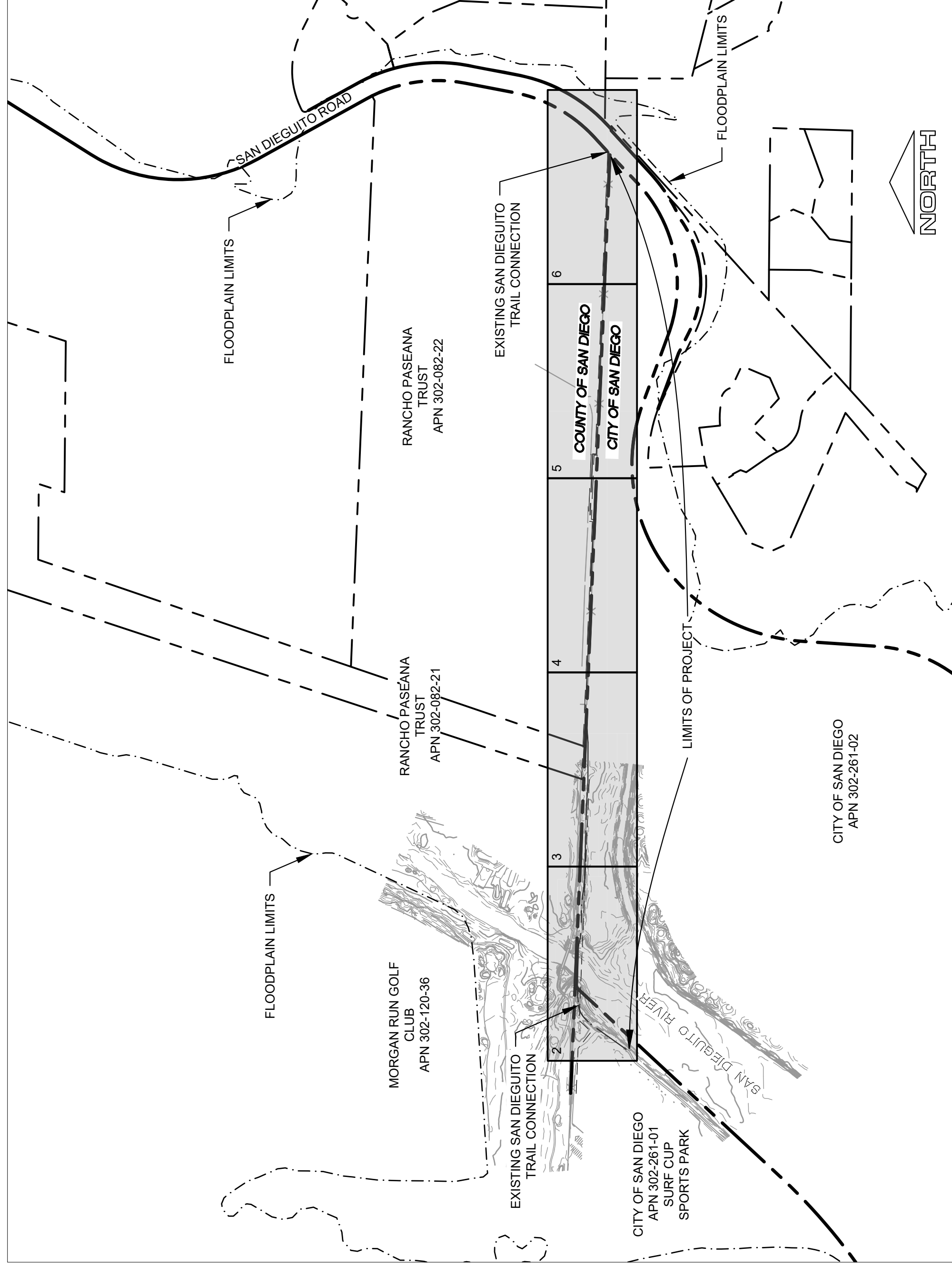
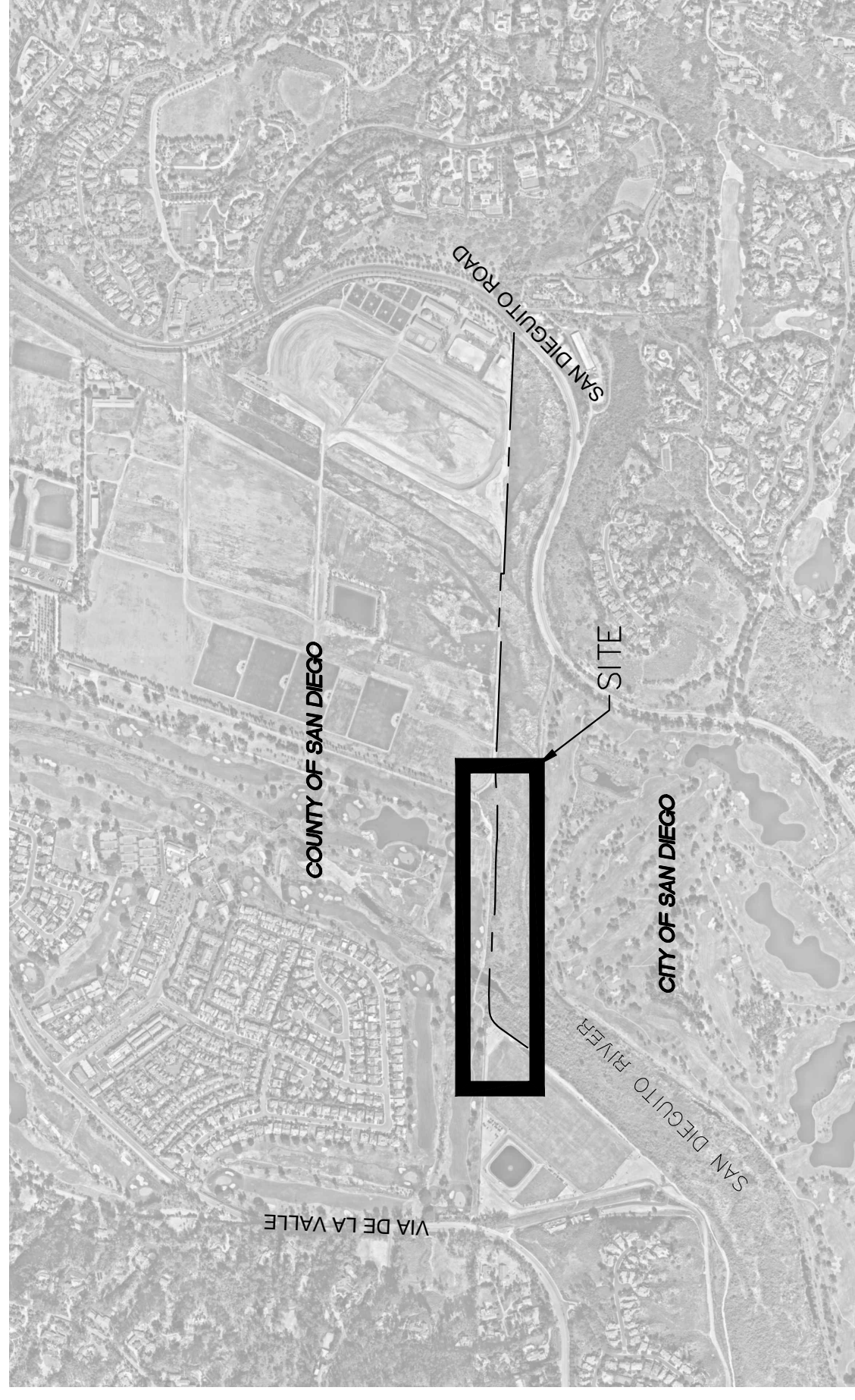


Appendix C Plan Sheets, Osuna Segment of the Coast to Crest Trail Project Preliminary

COAST TO CREST TRAIL: OSUNA TRAIL SEGMENT

PROJECT NO. 095226008

SITE DEVELOPMENT PERMIT No. PRJ #1049410



SOURCE OF TOPOGRAPHY

BASED ON AERIAL TOPOGRAPHY BY KIMLEY-HORN AND ASSOCIATES AND PHOTO GEODETIC INC., DATED APRIL 2021.

BENCHMARK

THE BENCHMARK FOR THIS DRAWING IS BASED ON THE CITY OF SAN DIEGO VERTICAL CONTROL RECORD, BEING A FOUND BRASS PUG ON SPANNING THE SAN DIEGO RIVER, BEING AN ELEVATION OF 28.205' MEAN SEA LEVEL.

REFERENCE DRAWINGS

THERE ARE NO CITY OF SAN DIEGO RECORD DRAWINGS WHICH ARE APPLICABLE TO THIS PROJECT.

