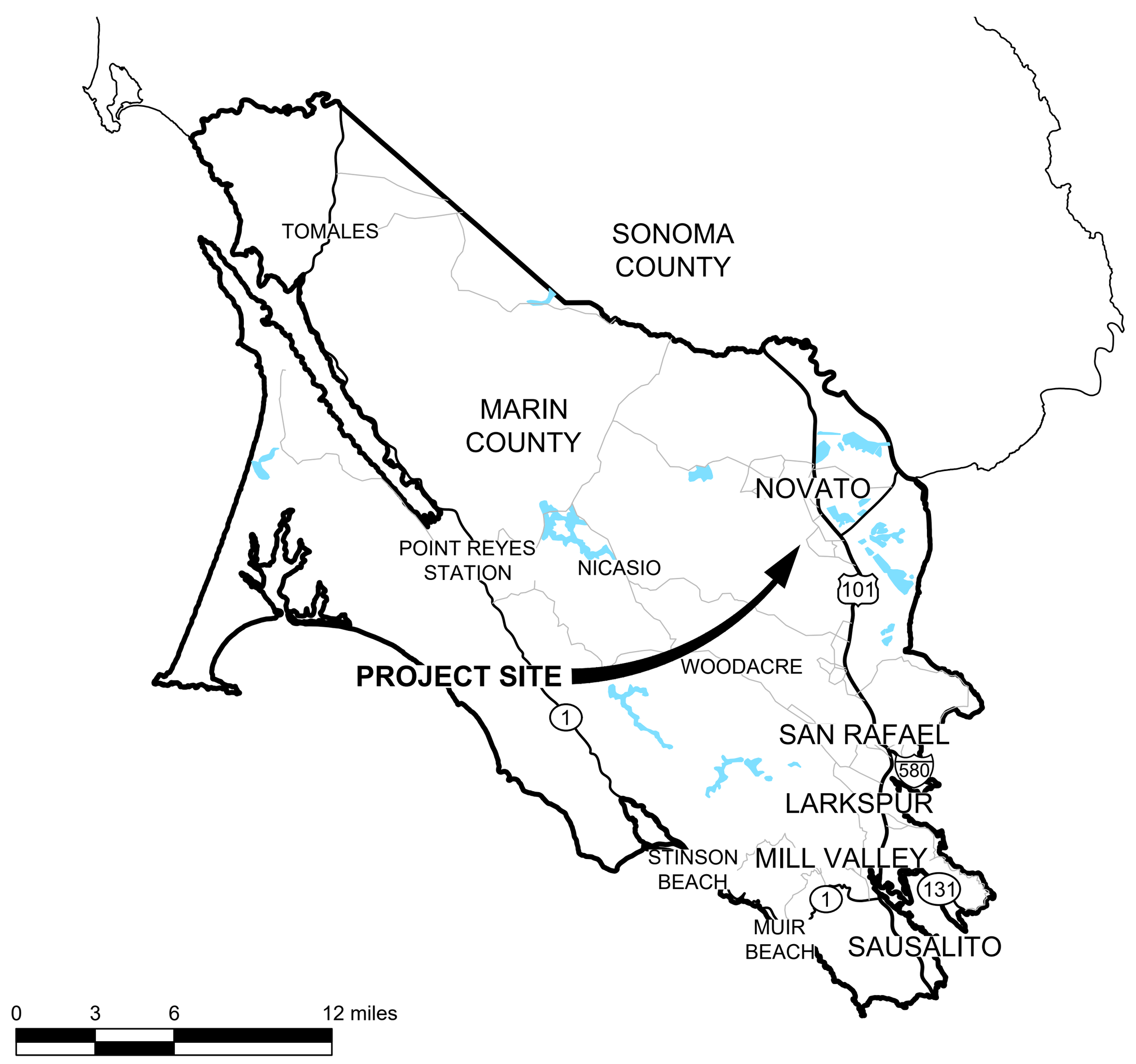
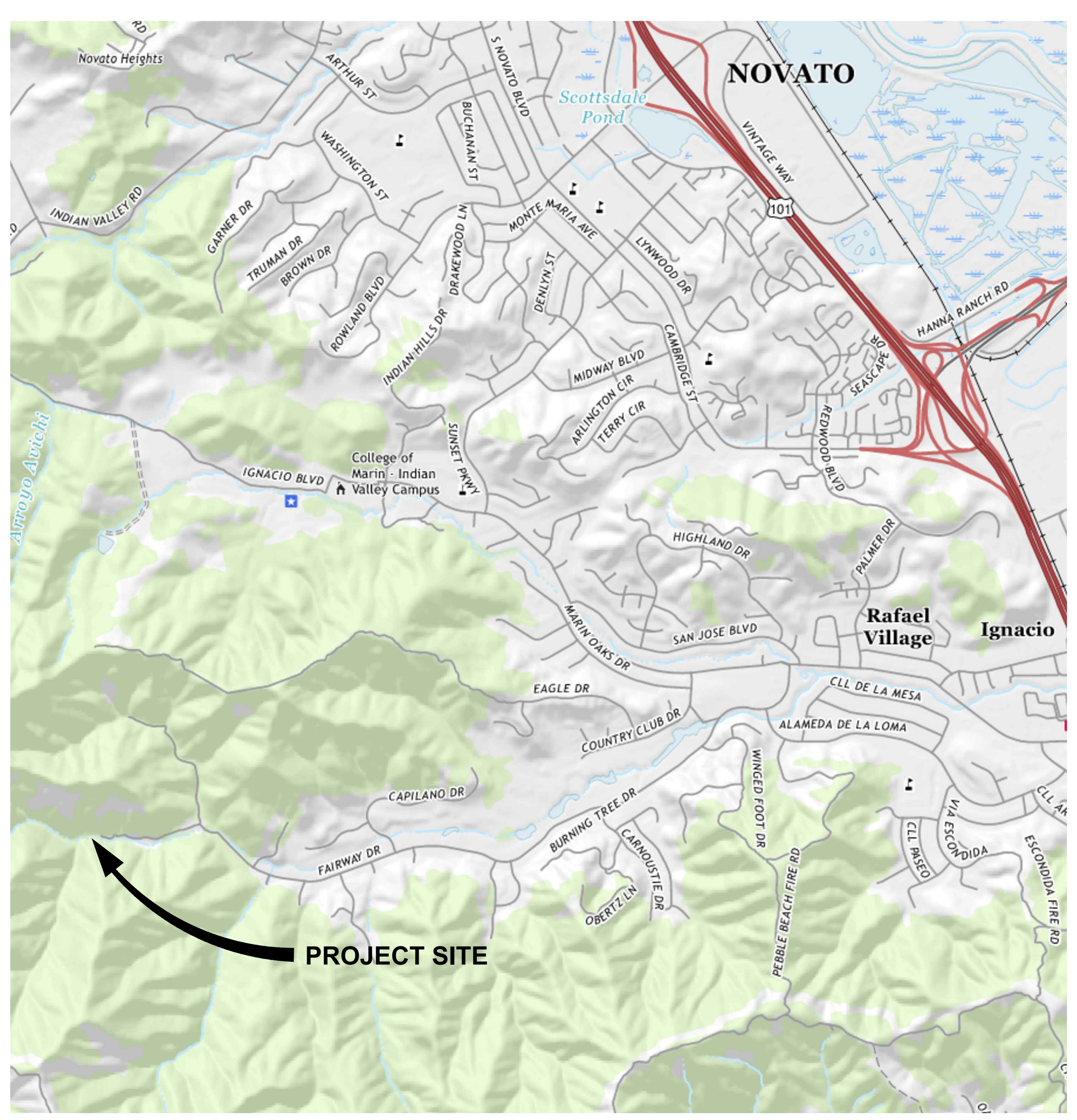
BUCK GULCH FALLS TRAIL
ARROYO SAN JOSE
STREAMBANK STABILIZATION

