



Ann M. Stillman
Director

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May 18, 2023

COUNTY OF SAN MATEO

TUNITAS CREEK BEACH IMPROVEMENTS PROJECT

**TOTAL PROJECT APPROXIMATELY 0.28 MILE IN LENGTH
WITH APPURTENANT WORK THERETO
IN SAN MATEO COUNTY**

**COUNTY PROJECT NO. P30T1
PROJECT FILE NO. E4995**

ADDENDUM NO. 1

TO ALL PLAN HOLDERS:

The following **Addendum No. 1** to the above referenced project, dated April 21, 2023, shall be included in the project specifications and plans.

1. The Bid Schedule has been updated for several bid items. Pages 7 through 10 of the NC (Notice to Contractors) Section shall be replaced in the Project Specifications:

Replace page 7 through 10 of the NC Section with page 7 (rev) through 10 (rev).

2. The Bid Schedule has been updated for several bid items. Pages 8 through 11 of the PR (Proposal) Section shall be replaced in the Project Specifications:

Replace page 8 through 11 of the PR Section with page 8 (rev) through 11 (rev).

3. Clarification regarding weather days has been added to Section 8-1 of the Special Provisions. Page 24 of the SP (Special Provisions) Section shall be replaced in the Project Specifications:

Replace page 24 of the SP Section with page 24 (rev).

4. Clarification regarding review time for submittals has been added to Section 10-2 of the Special Provisions. Page 34 and 35 of the SP (Special Provisions) Section shall be replaced in the Project Specifications:

Replace page 34 and 35 of the SP Section with page 34 (rev) and 35 (rev).



To All Plan Holders
Tunitas Creek Beach Improvements Project
Addendum No. 1
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5. Clarification on where the HSP (Health and Safety Plan) location and limits shall pertain to within the project limits has been added to Section 10-4 of the Special Provisions. Page 36 of the SP (Special Provisions) Section shall be replaced in the Project Specifications:

Replace page 36 of the SP Section with page 36 (rev).

6. Section 61-3 Seepage Zone has been added to Section 61 of the Special Provisions. Page 106 of the SP (Special Provisions) Section shall be replaced in the Project Specifications:

Replace page 106 of the SP Section with page 106 (rev).

7. Section 73.3 Concrete Stairs has been updated. Page 113 of the SP (Special Provisions) Section shall be replaced in the Project Specifications:

Replace page 113 of the SP Section with page 113 (rev).

8. Clarification on concrete footing depth has been added to Section 77-2 of the Special Provisions. Page 124 of the SP (Special Provisions) Section shall be replaced in the Project Specifications:

Replace page 124 of the SP Section with page 124 (rev).

9. Clarification for using open trench method and updated waterline pipe size has been added to Section 79 of the Special Provisions. Page 139 of the SP (Special Provisions) Section shall be replaced in the Project Specifications:

Replace page 139 of the SP Section with page 139 (rev).

10. Clarification regarding PG&E box material, size, and model type has been added to Section 86-2 of the Special Provisions . Page 147 of the SP (Special Provisions) Section shall be replaced in the Project Specifications:

Replace page 147 of the SP Section with page 147 (rev).

11. Clarification regarding the number of electric vehicle charging stations/stalls have been added to Section 87-4 of the Special Provisions. Page 151 and 152 of the SP (Special Provisions) Section shall be replaced in the Project Specifications:

Replace page 151 and 152 of the SP Section with page 151 (rev) and 152 (rev).

12. Note 3 of Plan Sheet C-11.1 through C-11.3 has been updated. Sheet C-11.1, Sheet C-11.2, and Sheet C11.3 shall be replaced in the Project Plans:

To All Plan Holders
Tunitas Creek Beach Improvements Project
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Replace Plan Sheet C-11.1 (Sheet 40 of 124) with Sheet C-11.1 (rev) (Sheet 40 of 124).

Replace Plan Sheet C-11.2 (Sheet 41 of 124) with Sheet C-11.2 (rev) (Sheet 41 of 124).

Replace Plan Sheet C-11.3 (Sheet 42 of 124) with Sheet C-11.3 (rev) (Sheet 42 of 124).

13. The waterline pipe size has been updated to 4 inches. Plan Sheet C-14 shall be replaced in the Project Plans:

Replace Plan Sheet C-14 (Sheet 49 of 124) with Sheet C-14 (rev) (Sheet 49 of 124).

14. The Joint Trench Plan Sheets have been updated to show the locations of the cable TV pullboxes. Plan Sheets JT00, JT01, JT02, and JT03 shall be replaced in the Project Plans:

Replace Plan Sheet JT00 (Sheet 60 of 124) with Sheet JT00 (rev) (Sheet 60 of 124).

Replace Plan Sheet JT01 (Sheet 61 of 124) with Sheet JT01 (rev) (Sheet 61 of 124).

Replace Plan Sheet JT02 (Sheet 62 of 124) with Sheet JT02 (rev) (Sheet 62 of 124).

Replace Plan Sheet JT03 (Sheet 63 of 124) with Sheet JT03 (rev) (Sheet 63 of 124).

15. The reference to the Habitat Protection Fence has been corrected on Sheet L-118. Plan Sheet L-118 shall be replaced in the Project Plans:

Replace Plan Sheet L-118 (Sheet 74 of 124) with Sheet L-118 (rev) (Sheet 74 of 124).

16. Details 1, 3 and 4 for the pedestrian path stairs have been updated on Sheet L-508. Plan Sheet L-508 shall be replaced in the Project Plans:

Replace Plan Sheet L-508 (Sheet 95 of 124) with Sheet L-508 (rev) (Sheet 95 of 124).

To All Plan Holders
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17. The Detail Notes 11-14, Detail 1 Single Line Diagram, and Feeder Schedule has been updated on Sheet E1.1. Plan Sheet E1.1 shall be replaced in the Project Plans:

Replace Plan Sheet E1.1 (Sheet 104 of 124) with Sheet E1.1 (rev) (Sheet 104 of 124).

18. The Sheet Notes 4, 5, and 7 have been updated on Sheet E2.1. Plan Sheet E2.1 shall be replaced in the Project Plans:

Replace Plan Sheet E2.1 (Sheet 105 of 124) with Sheet E2.1 (rev) (Sheet 105 of 124).

19. The Pullbox Schedule, Sheet Notes 20-23, and Detail 2 of Sheet E2.2 have been updated. Plan Sheet E2.2 shall be replaced in the Project Plans:

Replace Plan Sheet E2.2 (Sheet 106 of 124) with Sheet E2.2 (rev) (Sheet 106 of 124).

20. The Plan View, and Sheet Notes 1 and 6 have been updated on Sheet E2.3. Plan Sheet E2.3 shall be replaced in the Project Plans:

Replace Plan Sheet E2.3 (Sheet 107 of 124) with Sheet E2.3 (rev) (Sheet 107 of 124).

21. Detail 1 and Detail 4 have been updated on Sheet E6.1. Plan Sheet E6.1 shall be replaced in the Project Plans:

Replace Plan Sheet E6.1 (Sheet 108 of 124) with Sheet E6.1 (rev) (Sheet 108 of 124).

Please sign and return the attached "Receipt of Addendum No. 1" form. The "Receipt of Addendum No. 1" form MUST be received in this office no later than 4:00 PM, Wednesday, May 24, 2023 or the bid will NOT be considered. The Receipt of Addendum can be emailed to Anthony Lum's attention email at alum@smcgov.org, with carbon copy to mmanalo@smcgov.org.

All plan holders should check the project webpage for the latest updates on Request for Information. The project webpage address is:
<https://www.smcgov.org/publicworks/tunitas-creek-beach-improvement-project-POTB>.

If you have any questions or require additional information, please contact Michelle Manalo Mason or Anthony Lum of our office at (650) 363-4100. They can also be reached by e-mail at:

To All Plan Holders
Tunitas Creek Beach Improvements Project
Addendum No. 1
May 18, 2023

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mmanalo@smcgov.org
alum@smcgov.org

Very truly yours,



Ann M. Stillman
Director of Public Works

AMS:KL:AL:MM

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Encl.- "Receipt of Addendum No. 1" Form

Revised Page 7 (rev) through 10 (rev) of the NC (Notice to Contractors) Section

Revised Page 8 (rev) through 11 (rev) of the PR (Proposal) Section

Revised Pages 24 (rev), 34 (rev) through 36 (rev), 106 (rev), 113 (rev), 124 (rev),
139 (rev), 147 (rev), 151 (rev), and 152 (rev) of the SP (Special Provisions) Section

Revised Sheet C-11.1 (rev), C-11.2 (rev), C-11.3 (rev), C-14 (rev), JT00 (rev), JT01
(rev), JT02 (rev), JT03 (rev), L-118 (rev), L-508 (rev), E1.1 (rev), E2.1 (rev), E2.2
(rev), E2.3 (rev), and E6.1 (rev) of the Project Plans

cc: Krzysztof Lisaj, Deputy Director, Engineering and Resource Protection
Anthony Lum, WOC Principal Civil Engineer, Engineering and Construction
Michelle Manalo Mason, Associate Engineer, Project Development and Design



Ann M. Stillman
Director

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May 18, 2023

COUNTY OF SAN MATEO

TUNITAS CREEK BEACH IMPROVEMENTS PROJECT

COUNTY PROJECT NO. P30T1

PROJECT FILE NO. E4995

RECEIPT OF ADDENDUM NO. 1

I, _____, an
authorized representative for _____,
have received **Addendum No. 1** for the Tunitas Creek Beach Improvements Project
from an authorized representative of the County of San Mateo, which is to be included
in the Specifications for the above referenced project.

This form must be signed and received in the offices of the County of San Mateo,
Department of Public Works ***no later than 4:00 P.M., Wednesday, May 24, 2023.***

“Contractor”

(Print)

(Signature)

(Date)



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Item No.	Item Description	Section No.	Unit of Measure	Estimated Quantity
426	Wood Step	73-3	CY	<u>16</u> 40
427	Wood Step	19-8	EA	80
428	Midwest Guardrail	83	LF	660
429	Signs and Posts	82	EA	12
430	Detail 38A	84-1	LF	240
431	Detail 27B	84-1	LF	400
432	4" Stripe	84-1	LF	1,150
433	Markings	84-1	SF	1,000
501	Wood Decking	77-2	SF	855
502	Amphitheatre	77-3	LS	1
503	Guardrail	75-2	LF	415
504	Handrail	75-1	LF	4,620
505	Bollards	75-3	EA	5
506	Gate	75-4	EA	4
507	Top of Bluff Seatwalls Type A	77-5	LS	1
508	Top of Bluff Seatwalls Type B	77-5	LS	1
509	Mid Bluff Timber Bench	77-5	LS	1
510	Strata Beam Bench	77-6	EA	10
511	Precast Concrete Bench	77-6	EA	2

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Item No.	Item Description	Section No.	Unit of Measure	Estimated Quantity
512	Rammed Earth Seat Wall	77-4	EA	1
513	Bicycle Parking	77-6	EA	12
514	Bike Repair Station	77-6	EA	1
515	Picnic Tables	77-6	EA	5
516	Feature Log	77-6	EA	1
517	Concrete Wheel Stop	77-6	EA	15
518	Wayfinding Sign	77-7	EA	7
519	Land Recognition Plaque	77-7	EA	1
520	Interpretative Signage	77-7	EA	6
521	Donor Wall	77-8	LS	1
522	Donor Plaques on Seat Backs	77-8	EA	22
523	Bat House	77-9	EA	1
524	Entry Kiosk	77-10	EA	1
525	Habitat Protection Fence	80	LF	7,000
526 504	Slope Stabilization Seeding	21-1	SF	82,000
527 502	Social Trail Slope Stabilization Seeding	21-2	SF	10,000
528 503	Plants/ Shrubs	20-1	SF	32,000
529 504	Ground Cover	20-1	SF	32,000
530 505	Tree	20-1	EA	65

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Item No.	Item Description	Section No.	Unit of Measure	Estimated Quantity
506 531	Landscape Maintenance	20-2	LS	1
601	Restroom Plans and Materials	99-1	LS	1
602	Ranger Shed Plans and Materials	99-1	LS	1
603	Ranger Shed Foundation	99-2	EA	1
604	Ranger Shed	99-3	EA	1
605	Restroom Foundation	99-2	EA	1
606	Restroom	99-3	EA	1
701	12" PVC	64	LF	820
702	8" Perforated Pipe	68	LF	305
703	6" Perforated Pipe	68	LF	925
704	Class II Permeable	61-1	CY	65 225
705	Bioretention Soil	61-2	CY	97
706	Subdrain Cleanout	68	EA	24
707	Overflow Drain Inlet	70	EA	5
708	Turning Structure	70	EA	3
709	Drop Inlet with Side Opening	70	EA	1
710	Outfall Rock Dissipater	72	TON	35
801	Joint Trench	86-1	LF	1,800
802	Service Trench	86-1	LF	500

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Item No.	Item Description	Section No.	Unit of Measure	Estimated Quantity
803	PG&E #7 Vault	86-2	EA	3
804	AT&T 30x48 Pull Box	86-2	EA	1
805	AT&T 30x60 Pull Box	86-2	EA	3
806	Comcast Pull Box	86-2	EA	4
901	Transformer	87-2	EA	1
902	Switch Gear	87-2	EA	1
903	Electric Vehicle Charging Station	87-4	EA	4
904	Electrical Conduit and Conductors	87-1	LF	4,000
905	Handrail Lighting	87-3	LF	2,000
906	<u>4"</u> 6" Water Pipeline	79	LF	<u>1,070</u> 1,000
<u>907</u>	<u>Seepage Zone Mitigation (R)</u>	<u>61-3</u>	<u>LF</u>	<u>800</u>

Engineer's Estimate of Cost: \$ 11,000,000.00

(Note: Gaps in section numbering, above, indicate the Section is blank or does not apply.)

The foregoing quantities are approximate only, being given as a basis for the comparison of bids, and the County of San Mateo does not, expressly or by implication, agree that the actual amount of work will correspond herewith, but reserves the right to increase or decrease the amount of any class or portion of the work, or to omit any portion of the work, as may be deemed necessary or expedient by the Engineer.

Payment to the Contractor for materials furnished and work completed shall be made by the County in accordance with Section 9 of the "Special Provisions" portion of these Contract Documents. Pursuant to Section 22300 of the Public Contract Code, Contractor may, upon his request and at Contractor's expense, substitute equivalent securities for any moneys retained from such payment for the fulfillment of the Contract.

Item No.	Item Description	Section No.	Unit of Measure	Estimated Quantity	Item Price (In Figures)	Total (In Figures)
426	Wood Step	73-3	CY	<u>16</u> 40	\$	\$
427	Wood Step	19-8	EA	80	\$	\$
428	Midwest Guardrail	83	LF	660	\$	\$
429	Signs and Posts	82	EA	12	\$	\$
430	Detail 38A	84-1	LF	240	\$	\$
431	Detail 27B	84-1	LF	400	\$	\$
432	4" Stripe	84-1	LF	1,150	\$	\$
433	Markings	84-1	SF	1,000	\$	\$
501	Wood Decking	77-2	SF	855	\$	\$
502	Amphitheatre	77-3	LS	1	\$	\$
503	Guardrail	75-2	LF	415	\$	\$
504	Handrail	75-1	LF	4,620	\$	\$
505	Bollards	75-3	EA	5	\$	\$
506	Gate	75-4	EA	4	\$	\$
507	Top of Bluff Seatwalls Type A	77-5	LS	1	\$	\$
508	Top of Bluff Seatwalls Type B	77-5	LS	1	\$	\$
509	Mid Bluff Timber Bench	77-5	LS	1	\$	\$
510	Strata Beam Bench	77-6	EA	10	\$	\$
511	Precast Concrete Bench	77-6	EA	2	\$	\$
512	Rammed Earth Seat Wall	77-4	EA	1	\$	\$
513	Bicycle Parking	77-6	EA	12	\$	\$
514	Bike Repair Station	77-6	EA	1	\$	\$
515	Picnic Tables	77-6	EA	5	\$	\$

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Item No.	Item Description	Section No.	Unit of Measure	Estimated Quantity	Item Price (In Figures)	Total (In Figures)
516	Feature Log	77-6	EA	1	\$	\$
517	Concrete Wheel Stop	77-6	EA	15	\$	\$
518	Wayfinding Sign	77-7	EA	7	\$	\$
519	Land Recognition Plaque	77-7	EA	1	\$	\$
520	Interpretative Signage	77-7	EA	6	\$	\$
521	Donor Wall	77-8	LS	1	\$	\$
522	Donor Plaques on Seat Backs	77-8	EA	22	\$	\$
523	Bat House	77-9	EA	1	\$	\$
524	Entry Kiosk	77-10	EA	1	\$	\$
525	Habitat Protection Fence	80	LF	7,000	\$	\$
<u>526</u> 504	Slope Stabilization Seeding	21-1	SF	82,000	\$	\$
<u>527</u> 502	Social Trail Slope Stabilization Seeding	21-2	SF	10,000	\$	\$
<u>528</u> 503	Plants/ Shrubs	20-1	SF	32,000	\$	\$
<u>529</u> 504	Ground Cover	20-1	SF	32,000	\$	\$
<u>530</u> 505	Tree	20-1	EA	65	\$	\$
<u>531</u> 506	Landscape Maintenance	20-2	LS	1	\$	\$
601	Restroom Plans and Materials	99-1	LS	1	\$	\$
602	Ranger Shed Plans and Materials	99-1	LS	1	\$	\$
603	Ranger Shed Foundation	99-2	EA	1	\$	\$

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Item No.	Item Description	Section No.	Unit of Measure	Estimated Quantity	Item Price (In Figures)	Total (In Figures)
604	Ranger Shed	99-3	EA	1	\$	\$
605	Restroom Foundation	99-2	EA	1	\$	\$
606	Restroom	99-3	EA	1	\$	\$
701	12" PVC	64	LF	820	\$	\$
702	8" Perforated Pipe	68	LF	305	\$	\$
703	6" Perforated Pipe	68	LF	925	\$	\$
704	Class II Permeable	61-1	CY	<u>225</u> 65	\$	\$
705	Bioretention Soil	61-2	CY	97	\$	\$
706	Subdrain Cleanout	68	EA	24	\$	\$
707	Overflow Drain Inlet	70	EA	5	\$	\$
708	Turning Structure	70	EA	3	\$	\$
709	Drop Inlet with Side Opening	70	EA	1	\$	\$
710	Outfall Rock Dissipater	72	TON	35	\$	\$
801	Joint Trench	86-1	LF	1,800	\$	\$
802	Service Trench	86-1	LF	500	\$	\$
803	PG&E #7 Vault	86-2	EA	3	\$	\$
804	AT&T 30x48 Pull Box	86-2	EA	1	\$	\$
805	AT&T 30x60 Pull Box	86-2	EA	3	\$	\$
806	Comcast Pull Box	86-2	EA	4	\$	\$
901	Transformer	87-2	EA	1	\$	\$
902	Switch Gear	87-2	EA	1	\$	\$
903	Electric Vehicle Charging Station	87-4	EA	4	\$	\$

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Item No.	Item Description	Section No.	Unit of Measure	Estimated Quantity	Item Price (In Figures)	Total (In Figures)
904	Electrical Conduit and Conductors	87-1	LF	4,000	\$	\$
905	Handrail Lighting	87-3	LF	2,000	\$	\$
906	<u>4</u> " 6" Water Pipeline	79	LF	<u>1,070</u> 1,000	\$	\$
<u>907</u>	<u>Seepage Zone Mitigation (R)</u>	<u>61-3</u>	<u>LF</u>	<u>800</u>	<u>\$</u>	<u>\$</u>
TOTAL:						\$

Notes: (F) Final Pay Quantities - See Section 9-1.015, "Final Pay Items," of the Standard Specifications.

(S) Specialty Items - As defined in Section 8-1.01, "Subcontracting," of the Standard Specifications

SECTION 8. PROGRESS OF WORK AND TIME OF COMPLETION

Attention is directed to the provisions of Section 8, "Prosecution and Progress," of the Standard Specifications, except as herein provided.

8-1. Time of Completion

The Contractor shall begin work within **TEN (10) CALENDAR DAYS** after receiving Notice to Proceed from the Department of Public Works, and shall diligently prosecute the same to completion before the expiration of

ONE HUNDRED AND EIGHTY (180) WORKING DAYS

from the date of said beginning, as described above.

The Engineer will provide the Contractor with a Notice to Proceed which will allow the Contractor to complete the preconstruction tasks as described in Section 10 such as preparing submittals, attending trainings, complying with special status species requirements and coordination with Caltrans. However, the Engineer will not charge working days to the project until after the mutually agreed date that the Contractor can mobilize at the site. See Sections 8-4 and 8-5 of these Special Provisions for incentives and penalties related to completion of grading work.

The Contractor is advised that punch list items are required to be completed before the expiration of the working days stated above.

The Contractor may request, in writing, for an extension of working days, which request shall state the reason for said request and the number of additional working days. The Engineer will consider said request and respond, in writing, stating either the number of additional working days approved or the reason for denying the request.

The Engineer does not charge a working day for a day that has adverse weather conditions consistent with Section 1 of the Standard Specifications.

- d. Finish grade the mid bluff, trail, and parking lot areas.
- 9. Complete modifications to Highway 1 including joint trench construction.
- 10. Install electrical, storm drainage, and related utility or underground infrastructure.
- 11. Complete mockups of finishes at least two weeks in advance of installing the final products.
- 12. Install parking area hardscape.
- 13. Install walls, handrails, and surfacing for trail.
- 14. Construct mid bluff features including restroom and ranger residence.
- 15. Complete final planting.
- 16. Removing erosion control features.

The Contractor can propose an alternate sequence for County review and approval. County makes no guarantee that an alternate sequence will be approved. This shall be submitted with the initial schedule of work.

The Engineer will review all complete submittals provided by the Contractor within five (5) working days.

Payment. Full compensation for conforming to the requirements of this section, "Work Sequence" shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be allowed therefor.

10-3. Air Quality

The following Basic Construction Mitigation Measures by the Bay Area Air Quality Management District shall be implemented to minimize emissions associated with construction activities:

- 1) Any exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- 2) All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- 3) All visible mud or dirt track-out onto adjacent public roads shall be removed using

wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

- 4) All vehicle speeds on unpaved roads shall be limited to 15 mph.
- 5) All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- 6) Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- 7) All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- 8) Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Payment. Full compensation for conforming to the requirements of this section, "Air Quality" shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be allowed therefor.

10-4. Health and Safety Plan

In accordance with Section 5-11 of these Specifications, the Contractor shall be responsible for soil disposal at the site. The Contractor shall assume that all soil has levels of contamination that exceeds environmental screening levels listed by the California Regional Water Quality Control Board for residential land use or commercial/industrial land use, but the soil is non-regulated and non-hazardous. Thus, all material shall be disposed of in an appropriate landfill.

The Contractor shall retain a qualified vendor to prepare a site-specific Health and Safety Plan (HSP). The vendor shall complete analytical testing of soil conditions found at the site for: lead, hydrocarbons, metals, pesticides, polychlorinated biphenyls, and any other contaminate deemed necessary by the document's author.

The HSP area shall be limited to the top of bluff adjacent to State Route 1, along the pathway between the top of bluff and mid bluff, and within the mid bluff.

The HSP shall establish soil management and control specifications for excavation, grading, soil disposal, and health and safety provisions for monitoring the exposure of construction workers to contaminants. The HSP shall be submitted to the Engineer for review and approval.