ZONING SUMMARY

EXISTING - OPEN SPACE
PROPOSED - NO CHANGE

LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF SAN DIEGO, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

ASSESSOR'S PARCEL NUMBER

302-261-101 AND 302-261-102

ENVIRONMENTALLY SENSITIVE LANDS

ADR - ARUNDO DONAX RIPARIAN
CSR - COASTAL SALT MARSH
CSSR - COASTAL SAGE SCRUB-BACCHARIS DOMINATED
FMW - FRESHWATER MARSH
NHR - NON-NATIVE RIPARIAN
ORN - ORNAMENTAL
DSRW - DISTURBED SOUTHERN RIPARIAN WOODLAND
SWS - SOUTHERN WILLOW SCRUB
IS - TANNERS SCRUB

LIST OF PROJECT TEAM

CIVIL ENGINEER
KIMLEY-HORN AND ASSOCIATES
401 B STREET, SUITE 600
SAN DIEGO, CA 92101
(619) 234-9411

GEOTECHNICAL ENGINEER:

GECCON INC.
6960 FLANDERS DRIVE
SAN DIEGO, CA 92121
(619) 598-9300

RESTORATION AND MITIGATION SPECIALIST:

2280 HISTORIC DECATUR DRIVE, SUITE 200
SAN DIEGO, CA 92106
(619) 591-1370

ENGINEER OF WORK

KIMLEY-HORN AND ASSOCIATES
401 B STREET, SUITE 600
SAN DIEGO, CA 92101
TELEPHONE: (619) 234-9411
EMAIL: JULIANA.CUOMO@KIMLEY-HORN.COM

APPLICANT

SAN DIEGO RIVER PARK, IPA
ATTN: SHAWNA ANDERSON
1832 SYCAMORE CREEK ROAD
ESCONDIDO, CA 92025
PHONE: (619) 674-2570

PROJECT SUMMARY

THE PROJECT SUMMARY IS TO CONSTRUCT AN AT-GRADE TRAIL, CONNECTING A MISSING LINK BETWEEN THE EXISTING SAN DIEGO RIVER PARK TRAIL. THE PROJECT WILL CONSTRUCT A PEDESTRIAN BRIDGE OVER THE SAN DIEGO RIVER WITHIN A LEASE AGREEMENT BETWEEN THE CITY OF SAN DIEGO AND THE SAN DIEGO PARK-JOINT POWERS AUTHORITY AND THE CITY OF SAN DIEGO REAL ESTATE ASSETS DEPARTMENT.

GENERAL NOTES

- GRADING SHOWN IS APPROXIMATE AND SUBJECT TO CHANGE IN FINAL DESIGN.
- MAXIMUM SLOPES ARE 2:1, EXCEPT WHEN IN ACCORDANCE WITH SECTION 620415 OF THE MUNICIPAL CODE. SLOPES LESS THAN 10' IN VERTICAL HEIGHT MAY BE CONSTRUCTED AT A MAXIMUM OF 3:1.
- PERMANENT BEST MANAGEMENT PRACTICES (BMP'S) SHALL BE INSTALLED AND MAINTAINED TO TREAT ALL STORM DISCHARGED WATER INTO THE CITY STORM WATER SYSTEM. ANY DISCHARGED WATER INTO THE CITY STORM WATER SYSTEM WILL NOT CONTAIN POLLUTANTS.
- NO CONNECTION SHALL BE MADE TO ANY STORM WATER SEWER SYSTEM WITHOUT PROPER BMP'S.
- LONG TERM MAINTENANCE OF THE TRAIL WILL BE THE RESPONSIBILITY OF THE SAN DIEGO RIVER PARK.
- TRAIL SIGNS "CLOSED FROM DUSK TO DAWN" SHALL BE PROVIDED AT THE TRAIL HEADS.

STANDARD DRAWINGS

ALL TRAIL SIGNS SHALL BE IN ACCORDANCE WITH THE CITY OF SAN DIEGO STANDARD DRAWINGS ARE TO BE USED FOR PUBLIC IMPROVEMENTS.

SHEET INDEX

COVER SHEET
FOUNDATION PLAN
GRADING PLAN
GRADING PLAN
TRAIL ALIGNMENT DETAIL
TRAIL ALIGNMENT DETAIL
TRAIL ALIGNMENT DETAIL
REVEGETATION/RESTORATION IRRIGATION PLAN
REVEGETATION/RESTORATION IRRIGATION LEGEND AND DETAILS
REVEGETATION/RESTORATION IRRIGATION LEGEND AND SEED MIXES
REVEGETATION/RESTORATION PLANTING LEGEND AND SEED MIXES
GENERAL PLAN
FOUNDATION PLAN

SHEET INDEX

SHEET 1
SHEET 2
SHEET 3
SHEET 4
SHEET 5
SHEET 6
SHEET 7
SHEET 8
SHEET 9-10
SHEET 11
SHEET 12
SHEET 13-14
SHEET 15
SHEET 16
SHEET 17
SHEET 18

LEGEND

PROPERTY BOUNDARY
ENVIRONMENTALLY SENSITIVE LAND BOUNDARY
EASEMENTS
RIGHT OF WAY
CENTERLINE
GRADING LIMIT/DAYLIGHT LINE
PROP. MAJOR CONTOUR
PROP. MINOR CONTOUR
EX. MAJOR CONTOUR
EX. MINOR CONTOUR
BRIDGE ABUTMENT
EX. OVERHEAD POWER
EX. RECLAIMED WATER LINE
LOGS/POLE FENCE
CHAIN LINK GATE
FLOOD PLAIN LIMIT
LIMITS OF WORK
CONSTRUCTION STAGING AREA

ABBREVIATIONS

PROP.	RIGHT OF WAY PROPOSED
EX.	EXISTING
RD.	ROAD
CL.	CENTERLINE
PL.	PROPERTY LINE
AC.	ACRE
PVT.	PRIVATE
TYP.	TYPICAL
FS.	FINISHED SURFACE

GRADING TABULATIONS

TOTAL AMOUNT OF SITE TO BE GRADED: 23,900 SF
TOTAL DISTURBED AREA PER IMPROVEMENTS: 75,200 SF
EXISTING IMPERVIOUS AREA: 0 SF
PROPOSED IMPERVIOUS AREA: 23,350 SF
PROPOSED IMPERVIOUS AREA: 550 SF
AMOUNT OF FILL: 450 CY
MAXIMUM HEIGHT OF FILL SLOPE(S): 9 FT
MAXIMUM HEIGHT OF CUT SLOPE(S): 8 FT