PREPARED FOR:
MARIN COUNTY OPEN SPACE DISTRICT

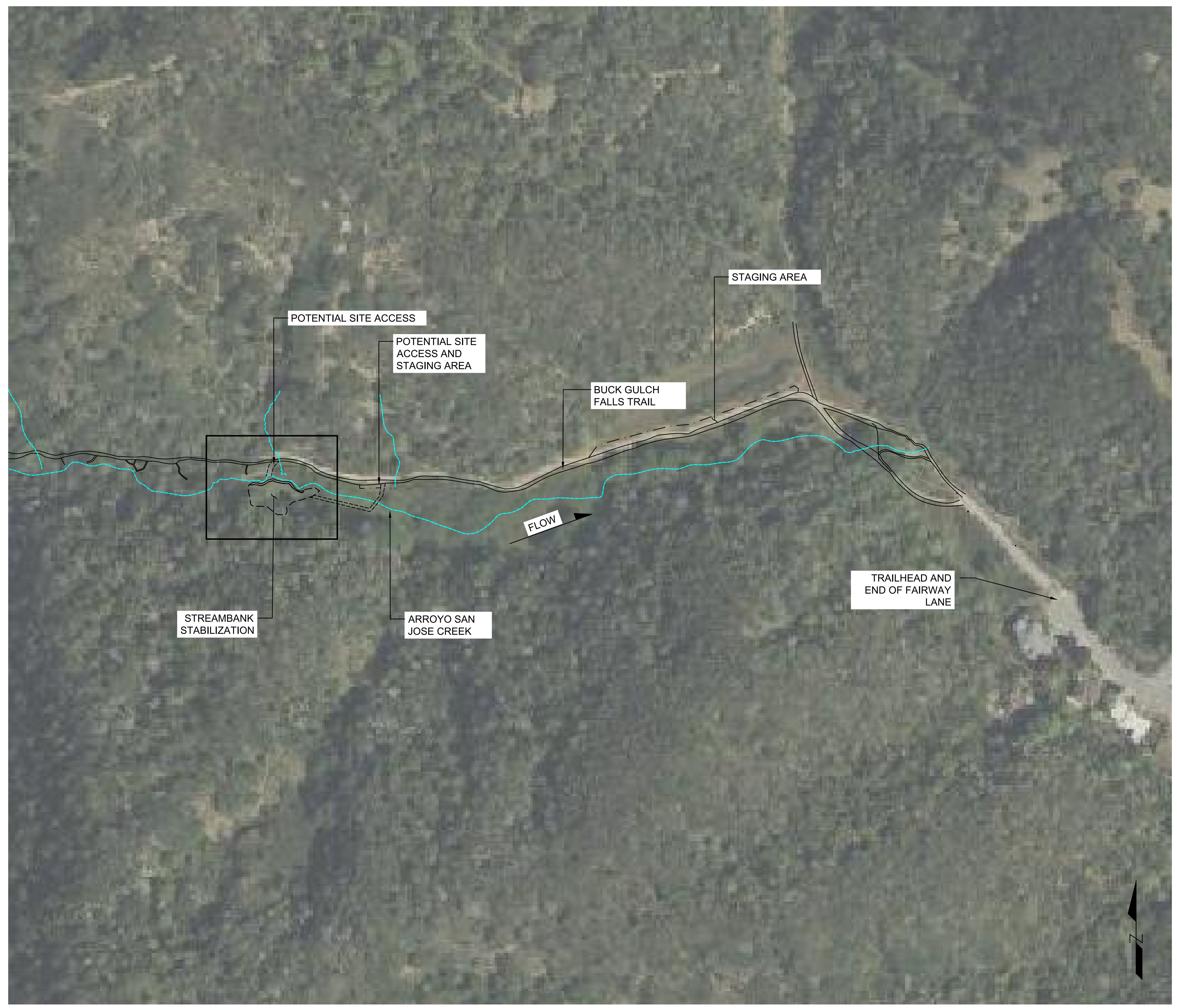


VICINITY MAP
SCALE: AS SHOWN



LOCATION MAP
SCALE: 1" = 2000'
USGS

PROJECT ADDRESS: 651 FAIRWAY LANE
NOVATO, CA



SITE LAYOUT
SCALE: 1" = 150'

Sheet Index	
Sheet Number	**Sheet Title**
1	TITLE SHEET
2	NOTE SHEET
3	SITE ACCESS PLAN
4	GRADING PLAN
5	EROSION CONTROL & REVEGETATION PLAN
6	CONSTRUCTION DETAILS

SURVEY NOTES

PCI PERFORMED LIMITED TOPOGRAPHIC SURVEY IN APRIL 2024. SURROUNDING TOPOGRAPHIC LIDAR DATA OBTAINED FROM NOAA AND IS APPROXIMATE ONLY.

HORIZONTAL DATUM: NAD83 CALIFORNIA STATE PLANE (ZONE 3)
VERTICAL DATUM: NAVD 1988

△ HORIZONTAL AND VERTICAL CONTROL AS SHOWN

PROJECT LOCATION: LAT: 38°3'44" N LONG: 122°35'11" W

PCI ECOLOGICAL
103 MORRIS STREET, SUITE A-5
SEBASTOPOL, CA 95472
(707) 824-4600

PREPARED FOR:
MARIN COUNTY OPEN SPACE DISTRICT
3501 CIVIC CENTER DRIVE, SUITE 260
SAN RAFAEL, CA 94903

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PRELIMINARY
DATE : Sep 10, 2024

REVISIONS	DATE	BY

DATE: 9/10/2024
SCALE: AS SHOWN
MAPPING BY: EC
DESIGNED BY: MJ, KJ
DRAFTED BY: KJ, EC
CHECKED BY: MJ

BUCK GULCH FALLS TRAIL
STREAMBANK STABILIZATION
TITLE SHEET

VERIFY SCALES
ONE INCH

Acad File Name: G:\CAD2020\MarinCoOpenSpaceDistrict\BuckGulch\02_MCOSDBUCKGULCH\Dwgs\TS.dwg
Plot date: 9/10/2024 8:49 AM Layout: TITLE SHEET

GENERAL CONSTRUCTION NOTES:

A. LEGAL

A1. Contractor will assume sole and complete responsibility for job site conditions during the course of construction of the project, including safety of all persons and property. This requirement will be made to apply continuously and not be limited to normal working hours. Construction Contractor will hold harmless, indemnify and defend the Owner (Marin County Open Space District), the Project Designer and their consultants, and each of their officers, employees, and agents.

B. INSPECTION / CONSTRUCTION REVIEW

B1. Project Designer will provide construction review related to site work shown on this plan set. Project Biologist will conduct and oversee biological protection according to permit conditions.

B2. A pre-construction site meeting will be held with Contractor, Project Designer, and Owner Representative to determine review points that require approval before continuing work, and discuss construction methods, work sequence, staging and spoils areas, protection of biological resources, permit conditions, and schedule.

B3. Project Designer to review: 1. All grade staking prior to construction. 2. After excavation to subgrade before installation of base rock. 3. After installation of base rock before revegetation/seeding/mulching. 4. During slope grading. 5. At job completion.

C. GENERAL CONDITIONS

C1. This plan set and these general construction notes are meant to fully describe all materials and methods required to construct the Project.

C2. All construction materials and workmanship shall conform to the Project plans.

C3. Contractor shall be fully responsible for being familiar with the provisions and requirements contained in the Project plans. Contractor shall have a copy available at the job site at all times.

C4. Construction staging areas and temporary access shall be coordinated with Owner Representative prior to construction. Staging shall occur within project area and as approved by Owner Representative.

C5. No work to commence prior to 7am except in an emergency. No work to occur on weekends unless authorized by Owner Representative.

C6. Demolition: Where shown on the plans, remove and dispose of items offsite in a lawful manner unless otherwise designated for storage by the Owner Representative or shown to be reinstalled on the plans. In no case shall disposal occur within wetlands of waters of the U.S. or State.

C7. Set grade stake site with adequate detail for inspector to verify horizontal and vertical conformance.

D. UTILITIES

D1. Prior to construction, locate all existing underground utilities through coordination with the Owner Representative, Underground Service Alert, and the various utility companies. Protect all utilities.

D2. If utilities are required to be relocated, submit a utility relocation plan for approval by Project Engineer as well as required County and Local agencies. Upon completion of the project, an as-built plan shall be completed and submitted to Project Owner, if the constructed project deviates substantially from plans.

E. SUBMITTALS

E1. Provide all submittals to the Project Designer for review and approval at least three business days prior to bringing materials on site.

E2. See required submittal table on this sheet.

F. ENVIRONMENTAL AND CULTURAL RESOURCES PROTECTION

F1. Comply with all regulatory permit conditions.