Payment. The contract lump sum price paid for "Prepare Health and Safety Plan" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in testing soils as well as preparing and implementing the plan, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

10-5. Environmental Training

The County will provide introductory training to the Contractor, his or her employees and subcontractors at the job site before work commences for any project with resource agency permits. The training will provide background information on sensitive species, permit requirements and site-specific water quality issues.

Payment. Full compensation for conforming to the requirements of this section, "Environmental Training" shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be allowed therefor.

END OF SECTION

compacted but placed to minimize the possibility of excessive settlement. The Contractor may water soils to encourage compaction. Do not plant the bioretention area until the process of natural compaction is complete, as determined by the Engineer.

Planting of the bioretention area shall be as shown on the Plans and as detailed in Section 20 of these Special Provisions.

Payment - The contract price paid per cubic yard for "Bioretention Soil" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing bioretention soil, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

61-3 Seepage Zone Mitigation

During excavation of the slide repair, the Contractor shall repair zones of seepage if found and as directed by the Engineer. This work shall include preparation for installation a subdrain as defined in Section 68 of these Special Provisions and placement of at least 2 feet thick layer of Class II permeable material as described in Section 61-1 of these Special Provisions.

Payment - The contract price paid per linear foot for "Seepage Zone Mitigation" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in removing groundwater, complete in place, including placement of the subdrain, cleanouts, outfalls, and Class II permeable material as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

END OF SECTION

73-3. Concrete **Stringer with Wood Tread** Stairs

In the locations shown on the Plans, the Contractor shall construct **concrete stringers with wood stairs treads**. The 28-day compressive strength shall be 3,600 psi or greater. The combined aggregate grading shall be either the 1-inch maximum grading, the 1/2-inch maximum grading, or the 3/8-inch maximum grading and shall conform to the requirements in Section 90 of the Standard Specifications.

Reinforcement shall conform to the provisions in Section 52, "Reinforcement," of the Standard Specifications and these Specifications. Bar reinforcement to be epoxy coated shall conform to the ASTM designation and grade required as indicated in the Plans.

Concrete finish shall be as shown in the Plans. Cure concrete consistent with Section 73-1.03E of the Standard Specifications.

The Contractor shall install handrails along the stairs per the plans. See section 75-1 of these Special Provisions for handrails.

Each stair **tread** shall be topped with wood as shown on the Plans. **The wood shall be grade B Heart redwood. All fasteners shall be Type 316 stainless steel.**

The contract price paid per cubic yard for "**Wood Step Topped Stairs**" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing flatwork complete in place, including constructing handrails, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

END OF SECTION

- An overlook at the mid bluff near the bottom of the tail.

Prior to procuring materials, the Contractor shall provide shop drawings illustrating the materials and layout for each deck for the Engineer's review and approval.

The materials used shall comply with the following:

1. All decking shall be redwood.
 - a. Wood products must be certified by the Forest Stewardship Council (FSC) or USGBC-approved equivalent.
 - b. Posts and timbers shall be grade construction heart and shall be surfaced four sides.
 - c. Decking shall be grade B Heart.
2. Structural members not exposed to view shall be pressure treated lumber, type as recommended for the use category by the Western Wood Preservatives Institute. Hand-apply chemical treatment to all cut surfaces of lumber.
3. Fasteners used shall be type 316 stainless steel.
4. Connectors shall be stainless steel.
5. Concrete shall comply with Section 73 of the Standard Specifications.

All concrete foundations shall be concrete cast into a drilled hole. All connections between wood and concrete as well as wood and wood shall be by metal connector with fasteners.

The guardrails are paid under Section 75-2 of these Special Provisions.

The construction of the decks shall include weathered steel plates as shown on the Plans and as required in Section 75-5 of these Special Provisions.

All concrete footings shall be imbedded to at least 30 inches below undisturbed soil.

Payment. The contract price paid per square foot for "Wood Decking," includes full

SECTION 79 WATER PIPELINE

The Contractor shall install potable water pipeline along the alignment shown on the Plans. The installation shall be by trenchless methods, such as horizontal directional boring. The pipe shall be a 4 inch in diameter C900 fusible polyvinyl chloride pipe conforming to ASTM D2241.

The Contractor may request to install the pipeline by conventional open trenching methods. Using this approach, the Contractor shall not damage existing vegetation. The Contractor shall provide their written approach to installation by open trenching for approval by the Engineer.

The Contractor shall trench bore and receiving pits as required to support the installation. Upon completion of installation, the Contractor shall restore all excavations to existing or better condition.

Upon completion of installation, the Contractor shall apply 100 PSI of air pressure to the line and hold for a period of 2 hours. At the end of the test, there shall be no reduction in pressure.

The Contractor shall record the two end points of the water line providing coordinates in northings and eastings to the hundreds place.

Payment. The contract price paid per linear foot for "4" ~~6~~" Water Pipeline" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in placing the pipeline, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

END OF SECTION

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accordance with the utility company's standard specifications.

All vaults shall be pre-cast concrete.

The PG&E #7 vault shall be 4686-Slice Heavy Traffic Assy - 100010963 - 04-1441.

The Contractor shall clear and grub, saw cut, remove asphalt, remove concrete, excavate, dispose of spoils and deleterious materials, and backfill as required to install the utility vault. It shall be the Contractor's responsibility to set the vault at the appropriate elevation to conform to the final condition.

Prior to installation, the Contractor should obtain approval from each utility company's inspector that the utility vault is acceptable. No backfill should be completed without obtaining the utility company inspector's approval.

All conduits entering vaults and boxes shall have bell ends secured to the vault or box by concrete (outside wall) and grouting (inside wall). Concrete shall be 5-sack mix and grout shall be standard bag mix. Ground rods are to be installed by the Contractor in all primary vaults and pads as directed by the inspector and conform to PG&E Standard Drawing No. 013109.

Payment - The contract unit price paid for each "PG&E #7 Vault", "AT&T 30x48 Pull Box", "AT&T 30x60 Pull" and "Comcast Pull Box" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in placing the boxes, complete in place, including, clearing and grubbing, trenching, providing and placing boxes, backfilling, compacting, and surface restoration, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

END OF SECTION

them on at low light levels, generally at sunset. This lighting control shall include a time clock that can automatically turn off the system. In addition, the Contractor shall install a manual switch as described in Section 87-2 of these Specifications to manually turn off the system.

The Contractor shall cut a hole in the handrail as detailed in Section 75-1 of these Special Provisions to accommodate the light fixture. The resulting hole shall be smoothed so as there are no sharp corners. The Contractor shall install the mounts, conductors, AC to DC transformer, and fixtures consistent with the manufacturer's instructions.

Payment. The contract price paid per foot for "Handrail Lighting" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing lighting, complete in place, including, but not limited to, providing and installing the fixtures and conductors, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

87-4. Electric Vehicle Charging Station

The Contractor shall furnish and install a vehicle charging station that includes the following features:

- ~~A single pedestal with a standard SAE J1772™ Level 2 charging port with locking holsters, supplying up to 7.2kW.~~
- **As shown on the Plans, the Contractor shall provide seven (7) electric vehicle charging stalls. Provide three (3) single pedestals with two (2) standard SAE J1772™ Level 2 charging ports with locking holsters, supplying up to 7.2kW. Provide one (1) single pedestal with one (1) standard SAE J1772™ Level 2 charging port with locking holster, supplying up to 7.2kW. The unit price paid will be the same regardless of the number of holsters per charging station.**

- The charger shall operate on a 40 ampere 240-volt circuit.
- The charger shall be ENERGY STAR® certified.
- The chargers should be mounted on a freestanding bollard.
- All software to operate the charging station shall provide for upgrades over a wireless connection.
- Each charger shall provide a cord that is at least 23 feet long.

Approved vendors include the following: Flow, Enel X, Blink, EV Connect, and ChargePoint.

The Contractor shall procure all hardware required to install the electric vehicle charging station as well as a service plan that includes software upgrades and payment methods for a term of no less than 3 years.

The Contractor installing the charging station must be certified by the vendor of the charging station to install the unit. The Contractor shall provide documentation of said certification. All installation shall comply with the manufacturer's requirements. When complete, the Contractor shall certify that the standard 1-year warranty including parts and labor for any defect in manufacturing or workmanship is in effect.

The Contractor shall provide all operating documents to the County. In addition, the Contractor shall provide a one-hour training session on the use, operation, and maintenance of the charging station.

Payment - The contract unit price paid for each "Electric Vehicle Charging Station" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing electric vehicle charging stations, complete in place, including, installing the foundation and providing training, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

END OF SECTION

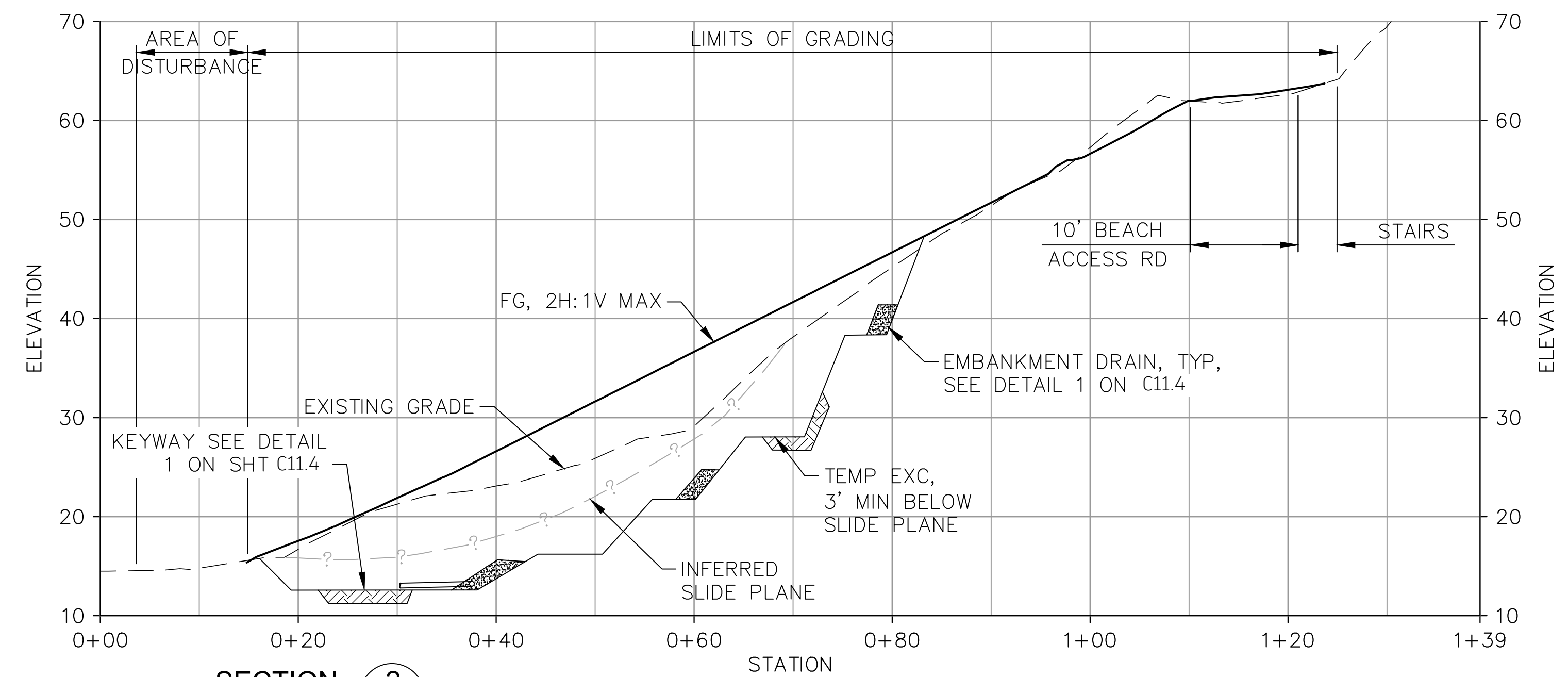
152 (rev)



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 DATE: 04/21/2023
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 DIRECTOR OF PUBLIC WORKS
 R. C. E. # 47882 / EXPIRES 12-31-2023



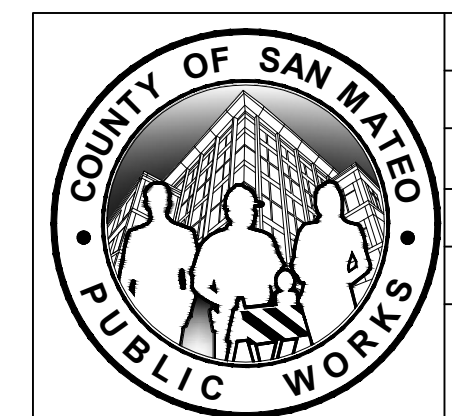
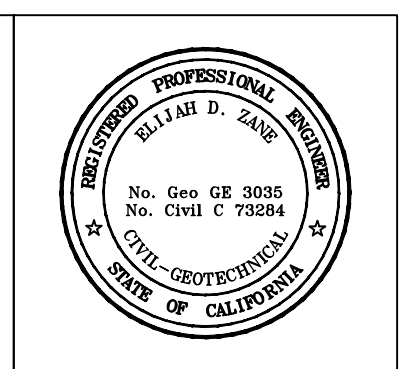
PLAN
 SCALE 1" = 10'
 1



SECTION
 SCALE 1" = 10'
 2

- NOTES:**
- EXCAVATION CONFIGURATION SHOWN IS PRELIMINARY. FINAL CONFIGURATION SHALL KEY ENGINEERED FILL 3 FEET INTO COMPETENT BEDROCK. THE DEPTH TO COMPETENT BEDROCK SHALL BE DETERMINED DURING CONSTRUCTION BY THE PROJECT GEOTECHNICAL ENGINEER OR GEOLOGIST.
 - FACE OF KEYWAY TO BE EMBEDDED 3 FEET MINIMUM INTO COMPETENT BEDROCK ON THE DOWNHILL SIDE AS DETERMINED BY THE PROJECT GEOTECHNICAL ENGINEER OR GEOLOGIST.
 - SEEPAGE ZONES ENCOUNTERED DURING EXCAVATION FOR THE LANDSLIDE MITIGATION SHALL BE EXCAVATED IN CONFORMANCE WITH NOTE 1 AND A SUBDRAIN INSTALLED AS OUTLINED ON DETAIL 1 ON SHEET C11.4 "EMBANKMENT DRAIN." ALL IDENTIFIED SEEPAGE ZONES SHALL RECEIVE 100 PERCENT COVERAGE OF A 2 FOOT THICK LAYER OF CALTRANS CLASS 2 PERMEABLE MATERIAL. THE PERFORATED SUBDRAIN PIPE SHALL BE CONNECTED TO THE SUBDRAIN OUTFALL SYSTEM.

APPROVED DATE: _____
 ELIJAH ZANE, P.E., G.E.
 R.C.E. # C73284 EXPIRES 12/31/2024



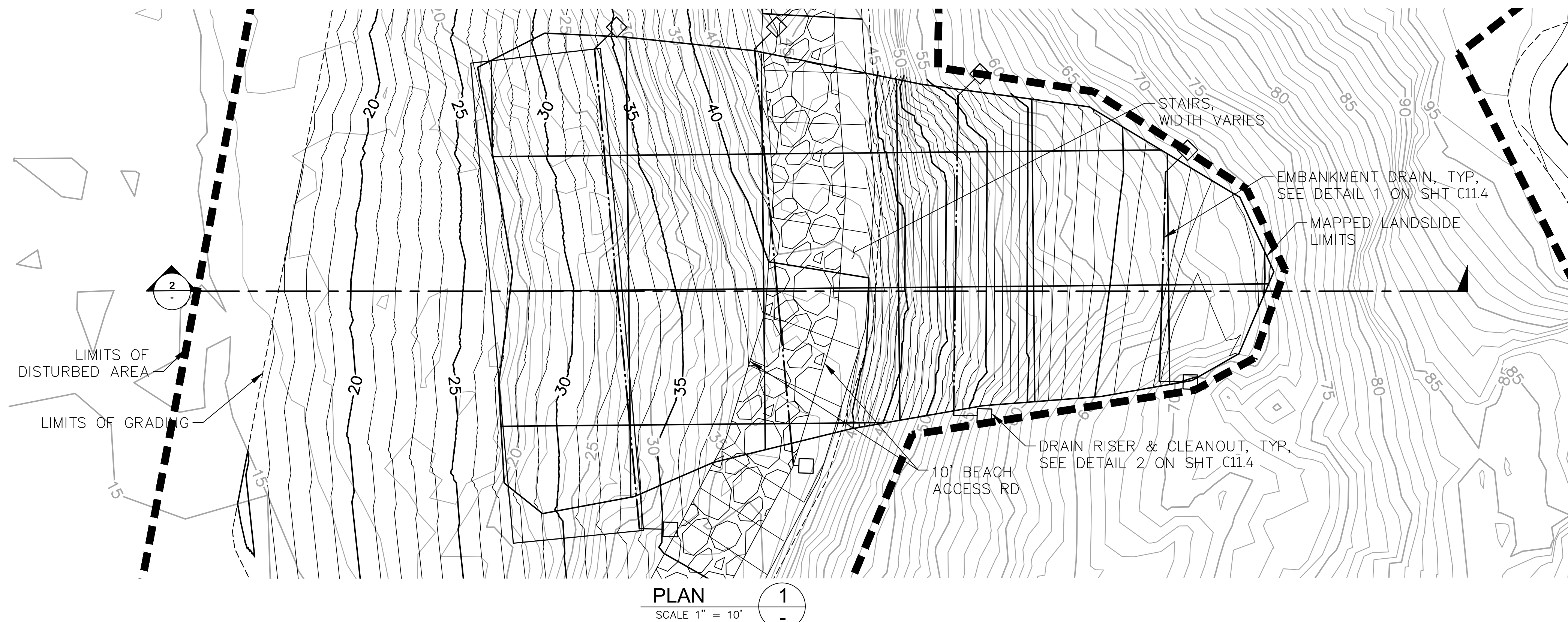
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CHECKED BY: CE&G (CRN)		MITIGATION SECTIONS		DATE: 04/21/2023
DRAWN BY: EDZ		SAN MATEO COUNTY PARKS		FILE NO. 2019-20-006
1	5/17/2023	ANN MADER STILLMAN, DIRECTOR OF PUBLIC WORKS COUNTY SAN MATEO		555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063
REVISION	DATE			C11.1(REV) SHEET 40 OF 124



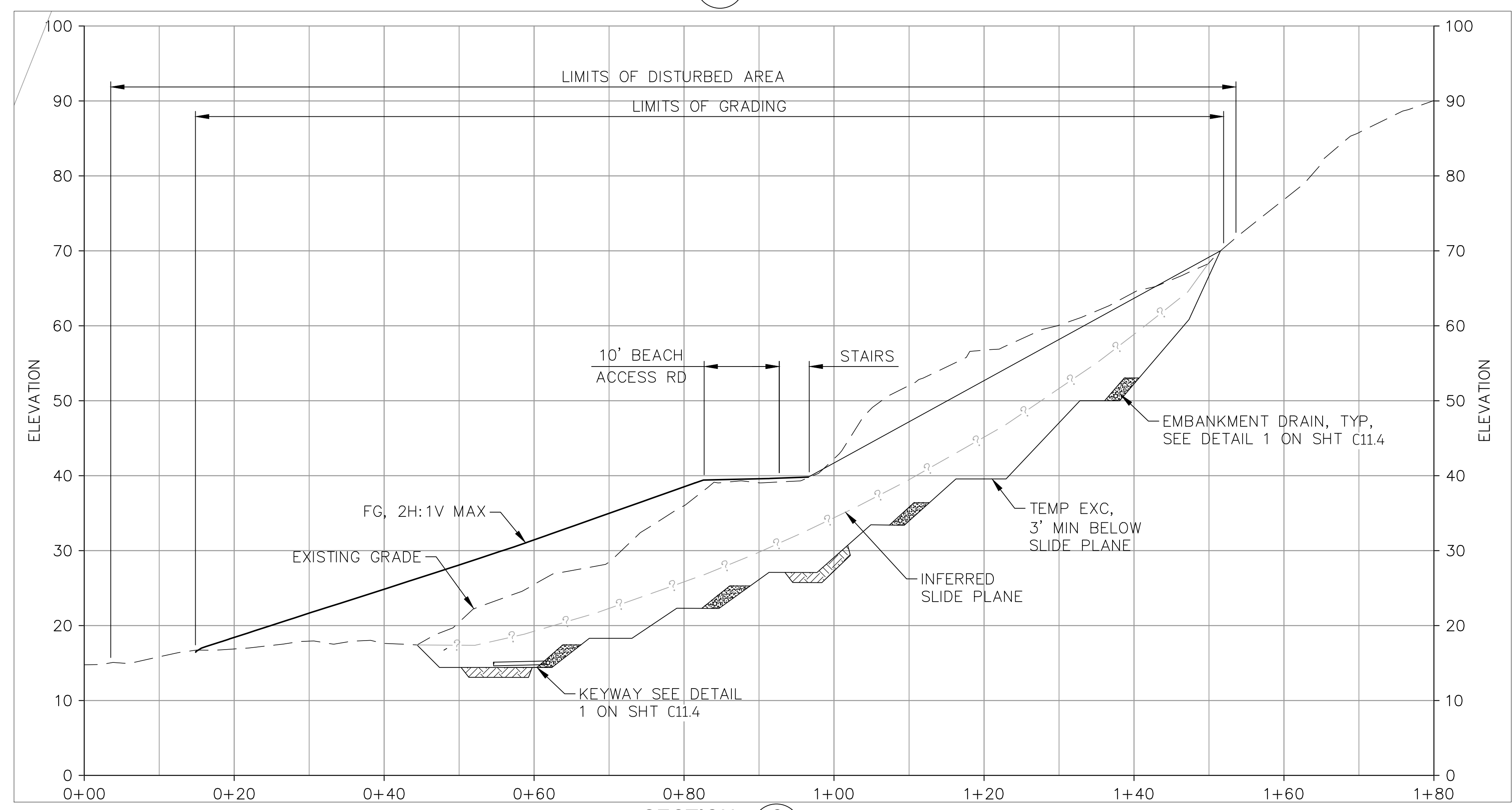
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 DATE: 04/21/2023
 ANN MADER STILLMAN,
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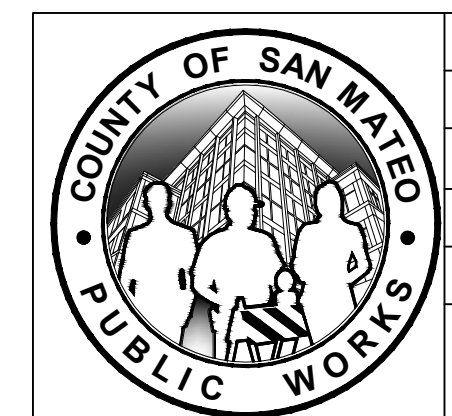
PLAN 2
 SCALE 1" = 10'



SECTION 2
 SCALE 1" = 10'

- NOTES:
- EXCAVATION CONFIGURATION SHOWN IS PRELIMINARY. FINAL CONFIGURATION SHALL KEY ENGINEERED FILL 3 FEET INTO COMPETENT BEDROCK. THE DEPTH TO COMPETENT BEDROCK SHALL BE DETERMINED DURING CONSTRUCTION BY THE PROJECT GEOTECHNICAL ENGINEER OR GEOLOGIST.
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APPROVED DATE: _____
 ELIJAH ZANE, P.E., G.E.
 R.C.E. # C73284 EXPIRES 12/31/2024