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WWW.KIMLEY-HORN.COM

LICENSED PROFESSIONAL
JULIANA CUOMO
CALIFORNIA LICENSE NUMBER
#23787
EXP. DATE: 12/31/2023

KHA PROJECT
095226008
DATE
3/5/2024
SCALE AS SHOWN
DESIGNED BY TK
DRAWN BY TK
CHECKED BY MK

COVER SHEET

OSUNA TRAIL SEGMENT OF
THE CREST TO COAST TRAIL
PREPARED FOR
SAN DIEGO RIVER PARK IPA
CITY OF SAN DIEGO

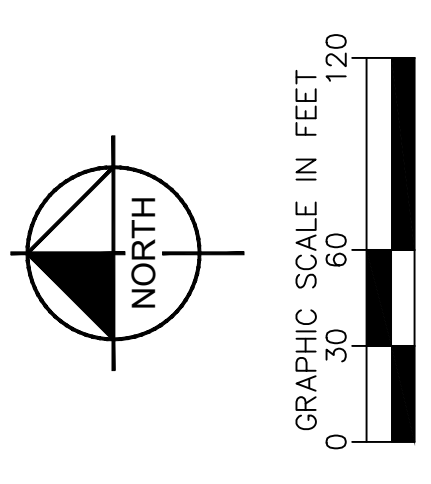
1 OF 18
SHEET NUMBER

OVERALL SITE PLAN

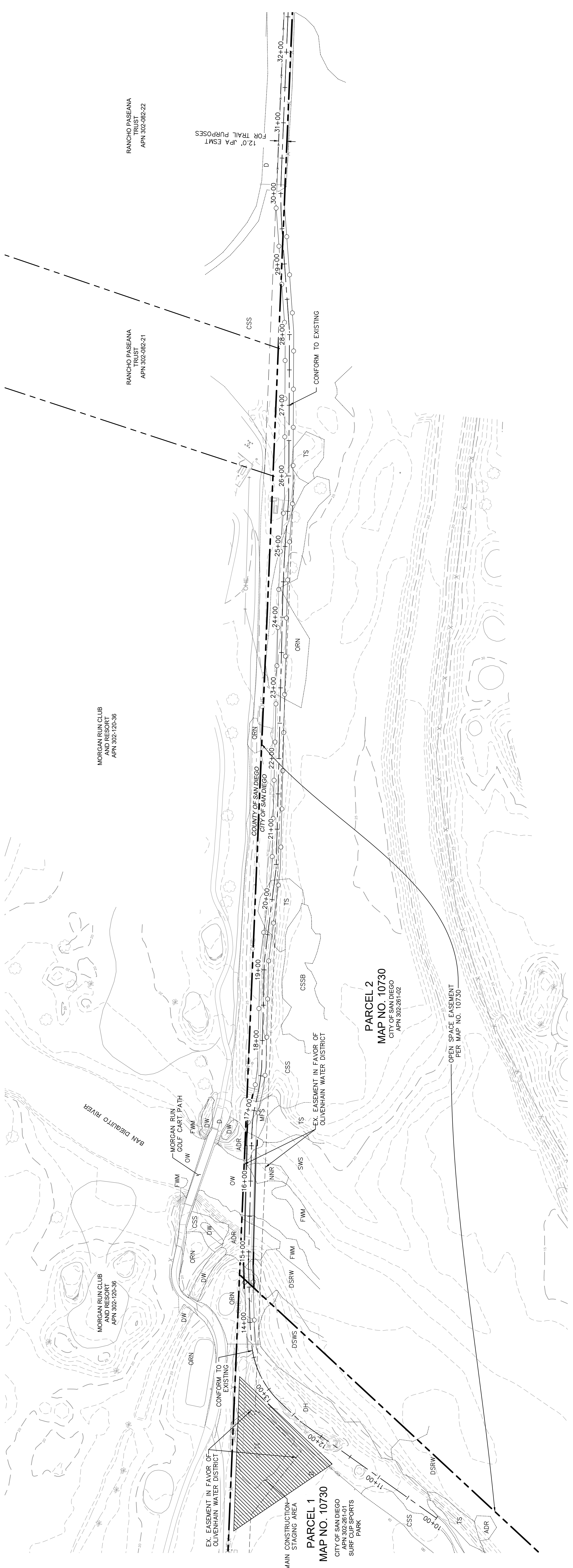
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985226008
DATE
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DRAWN BY TK
CHECKED BY MK
EXP DATE 12/31/2023
LICENSED PROFESSIONAL
JULIANA CUOMO
CALIFORNIA LICENSE NUMBER
#52787

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PHONE 619.224.9411

NO.	REVISIONS	DATE	BY



GENERAL NOTES
1. SEE SHEET 1 FOR FLOOD PLAIN LIMITS.



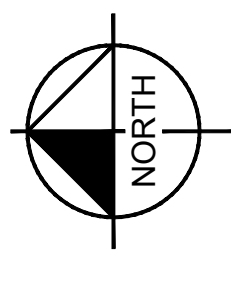
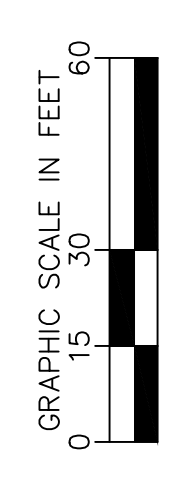
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GRADING PLAN

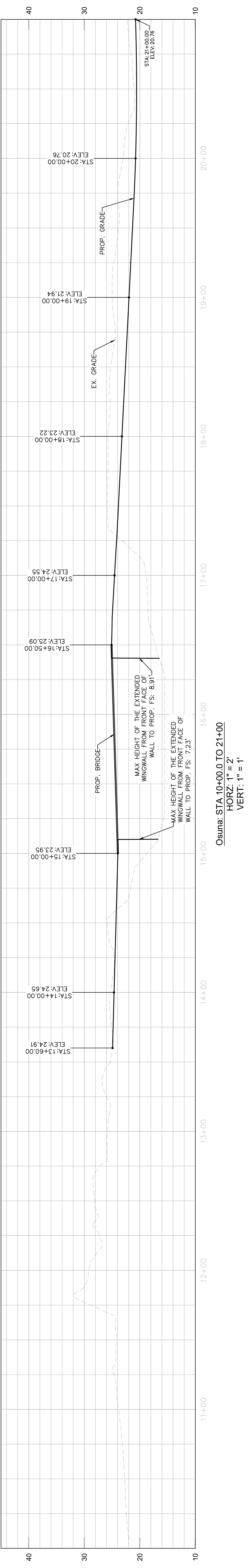
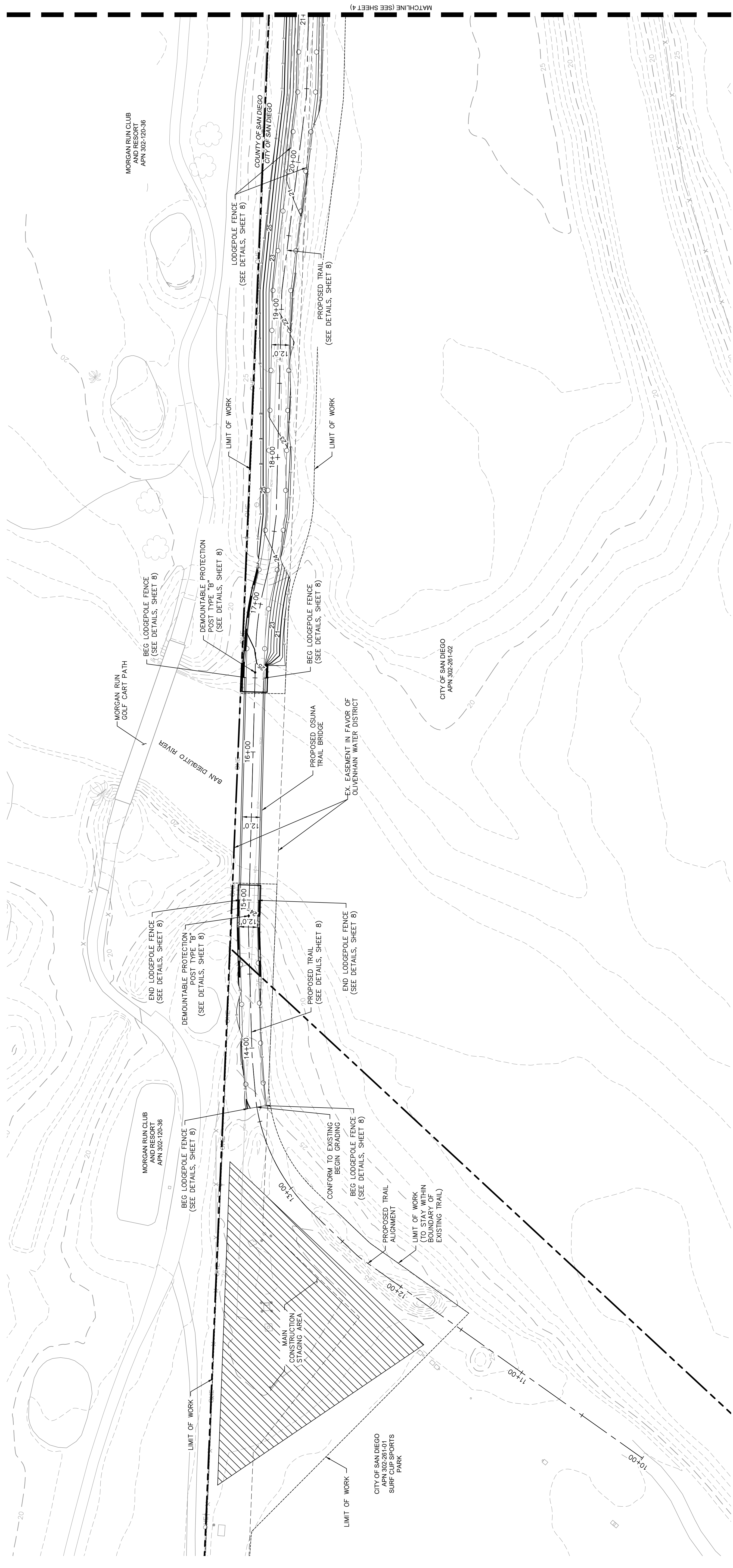
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SCALE	AS SHOWN
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DRAWN BY	TK
CHECKED BY	MK
EXP. DATE	12/31/2023
CALIFORNIA LICENSE NUMBER	#2787
JULIANA CUOMO	
LICENSED PROFESSIONAL	

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Osuna: STA 10+00.0 TO 21+00
HORIZ: 1" = 2'
VERT: 1" = 1'

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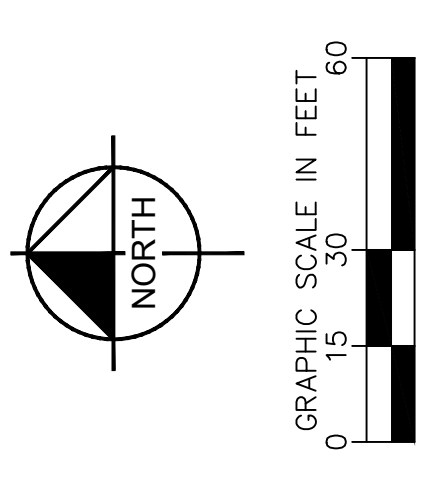
GRADING PLAN