F2. Vegetation Protection: Install tree protection fencing as shown on plan to protect existing vegetation beyond the project limits. Within the project area, protect trees designated to remain with temporary fencing located around the tree dripline.

F3. Species Protection: All work shall be conducted in conformance with regulatory permit conditions and mitigations.

F4. All vehicles and equipment on the site must not leak any type of hazardous materials such as oil, hydraulic fluid, or fuel. Vehicles and equipment must be inspected and approved by Owner Representative before use. Refuel outside of the riparian corridor.

F5. Emergency spill clean up gear (spill containment and absorption materials) and fire equipment shall be available on site at all times. These items are to be reviewed by Owner Representative before construction begins.

F6. Access to the site must be reviewed with the Owner Representative and Project Designer. Prior to construction start up, submit exact location of access way and type of vehicles to be used during construction. List must be approved by Owner Representative and Project Designer. Contractor is responsible for repairing, at their own cost above and beyond the scope of work, any damage to property caused by access not approved by the Owner Representative and Project Designer.

F7. Store trash, litter, construction debris, cigarette butts, etc., in designated area approved by the Owner Representative or removed from the site at the end of each working day. Upon completion of work, remove all debris to the satisfaction of the Owner Representative.

F8. Construction personnel shall be briefed about the potential to uncover prehistoric resources, including chert or obsidian flakes, projectile points, mortars and pestles, dark friable soil containing shell and bone, heat-affected rock, or human burials, as well as historic resources such as stone or adobe foundations or walls, structures and remains with square nails, and refuse deposits or bottle dumps. Construction personnel shall be instructed to avoid areas containing potential cultural resources and that collection of cultural resources is forbidden.

F9. Should potential cultural resources be discovered, stop work until the area can be evaluated by a qualified archaeologist. If human remains are encountered, all work must stop in the immediate vicinity of the discovered remains, and the County Coroner and a qualified archaeologist must be notified immediately so that an evaluation can be performed. If the remains are deemed to be Native American and prehistoric, the Native American Heritage Commission must be contacted by the Coroner so that a "Most Likely Descendant" can be designated.

F10. Where possible, do not operate equipment within the drip line of trees. When operation within the drip line of trees is required use steel plates to prevent excessive compaction.

G. TEMPORARY CONSTRUCTION BEST MANAGEMENT PRACTICES (BMPs)

G1. Dust Control: Apply water as needed to minimize wind-blown dust.

G2. Sediment Control: Employ Best Management Practices to prevent the discharge of sediment or turbid water beyond grading limits.

G3. All permanent erosion control material must be 100% biodegradable and made of all natural materials (no plastic).

H. EARTHWORK SPECIFICATIONS

H 1.0. General

H 1.1. Perform all earthwork in accordance with the plans and details.
H 1.2. Excavate to the extent and depths shown on plans and details or determined by the Project Designer.
H 1.3. Temporary Stockpiles: Stockpile soil or other material in areas where it will not be washed into the stream. If rain should occur while the soil is temporarily stockpiled, cover the stockpiled soil with plastic. Secure the plastic in place to insure that soil is protected from rain and wind. Install silt fencing or wattles on contour around all stockpile locations.

H 2.0. Materials

H 2.1. Salvaged Bed Material: Alluvial fines, gravels, cobble, and rock that is approved by the Project Designer may be used as streambed material.
H 2.2. Compacted Fill: Clean Native Backfill or Imported Backfill as approved by Project Designer, compacted to specifications below.
H 2.3. Unsuitable Soils for Compacted Fill: Soil containing debris or rocks larger than 4 inches, overwet soils that cannot meet compaction requirements, or otherwise deemed unsuitable by the Project Designer.
H 2.4. Clear and Grub: All vegetation not designated to remain within the project limits shall be cleared and grubbed. All woody vegetation that is not to be re-used as salvage wood shall be disposed of off-site.
H 2.5. Topsoil: Top 6" of soil containing organic material within grading limits shall be salvaged, stockpiled and replaced within grading limits after grading.

H 3.0. Execution

H 3.1. Clearing and grubbing of site shall occur prior to earthwork. Clearing and grubbing shall occur only within limits of grading, and as necessary for construction operations in the staging area. Contractor shall remove all cleared and grubbed materials including, but not limited to, trash, debris, vegetation, trees, soil unsuitable for compaction or re-use to an approved disposal site, or as directed by the Project Designer.
H 3.2. Stripping of Topsoil: Areas to be graded shall be stripped of the upper 6" layer of soil containing organic matter. Actual stripping depth shall be determined by the Project Designer. The stripping shall be stockpiled for placement in revegetated areas.
H 3.3. If excavation of the creek bank is required for creek access, Contractor shall restore excavation with compacted fill to original bank contours or to finished grade contours as shown on plans and provide treatment per erosion control specifications. Access to the creek shall be minimized to a single access point, unless otherwise approved by project designer.
H 3.4. Salvaged material may be used for channel rock, or as interstitial fill, if approved by Project Designer.
H 3.5. Maximum cut and fill slopes shall be 2.5:1 unless otherwise noted.
H 3.6. Replace stripped topsoil within grading limits.

I. EROSION CONTROL SPECIFICATIONS

I 1.0. General

I 1.1.This work includes site preparation, installing and maintenance of erosion control Best Management Practices, seeding, laying and pinning of biodegradable erosion control blankets and mats.
I 1.2. Erosion control and revegetation shall be provided and placed in conformance with Section 20 of Caltrans specifications, the Caltrans Storm Water Quality Handbook, CASQA standards and handbooks, permit requirements, these special provisions, and the details and dimensions shown on the plans or as directed by the Project Designer.
I 1.3. Product Data: Submit manufacturer's literature including physical characteristics, application, and installation instructions to the Project Designer for all erosion control materials.
I 1.4. Seed Tags: Submit to Project Designer documentation showing seed mix prior to placement. All seed shall include labeling indicating the supplier, formulation, germination rates and seed harvest date. Seed may be subject to retesting by a certified lab.
I 1.5. It is the Contractor's responsibility to minimize erosion and prevent the transport of sediment to the adjacent stream and sensitive area.
I 1.6. All disturbed areas shall be seeded by hand broadcasting method or by hydroseeding method.
I 1.7. All disturbed areas not designated for erosion control blanket shall be seeded and mulched.These areas include, but are not limited to temporary access roads and staging areas outside of active channel.
I 1.8. Schedule: Seed shall be applied before October 15 unless permit extension is granted.

I 2.0. Materials

I 2.1. Erosion Control Blanket shall contain 0.5 lbs large coir fiber per sq. yd. stitched together with a coir or jute string netting.
Manufacturers:
a. North American Green C125BN, or approved equal.
I 2.2. Wood wedge stakes shall be used to secure erosion control blanket. See Sheet 6 for wood wedge stake detail.
I 2.3. Straw Wattle netting shall be non-plastic bio-degradable natural fiber.
I 2.4. Mulch: Mulch shall be weed free and may include wood fiber hydro mulch (not recycled paper) and irrigated crop certified weed-free rice, wheat, or barley straw. Contractor shall submit weed-free mulch for approval by Project Designer.
I 2.5. Compost shall be screened and mature.
I 2.6. Mid & Upper Bank Native Seed Mix, 40 pounds per acre:
20% Purple Needle Grass (Stipa Pulchra)
20% California brome (Bromus carinatus)
20% Blue wild rye(Elymus glaucus)
20% Small fescue (*Festuca microstachys*)
10% Spanish lotus (*Acimspan americanus*)
10% Yarrow (*Achillea millefolium*)