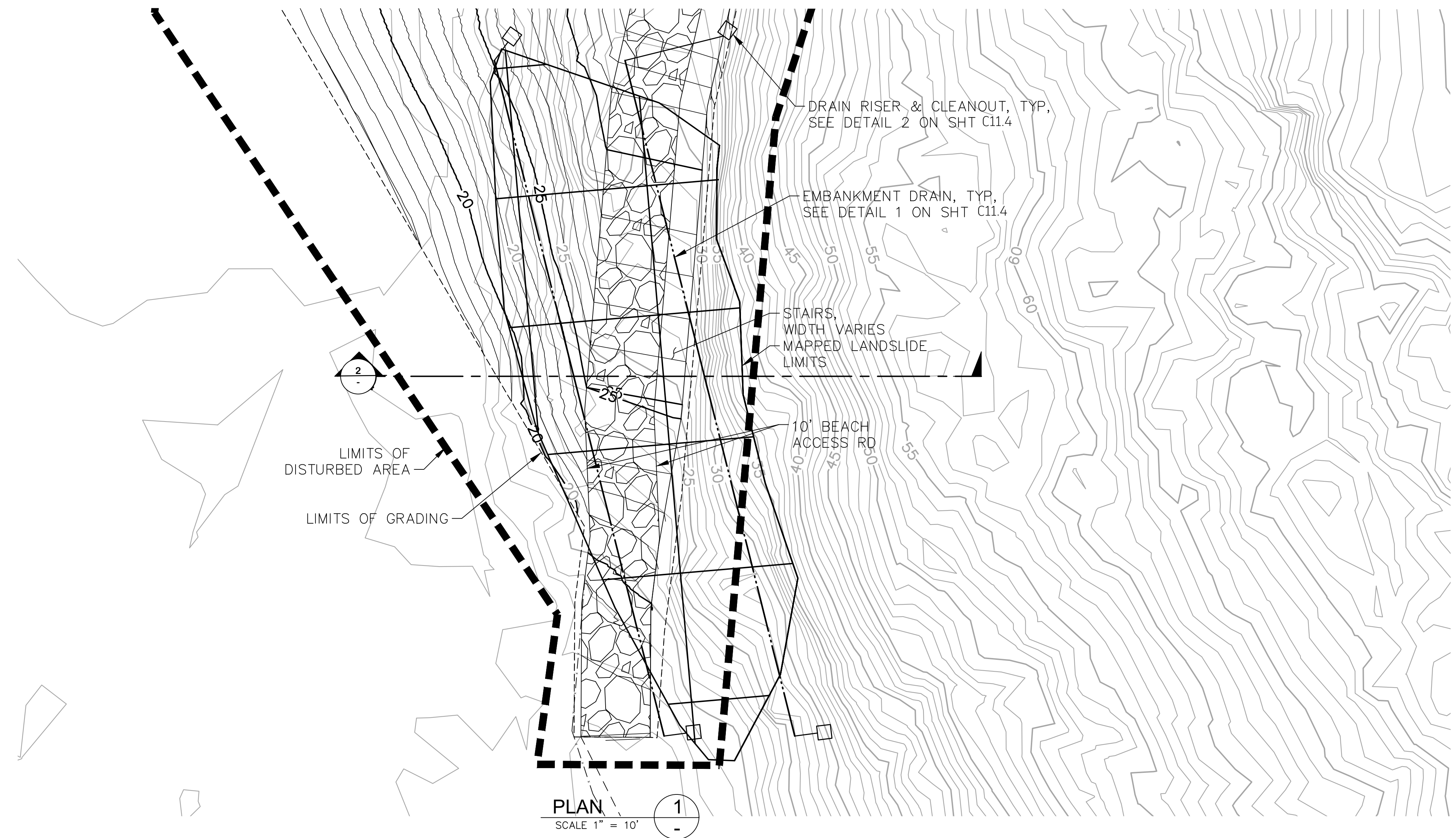
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CHECKED BY: CE&G (CRN)		SAN MATEO COUNTY PARKS		DATE: 04/21/2023
DRAWN BY: EDZ		ANN MADER STILLMAN, DIRECTOR OF PUBLIC WORKS COUNTY SAN MATEO		FILE NO.: 2019-20-006
1	5/17/2023	555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063		C11.2(REV) SHEET 41 OF 124
REVISION	DATE	FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES		

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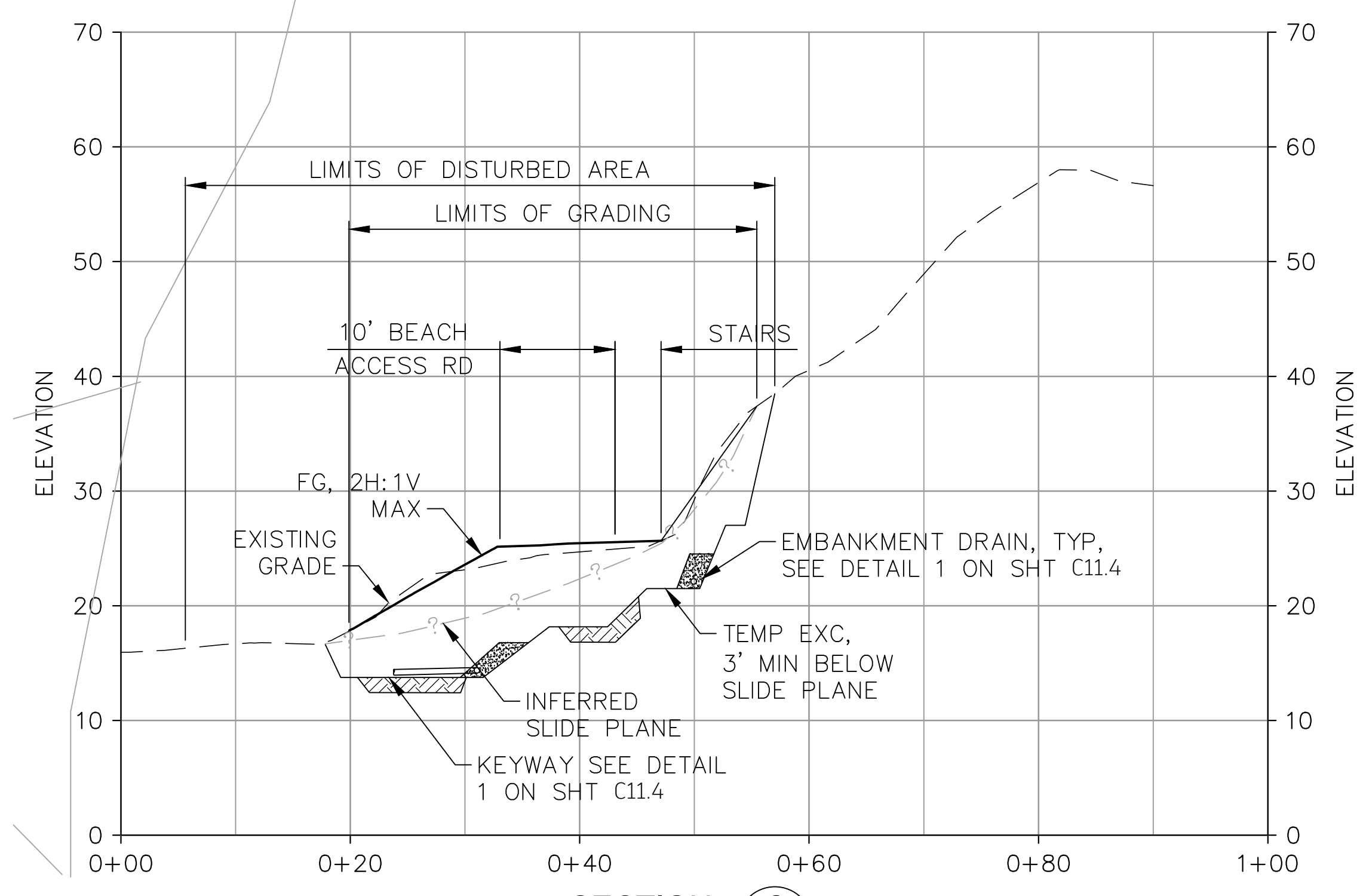


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 DATE: 04/21/2023

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 DIRECTOR OF PUBLIC WORKS
 R. C. E. # 47882 / EXPIRES 12-31-2023



PLAN
 SCALE 1" = 10'



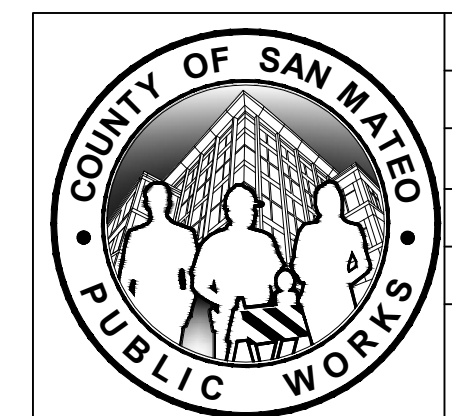
SECTION
 SCALE 1" = 10'

NOTES:

- EXCAVATION CONFIGURATION SHOWN IS PRELIMINARY. FINAL CONFIGURATION SHALL KEY ENGINEERED FILL 3 FEET INTO COMPETENT BEDROCK. THE DEPTH TO COMPETENT BEDROCK SHALL BE DETERMINED DURING CONSTRUCTION BY THE PROJECT GEOTECHNICAL ENGINEER OR GEOLOGIST.
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APPROVED DATE: _____

 ELIJAH ZANE, P.E., G.E.
 R.C.E. # C73284 EXPIRES 12/31/2024



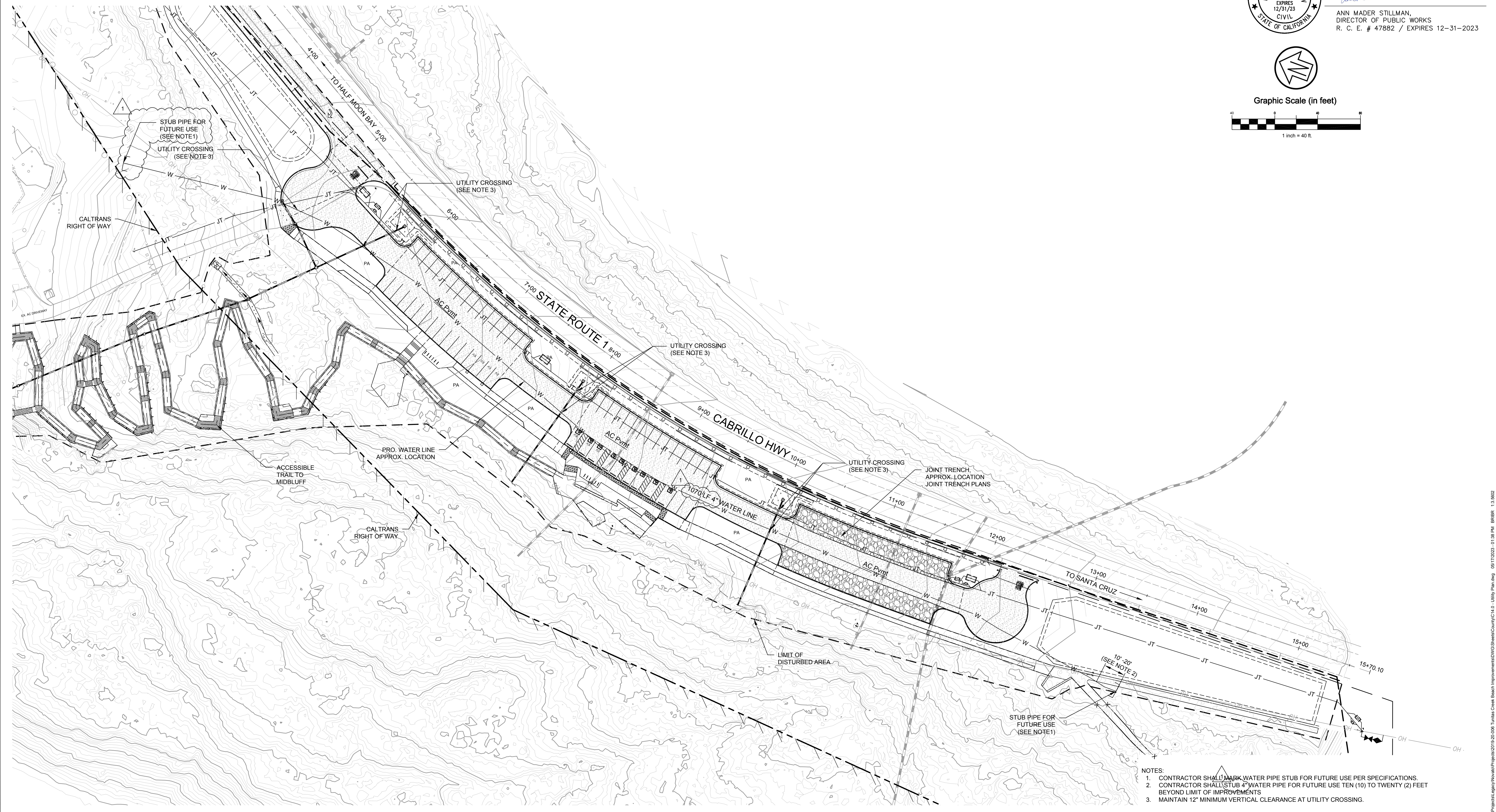
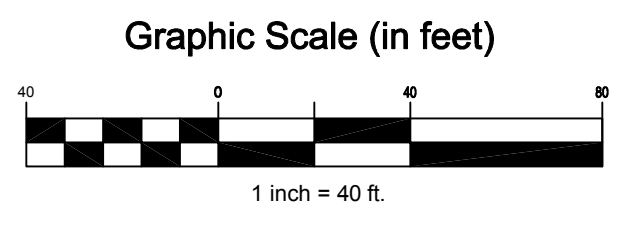
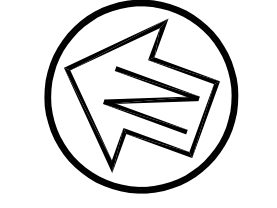
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CHECKED BY: CE&G (CRN)		MITIGATION SECTIONS		DATE: 04/21/2023
DRAWN BY: EDZ		SAN MATEO COUNTY PARKS		FILE NO.: 2019-20-006
1	5/17/2023	ANN MADER STILLMAN, DIRECTOR OF PUBLIC WORKS COUNTY SAN MATEO		555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063
REVISION	DATE			C11.3(REV) SHEET 42 OF 124



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 DATE: 04/21/2023
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 DIRECTOR OF PUBLIC WORKS
 R. C. E. # 47882 / EXPIRES 12-31-2023



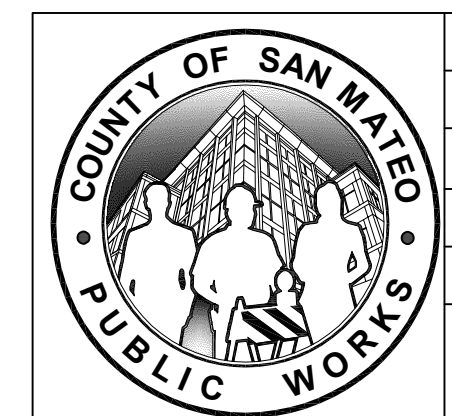
- NOTES:
1. CONTRACTOR SHALL MARK WATER PIPE STUB FOR FUTURE USE PER SPECIFICATIONS.
 2. CONTRACTOR SHALL STUB 4" WATER PIPE FOR FUTURE USE TEN (10) TO TWENTY (2) FEET BEYOND LIMIT OF IMPROVEMENTS
 3. MAINTAIN 12" MINIMUM VERTICAL CLEARANCE AT UTILITY CROSSING.

CSW | ST2

CSW/Stuber-Stroeh Engineering Group, Inc.
 Civil & Structural Engineers | Surveying & Mapping | Environmental Planning
 Civil Planning | Construction Management
 504 Redwood Blvd, Suite 310
 Novato, CA 94947
 tel: 415.883.9850
 fax: 415.883.9835
 http://www.cswst2.com © 2013

APPROVED DATE: _____

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 R.C.E. # 058660 EXPIRES 12/31/2024



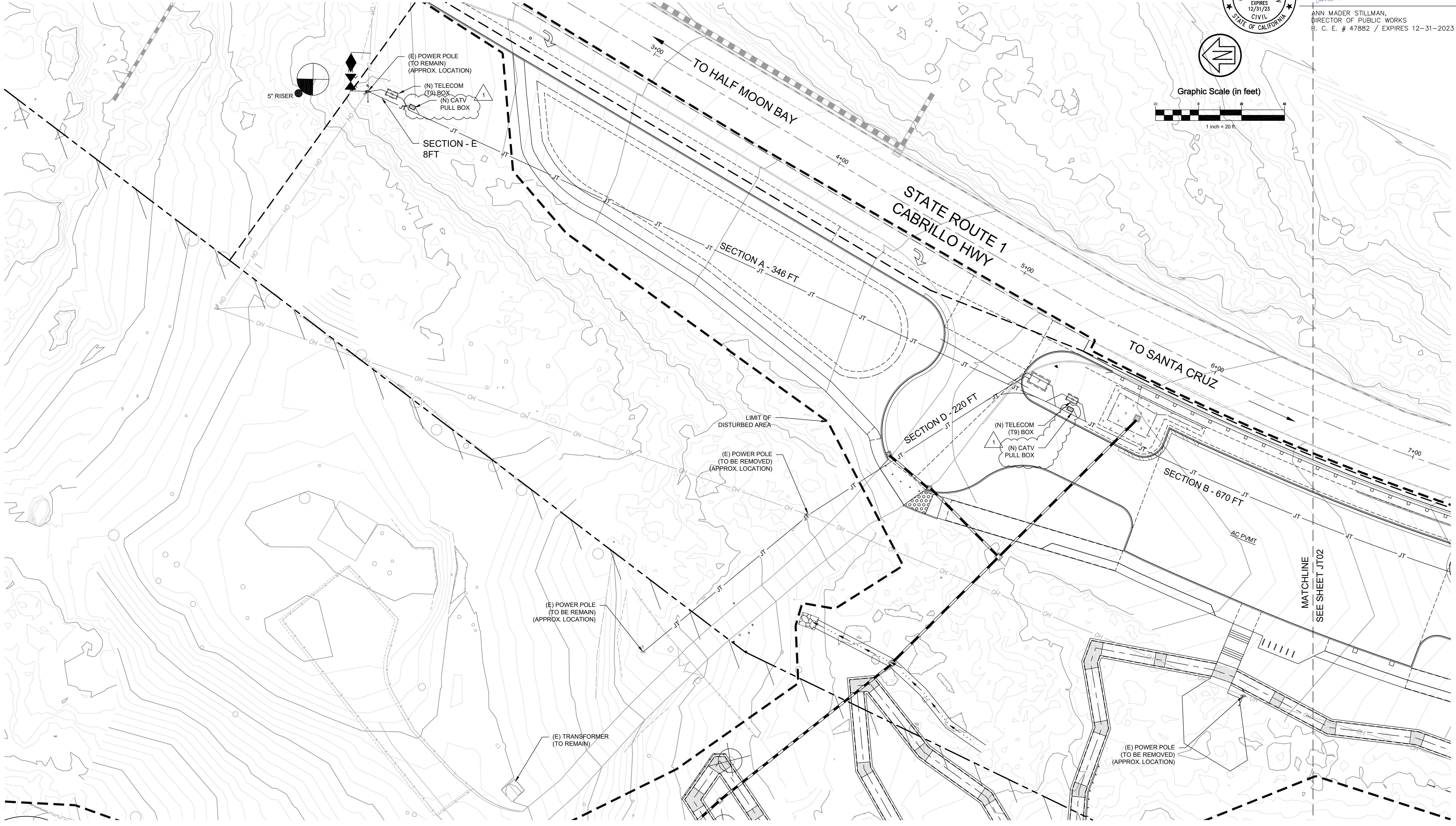
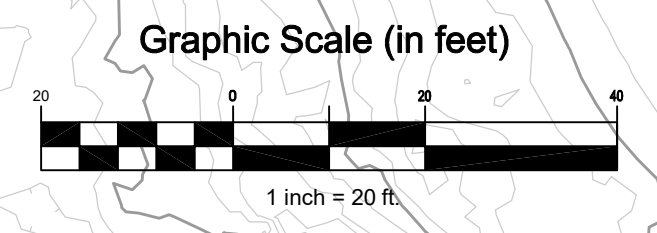
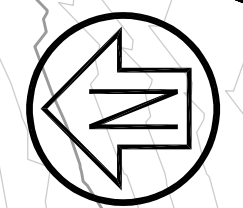
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CHECKED BY: CSW/ST2 (JAH)		UTILITY PLAN		DATE: 04/21/2023
DRAWN BY: MTM		SAN MATEO COUNTY PARKS		FILE NO.: E4995
1	5/17/2023	ANN MADER STILLMAN, DIRECTOR OF PUBLIC WORKS COUNTY SAN MATEO		555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063
REVISION	DATE			C14.0(REV) SHEET 49 OF 124



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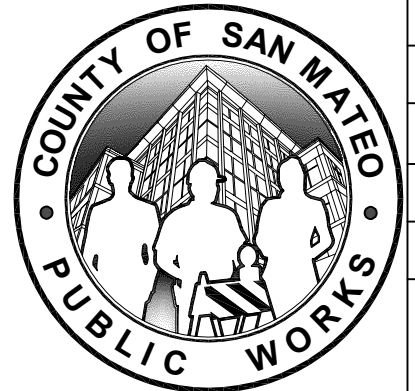


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 Civil & Structural Engineers | Surveying & Mapping | Environmental Planning
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 www.cswst2.com

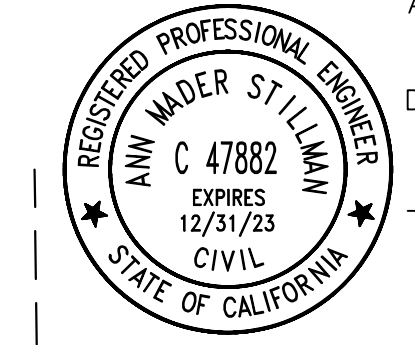
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 R.C.E. # 058660 EXPIRES 12/31/2024