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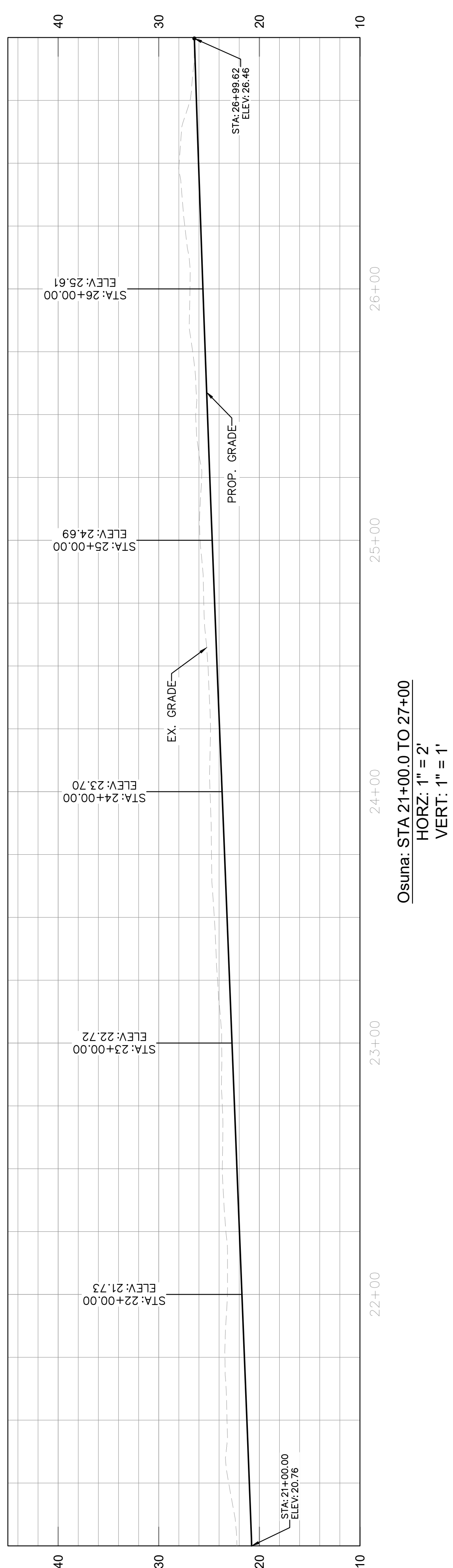
Kimley-Horn

KHA PROJECT LICENSED PROFESSIONAL	905228008	DATE	3/5/2024
SCALE AS SHOWN		DESIGNED BY	TK
DRAWN BY	TK	CHECKED BY	MK
DATE	3/5/2024	EXP. DATE	12/31/2023
FORMAL LICENSE NUMBER	#2787		
JULIANA CUOMO			

NO.	REVISIONS	DATE	BY



GENERAL NOTES
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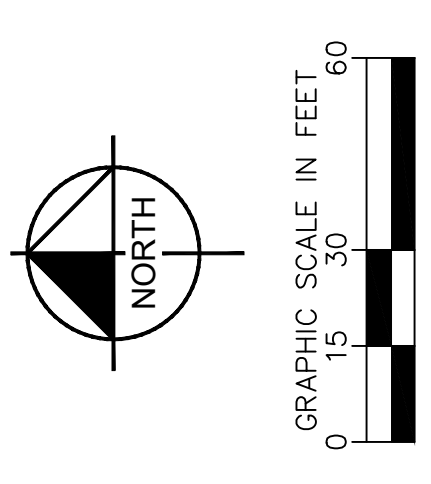
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TRAIL ALIGNMENT DETAIL

KHA PROJECT
095228008
DATE
3/5/2024
SCALE AS SHOWN
DESIGNED BY TK
DRAWN BY TK
CHECKED BY MK
EXP DATE 12/31/2023
LICENSED PROFESSIONAL
JULIANA CUOMO
CALIFORNIA LICENSE NUMBER
#26787

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PHONE 619-224-9411

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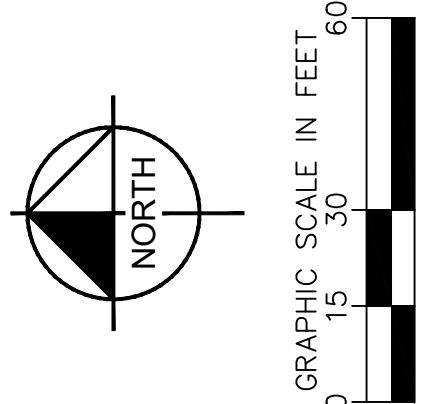
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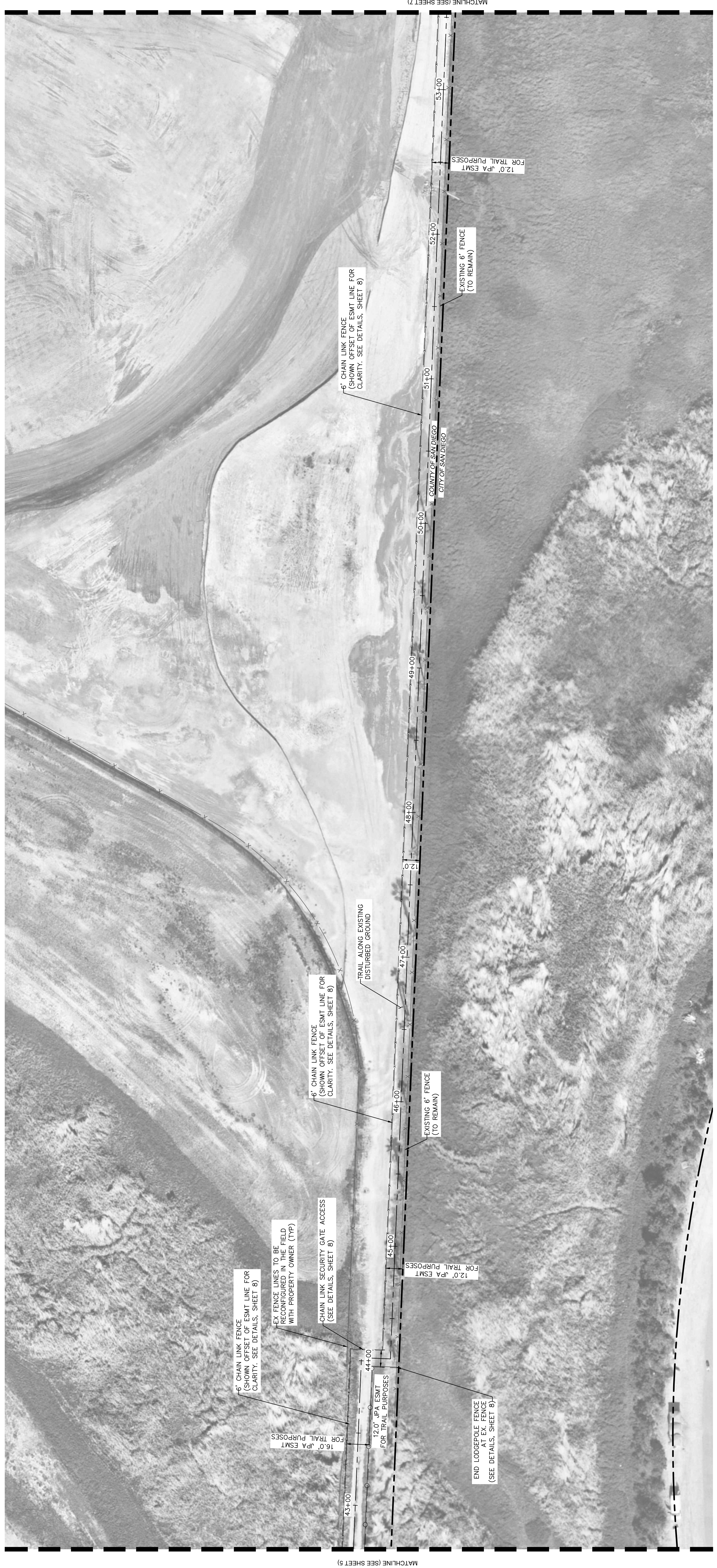
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LICENSURE LICENSE NUMBER
#22787
JULIANA CUOMO
LULAMA CUOMO
LICENSED PROFESSIONAL