I 3.0. Execution

I 3.1. Quality Assurance: Prior to purchase, products requiring Product Data submittals shall be approved by the Project Designer.
I 3.2. Surface Preparation: After the slopes have been graded, prepare slopes for coir twine mat and erosion control blanket at the locations shown on the Contract Drawings.
I 3.3. Scarify surface on contour to prepare the seed bed. If slopes are rutted or uneven, these areas shall be smoothed to allow for even distribution and full soil contact of the erosion control blanket (no bridging).
I 3.4. Broadcast native seed mixes to the specified rates and mixes.
I 3.5. Apply 1" of compost evenly on slope after seeding.
I 3.6. Install erosion control blanket following Project Designer's approval of surface preparation.
I 3.7. Install erosion control blanket vertical to the slope. Start by installing the required keys and pinning the mat along the upstream edge as each roll is rolled out.
I 3.8. Blanket Keys: The top of bank edge of blankets shall be stacked and tucked into a 6-inch deep trench, which shall then be backfilled and compacted, per Contract Drawings. The upstream anchor edge shall be tucked into a 12-inch trench filled with native soil and overlapped and staked as shown on the Contract Drawings. Compact soil in keys.
I 3.9. Downslope edges and downstream edges of abutting blankets shall be overlapped in a shingle fashion to allow water to flow over the protected slope without catching a blanket edge. Overlap blankets as shown in Contract Drawings.
I 3.10. Install wattles every 5 vertical feet, on slope on top of erosion control blanket, and in all other disturbed areas. Use a laser level to mark location of wattles to ensure level installation. Install additional wattles at the direction of Project Designer or Owner. Install wattles according to CalTrans SC-5 Type 2 method.
I 3.11. On all disturbed areas where erosion control blanket is not specified, scarify surface and then broadcast seed and apply weed-free mulch on top of seeded area at a rate of 3,000 pounds per acre. Rake or roll ground surface after broadcasting seed and before mulch application. Do not apply seed mix in channel were access route crosses channel.

J. ROCK TOE PROTECTION

J 1.0. General

J 1.1. The work includes excavation to subgrade and placement of rock.
J 1.2. Rock shall be provided and placed in conformance with Section 72-2 of Caltrans specifications using rock placement Method A, these special provisions, the details and dimensions shown on the plans, or as directed by the Project Designer.
J 1.3. Approval of materials: Certified copies of test results shall be submitted not less than 5 days before material is required for the work.

J 2.0. Materials

J 2.1. Rock: All rock shall be of sound quality, free of cracks, of sufficient durability, and not contain swelling type clay. All rock shall conform to Caltrans Standard Specifications, Section 72-2.02 for all material qualities including but not limited to durability, absorption, and apparent specific gravity.
J 2.2. Rock gradation:
70% 1/2 Ton
10% Head size (9-14 inches)
10% Cobble Chinking Rock
10% CalTrans Class 2 permeable gravel

J 3.0. Execution

J 3.1. Quality Assurance: Submit certified test results and to Project Designer for approval before rock delivery to site.
J 3.2. Subgrade Preparation: Before laying rock, prepare the subgrade to the required lines and grades. Finish grade at top of rock is shown on the Contract Drawings. Remove any organic or other objectionable material.
J 3.3. Subgrade shall be excavated sufficiently to allow placement of the rock in a manner such that the finished inside dimensions and grade of the rock meet or exceed design specifications for toe depth and thickness shown on the Contract Drawings. Allow for smooth transition at upstream and downstream ends. All rock placed that exceeds the specified width and depth shown on Contract Drawings shall be at the Contractor's cost.
J 3.4. Place rock so that it forms a dense, well-graded mass of stone, with a minimum of voids. Larger rocks shall be placed at the base and toe as footer rocks to support next course of rocks. Larger rocks shall be placed firmly at bottom excavation. Larger rocks shall be interlocked to resist stream shear stresses and placed to avoid large uplift surfaces exposed to flowing water.
J 3.5. Rock shall be individually placed in lifts, one coarse at at time, hand-chinking and water-jetting after each lift to ensure interstitial voids between larger rocks have been filled with gravel. The objective is to create an interlocking matrix with each rock supported at a minimum of 3 points on adjacent rocks so that every rock is firmly placed and unmovable, before finishing one layer and proceeding to the next.
J 3.6. Rock shall be firmly in contact with one another, using smaller rocks and interstitial fill to fill voids between larger rocks by water-jetting. Rock shall be placed to the grades shown on the Contract Drawings.

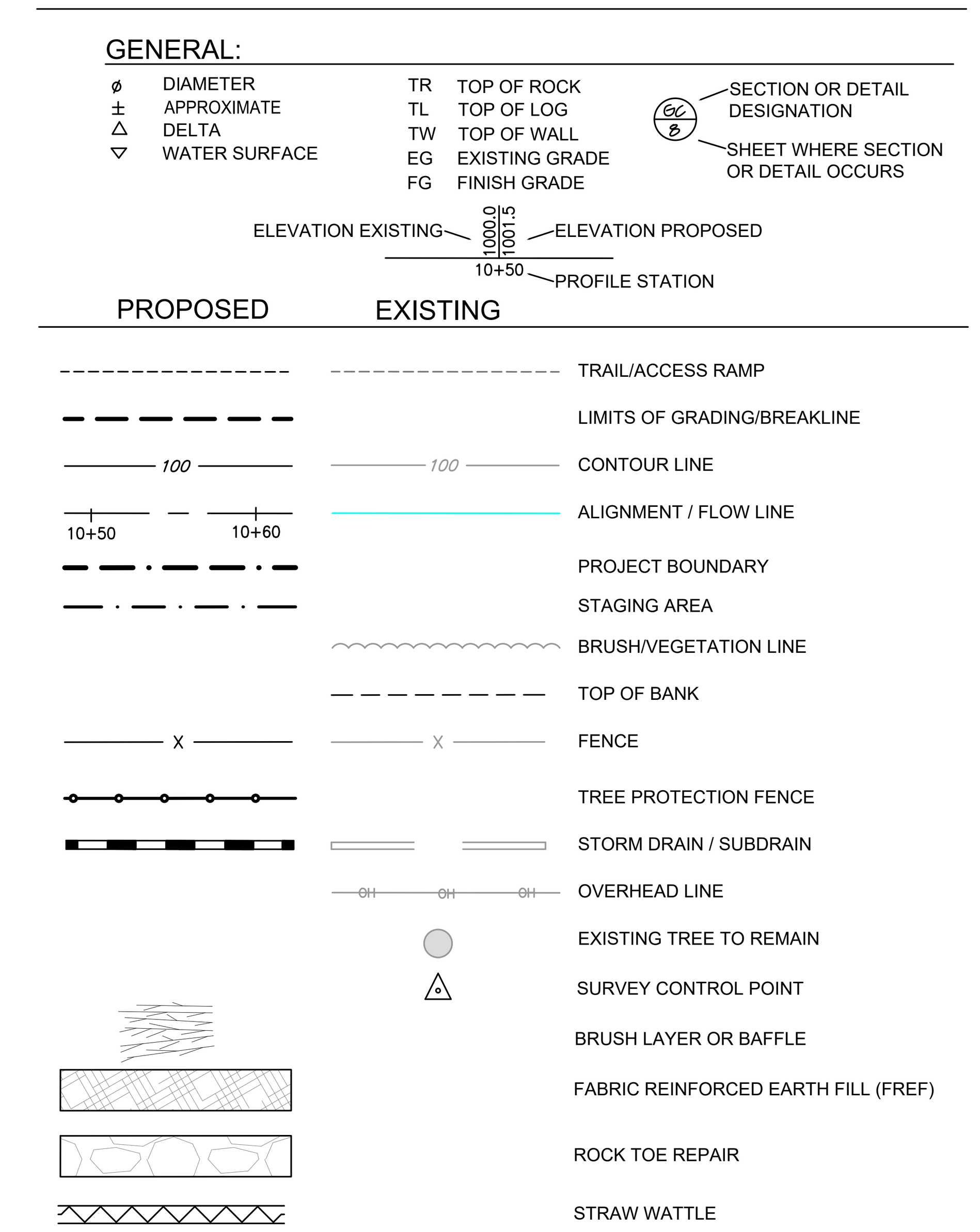
APPROXIMATE CONSTRUCTION QUANTITIES:

1. Total excavation from existing grade to subgrade: 480 cy
2. Total channel rock fill from subgrade to finish grade: 70 tons
3. Total area in project limits: 0.4 ac
4. Total area in extent of grading: 0.15 ac
5. Length of channel diversion/dewatering, if required (see note next section): 150 ft

CONSTRUCTION QUANTITY NOTES:

1. Construction quantities shown are approximate. Contractor is responsible for determining proper earthwork, rock, and material quantities.
2. Work will be done in dry season and no flow is expected through reach. If water is present, water diversion may be required.