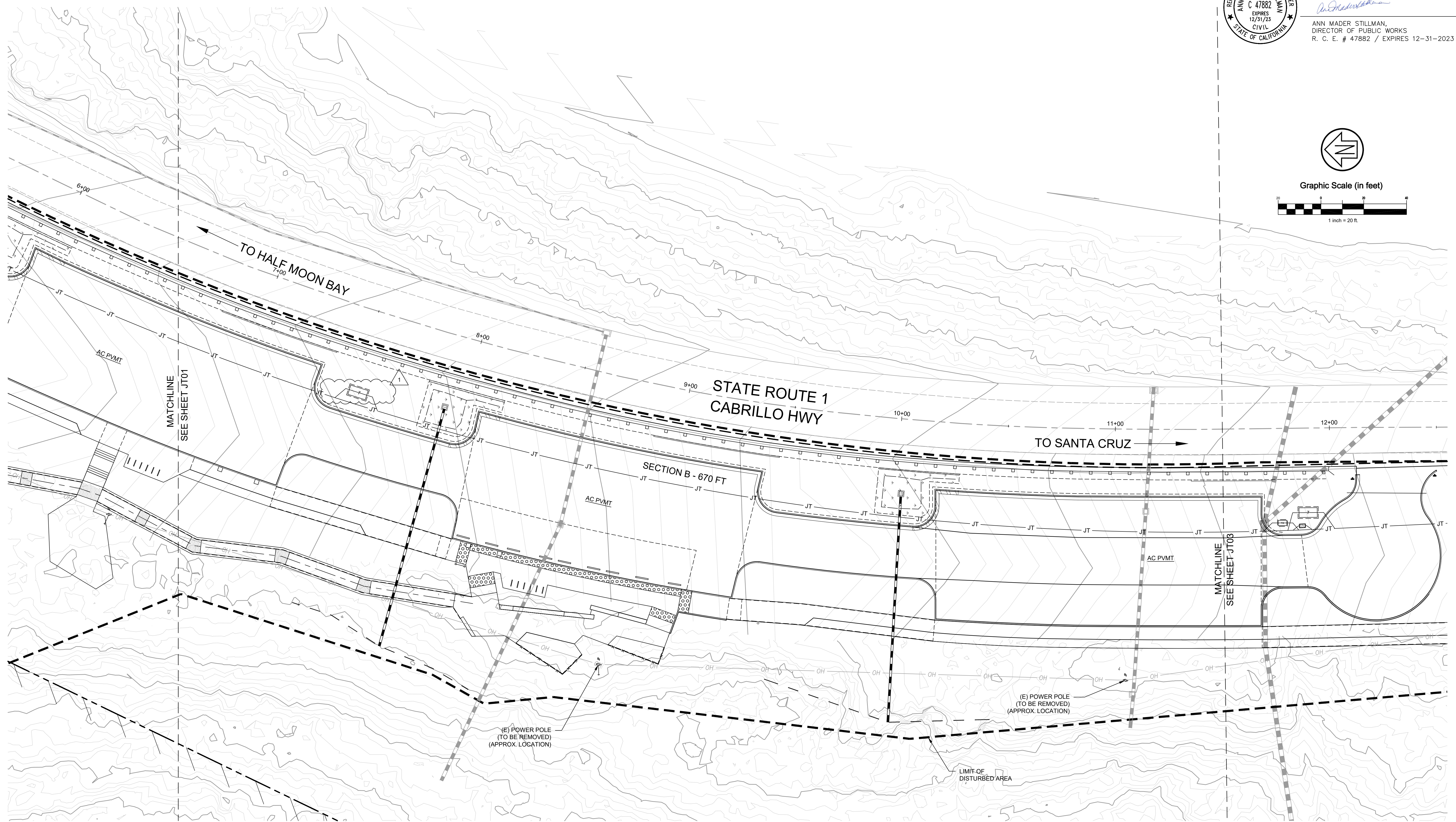
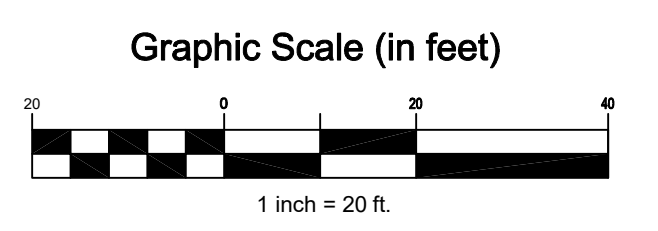
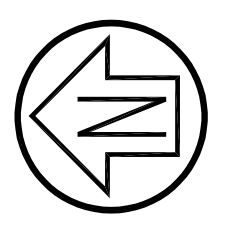
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DRAWN BY: MTM		SAN MATEO COUNTY PARKS		FILE NO.: E4995
1	5/17/2023	ANN MADER STILLMAN, DIRECTOR OF PUBLIC WORKS COUNTY SAN MATEO		555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063
REVISION	DATE			JT01 (REV) SHEET 61 OF 124



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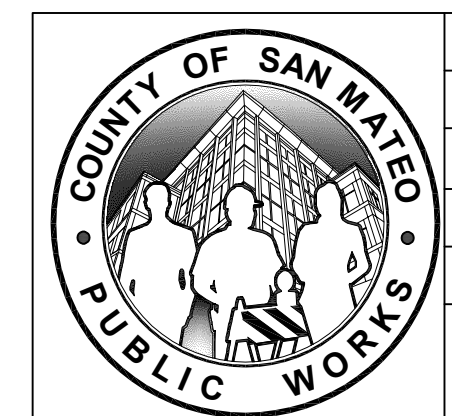
APPROVED:
 DATE: 04/21/2023
 ANN MADER STILLMAN,
 DIRECTOR OF PUBLIC WORKS
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APPROVED DATE:

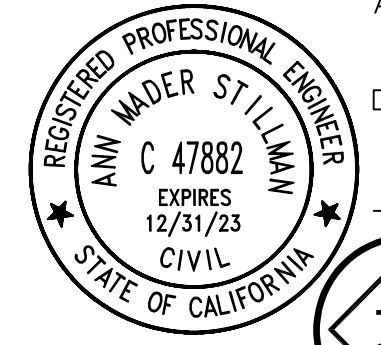
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 R.C.E. # 058660 EXPIRES 12/31/2024



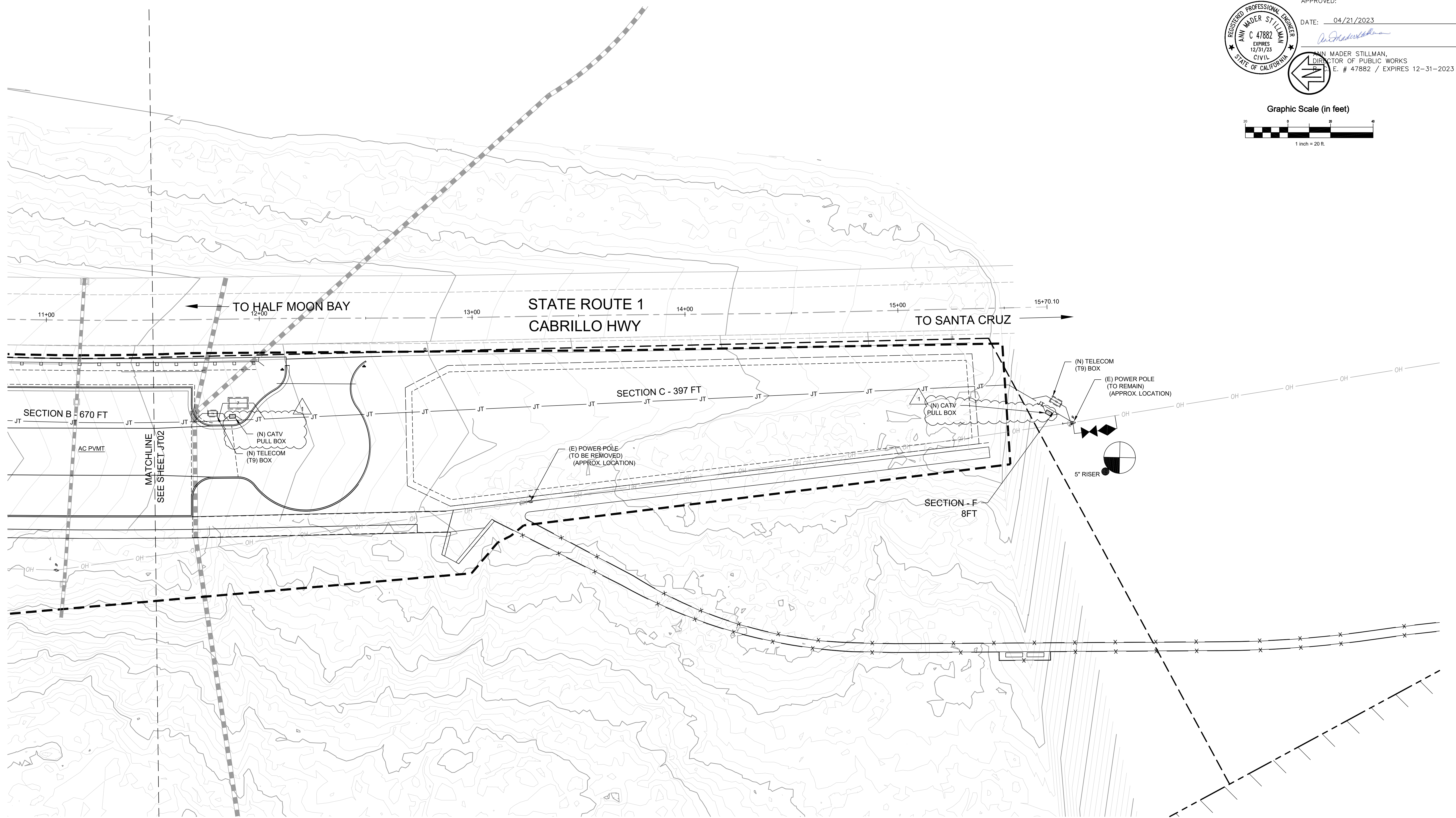
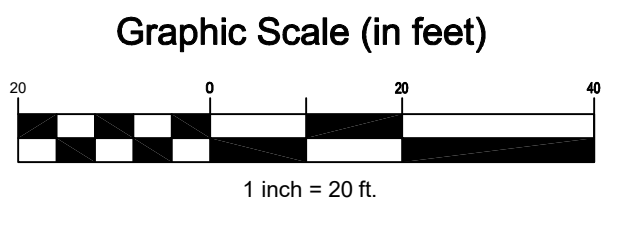
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CHECKED BY: CSW/ST2 (JAH)		JOINT TRENCH PLAN		DATE: 04/21/2023
DRAWN BY: MTM		SAN MATEO COUNTY PARKS		FILE NO.: E4995
1	5/17/2023	ANN MADER STILLMAN, DIRECTOR OF PUBLIC WORKS COUNTY SAN MATEO		555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063
REVISION	DATE			JT02 (REV) SHEET 62 OF 124



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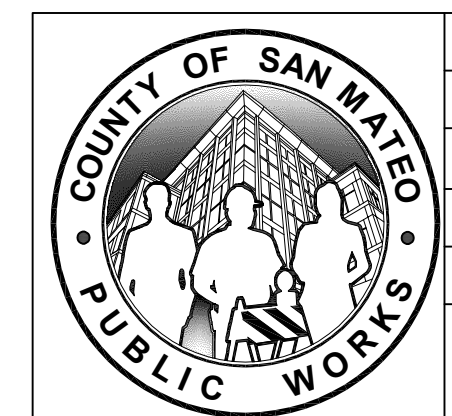


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 DATE: 04/21/2023
 ANN MADER STILLMAN,
 DIRECTOR OF PUBLIC WORKS
 P.E. # 47882 / EXPIRES 12-31-2023



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 504 Redwood Blvd, Suite 310 Novato, CA 94947
 tel: 415.883.9850 fax: 415.883.8835
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 R.C.E. # 058660 EXPIRES 12/31/2024

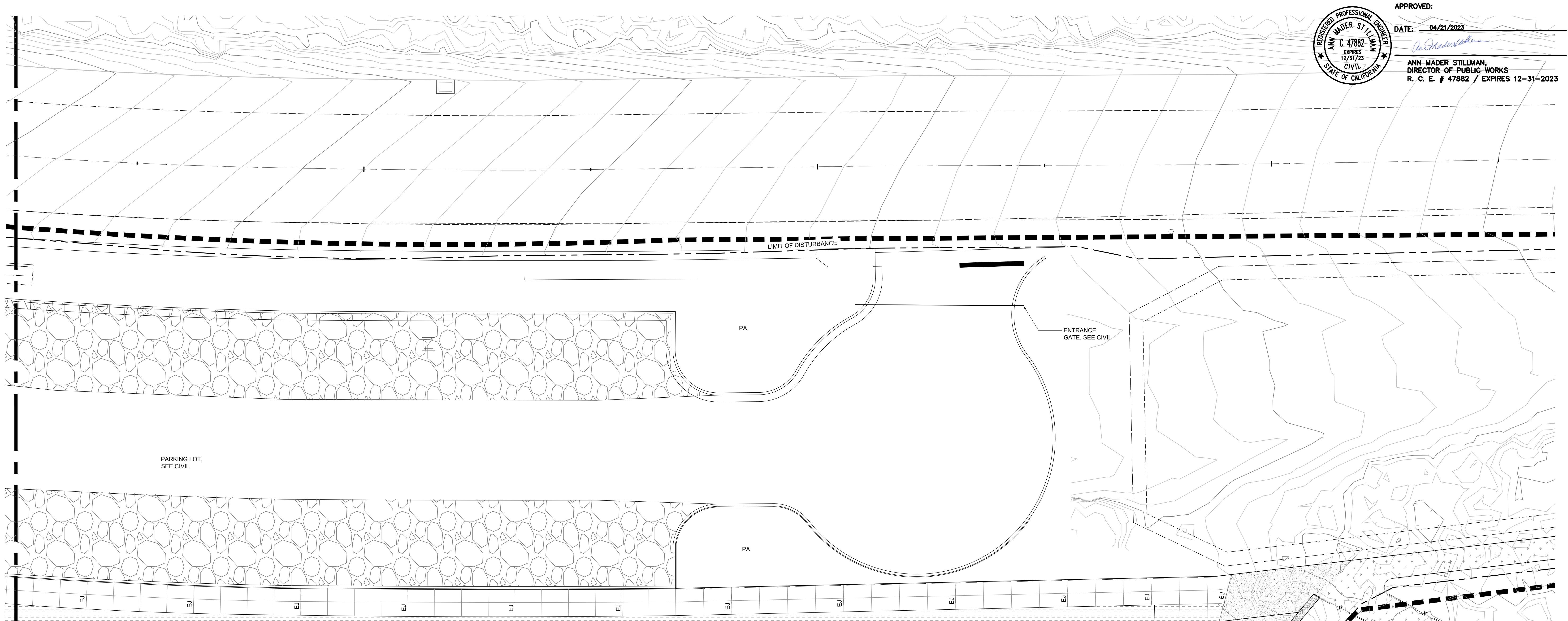


DESIGNED BY: CSW/ST2 (BRB)		TUNITAS CREEK BEACH IMPROVEMENT PROJECT		SCALE: 1" = 20'
CHECKED BY: CSW/ST2 (JAH)		JOINT TRENCH PLAN		DATE: 04/21/2023
DRAWN BY: MTM		SAN MATEO COUNTY PARKS		FILE NO.: E4995
1	5/17/2023	ANN MADER STILLMAN, DIRECTOR OF PUBLIC WORKS COUNTY SAN MATEO		555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063
REVISION	DATE			
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES		0 1 2 3 4		
				JT03 (REV) SHEET 63 OF 124

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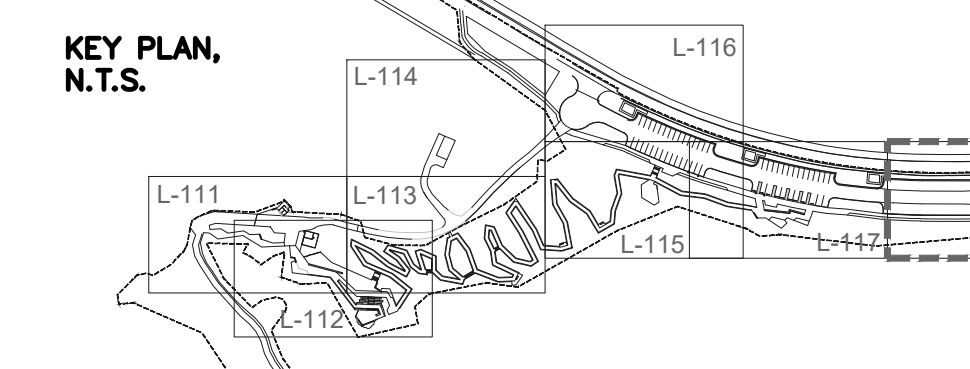
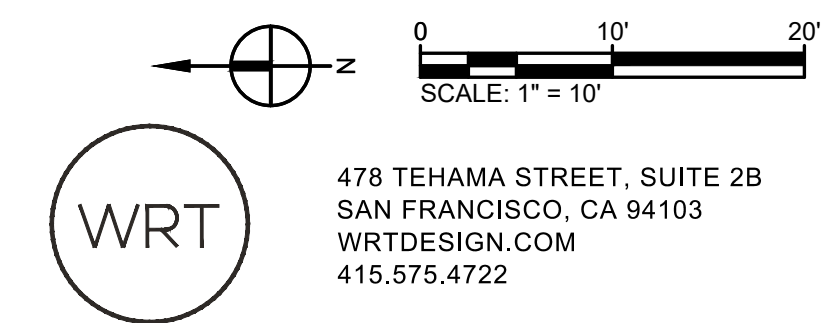
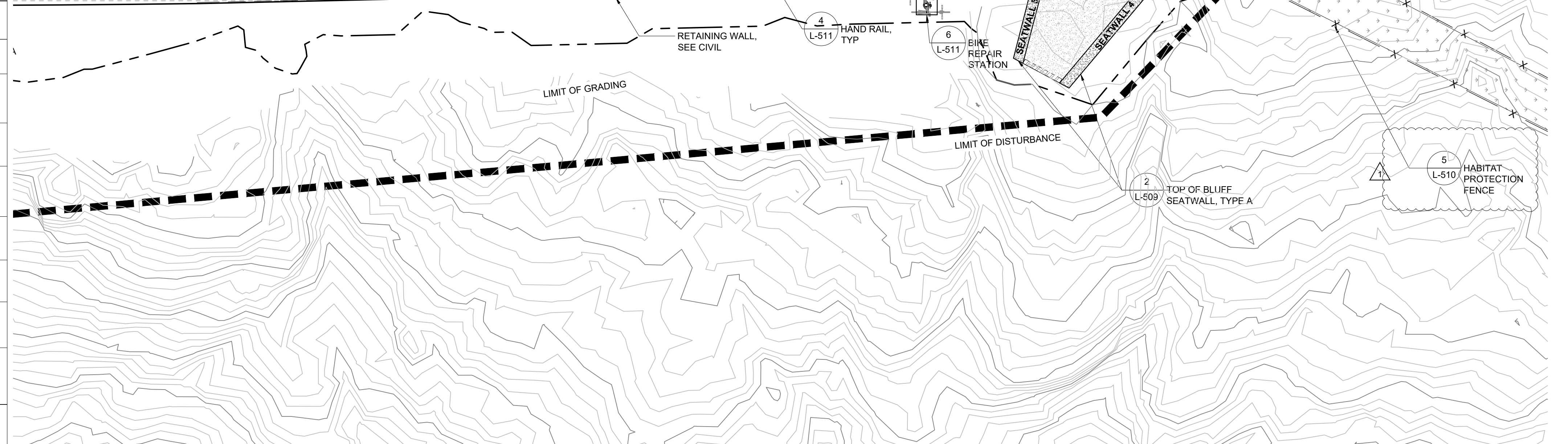
APPROVED:
 DATE: 04/21/2023
 ANN MADER STILLMAN,
 DIRECTOR OF PUBLIC WORKS
 R. C. E. # 47882 / EXPIRES 12-31-2023



LEGEND

	C.I.P. CONCRETE - TYPE A BROOM FINISH 1 / L-501		WOOD DECKING L-504
	C.I.P. CONCRETE - TYPE B EXPOSED AGGREGATE FINISH 1 / L-501		STABILIZED DECOMPOSED GRANITE 5 / L-501
	ADMIXTURE - BOUND DECOMPOSED GRANITE PAVING 3 / L-501		CLASS 2 AGGREGATE BASE SEE CIVIL
	NATIVE SOIL TRAIL 4 / L-501		MULCH

	STEEL EDGING
	BENT STEEL PLATE AT DECK
	GUARDRAIL
	HANDRAIL AT AMPHITHEATER
	HANDRAIL AT PEDESTRIAN STAIR
	HANDRAIL AT PEDESTRIAN PATH
	GUARDRAIL AT PEDESTRIAN PATH
	TOE RAIL
	HABITAT PROTECTION FENCE
	RETAINING WALL



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APPROVED DATE:
 JOHN GIBBS
 JOHN GIBBS
 # 4417 EXPIRES 06/30/2024

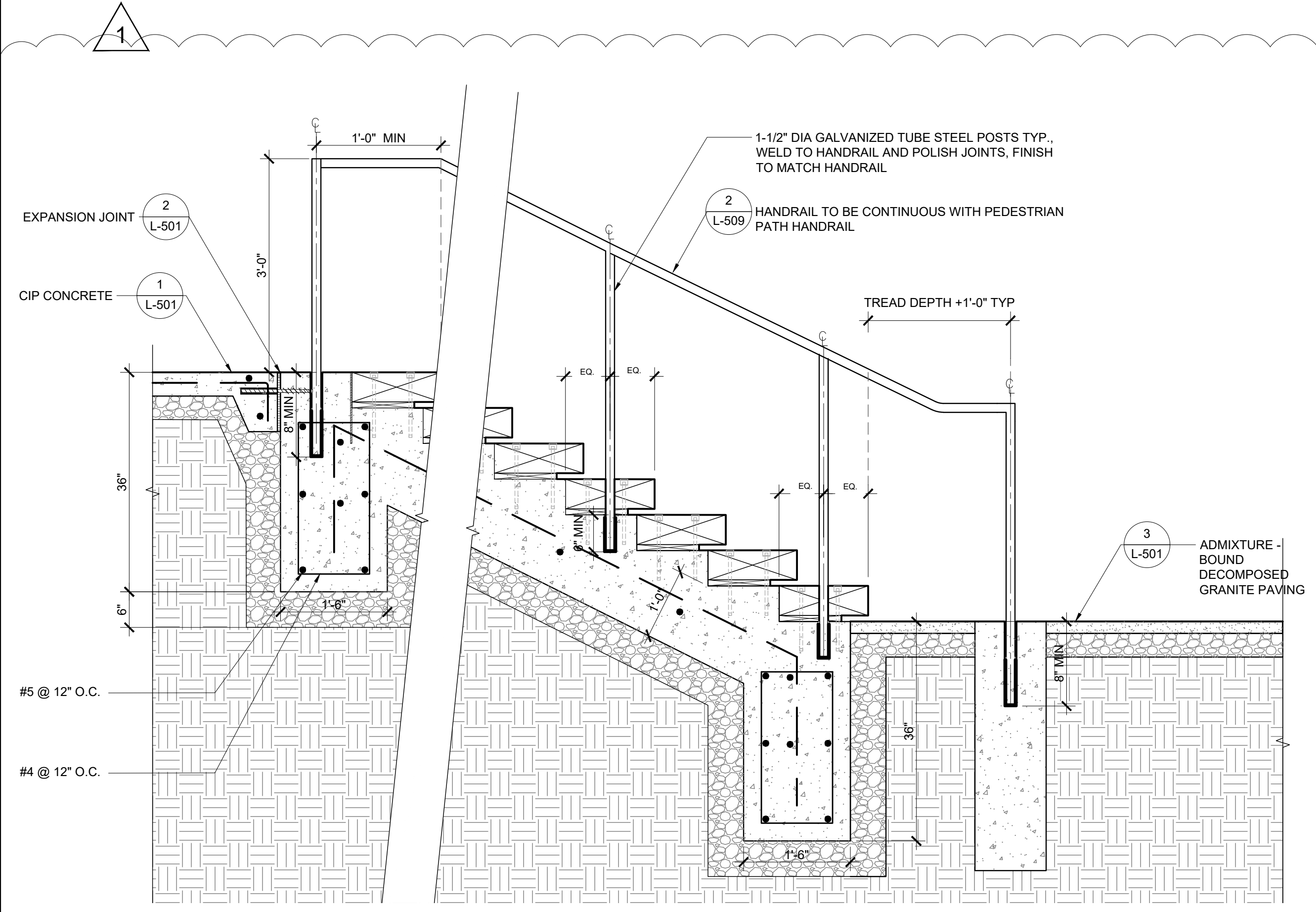


DESIGNED BY: CSW/ST2 (BRB)		TUNITAS CREEK BEACH IMPROVEMENT PROJECT		SCALE:
CHECKED BY: CSW/ST2 (JAH)		MATERIALS PLAN 8		DATE: 04/21/2023
DRAWN BY: MTM		SAN MATEO COUNTY PARKS		FILE NO.: E4995
1	5/17/2023	ANN MADER STILLMAN, DIRECTOR OF PUBLIC WORKS COUNTY SAN MATEO		555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063
REVISION	DATE			L-118 (REV) SHEET 74 OF 124
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES				
0 1 2 3 4				