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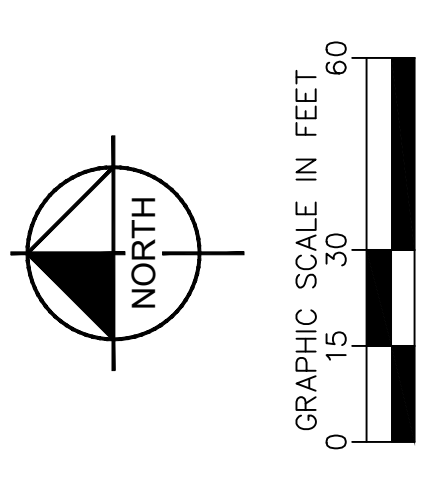
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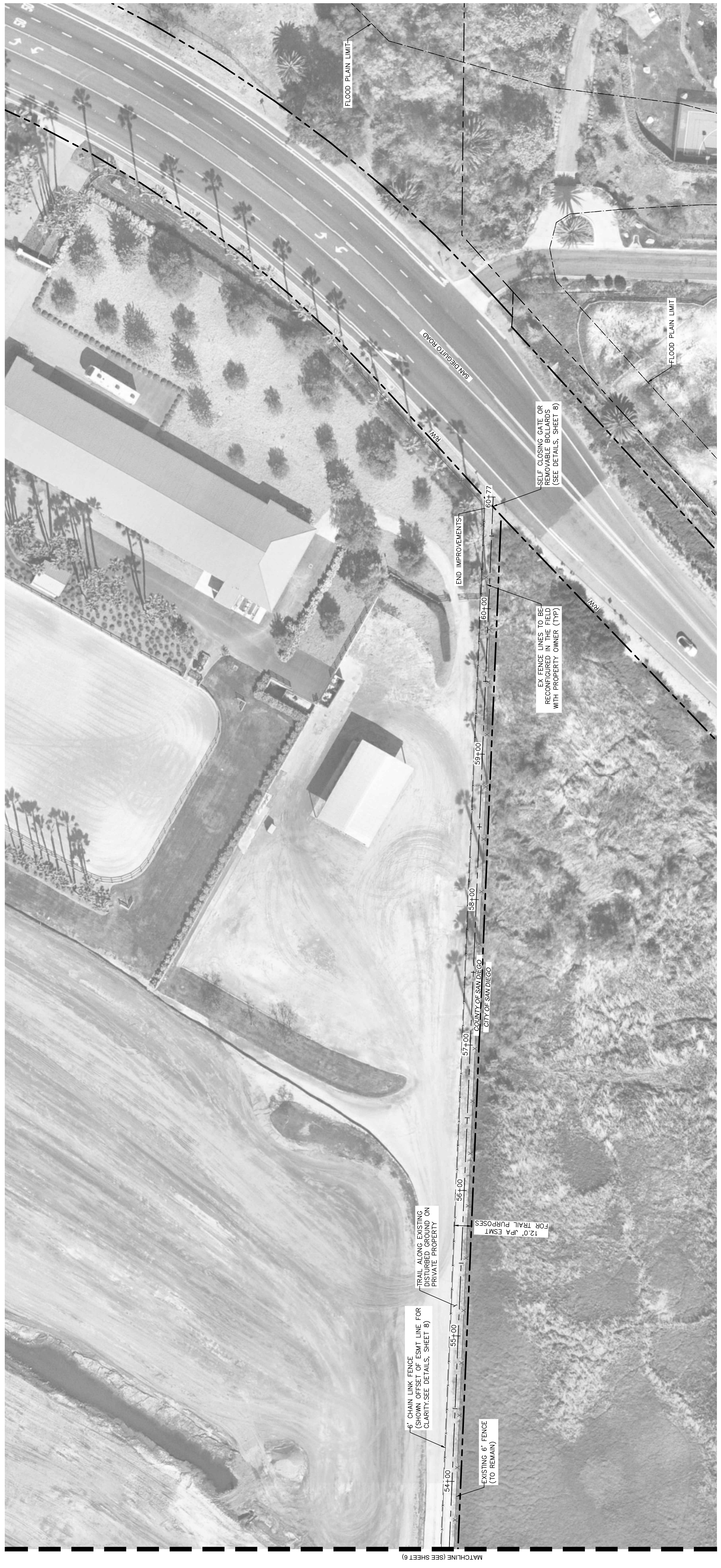
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EXP. DATE	12/31/2023
FORMAL LICENSE NUMBER	#2787
CLIENT	JULIANA CUOMO
LICENSED PROFESSIONAL	