LEGEND



REQUIRED SUBMITTALS

SUBMITTAL	CONTENTS
SITE ACCESS	ACCESS ROUTE AND CONSTRUCTION EQUIPMENT TO BE USED
UTILITY RELOCATION PLAN	RELOCATION PLAN IF UTILITIES ARE FOUND
ROCK MATERIALS	CERTIFIED COPIES OF MATERIAL TEST RESULTS
EROSION CONTROL MATERIALS	PRODUCT DATA ON ALL EROSION CONTROL MATERIALS
SEED MIX	SEED MIX TAGS
WEED-FREE MULCH	SAMPLE AND WEED-FREE CERTIFICATION
AS-BUILT PLANS	AS-BUILT PLAN IF FINISHED CONSTRUCTION DEVIATES SUBSTANTIALLY FROM PLANS
SOIL DISPOSAL	DISPOSAL LOCATION AND APPLICABLE PERMITS

VERIFY SCALES
ONE INCH

PCI ECOLOGICAL
103 MORRIS STREET, SUITE A-5
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(707) 824-4600

PREPARED FOR:
MARIN COUNTY OPEN SPACE DISTRICT
3501 CIVIC CENTER DRIVE, SUITE 260
SAN RAFAEL, CA 94903

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PRELIMINARY
DATE : Sep 10, 2024

REVISIONS	DATE	BY

DATE: 9/10/2024
SCALE: N/A
MAPPING BY: EC
DESIGNED BY: MJ, KJ
DRAFTED BY: KJ, EC
CHECKED BY: MJ

BUCK GULCH FALLS TRAIL STREAMBANK STABILIZATION NOTE SHEET

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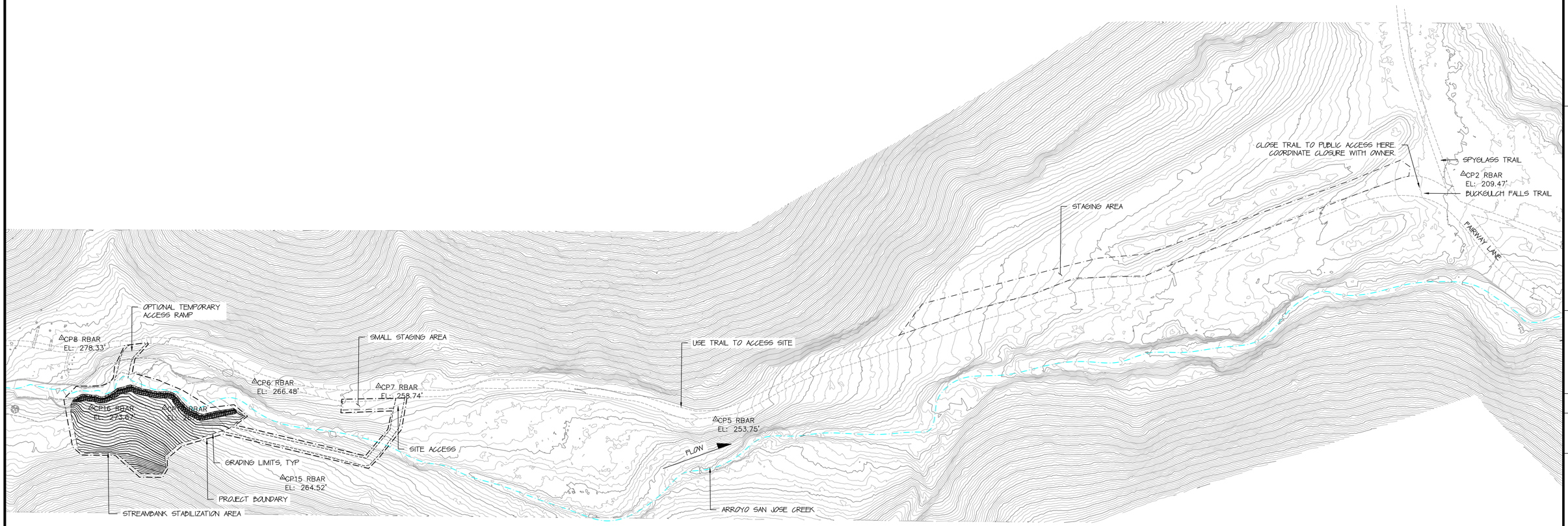

PROJECT CONTROL POINTS

CALIFORNIA STATE PLANE ZONE 3, FT				
POINT #	EASTING	NORTHING	ELEVATION	DESCRIPTION
2	5962222.4620'	2216119.2220'	209.47	CP2RBAR
5	5961579.7520'	2215908.1190'	253.75	CP5RBAR
6	5961183.6390'	2215940.6740'	266.48	CP6RBAR
7	5961290.0670'	2215936.6310'	258.74	CP7RBAR
8	5961017.7540'	2215978.0420'	278.33	CP8RBAR
15	5961207.7460'	2215858.0410'	264.52	CP15RBAR
16	5961043.2190'	2215918.3600'	273.67	CP16RBAR
17	5961106.3760'	2215918.1420'	267.21	CP17RBAR

0 20 40 80

VERIFY SCALES ONE INCH

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PRELIMINARY
DATE: Sept 10, 2024

DATE: 9/10/2024
SCALE: 1" = 40'
MAPPING BY: EC
DESIGNED BY: MJ, KJ
DRAFTED BY: KJ, EC
CHECKED BY: MJ

BUCK GULCH FALLS TRAIL STREAMBANK STABILIZATION SITE PLAN

SHEET 3 OF 6

Acad File Name:G:\CAD2020\MarinCoOpenSpaceDistrict\BuckGulch\02_MCOSDBUCKGULCH\Dwgs\SP1.dwg
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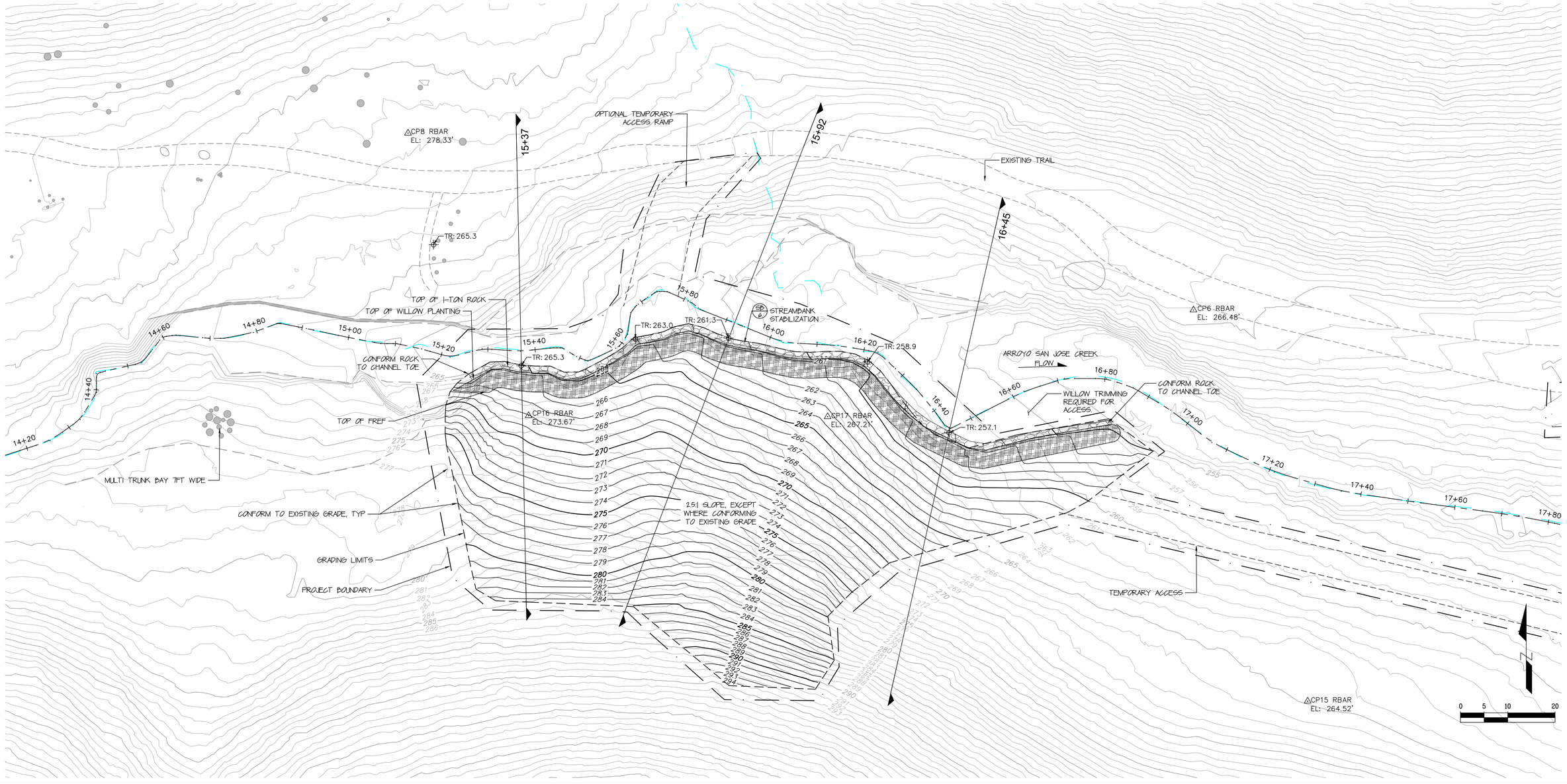