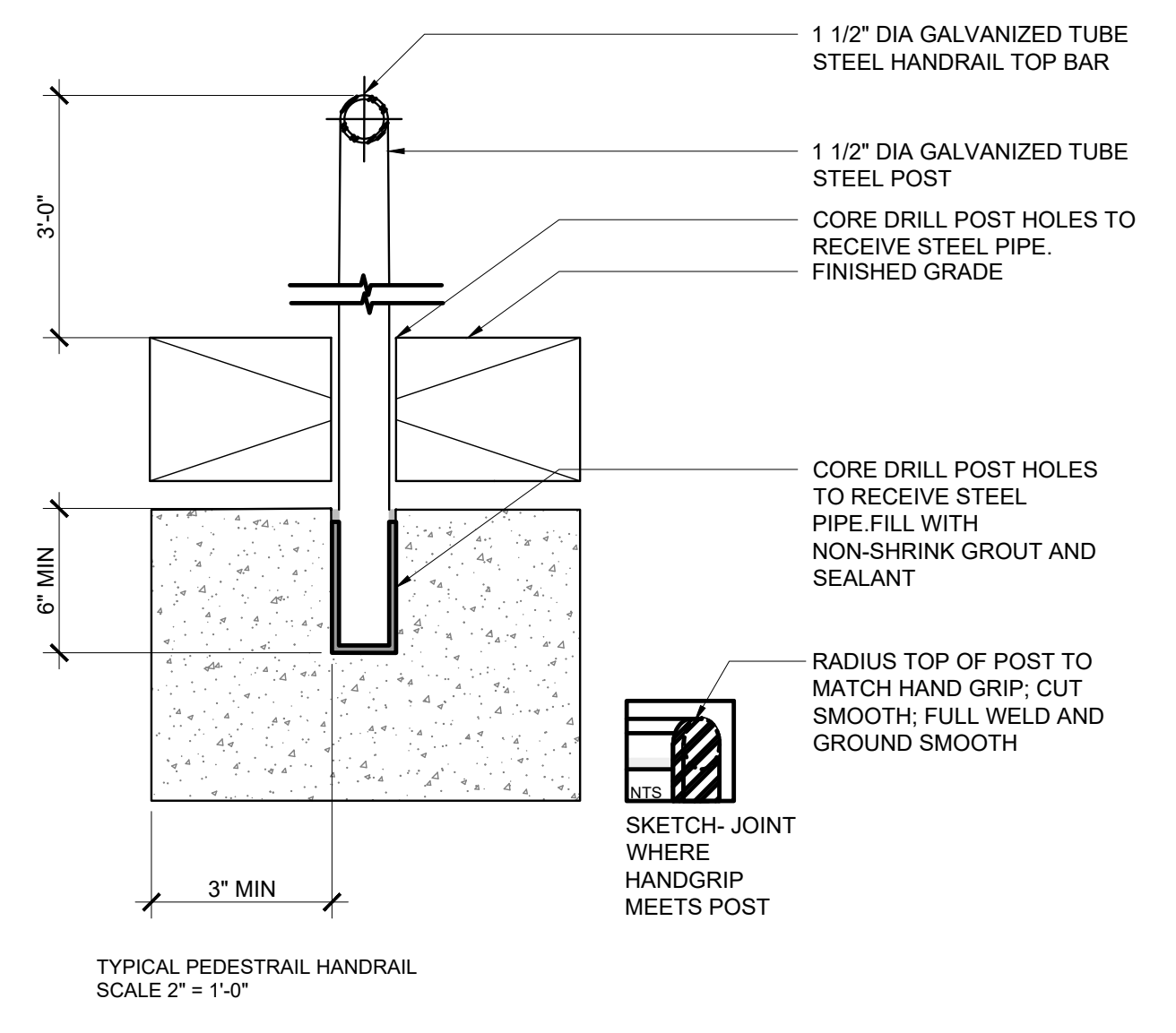
N:\00000337\tunitas creek beach improvement project\4-ACAD\5-consultation\documentation\sheet\110 MATERIALS PLAN.dwg 05/17/2023 - 11:53 AM (jru 1:3, 5/2021)



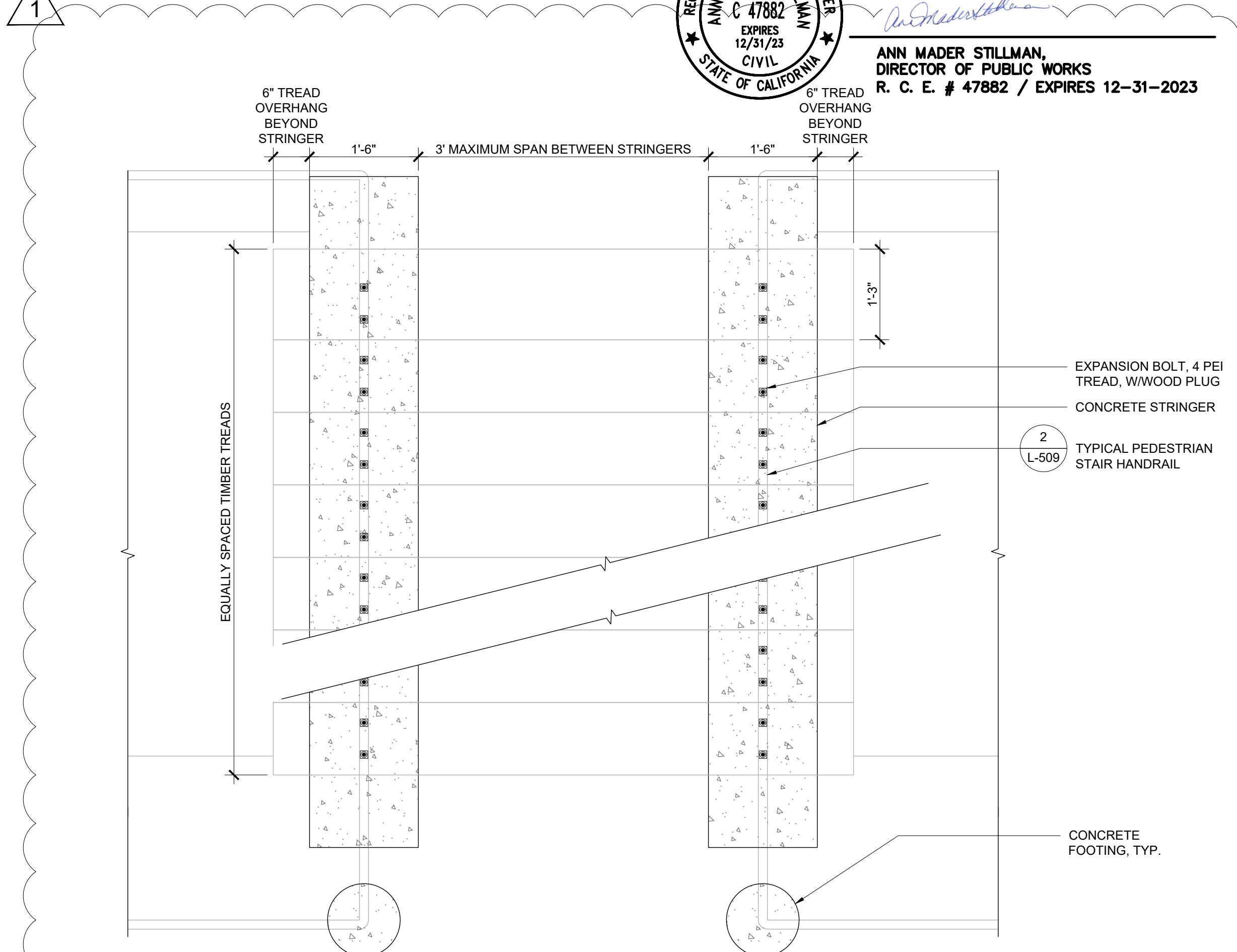
APPROVED: *Ann Mader Stillman*
 DATE: 04/21/2023
 ANN MADER STILLMAN,
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 R. C. E. # 47882 / EXPIRES 12-31-2023



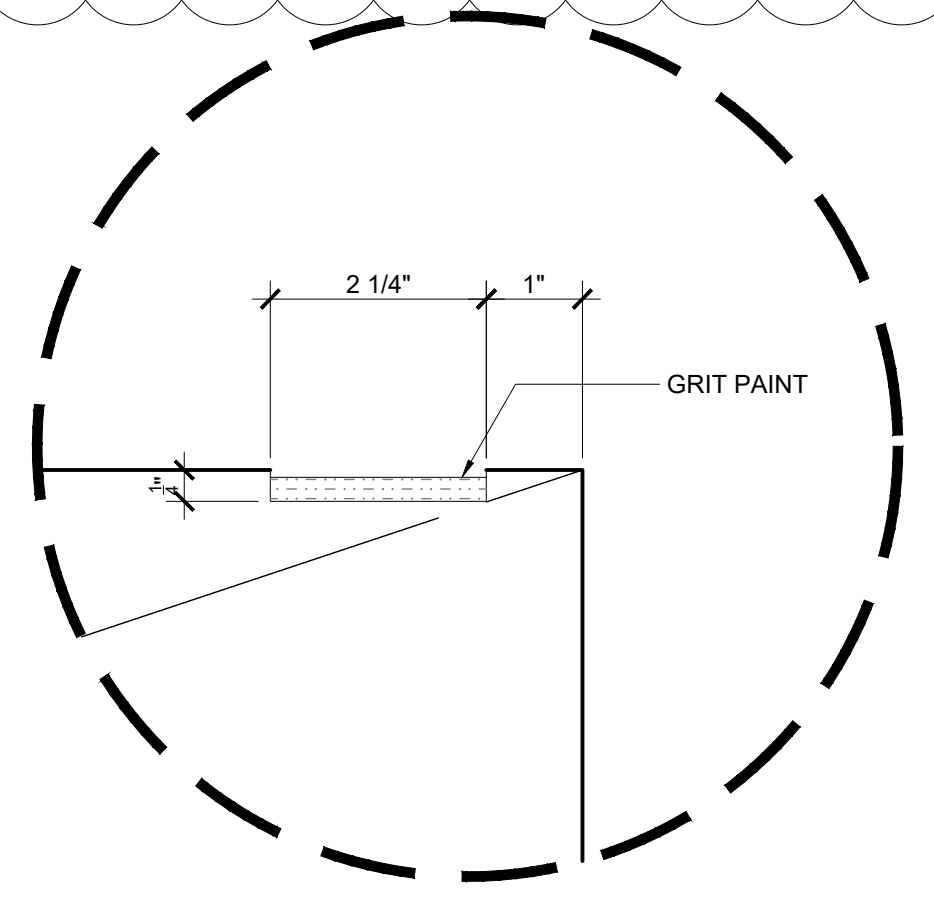
1 PEDESTRIAN STAIR HANDRAIL SECTION
 SCALE: 3/4"=1'-0"



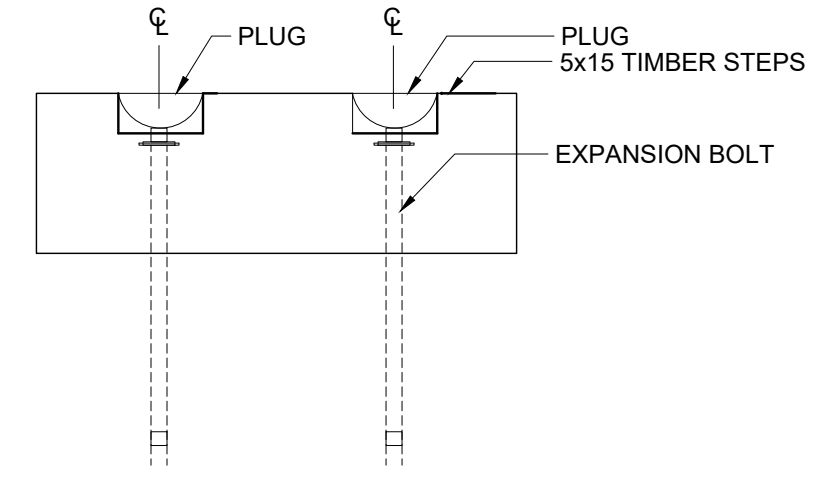
2 PEDESTRIAN STAIR HANDRAIL DETAIL
 SCALE: 3/4"=1'-0"



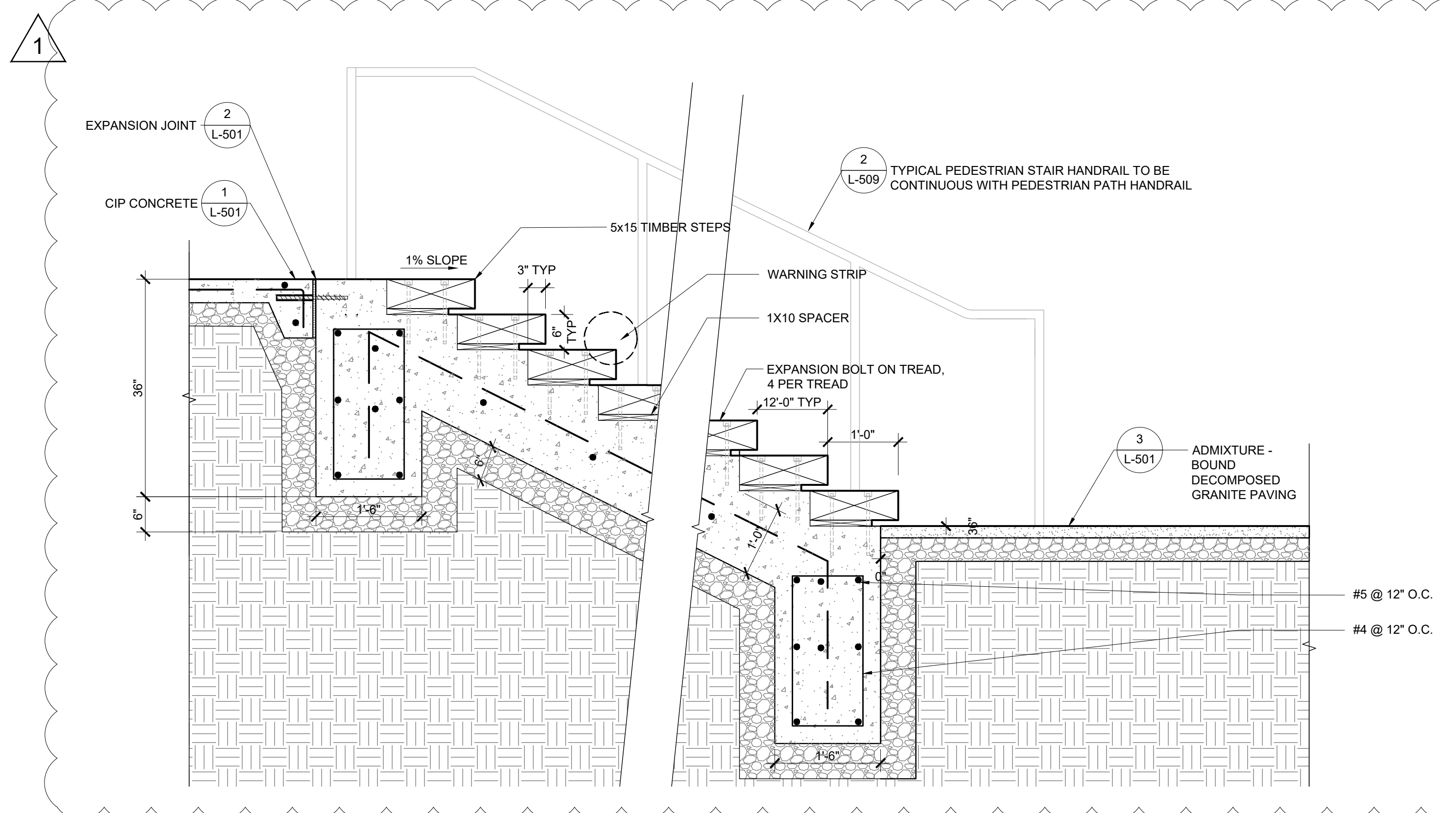
3 STAIR AND HAND RAIL FOUNDATION PLAN
 SCALE: 3/4"=1'-0"



WARNING STRIP WITH GRIT PAINT DETAIL
 SCALE: 6"=1'-0"



EXPANSION BOLT ON TREAD DETAIL
 SCALE: 2"=1'-0"



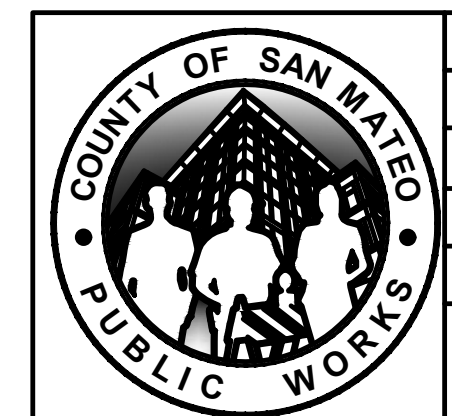
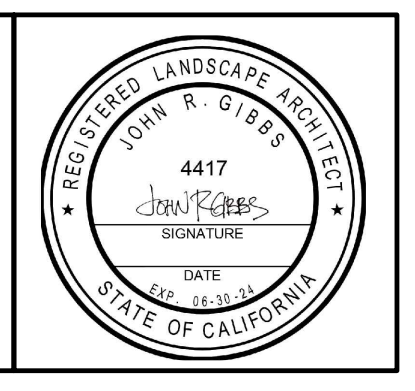
4 PEDESTRIAN STAIR SECTION, TYP.
 SCALE: 3/4"=1'-0"

SHEET NOTES:
 1. SHOP DRAWINGS REQUIRED

WRT
 478 TEHAMA STREET, SUITE 2B
 SAN FRANCISCO, CA 94103
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APPROVED DATE:
John Gibbs
 JOHN GIBBS
 # 4417 EXPIRES 06/30/2024



DESIGNED BY: CSW/ST2 (BRB)	TUNITAS CREEK BEACH IMPROVEMENT PROJECT	SCALE:
CHECKED BY: CSW/ST2 (JAH)	PEDESTRIAN PATH STAIR DETAILS	DATE:
DRAWN BY: MTM	SAN MATEO COUNTY PARKS	FILE NO.: E4095
1	5/17/2023	ANN MADER STILLMAN, DIRECTOR OF PUBLIC WORKS COUNTY SAN MATEO
REVISION	DATE	555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES		L-508(REV) SHEET 95 OF 124

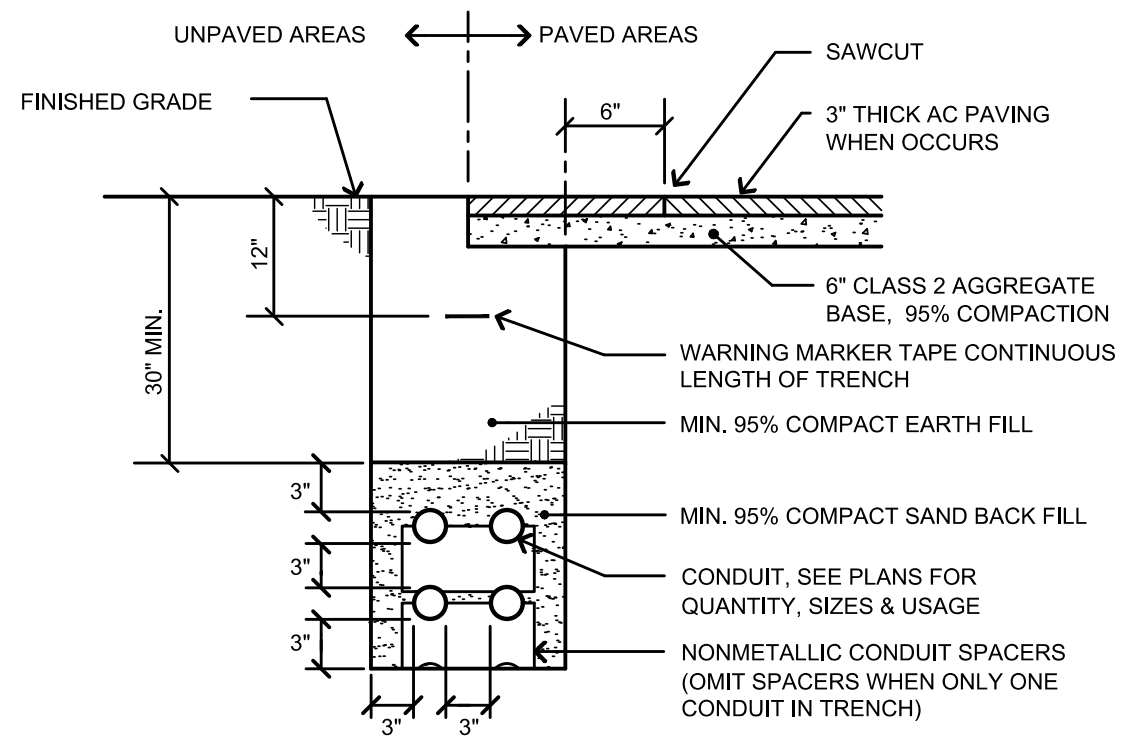
N:\00000137\tunitas creek beach improvement project\ACAD\5-construction documentation\Sheet\009 PEDESTRIAN PATH DETAILS.dwg 05/18/2023 - 11:49 AM jrou 13,96021



APPROVED:
 DATE: 04/21/2023
 ANN MADER STILLMAN,
 DIRECTOR OF PUBLIC WORKS
 R. C. E. # 47882 / EXPIRES 12-31-2023

GENERAL NOTES:

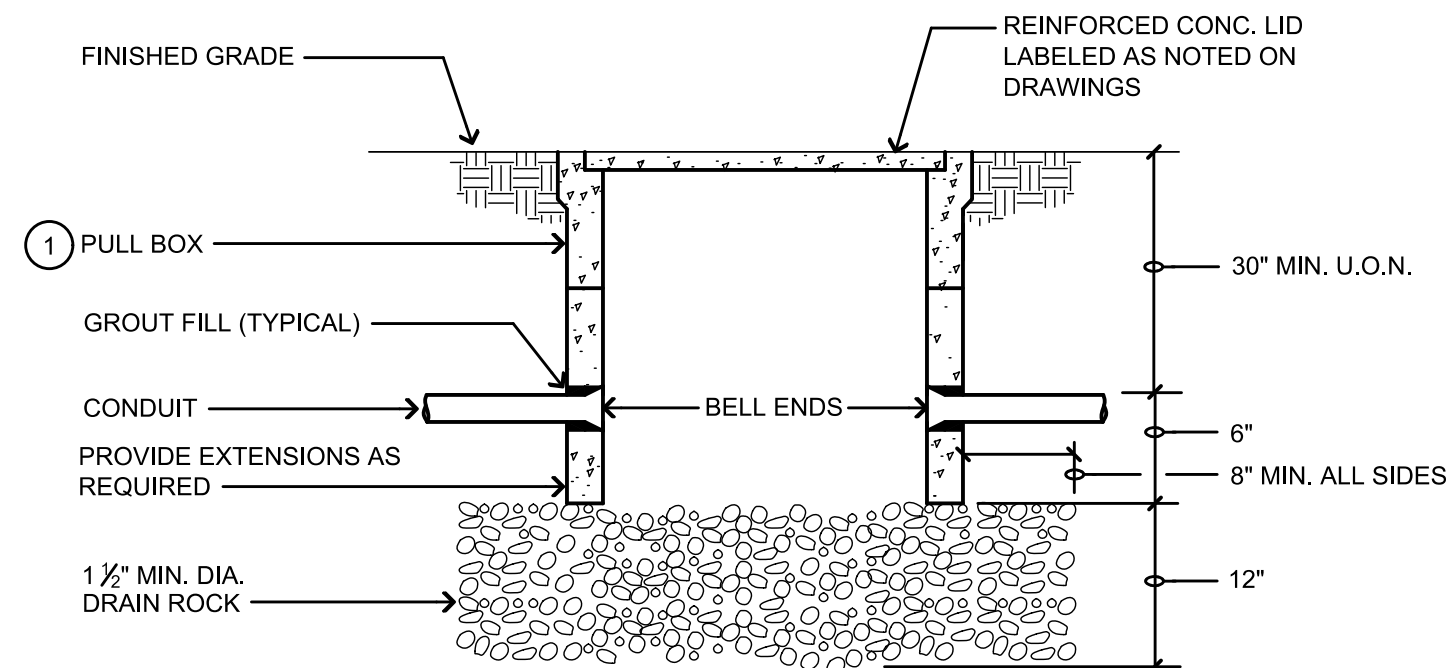
- SAW CUT, TRENCH & BACKFILL FOR (N) CONDUITS. PATCH WALKWAY TO MATCH (E) SURROUNDING SURFACES. CARE SHALL BE TAKEN TO PROTECT EXISTING TREES, RESEED OR RESOD (E) DISTURBED PLANTED AREAS TO ARCHITECT'S SATISFACTION.
- BASE MATERIAL TO BE REPLACED TO THE DEPTH OF EXISTING BASE AND COMPACTED TO A MIN. 95% RELATIVE COMPACTION. A.C. MAY BE SUBSTITUTED FOR BASE MATERIAL. WHEN USED AS BACKFILL, CLASS 100-E-100 P.C.C. MAY BE SUBSTITUTED FOR BASE MATERIAL.