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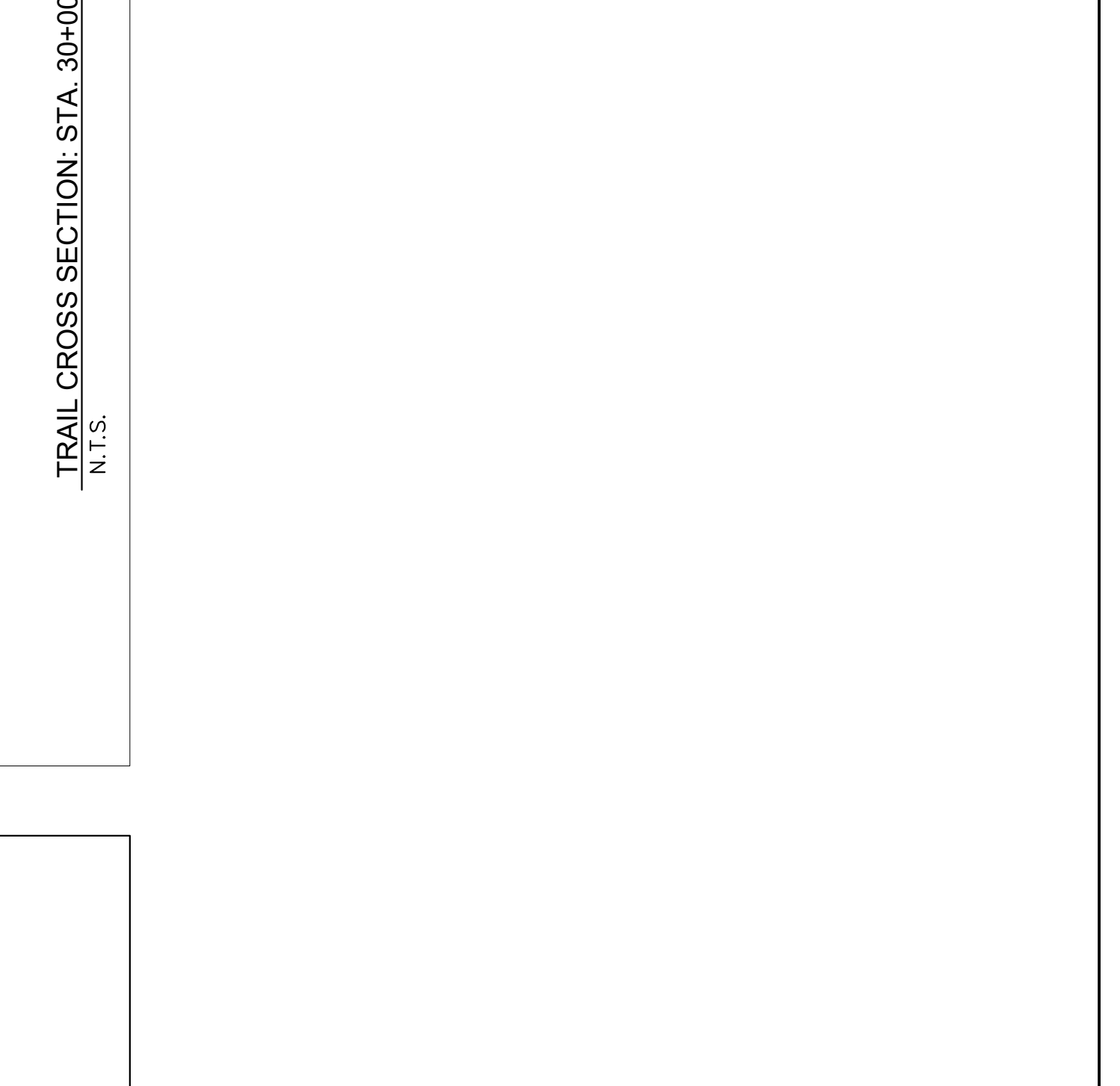
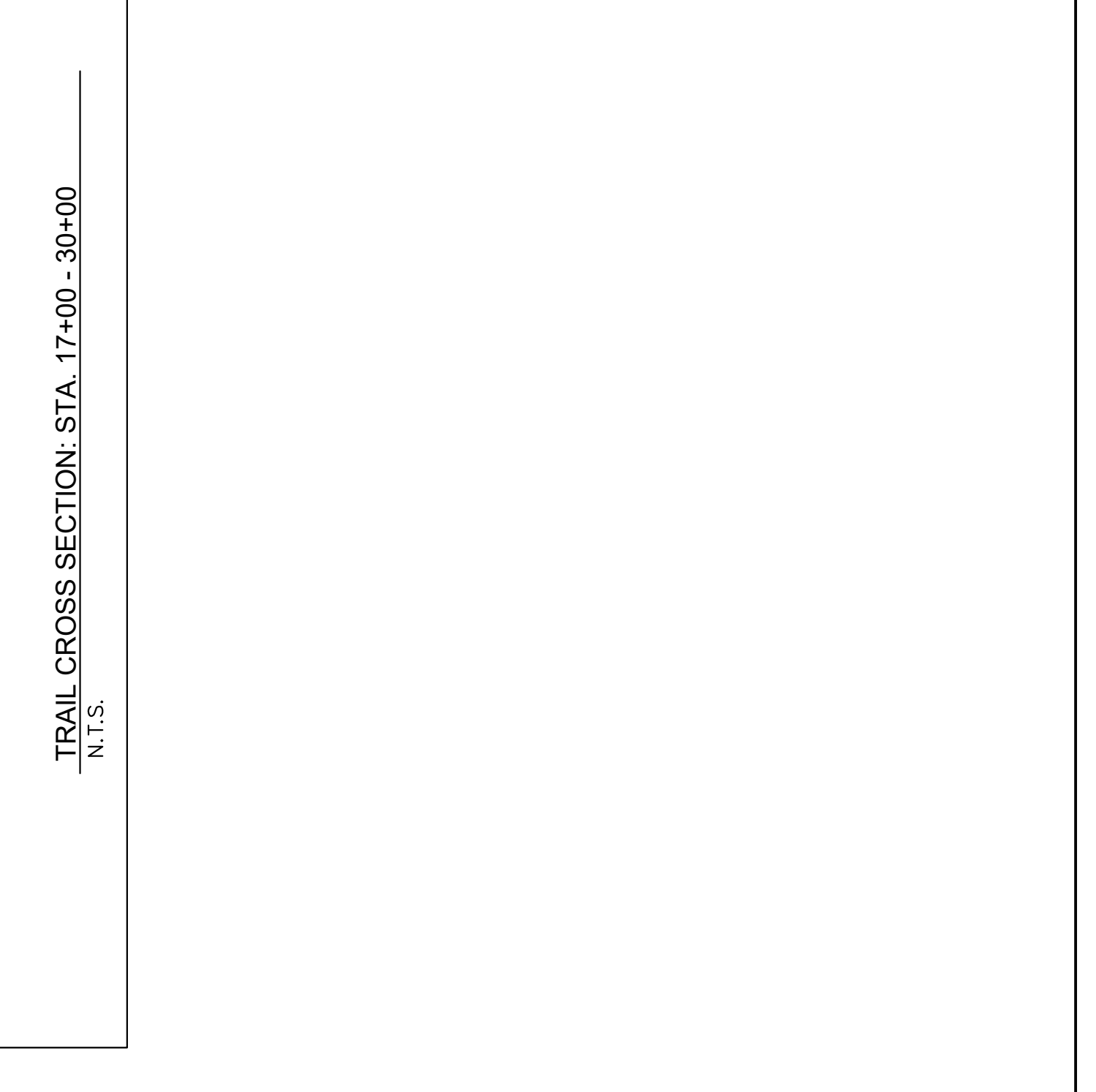