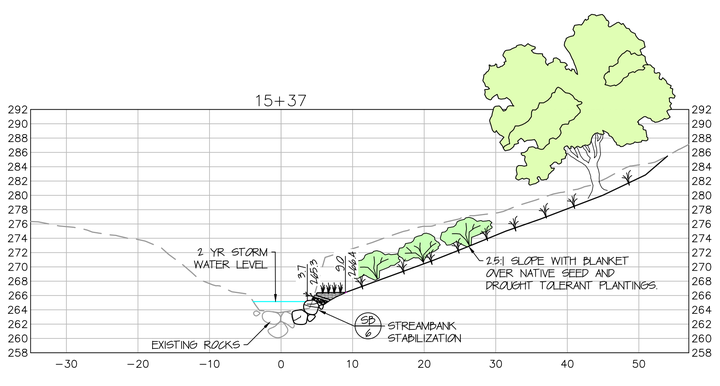

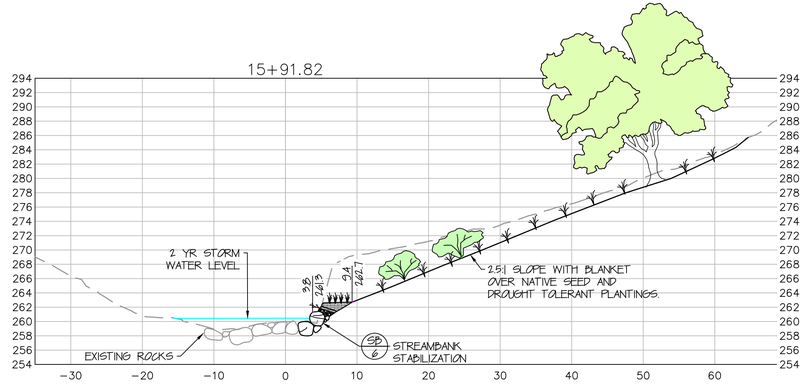

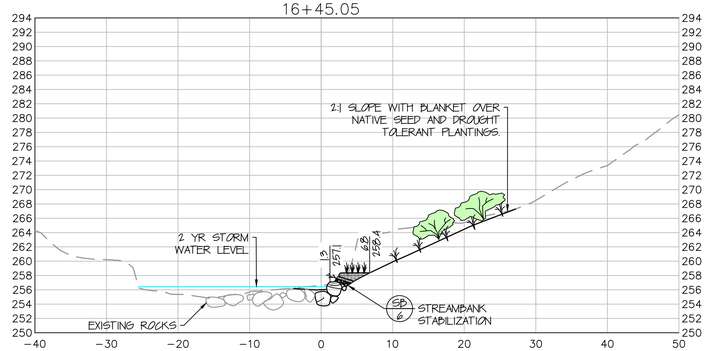

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REVISIONS	DATE	BY

PRELIMINARY
DATE: Sept 10, 2024

DATE:	9/10/2024
SCALE:	1" = 10'
MAPPING BY:	EC
DESIGNED BY:	MJ, KJ
DRAFTED BY:	KJ, EC
CHECKED BY:	MJ

BUCK GULCH FALLS TRAIL
STREAMBANK STABILIZATION
GRADING PLAN

SHEET
4
OF 6

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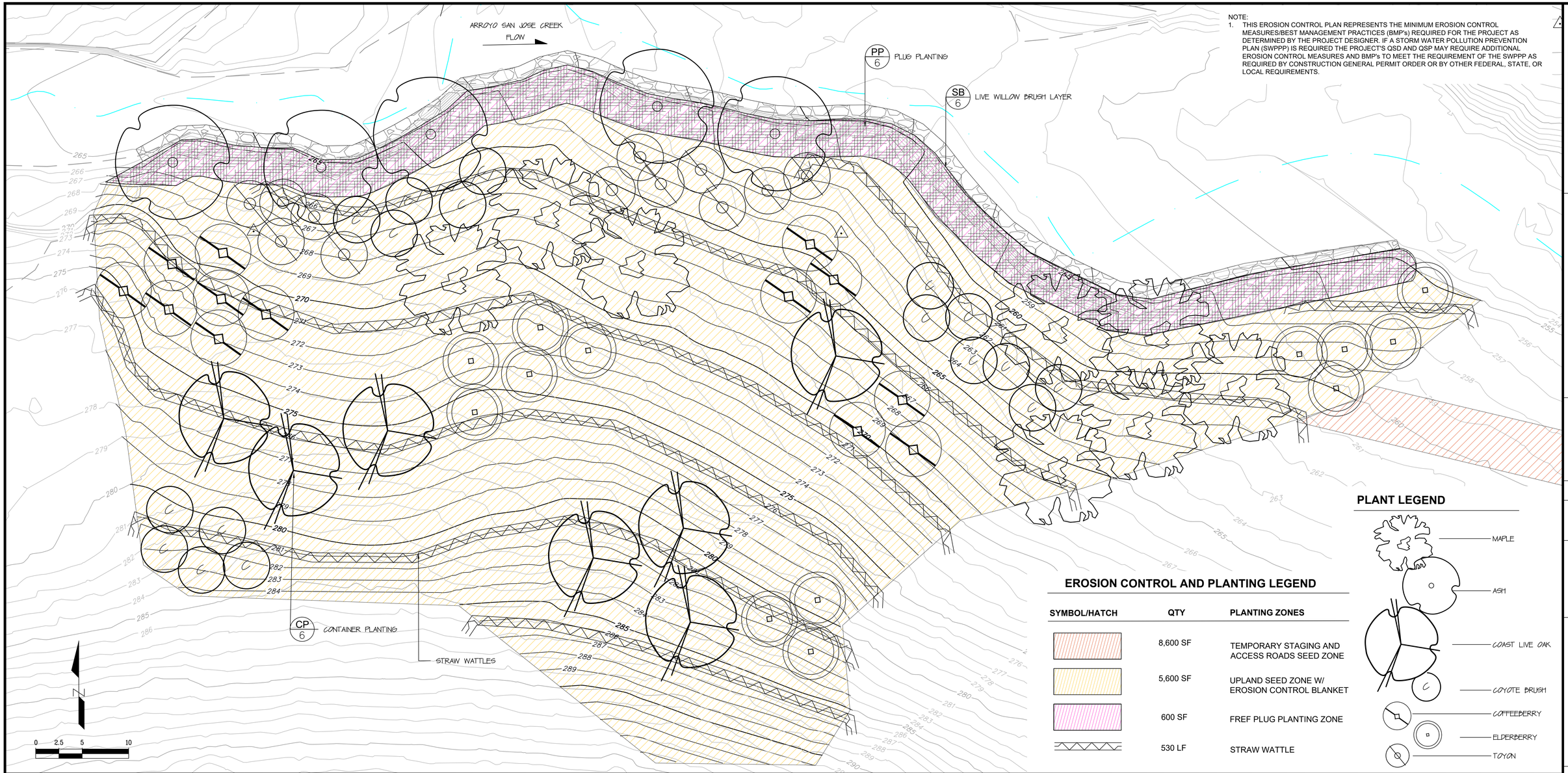

NOTE:
1. THIS EROSION CONTROL PLAN REPRESENTS THE MINIMUM EROSION CONTROL MEASURES/BEST MANAGEMENT PRACTICES (BMP's) REQUIRED FOR THE PROJECT AS DETERMINED BY THE PROJECT DESIGNER. IF A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS REQUIRED THE PROJECT'S QSD AND QSP MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES AND BMP's TO MEET THE REQUIREMENT OF THE SWPPP AS REQUIRED BY CONSTRUCTION GENERAL PERMIT ORDER OR BY OTHER FEDERAL, STATE, OR LOCAL REQUIREMENTS.