6 TYPICAL TRENCH SECTION
 NO SCALE

DETAIL NOTES:

- SIZE(S) & MFR. PER PULLBOX SCHEDULE SHOWN ON SHEET E2.2.

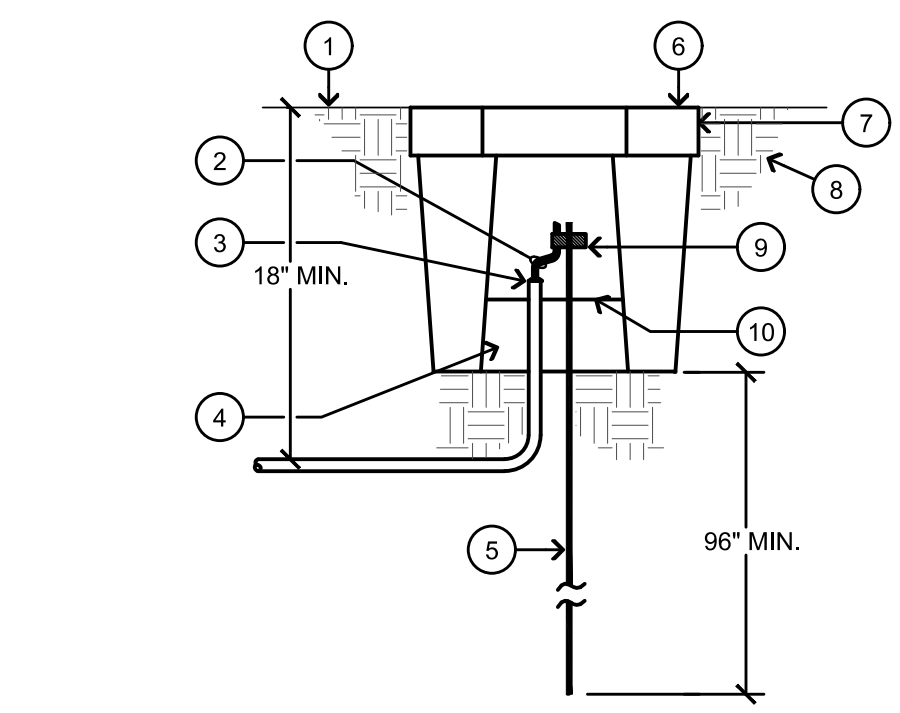


5 TYPICAL PULLBOX DETAIL
 NO SCALE

DETAIL NOTES:

- FINISHED GRADE
- GROUND CONDUCTOR
- SEAL CONDUIT WATERTIGHT
- GROUT BOTTOM MINIMUM 3"
- 1/2" x 10'-0" COPPER CLAD GROUND ROD
- LID LABELED "GROUND ROD"
- CHRISTY "F8" GROUND ROD BOX
- UNDISTURBED EARTH
- GROUND CLAMP
- COAT ALL INSIDE SURFACES W/SEALANT

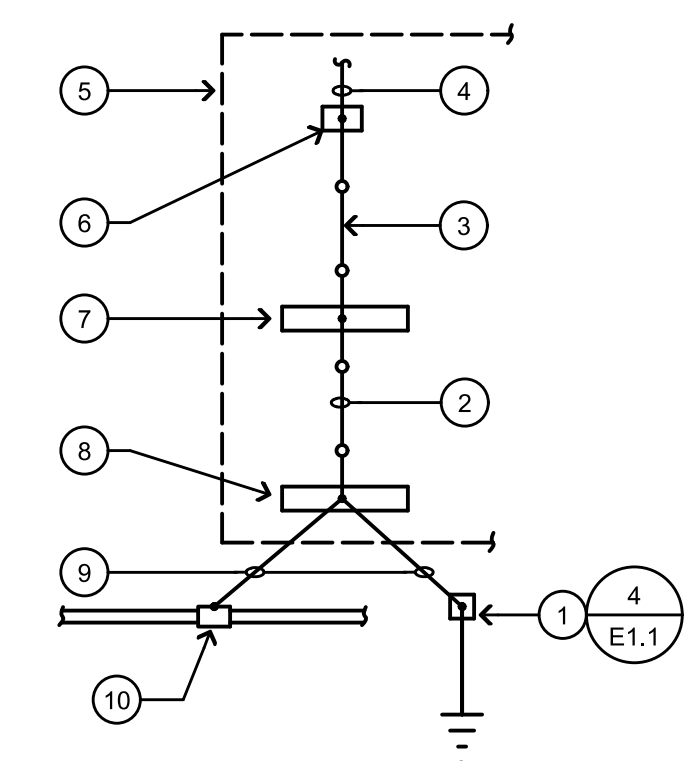
GENERAL NOTE:
 WHERE METAL CONDUIT USED IN LIEU OF PVC, PROVIDE GROUND BUSHINGS & BONDS PER CODE.



4 GROUND ROD BOX DETAIL
 NO SCALE

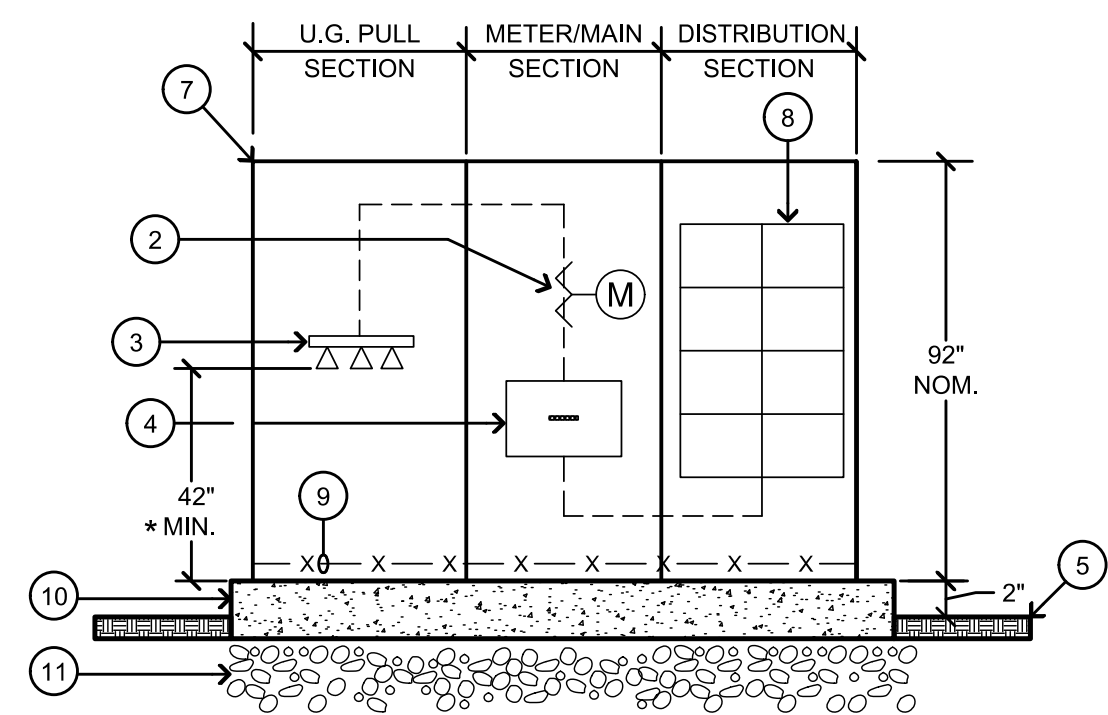
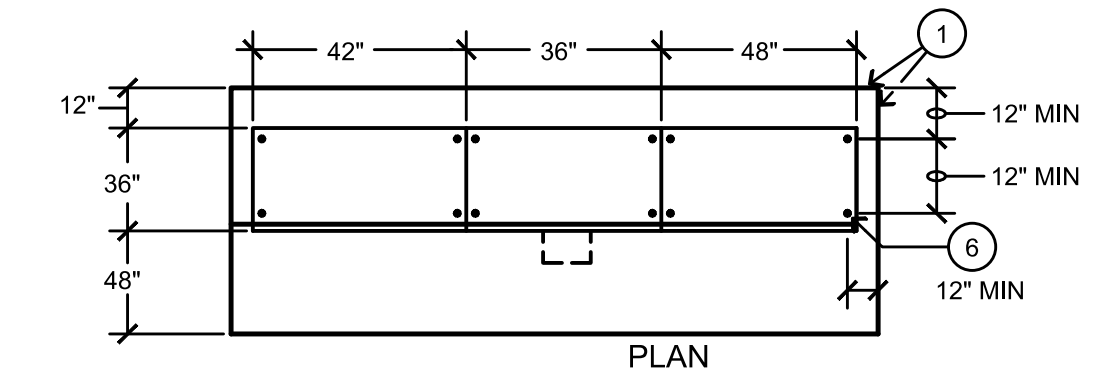
DETAIL NOTES:

- SERVICE GROUND ROD
- REMOVABLE LINK OR MAIN BONDING JUMPER FURNISHED WITH SWITCHBOARD & CONNECTED BY CONTRACTOR
- REMOVABLE LINK
- INCOMING NEUTRAL
- SERVICE EQUIP.
- SERVICE NEUTRAL LANDING LUG
- NEUTRAL BUS
- GROUND BUS
- 1" PVC, #3/0 BARE COPPER GROUNDING ELECTRODE CONDUCTOR
- COLD WATER PIPE IN BUILDING WITHIN 5 FEET OF ENTRANCE OF BUILDING THAT MEETS REQUIREMENTS OF CEC 250-50



GENERAL NOTE:
 IF AVAILABLE ON THE PREMISES AT EACH BUILDING OR STRUCTURE SERVED EACH OF THE FOLLOWING SHALL BE BONDED TOGETHER TO FORM THE GROUNDING ELECTRODE SYSTEM:
 a. METAL UNDERGROUND WATER PIPE,
 b. METAL FRAME OF BUILDING,
 c. GROUND RING,
 d. OTHER ELECTRODES PER CEC 250-50

3 ELECTRICAL SERVICE GROUND
 NO SCALE

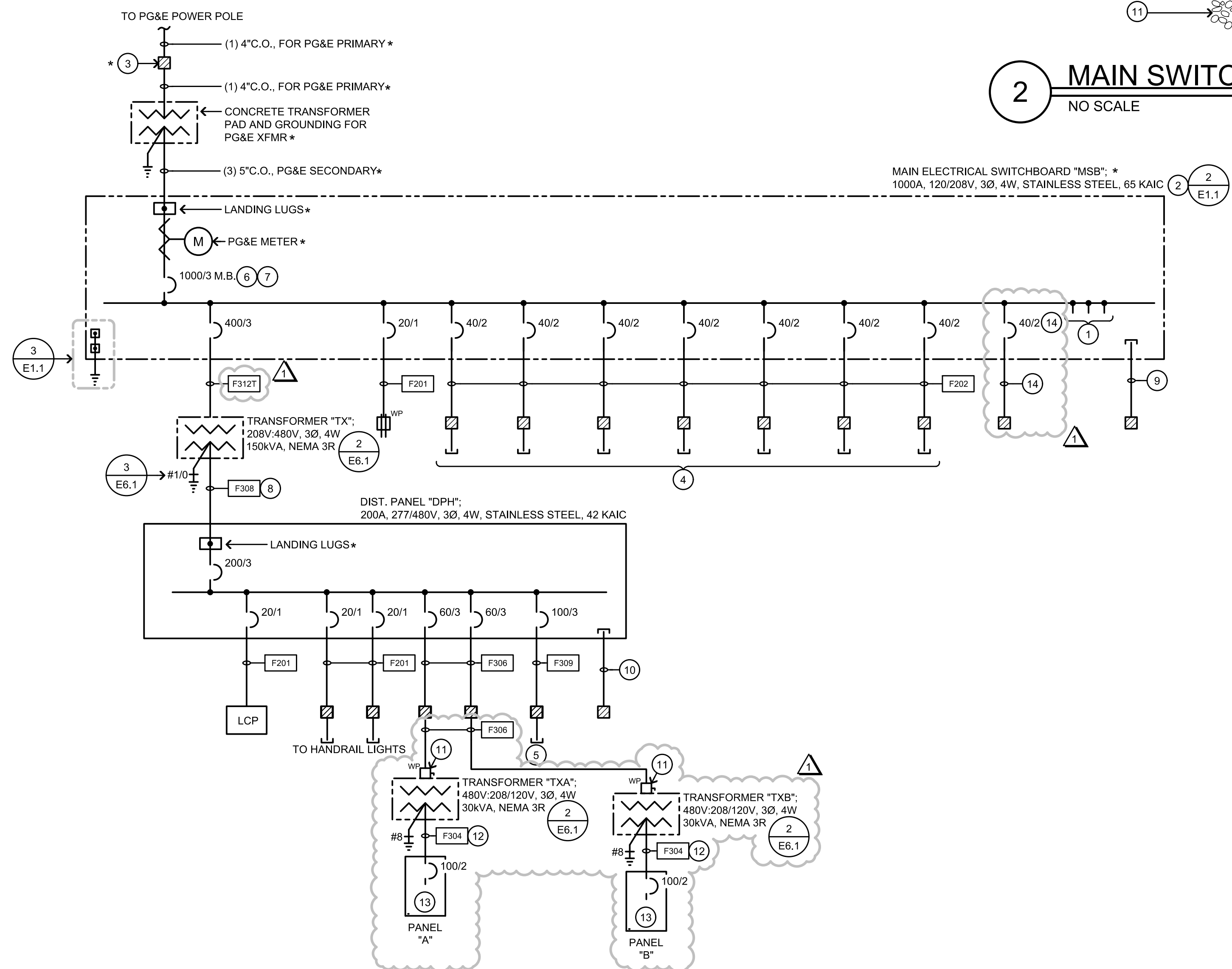


2 MAIN SWITCHBOARD "MSB" ELEVATION
 NO SCALE

DETAIL NOTES:

- 12" SIDES, 12" BACK AND 48" IN FRONT, PAD
- METERING FACILITIES & C.T.'S*
- LANDING LUGS*
- MAIN BREAKER
- TOP OF GRADE
- 6" DIA. x 3/4" EMBED STAINLESS STEEL HILTI KB-TZ (ICC ESR-1917) AT EACH CORNER OF EACH SECTION.
- STAINLESS STEEL ENCLOSURE OMITTED FOR CLARITY. MAX WEIGHT OF MSB: 2900 LBS. MAX HEIGHT TO CENTER OF GRAVITY = 4'-0"
- FEEDER BREAKER (TYP.) (SEE SINGLE LINE FOR SIZES AND QUANTITIES)
- FULL LENGTH CU. GND. BUS
- 12" THICK CONC. PAD WITH #5 AT 12" O.C. EACH WAY AT 3" CLEAR FROM BOTTOM AND 2" CLEAR FROM TOP. 2500 PSI @ 28 DAY CONCRETE.
- 1 1/2" MIN. DIA. BASE ROCK.

* PER PG&E RULES, REGULATIONS & STANDARDS.



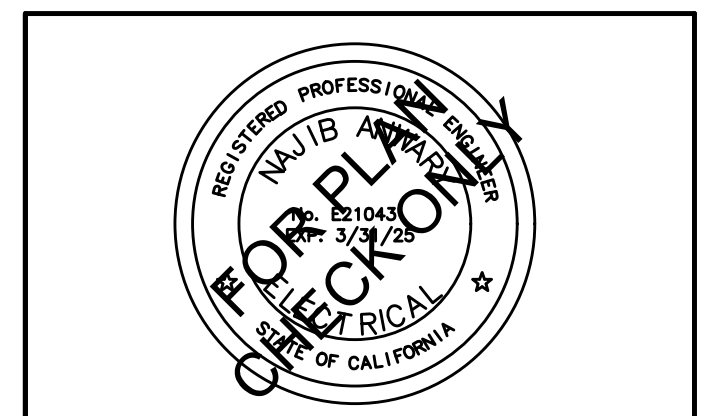
1 SINGLE LINE DIAGRAM
 NO SCALE

DETAIL NOTES:

- SPACE FOR MINIMUM (4) 40/3, (1) 100/3 AND (1) 150/3 BREAKERS.
- CONTRACTOR SHALL PLACE A PERMANENT WARNING LABEL ON FACE OF SWITCHBOARD WITH THE AVAILABLE FAULT CURRENT. LABEL SHALL INCLUDE DATE OF INSTALLATION. SEE SPEC SECTION FOR POWER SYSTEMS STUDIES REQUIRED PRIOR TO ORDER/SUBMITTAL AND INSTALLATION OF EQUIPMENT.
- PROVIDE & INSTALL PG&E PRIMARY IN-GRADE VAULT. COORDINATE WITH PG&E WITH SIZE, CONSTRUCTION AND LOCATION.
- STUB OUT CONDUITS FOR FUTURE EV CHARGING STATIONS. SEE 2.1 FOR IN-GRADE PULLBOX QUANTITY AND SIZE.
- STUB OUT CONDUITS FOR FUTURE LOADS. SEE E2.2 FOR IN-GRADE PULLBOX QUANTITY AND SIZES.
- MAIN BREAKER SHALL INCLUDE ARC ENERGY REDUCTION PER CEC 240.87(A)(B)(3) ENERGY REDUCING MAINTENANCE SWITCHING WITH LOCAL STATUS INDICATOR.
- SERVICE DISCONNECT SHALL BE MARKED PERMANENTLY TO READ "SERVICE MAIN DISCONNECT".
- CONDUCTOR LENGTH SHALL NOT EXCEED 10'-0".
- STUB (4) 2 1/2" C.O. WITH PULLSTRINGS FOR FUTURE USE. SEE E2.2 FOR IN-GRADE PULLBOX QUANTITY AND SIZE.
- STUB (2) 2 1/2" C.O. WITH PULLSTRINGS FOR FUTURE USE. SEE E2.2 FOR IN-GRADE PULLBOX QUANTITY AND SIZE.
- PROVIDE AND INSTALL A 100A, 600V RATED, 3-POLE NEMA 3R HEAVY DUTY DISCONNECT SWITCH. MOUNT ON TRANSFORMER.
- CONDUCTOR LENGTH SHALL NOT EXCEED 10 FEET.
- SHOWN FOR REFERENCE ONLY. BUILDING MANUFACTURER SHALL PROVIDE AND INSTALL ELECTRICAL PANEL. ELECTRICAL CONTRACTOR TO CONNECT NEW FEEDER TO PANEL.
- PROVIDE AND INSTALL 2" SPARE CONDUIT ONLY AND BOXES FOR FUTURE EV CHARGING STATIONS. TOTAL OF (6). NOT ALL BREAKERS SHOWN FOR CLARITY. SEE E2.2 FOR LOCATION.

FEEDER SCHEDULE		
DESIGNATION	AMPACITY	CONDUIT & CONDUCTORS SIZES
F201	30	3/4" C., 2 #10 & 1 #10 GND.
F202	40	3/4" C., 2 #8 & 1 #10 GND.
F304	100	1 1/4" C., 3 #2 & 1 #8 GND.
F306	150	1 1/2" C., 3 #1/0 & 1 #6 GND.
F308	200	2" C., 3 #3/0 & 1 #6 GND.
F309	225	2" C., 3 #4/0 & 1 #4 GND.
F312T	400	4" C., 3 #600kcm & 1 #2 GND.