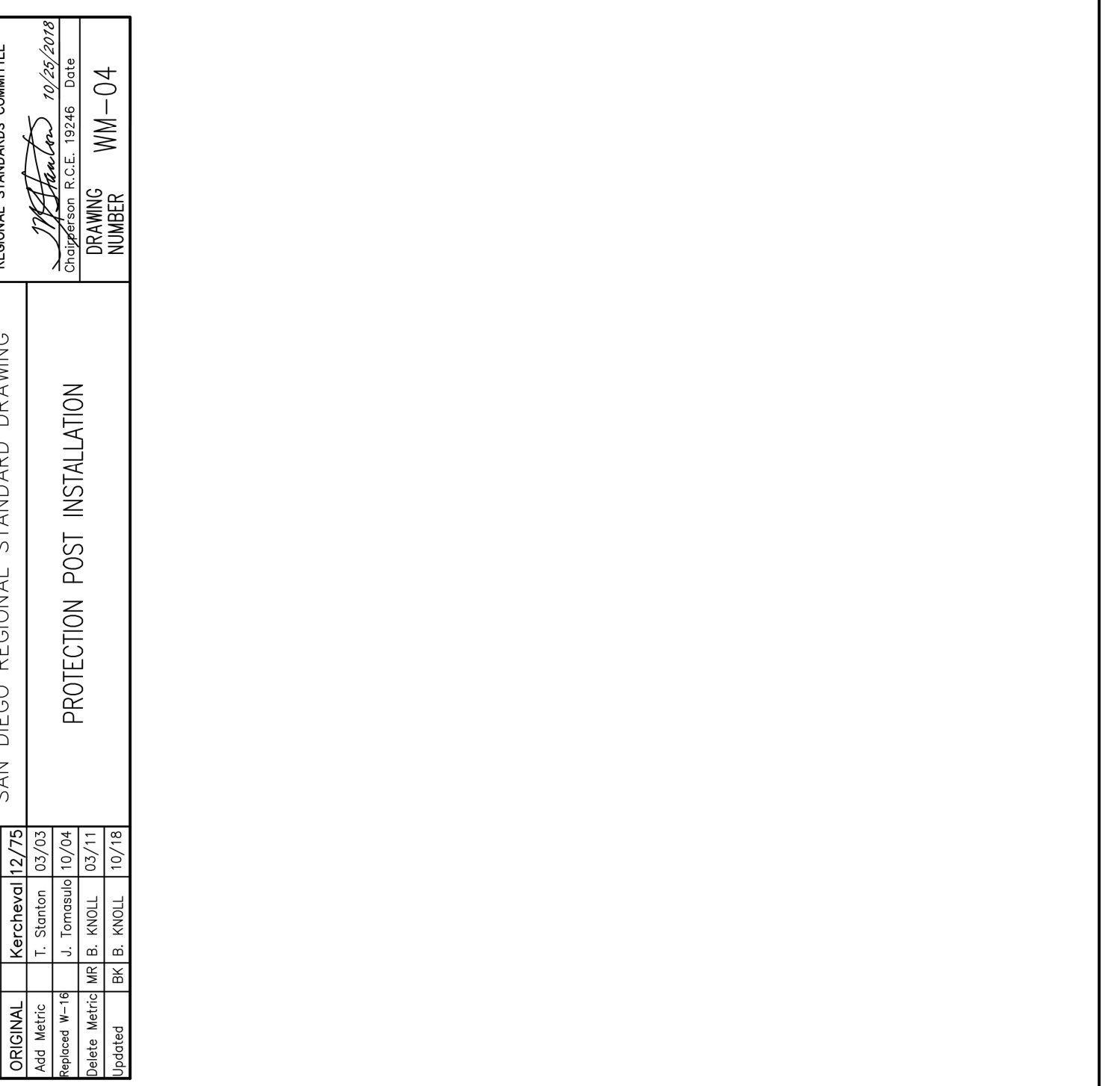
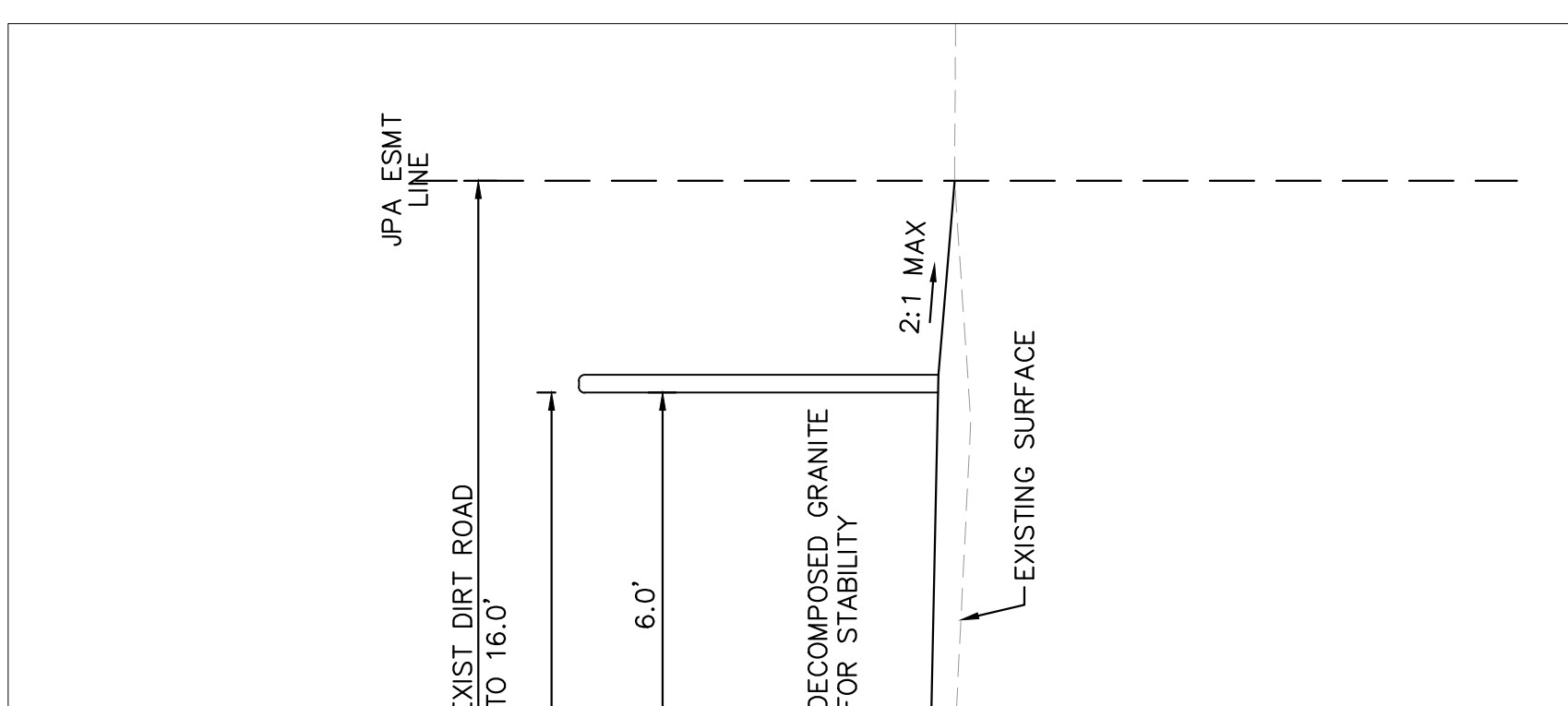
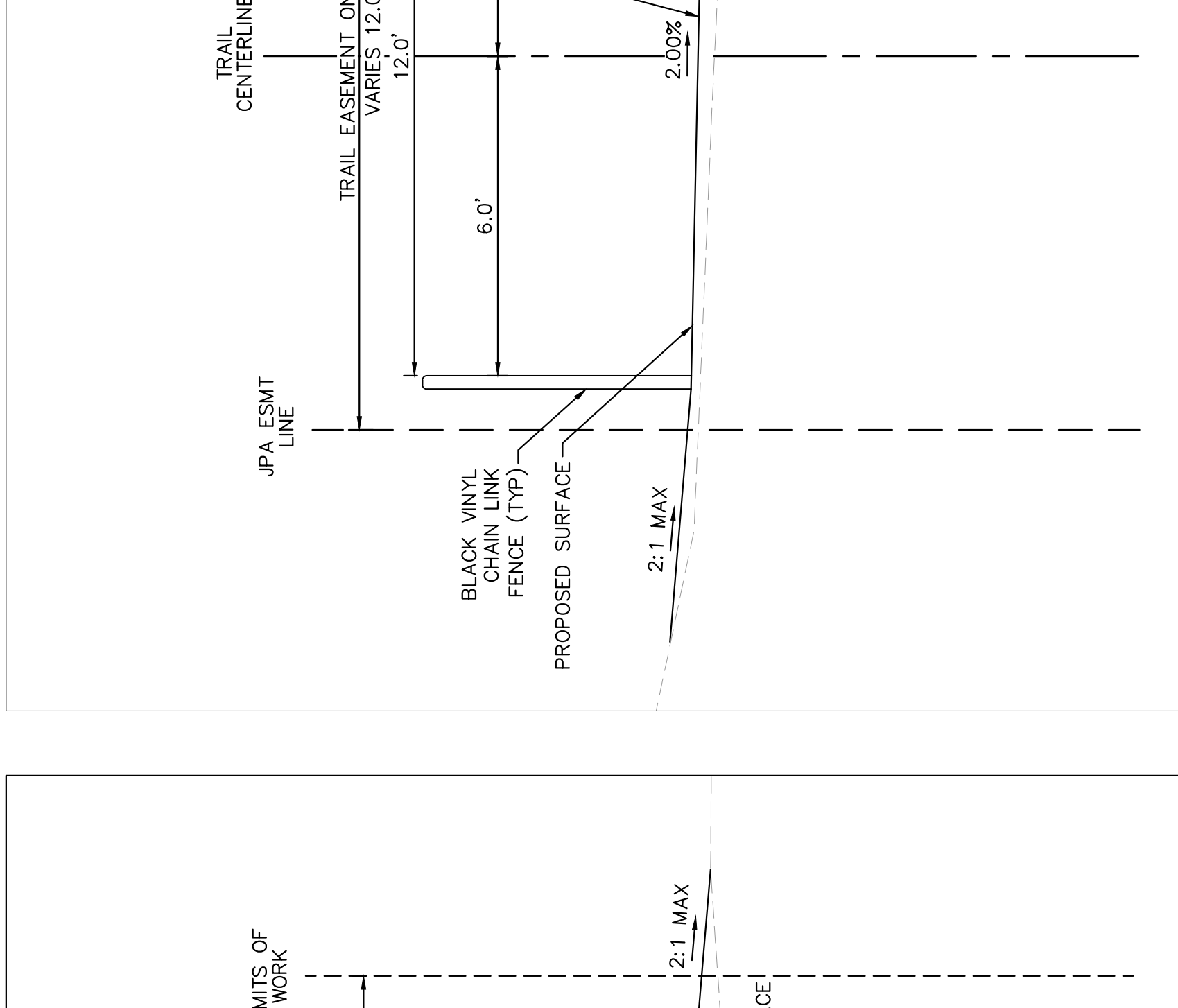
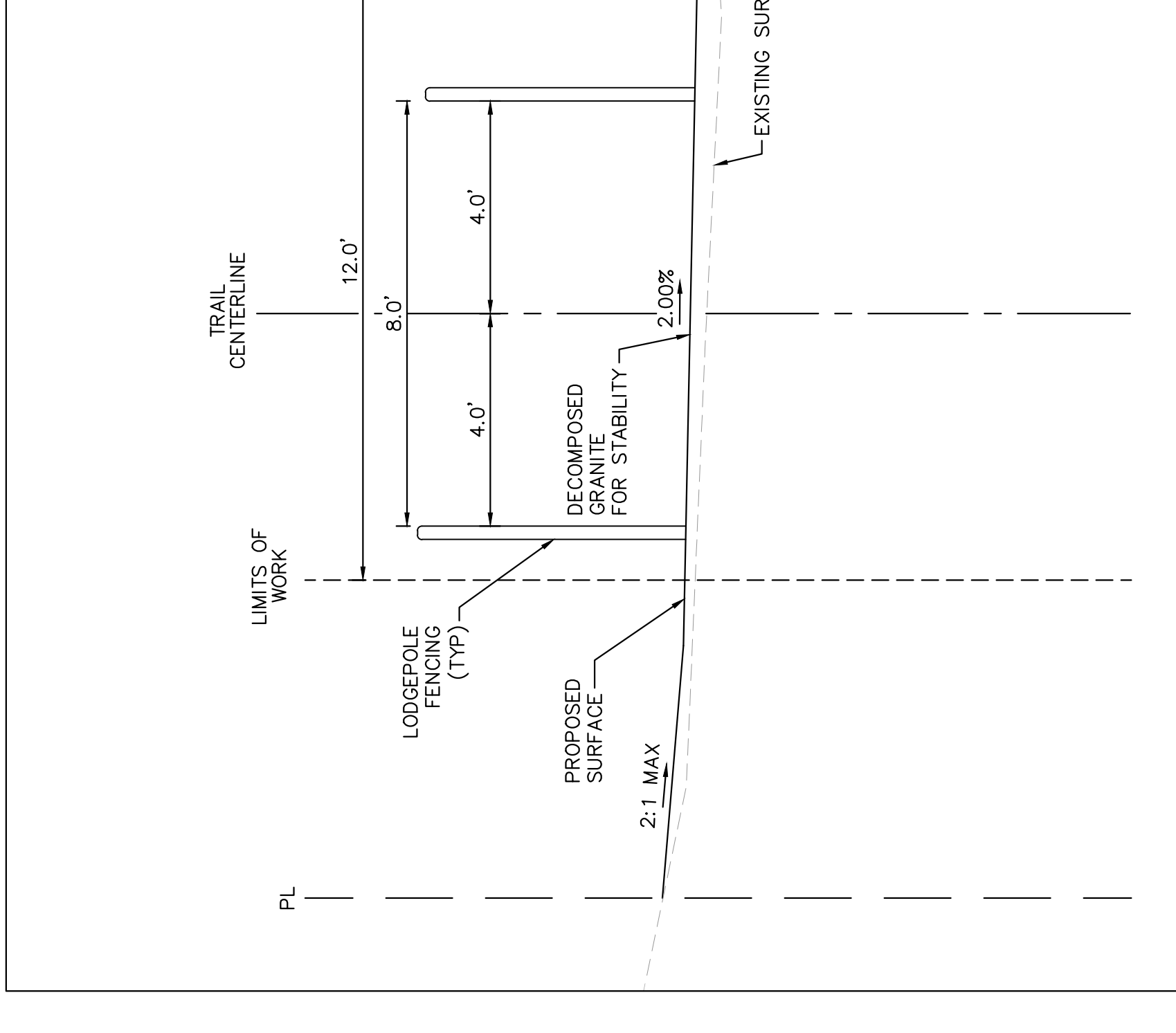