EROSION CONTROL AND PLANTING LEGEND

SYMBOL/HATCH	QTY	PLANTING ZONES
	8,600 SF	TEMPORARY STAGING AND ACCESS ROADS SEED ZONE
	5,600 SF	UPLAND SEED ZONE W/ EROSION CONTROL BLANKET
	600 SF	FREF PLUG PLANTING ZONE
	530 LF	STRAW WATTLE

PLANT LEGEND

PLANTING NOTES

1.0 Plant Materials
1.1 Secure the necessary container grown planting materials shown on the plant list. The table specifies the species and size of plants to be installed. Treepots (TP) are 14 inch deep containers that support a 173 cubic inch root mass. Deepots (DP) are 10 inch deep containers that support a 40 cubic inch root mass. All trees and shrubs shall be in deepots, treepots or 1 gallon pots.

1.2 Procure plant material only from nurseries with Best Management Practices (BMPs) in place to exclude Phytophthora and other plant pathogens, and to detect and correct problems if they are found. If possible, select nurseries that implement BMPs equivalent to or more stringent than those identified by the California Oak Mortality Task Force, and nurseries which are tested annually by USDA APHIS for P. ramorum infection with negative results. Inspect all purchased plant material before leaving the nursery and accept only plants that appear healthy.

2.0 Schedule
2.1 Plant after the first rains, preferably after the first 6 inches of precipitation. The typical planting season is between November 15th and January 31st.

3.0 Installation of Container Plants (Weed Mats & Browse Protection)
3.1 Container grown plants include trees and shrubs.
Planting holes shall be no deeper than the root ball and at least twice as wide. Keep roots straight and avoid "j" rooting. Backfill with native material half way up the root ball. Continue the backfill to grade and firm in soil. Root crown shall be at or $\frac{1}{2}$ inch above grade (but not below grade) for container plants 1 gallon and smaller. See plant list for species requiring browse protection. All container plants shall be thoroughly watered in immediately after installation to remove air pockets.

3.2 Plug Planting
Excavate planting holes no deeper than the existing roots of plugs. Keep roots straight. Tamp soil firmly to eliminate air holes. Apply additional native material if watering settles soil below adjacent finish grade. Ensure that root crown remains level with finish grade. Water plants to soil saturation immediately after installation.

4.0 Irrigation
4.1 Irrigate all plants by hand-watering from a small water tank and pump in a maintenance vehicle. Coordinate site access with Owner.

4.2 Watering season: April 1 to November 1.

4.3 Watering schedule:
Year one: Weekly: 1 gallon to each container plant and $\frac{1}{2}$" of water on FREF plug planting zone
Year two: Every two weeks: 1 gallon to each container plant and $\frac{1}{2}$" of water on FREF plug planting zone
Year three: Every four weeks: 1 gallon to each container plant and $\frac{1}{2}$" of water on FREF plug planting zone

4.4 Water amount shall be adjusted according to plant and soil requirements. The top $\frac{1}{2}$ inch of soil should be dry after two days to avoid fungus growth. Additional watering will be required if less than $\frac{1}{2}$ inch of precipitation falls during any 6 week period from December through March. Additional watering may be required during hot, dry weather.

5.0 Maintenance of Revegetation Areas
5.1 Typically, native plants require three years of watering and maintenance to become established. During the three-year establishment period, water, weed, and monitor, the health of the plants. Replace plants that die. The establishment period will be extended for three years if plants die and are replaced.

5.2 Weeding
During the 3-year establishment period, the maintenance crew shall keep the area within a 3 foot by 3 foot zone around each container plant weed free. Weeding shall be required 3 times each year in April, May, and June. Invasive weed species shall be pulled by hand, bagged, and disposed of at an acceptable off-site location (such as the county dump).

Buck Gulch Plant Schedule

Common Name	Latin Name	size	qty	Protection Required	Comments
TREES					
Coast Live Oak	Quercus agrifolia	TP	7	Yes	
Big Leaf Maple	Acer macrophyllum	TP	8	Yes	
Ash	Fraxinus dipetala	TP	5	Yes	
SHRUBS AND GRASSES					
Coyote Brush	*Baccharis pilularis*	1 Gal	17	Yes	
Coffeeberry	*Rhamnus californica*	1 Gal	13	Yes	
Elderberry	*Sambucus nigra*	1 Gal	13	Yes	
Toyon	*Heteromeles arbutifolia*	1 Gal	12	Yes	
California Rose	*Rosa californica*	DP	12	No	FREF zone, Stipa pulchra or melica torreyana acceptable alternatives
Creeping Wildrye	*Leymus triticoides*	Plug	74	No	
Grey Rush	Juncus patens	Plug	25	No	
Thimbleberry	*Rubus parviflorus*	DP	12	No	
Total			**198**		
Notes:					
Install plug planting 24" on center.					

VERIFY SCALES
ONE INCH

PCI ECOLOGICAL
103 MORRIS STREET, SUITE A-5
SEBASTOPOL, CA 95472
(707) 824-4800

PREPARED FOR:
MARIN COUNTY OPEN SPACE DISTRICT
3501 CIVIC CENTER DRIVE, SUITE 260
SAN RAFAEL, CA 94903

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PRELIMINARY
DATE : Sept 10, 2024

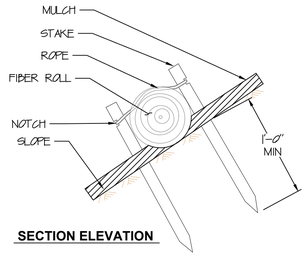
REVISIONS	DATE	BY

DATE: 9/10/2024
SCALE: 1" = 5'
MAPPING BY: EC
DESIGNED BY: MJ, KJ
DRAFTED BY: KJ, EC
CHECKED BY: MJ

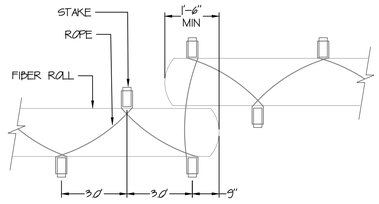
BUCK GULCH FALLS TRAIL STREAMBANK STABILIZATION
EROSION CONTROL & REVEGETATION PLAN

SHEET
5
OF 6

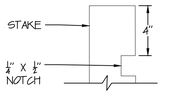
Acad File Name:G:\CAD2020\MarinCoOpenSpaceDistrict\BuckGulch\02_MCOSDBUCKGULCH\Dwgs\RP1.dwg
Plot date:9/10/2024 8:54 AM Layout:REVEGETATION PLAN