* PER PG&E RULES, REGULATIONS, AND STANDARDS



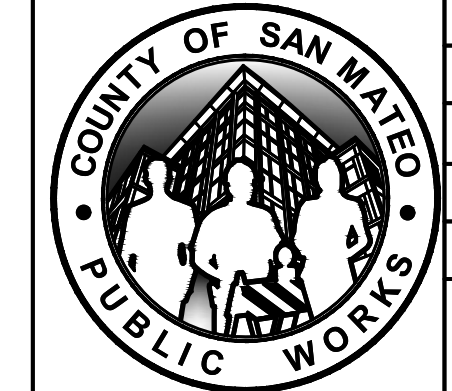
AURUM CONSULTING ENGINEERS
 MONTEREY BAY, INC.
 Project No. 22-525.00
 1798 Technology Dr. • Suite 242 • San Jose, CA 95110
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APPROVED DATE:

 ROBERT C. STEVENS, P.E.
 R.C.E. # 058660 EXPIRES 12/31/2024



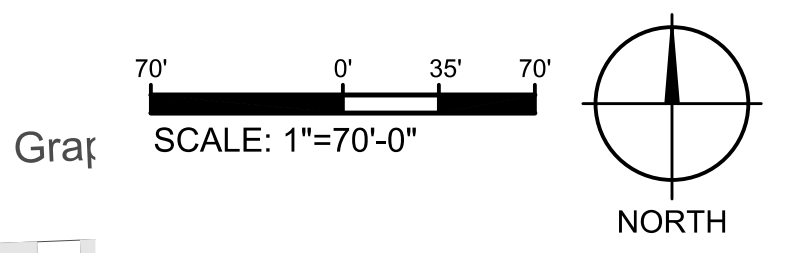
DESIGNED BY: CSW/ST2 (BRB)	TUNITAS CREEK BEACH IMPROVEMENT PROJECT	SCALE: As Noted
CHECKED BY: CSW/ST2 (JAH)	ELECTRICAL SINGLE LINE DIAGRAM, DETAILS & PANELBOARD SCHEDULES	DATE: 04/21/2023
DRAWN BY: MTM	SAN MATEO COUNTY PARKS	FILE NO.: E4995
1 05/17/2023	ANN MADER STILLMAN, DIRECTOR OF PUBLIC WORKS COUNTY SAN MATEO	555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063
REVISION DATE	FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES	
	E1.1(REV) SHEET 104 OF 124	



APPROVED:
 DATE: 04/21/2023
 ANN MADER STILLMAN,
 DIRECTOR OF PUBLIC WORKS
 R. C. E. # 47882 / EXPIRES 12-31-2023

- ### SHEET NOTES
- EXISTING PG&E POWER POLE TO REMAIN IN PLACE. FIELD VERIFY EXACT LOCATION AND COORDINATE WITH UTILITY ENGINEERING DRAWINGS FOR INSTALLATION OF NEW RISER.
 - EXISTING POWER POLE AND BASE TO BE DEMOLISHED BY PG&E.
 - OVERHEAD PG&E LINES TO BE DEMOLISHED BY PG&E.
 - PROVIDE AND INSTALL (1) 6" C.O. FOR PG&E PRIMARY.
 - PROVIDE AND INSTALL PG&E #7 PULLBOXES (4' 6" X 8' 6") PER UTILITY'S DRAWINGS STANDARDS, RULES AND REGULATIONS. FIELD VERIFY EXACT LOCATION.
 - TO PG&E TRANSFORMER, SEE 1/E2.2 FOR CONTINUATION.
 - PROVIDE AND INSTALL (1) 4" C.O. FOR PG&E PRIMARY.

- ### NOTES
- CONTRACTOR SHALL LOCATE ALL (E) UNDERGROUND UTILITIES PRIOR TO TRENCHING AND TAKE CAUTION TO AVOID DAMAGE DURING TRENCHING. HAND TRENCH IF NECESSARY. CONTRACTOR SHALL MAKE ALL REPAIRS TO DAMAGED UTILITIES AT NO CHARGE TO OWNER.
 - CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES AND ARCHITECT FOR SCHEDULING OF UTILITY DEMOLITION WORK.
 - ALL UTILITIES (PG&E, AT&T AND CATV) ARE SHOWN IN SCHEMATIC FORM ONLY. CONTRACTOR SHALL VERIFY EXACT REQUIREMENTS WITH UTILITY COMPANY ENGINEERED DRAWINGS PRIOR TO START OF CONSTRUCTION AND PROVIDE FACILITIES ACCORDINGLY.

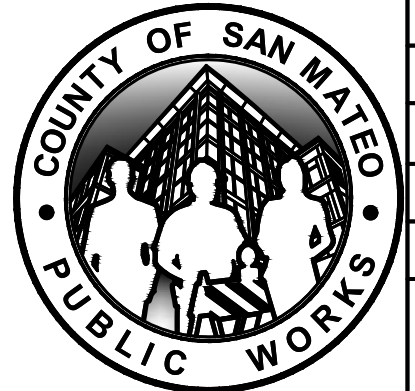


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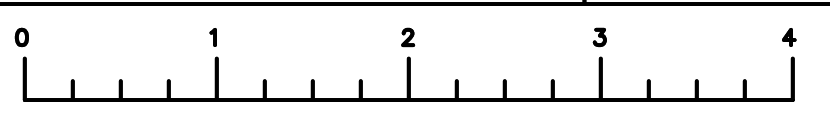
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APPROVED DATE:
 ROBERT C. STEVENS, P.E.
 R.C.E. # 058660 EXPIRES 12/31/2024



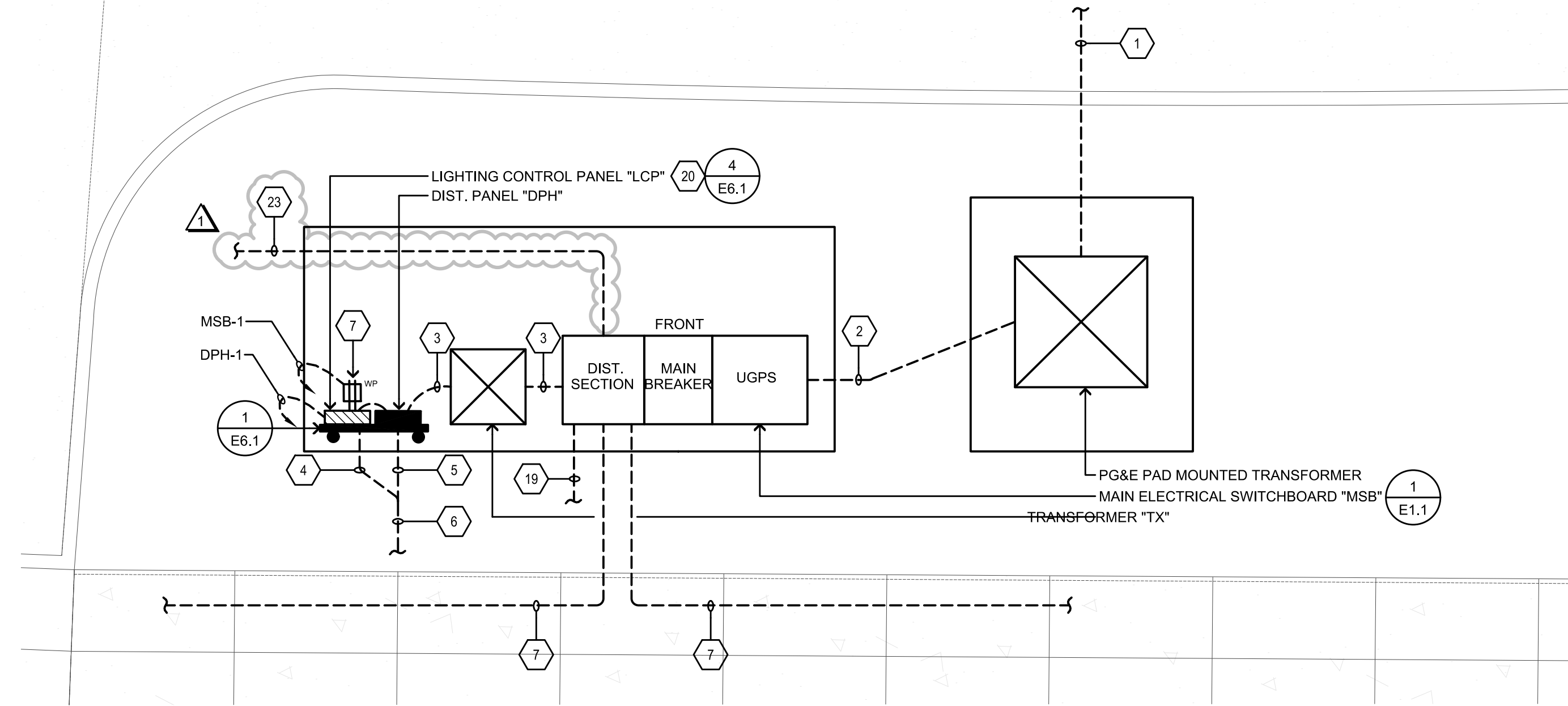
DESIGNED BY: CSW/ST2 (BRB)	TUNITAS CREEK BEACH IMPROVEMENT PROJECT	SCALE: As Noted
CHECKED BY: CSW/ST2 (JAH)	ELECTRICAL OVERALL SITE PLAN	DATE: 04/21/2023
DRAWN BY: MTM	SAN MATEO COUNTY PARKS	FILE NO.: E4995
1	05/17/2023	ANN MADER STILLMAN, DIRECTOR OF PUBLIC WORKS COUNTY SAN MATEO
REVISION	DATE	555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063
FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES		E2.1 (REV) SHEET 105 OF 124



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APPROVED: *Ann Mader Stillman*
 DATE: 04/21/2023
 ANN MADER STILLMAN,
 DIRECTOR OF PUBLIC WORKS
 R. C. E. # 47882 / EXPIRES 12-31-2023



2 ELECTRICAL EQUIPMENT PLAN
 SCALE: 1/4"=1'-0"
 NORTH

DWG ID.	DESCRIPTION	MFGR	LABEL
EV	18" x 27" HIGH DENSITY REINFORCED CONCRETE BOX AND BOLT DOWN REINFORCED CONCRETE LID.	CHRISTY N30	EV CHARGERS
P1	15" x 25" HIGH DENSITY REINFORCED CONCRETE BOX AND BOLT DOWN REINFORCED CONCRETE LID.	CHRISTY N16	ELECTRICAL
P2	18" x 27" HIGH DENSITY REINFORCED CONCRETE BOX AND BOLT DOWN REINFORCED CONCRETE LID.	CHRISTY N30	ELECTRICAL
P3	22" x 35" HIGH DENSITY REINFORCED CONCRETE BOX AND BOLT DOWN REINFORCED CONCRETE LID.	CHRISTY N36	ELECTRICAL
P4	34 3/4" x 52 1/2" HIGH DENSITY REINFORCED CONCRETE BOX AND BOLT DOWN REINFORCED CONCRETE LID.	CHRISTY N48	ELECTRICAL
EV1	22" x 35" HIGH DENSITY REINFORCED CONCRETE BOX AND BOLT DOWN REINFORCED CONCRETE LID FOR FUTURE EV CHARGING STATIONS.	CHRISTY N36	EV CHARGERS

NOTES:

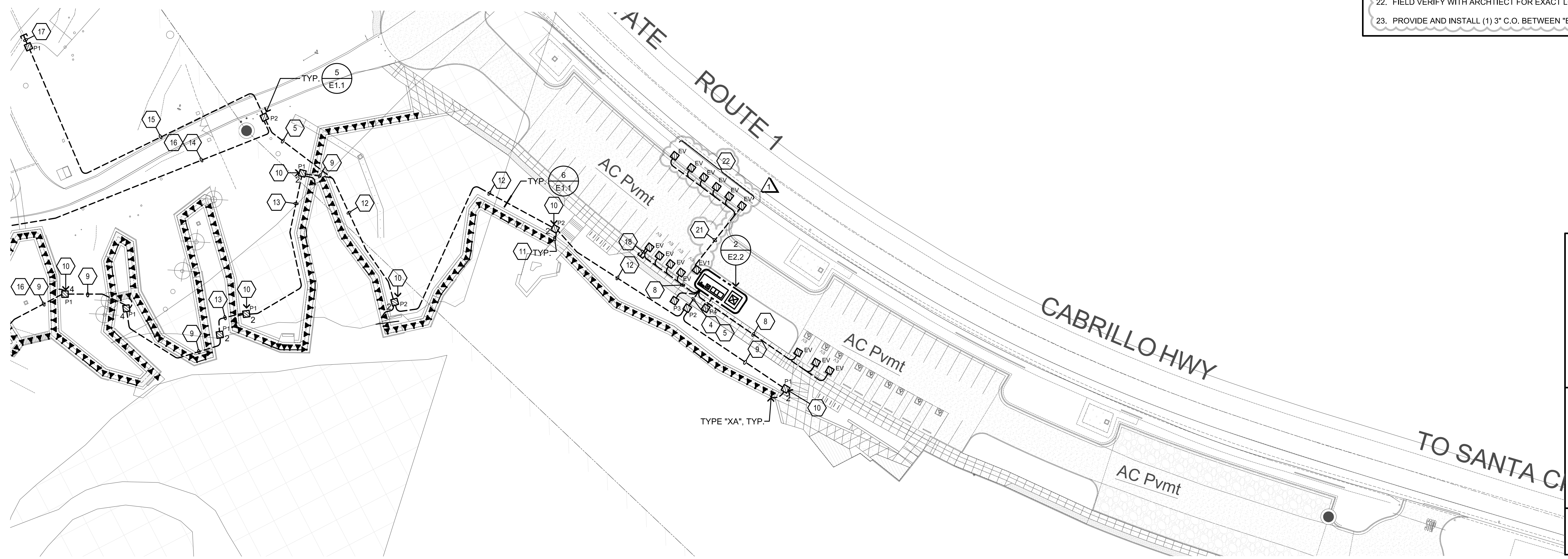
A. CONTRACTOR SHALL LOCATE ALL (E) UNDERGROUND UTILITIES PRIOR TO TRENCHING AND TAKE CAUTION TO AVOID DAMAGE DURING TRENCHING. HAND TRENCH IF NECESSARY. CONTRACTOR SHALL MAKE ALL REPAIRS TO DAMAGED UTILITIES AT NO CHARGE TO OWNER.

B. ALL WIRING FOR SITE LIGHTING SHALL BE #10 AWG MINIMUM, U.O.N.

C. ALL UTILITIES (PG&E, AT&T AND CATV) ARE SHOWN IN SCHEMATIC FORM ONLY. CONTRACTOR SHALL VERIFY EXACT REQUIREMENTS WITH UTILITY COMPANY ENGINEERED DRAWINGS PRIOR TO START OF CONSTRUCTION AND PROVIDE FACILITIES ACCORDINGLY.

D. CONNECT (30) LED PODS MAX TO EACH REMOTE DRIVER.

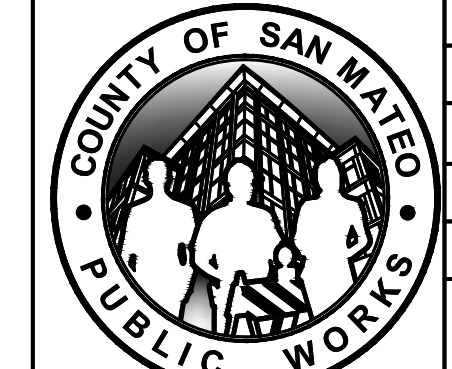
- SHEET NOTES**
- PG&E PRIMARY, SEE E2.1 FOR CONTINUATION AND E1.1 FOR FEEDER SIZE.
 - PG&E SECONDARY, SEE E1.1 FOR FEEDER SIZE.
 - SEE E1.1 FOR FEEDER SIZE.
 - ROUTE 3/4" C. 4 #10 & 1 #10 GND (CIRCUITS 1 & 3) TO THE HANDRAIL REMOTE DRIVERS.
 - PROVIDE AND INSTALL:
 - (2) 1 1/2" C. 3 #1/0 & 1 #6 GND, EACH FEEDER FOR STORAGE AND RESTROOMS.
 - (1) 2" C. 3 #4/0 & 1 #4 GND, FOR RANGER RESIDENCE.
 - (2) 2 1/2" C.O. FOR SPARE.
 - SEE 1/E2.2 FOR CONTINUATION.
 - FEEDER FOR EV CHARGING STATIONS, SEE 1/E1.1 FOR FEEDER SIZE AND 1/E2.2 FOR CONTINUATION.
 - ROUTE FEEDERS TO EACH EV PULLBOX, SEE 1/E1.1 FOR QUANTITY AND SIZE.
 - 3/4" C., 2 #10 & 1 #10 GND, FOR HANDRAIL LIGHTING.
 - CONTRACTOR SHALL INSTALL (1) REMOTE DRIVER INSIDE THE IN-GRADE PULL BOX PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 - CONTRACTOR SHALL ROUTE 3/4" C. WITH (2) 24VDC UNDERGROUND RATED CABLES TO HANDRAIL LIGHTING.
 - PROVIDE AND INSTALL:
 - (2) 1 1/2" C. 3 #1/0 & 1 #6 GND, EACH FEEDER FOR STORAGE AND RESTROOMS.
 - (1) 2" C. 3 #4/0 & 1 #4 GND, FOR RANGER RESIDENCE.
 - (1) 3/4" C. 4 #10 & 1 #10 GND, FOR HANDRAIL LIGHTING (CIRCUITS 2 & 4)
 - 3/4" C., 4 #10 & 1 #10 GND, FOR HANDRAIL LIGHTING (CIRCUITS 2 & 4)
 - (2) 1 1/2" C. 3 #1/0 & 1 #6 GND, EACH FEEDER FOR STORAGE AND RESTROOMS.
 - 2" C., 3 #4/0 & 1 #4 GND, FOR RANGER RESIDENCE.
 - SEE E2.3 FOR CONTINUATION.
 - STUB OUT 2" C.O. WITH PULLSTRING WITHIN 3 FEET OF CONCRETE PULLBOX.
 - STUB OUT 3/4" C.O. WITH PULLSTRING WITHIN 3 FEET OF CONCRETE PULLBOX FOR EACH EV PULLBOX, TYPICAL.
 - (2) 2 1/2" C.O. FOR SPARE. SEE 1/E2.2 FOR CONTINUATION.
 - COORDINATE WITH OWNER FOR SCHEDULING TIME EVENTS.
 - SPARE CONDUITS FOR FUTURE EV CHARGING STATIONS, SEE 1/E1.1 FOR CONDUIT SIZE.
 - FIELD VERIFY WITH ARCHITECT FOR EXACT LOCATION PRIOR TO INSTALLATIONS.
 - PROVIDE AND INSTALL (1) 3" C.O. BETWEEN "EV1" PULLBOX AND "MSB".



1 PARTIAL SITE PLAN
 SCALE: 1"=40'-0"
 NORTH

CSW | ST2
 CSW/Stuber-Stroch Engineering Group, Inc.
 504 Redwood Blvd, Suite 310
 Novato, CA 94947
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APPROVED DATE: *Robert C. Stevens*
 ROBERT C. STEVENS, P.E.
 R.C.E. # 058660 EXPIRES 12/31/2024



DESIGNED BY: CSW/ST2 (BRB)	TUNITAS CREEK BEACH IMPROVEMENT PROJECT	SCALE: As Noted
CHECKED BY: CSW/ST2 (JAH)	ELECTRICAL PARTIAL SITE PLAN AREA-1	DATE: 04/21/2023
DRAWN BY: MTM	SAN MATEO COUNTY PARKS	FILE NO.: E4995
1 05/17/2023	ANN MADER STILLMAN, DIRECTOR OF PUBLIC WORKS COUNTY SAN MATEO	555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063
REVISION DATE	FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES	
	E2.2 (REV) SHEET 106 OF 124	

FOR PULLBOX CHECK ONLY

AURUM CONSULTING ENGINEERS
 MONTEREY BAY, INC.
 Project No. 22-525.00
 1798 Technology Dr. • Suite 242 • San Jose, CA 95110
 T.831.646.3330 • F.831.646.3336 • www.acemb.com

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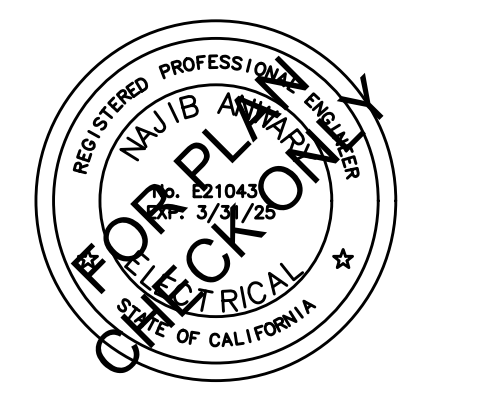
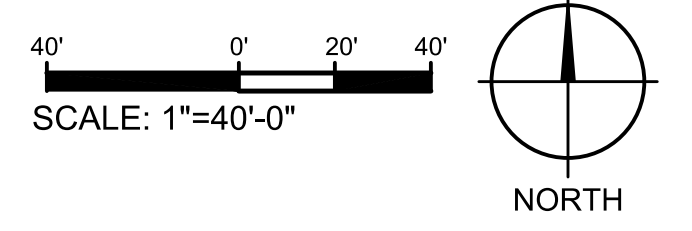
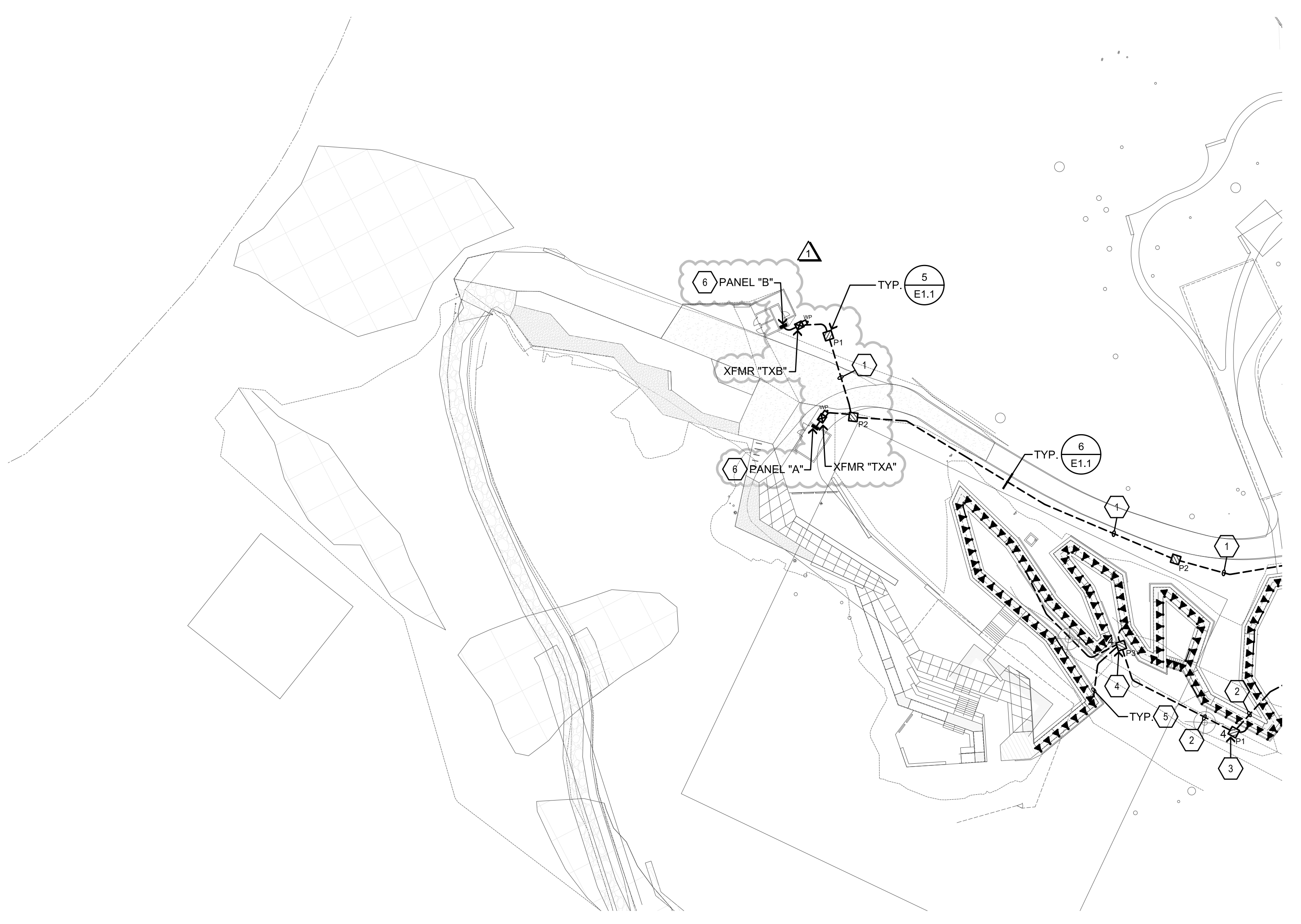
APPROVED:
 DATE: 04/21/2023
 ANN MADER STILLMAN,
 DIRECTOR OF PUBLIC WORKS
 R. C. E. # 47882 / EXPIRES 12-31-2023

SHEET NOTES

- SEE 1/E1.1 FOR FEEDER SIZE FOR STORAGE AND RESTROOMS.
- 3/4" C., 2 #10 & 1 #10 GND. FOR HANDRAIL LIGHTING.
- CONTRACTOR SHALL INSTALL (1) REMOTE DRIVER INSIDE THE IN-GRADE PULL BOX PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- CONTRACTOR SHALL INSTALL (3) REMOTE DRIVER INSIDE THE IN-GRADE PULL BOX PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- CONTRACTOR SHALL ROUTE 3/4" C. WITH (2) 24VDC UNDERGROUND RATED CABLES TO HANDRAIL LIGHTING.
- PANELS SHOWN FOR REFERENCE ONLY. PROVIDED AND INSTALLED BY BUILDING MANUFACTURER. ELECTRICAL CONTRACTOR TO INSTALL NEW FEEDERS TO PANEL.

