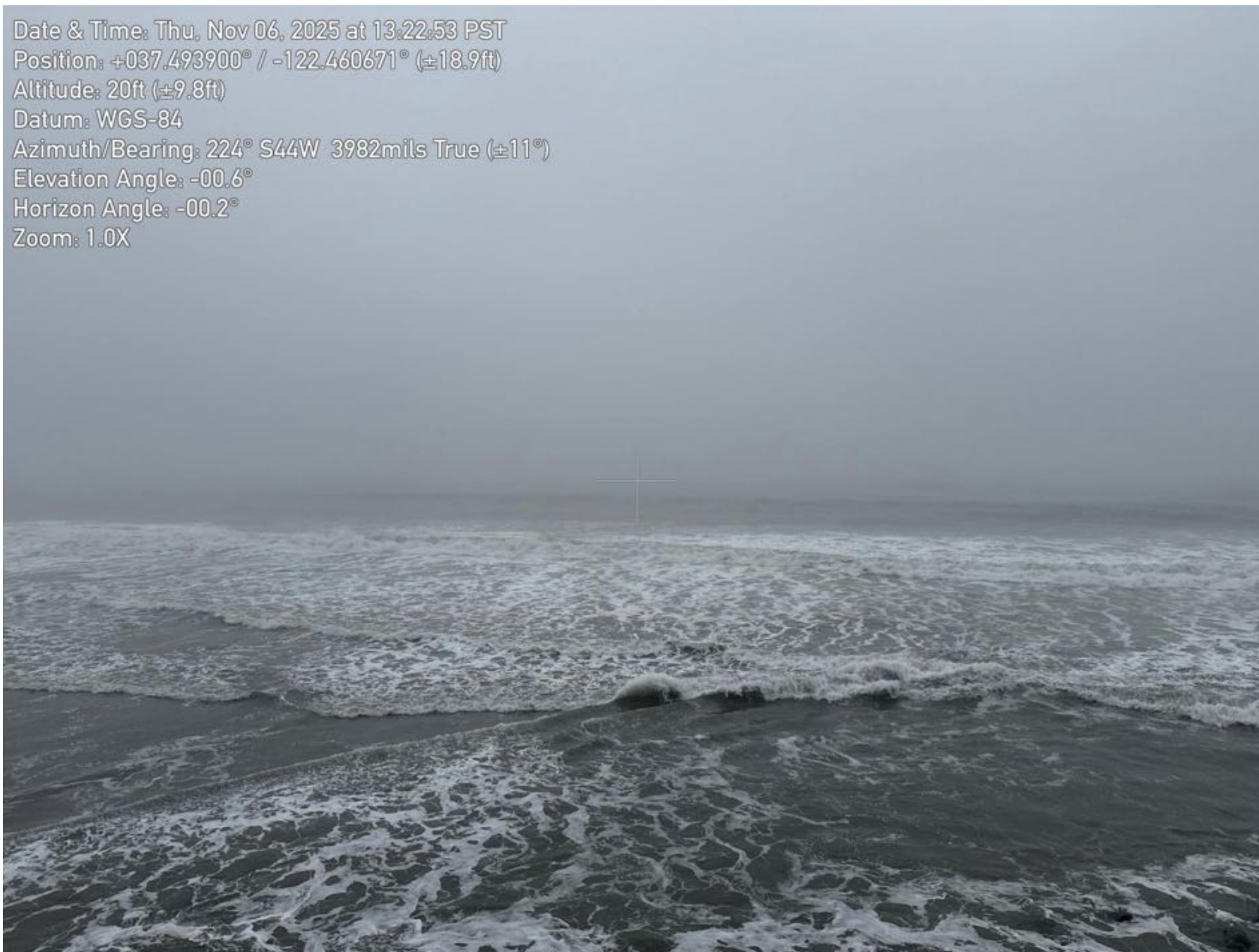


Figure 14.2: Photopoint 14 – Looking South



Figure 14.3: Photopoint 14 – Looking West