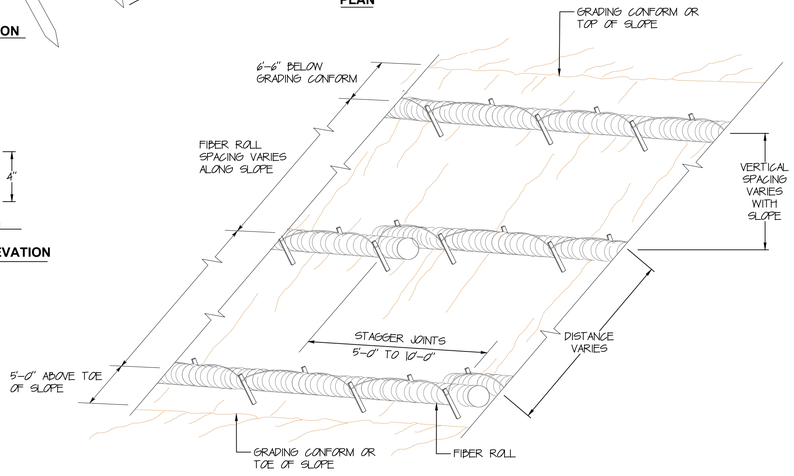
SECTION ELEVATION



PLAN

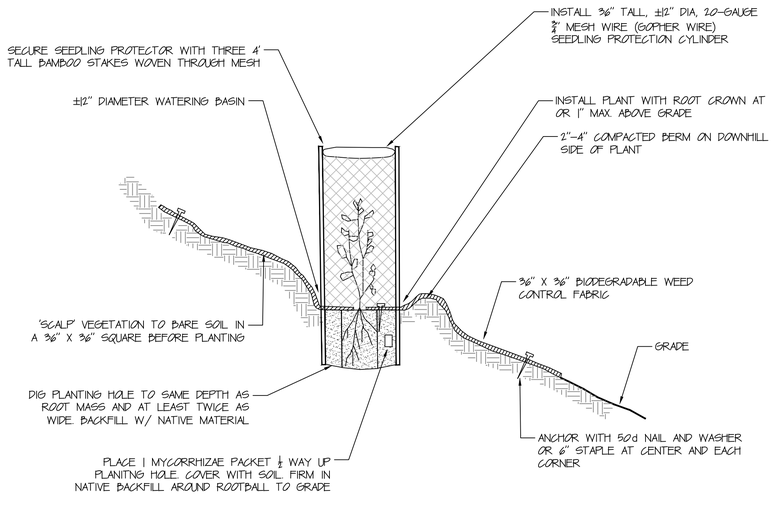


STAKE NOTCH ELEVATION



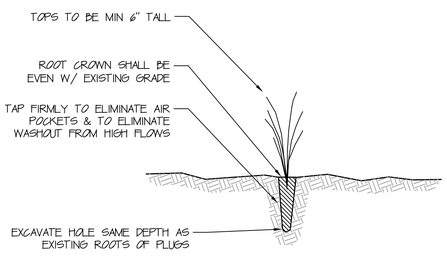
PERSPECTIVE

W — WATTLE DETAIL
NTS

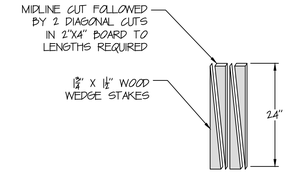


INSTALLATION ON HILL SLOPE

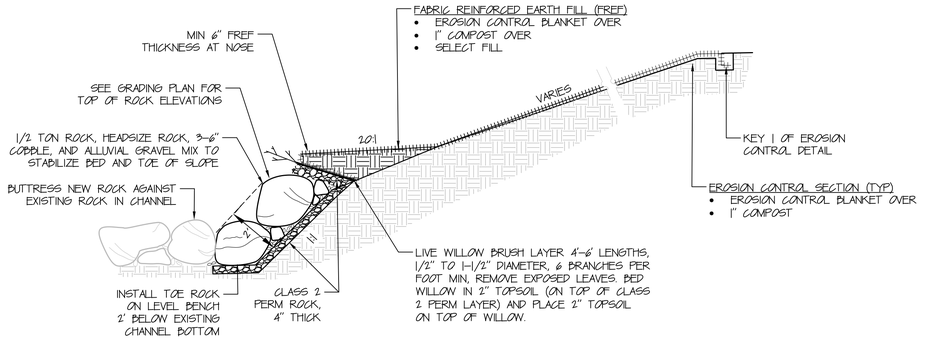
CP — CONTAINER PLANTING
NTS



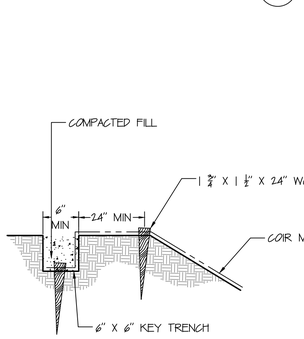
PP — PLUG PLANTING
NTS



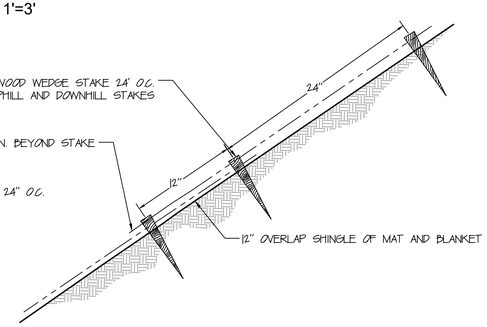
WS — WOOD WEDGE STAKE
NTS



SB — STREAMBANK STABILIZATION
1'=3'

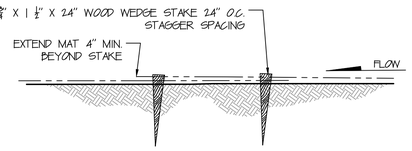


K1 — KEY 1 DETAIL
(TOP OF SLOPE, NTS)

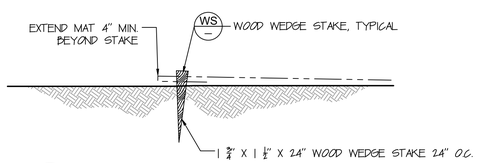


NOTE: SLOPE SHINGLING IS SHOWN. TOE OVERLAP IS SIMILAR.

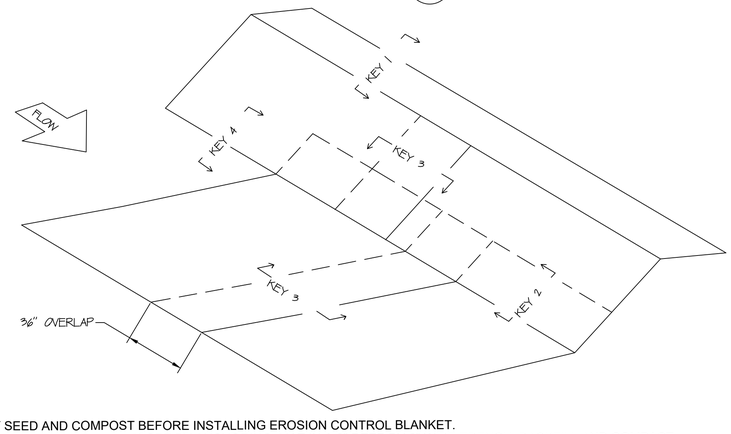
K2 — KEY 2 DETAIL
(SLOPE & TOE OVERLAP, NTS)



K3 — KEY 3 DETAIL
(SIDE SLOPE OVERLAP, NTS)



K4 — KEY 4 DETAIL
(TERMINATION, NTS)



NOTES:

1. APPLY SEED AND COMPOST BEFORE INSTALLING EROSION CONTROL BLANKET.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING MAT IN A 6" DEEP BY 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAKING.
3. BEGIN EROSION CONTROL BLANKET PLACEMENT AT THE DOWNSTREAM END OF PROJECT.
4. OVERLAP EDGES OF ALL ADJACENT FABRIC 12" MIN.
5. STAKE EROSION CONTROL BLANKET AS SHOWN.
6. INSTALL WOOD WEDGE STAKES 36" O.C. (MIN) TRIANGULAR SPACING ON STREAM BANKS.
7. PIN CHANNEL BOTTOMS WITH EROSION CONTROL BLANKET AT 36" ON CENTER WITH TRIANGULAR SPACING, IN BETWEEN WOOD STAKES INSTALLED AT 3' O.C..
8. LOWER END OF EROSION CONTROL BLANKET ON SLOPE TO BE FOLDED UNDER AT THE TOE OF SLOPE.

EC — EROSION CONTROL DETAIL
NTS

VERIFY SCALES
ONE INCH

PCI ECOLOGICAL
103 MORRIS STREET, SUITE A-5
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(707) 824-4800

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SCALE: AS SHOWN
MAPPING BY: EC
DESIGNED BY: MJ, KJ
DRAFTED BY: KJ, EC
CHECKED BY: MJ

BUCK GULCH FALLS TRAIL STREAMBANK STABILIZATION CONSTRUCTION DETAILS

SHEET
6
OF 6

Acad File Name:G:\CAD2020\MarinCoOpenSpaceDistrict\BuckGulch\02_MOOSBUCKGULCH\Dwgs\DT1.dwg
Plot date:9/10/2024 8:54 AM Layout:CONSTR DETAILS