NOTES:

- CONTRACTOR SHALL LOCATE ALL (E) UNDERGROUND UTILITIES PRIOR TO TRENCHING AND TAKE CAUTION TO AVOID DAMAGE DURING TRENCHING. HAND TRENCH IF NECESSARY. CONTRACTOR SHALL MAKE ALL REPAIRS TO DAMAGED UTILITIES AT NO CHARGE TO OWNER.
- ALL WIRING FOR SITE LIGHTING SHALL BE #10 AWG MINIMUM, U.O.N.
- ALL UTILITIES (PG&E, AT&T AND CATV) ARE SHOWN IN SCHEMATIC FORM ONLY. CONTRACTOR SHALL VERIFY EXACT REQUIREMENTS WITH UTILITY COMPANY ENGINEERED DRAWINGS PRIOR TO START OF CONSTRUCTION AND PROVIDE FACILITIES ACCORDINGLY.
- CONNECT (30) LED PODS MAX TO EACH REMOTE DRIVER.
- SEE 1/E2.2 FOR IN-GRADE PULLBOX SCHEDULE.

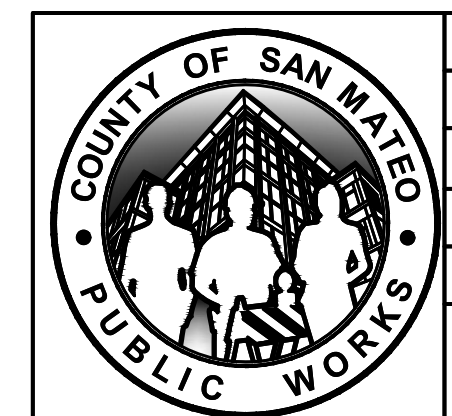


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APPROVED DATE: *[Signature]*
 ROBERT C. STEVENS, P.E.
 R.C.E. # 058660 EXPIRES 12/31/2024



DESIGNED BY: CSW/ST2 (BRB)	TUNITAS CREEK BEACH IMPROVEMENT PROJECT	SCALE: As Noted
CHECKED BY: CSW/ST2 (JAH)	ELECTRICAL PARTIAL SITE PLAN AREA - 2	DATE: 04/21/2023
DRAWN BY: MTM	SAN MATEO COUNTY PARKS	FILE NO.: E4995
1 05/17/2023	ANN MADER STILLMAN, DIRECTOR OF PUBLIC WORKS COUNTY SAN MATEO	555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063
REVISION DATE	FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES	
	E2.3 (REV) SHEET 107 OF 124	

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PANELBOARD SCHEDULES

1 2 DIST. PANEL DPH												
Load	A	B	C	Bkr	Ck	abc	Ck	Bkr	A	B	C	Load
LIGHTING CONTROL PANEL LCP	100			20/1	1	2	20/1	600				HANDRAIL LIGHTS
SPARE					3	4	20/1		600			HANDRAIL LIGHTS
SPARE				100B	5	6	20/1					SPARE
SPARE					7	8		110B0				RANGER SHED
SPACE ONLY					9	10	60/3		110B0			RANGER SHED
SPACE ONLY					11	12			110B0			RANGER SHED
SPACE ONLY					13	14		110B0				RANGER RESTROOM
SPACE ONLY					15	16	60/3		110B0			RANGER RESTROOM
SPACE ONLY					17	18			110B0			RANGER RESTROOM
SPACE ONLY					19	20		1800S				RANGER RESIDENCE
SPACE ONLY					21	22	100/3		1800S			RANGER RESIDENCE
SPACE ONLY					23	24			1800S			RANGER RESIDENCE
SPACE ONLY					25	26						SPACE ONLY
SPACE ONLY					27	28						SPACE ONLY
SPACE ONLY					29	30						SPACE ONLY
SPACE ONLY					31	32						SPACE ONLY
SPACE ONLY					33	34						SPACE ONLY
SPACE ONLY					35	36						SPACE ONLY
SPACE ONLY					37	38						SPACE ONLY
SPACE ONLY					39	40						SPACE ONLY
SPACE ONLY					41	42						SPACE ONLY
	100	0	0					40765	40765	40165		

1 SUBMITTAL SHALL MATCH EXACT BREAKER LOCATIONS SHOWN.
2 LABEL PANEL FOR SHORT CIRCUIT AMPS AVAILABLE PER CEC 110-24.

KVA Phase A	40.9	Total Connected Load KVA	121.6
KVA Phase B	40.8	Total Load Amperes	147
KVA Phase C	40.2		

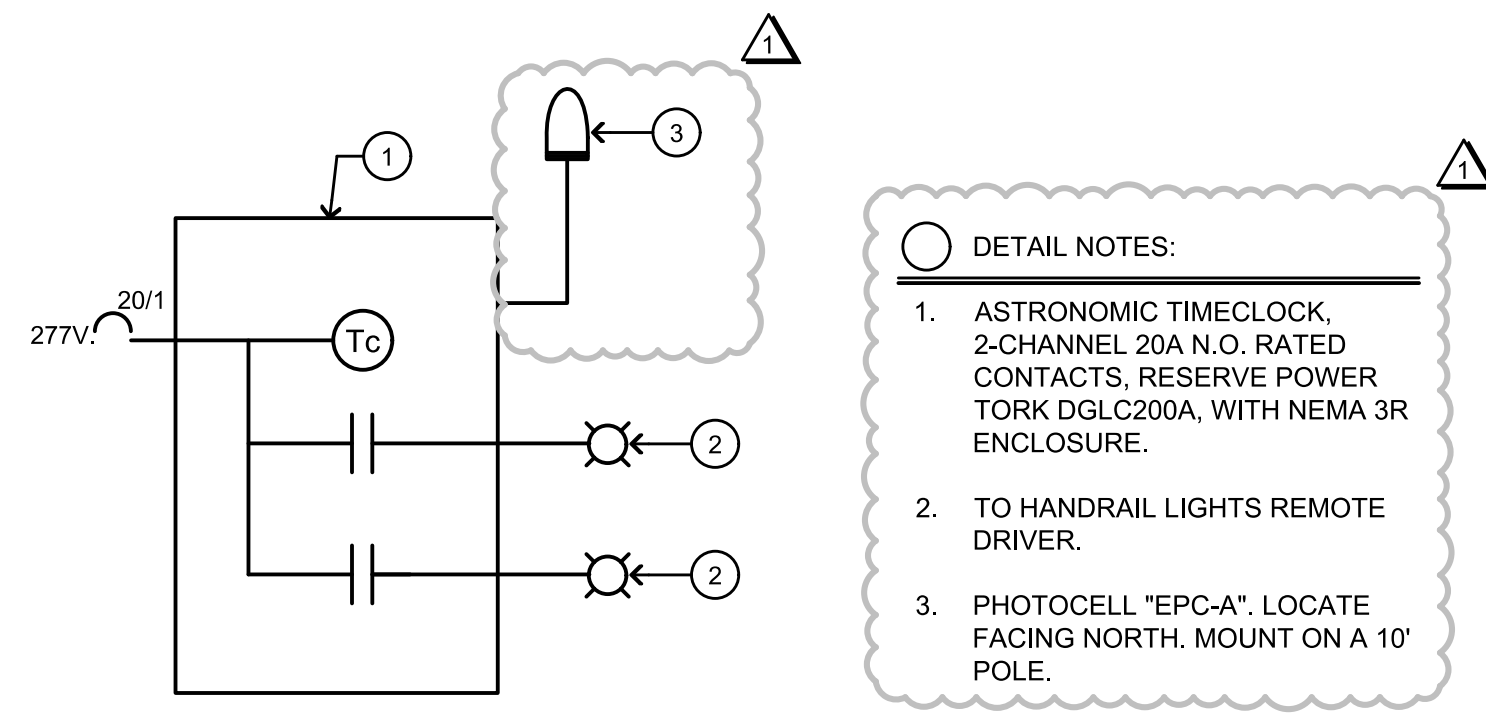
1 2 MSB												
Load	A	B	C	Bkr	Ck	abc	Ck	Bkr	A	B	C	Load
EV CHARGING STATION	332B			40/2	1	2	20/1	100				RECEPT
EV CHARGING STATION		332B			3	4	20/1					SPARE
EV CHARGING STATION			332B		5	6	20/1					SPARE
EV CHARGING STATION	332B			40/2	7	8		40B65				TRANSFORMER TX
EV CHARGING STATION		332B			9	10	400/3		40765			TRANSFORMER TX
EV CHARGING STATION			332B		11	12				40165		TRANSFORMER TX
EV CHARGING STATION	332B			40/2	13	14	40/2					SPARE
EV CHARGING STATION		332B			15	16						SPARE
EV CHARGING STATION			332B		17	18	40/2					SPARE
EV CHARGING STATION	332B			40/2	19	20						SPARE
EV CHARGING STATION		332B			21	22	40/2					SPARE
EV CHARGING STATION			332B		23	24	40/2					SPARE
EV CHARGING STATION	332B			40/2	25	26	40/2					SPARE
EV CHARGING STATION		332B			27	28						SPARE
SPARE					29	30						SPARE
SPARE					31	32	150/3					SPARE
SPARE					33	34						SPARE
	16640	16640	13312					41045	40765	40165		

1 SUBMITTAL SHALL MATCH EXACT BREAKER LOCATIONS SHOWN.
2 LABEL PANEL FOR SHORT CIRCUIT AMPS AVAILABLE PER CEC 110-24.

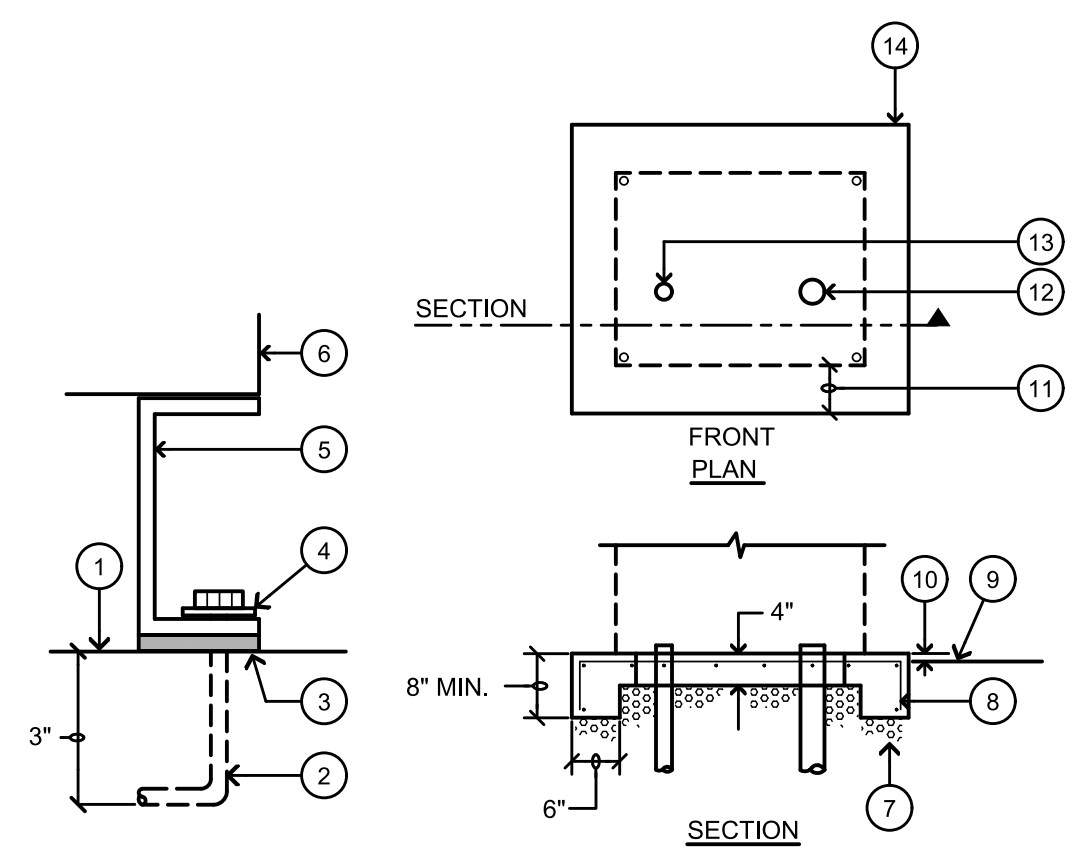
KVA Phase A	57.7	Total Connected Load KVA	162.6
KVA Phase B	57.4	Total Load Amperes	468
KVA Phase C	53.5		



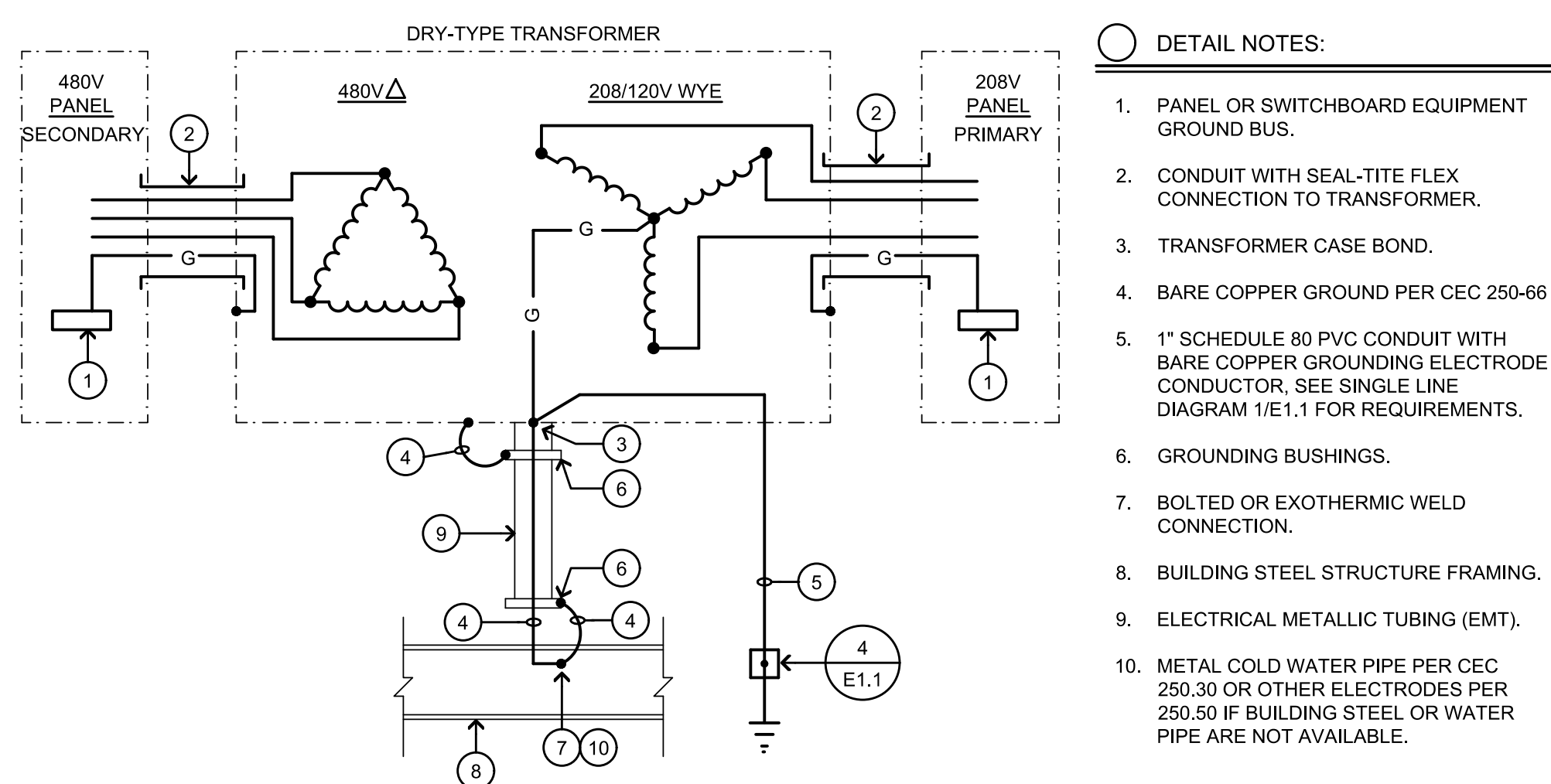
APPROVED: *Ann Mader Stillman*
DATE: 04/21/2023
ANN MADER STILLMAN,
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R. C. E. # 47882 / EXPIRES 12-31-2023



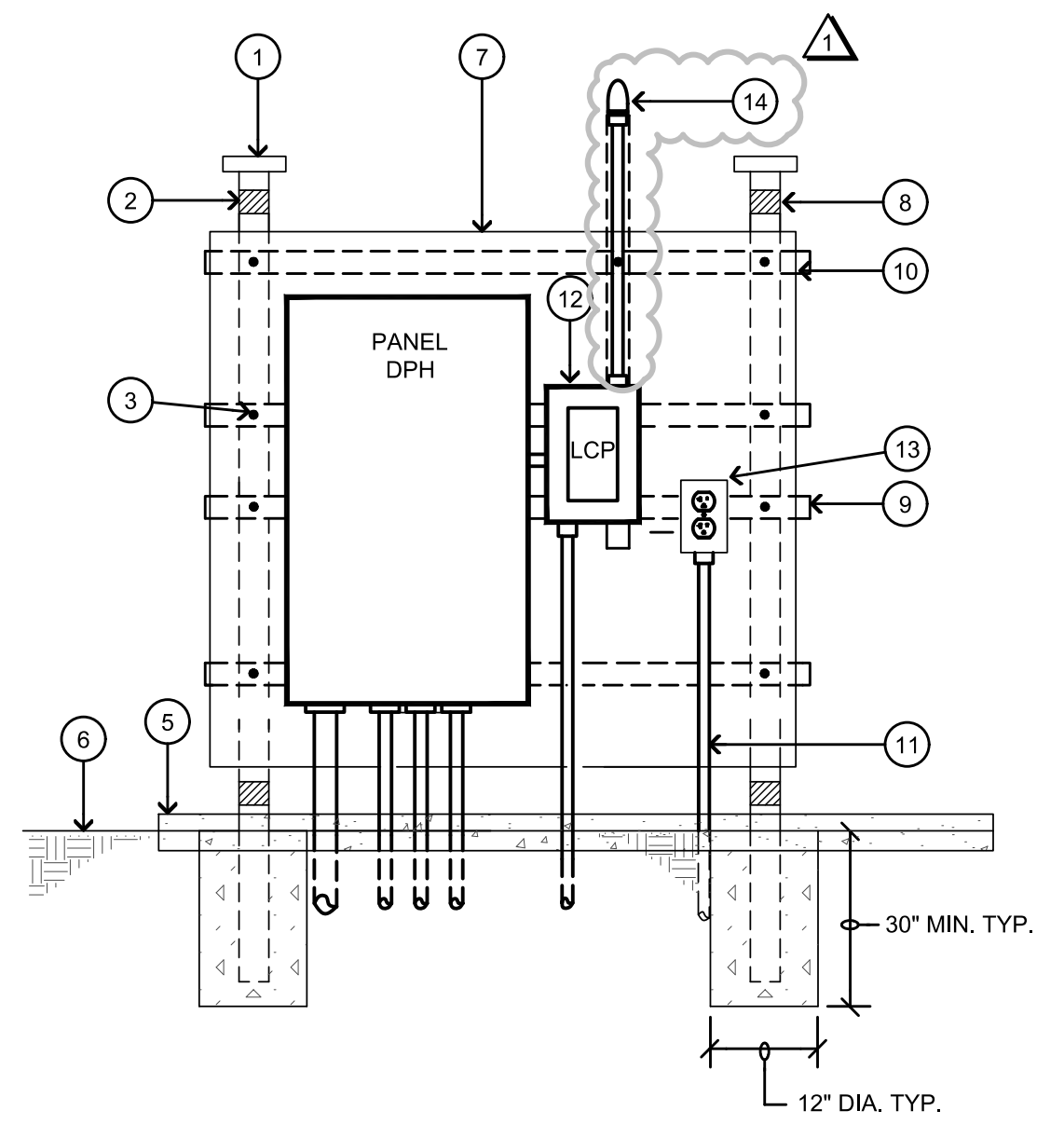
4 LIGHTING TIME CLOCK
NO SCALE



2 DRY TYPE TRANSFORMER MOUNTING DETAIL
NO SCALE



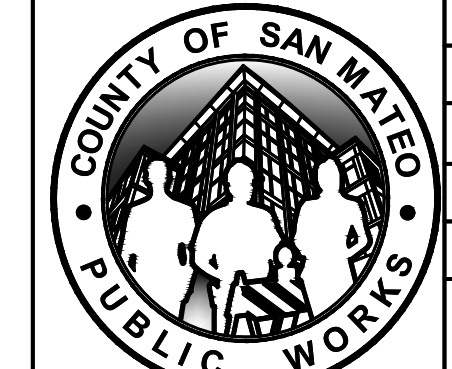
3 DRY TYPE TRANSFORMER GROUNDING DETAIL
NO SCALE



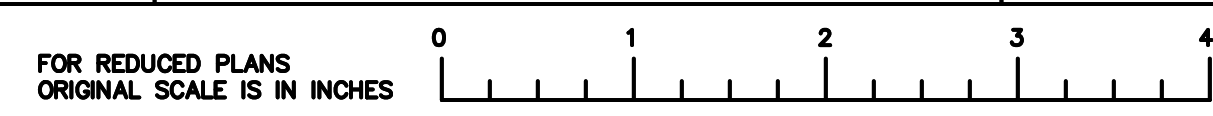
1 PANELBOARD DPH AND TIMECLOCK LCP MOUNTING
NO SCALE



APPROVED DATE: *Robert C. Stevens*
ROBERT C. STEVENS, P.E.
R.C.E. # 058660 EXPIRES 12/31/2024



DESIGNED BY: CSW/ST2 (BRB)	TUNITAS CREEK BEACH IMPROVEMENT PROJECT	SCALE: As Noted
CHECKED BY: CSW/ST2 (JAH)	ELECTRICAL DETAILS & PANELBOARD SCHEDULE	DATE: 04/21/2023
DRAWN BY: MTM	SAN MATEO COUNTY PARKS	FILE NO.: E4995
1 05/17/2023	ANN MADER STILLMAN, DIRECTOR OF PUBLIC WORKS COUNTY SAN MATEO	555 COUNTY CENTER, 5th FLOOR REDWOOD CITY, CALIFORNIA 94063
REVISION DATE		E6.1(REV) SHEET 108 OF 124



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