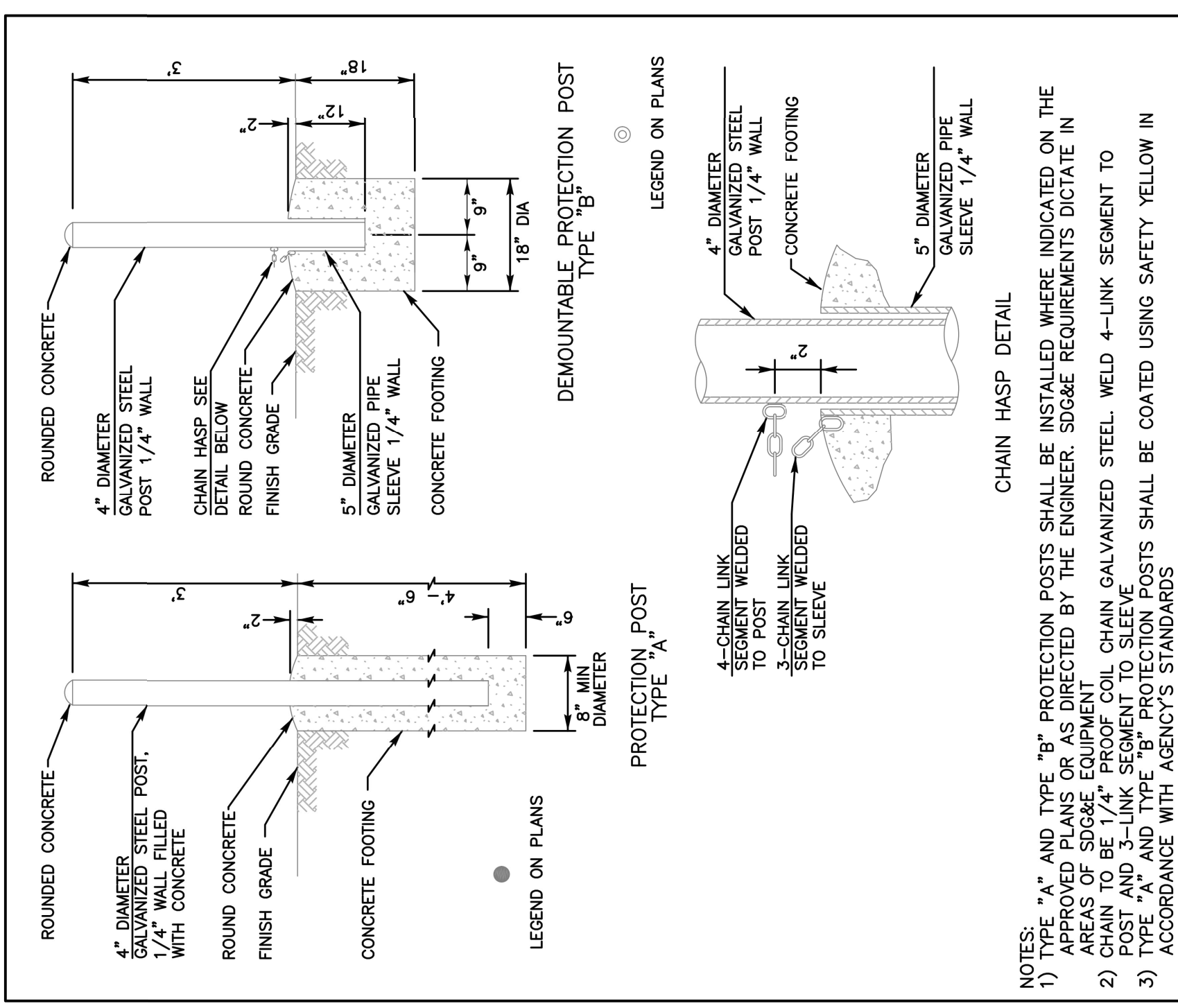
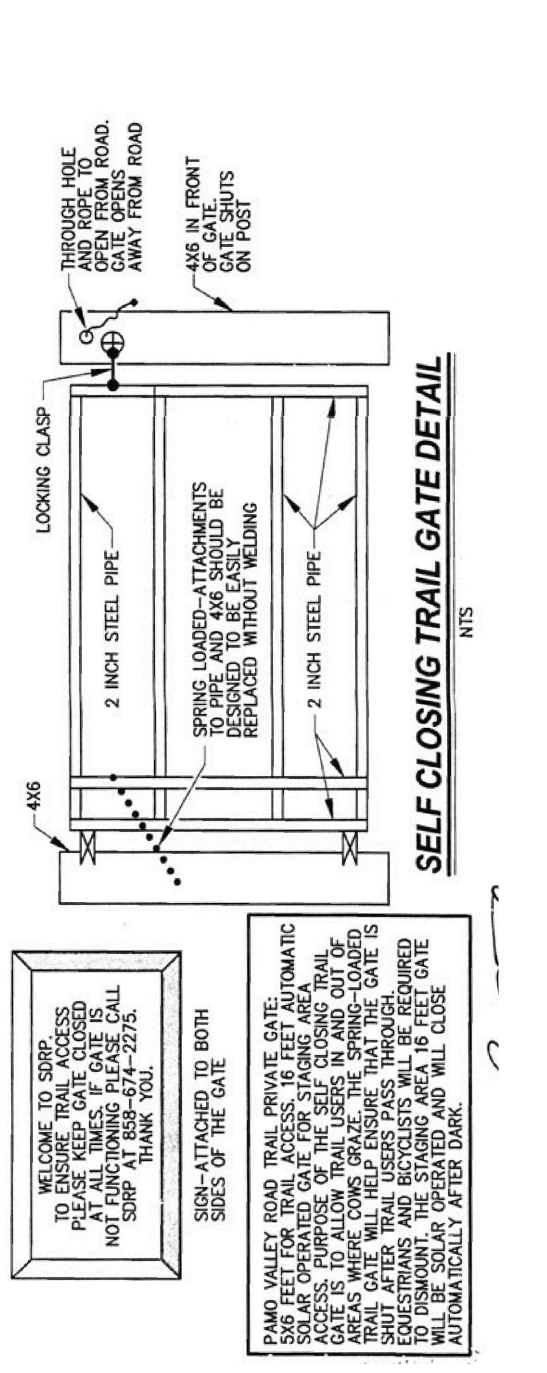
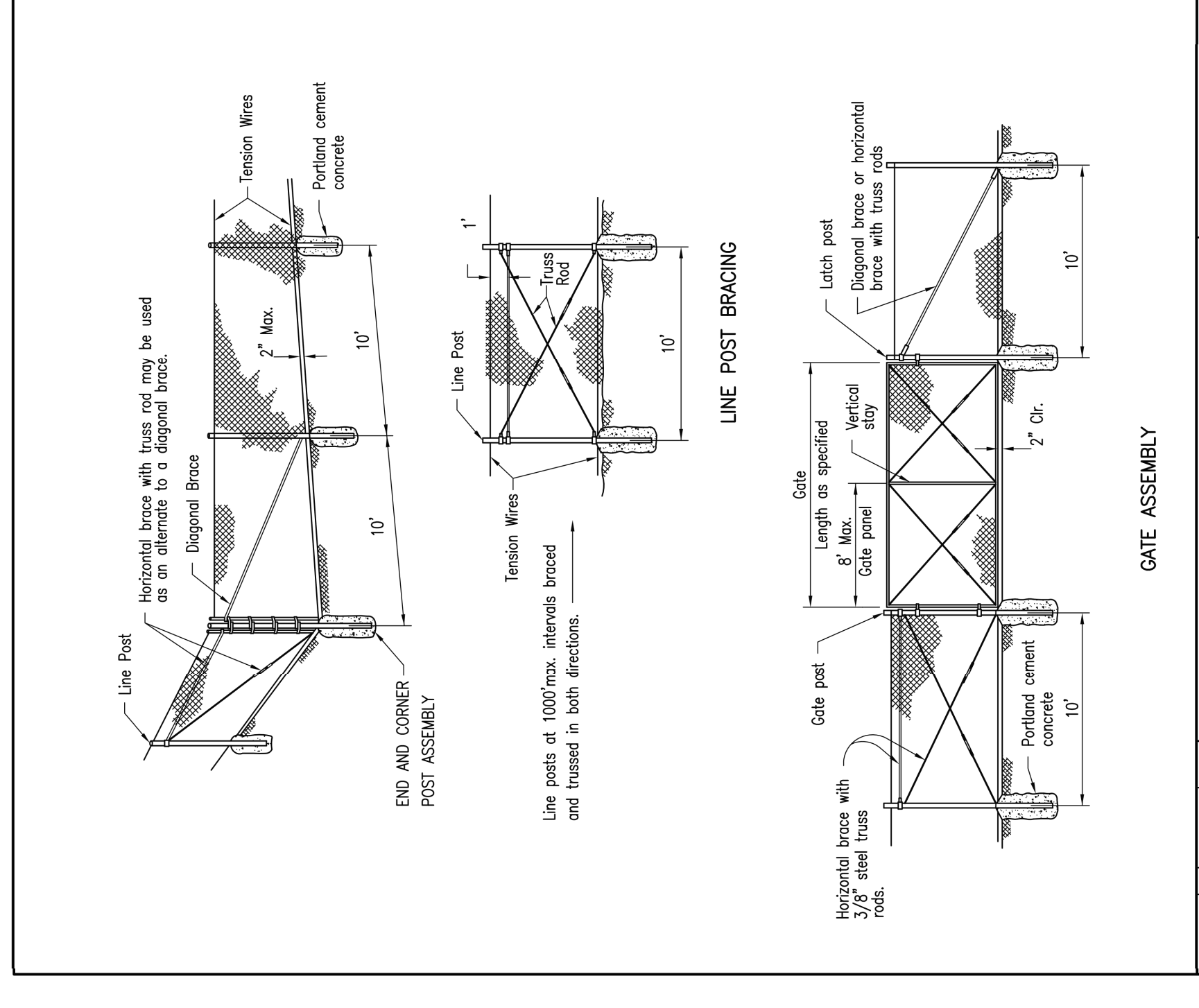
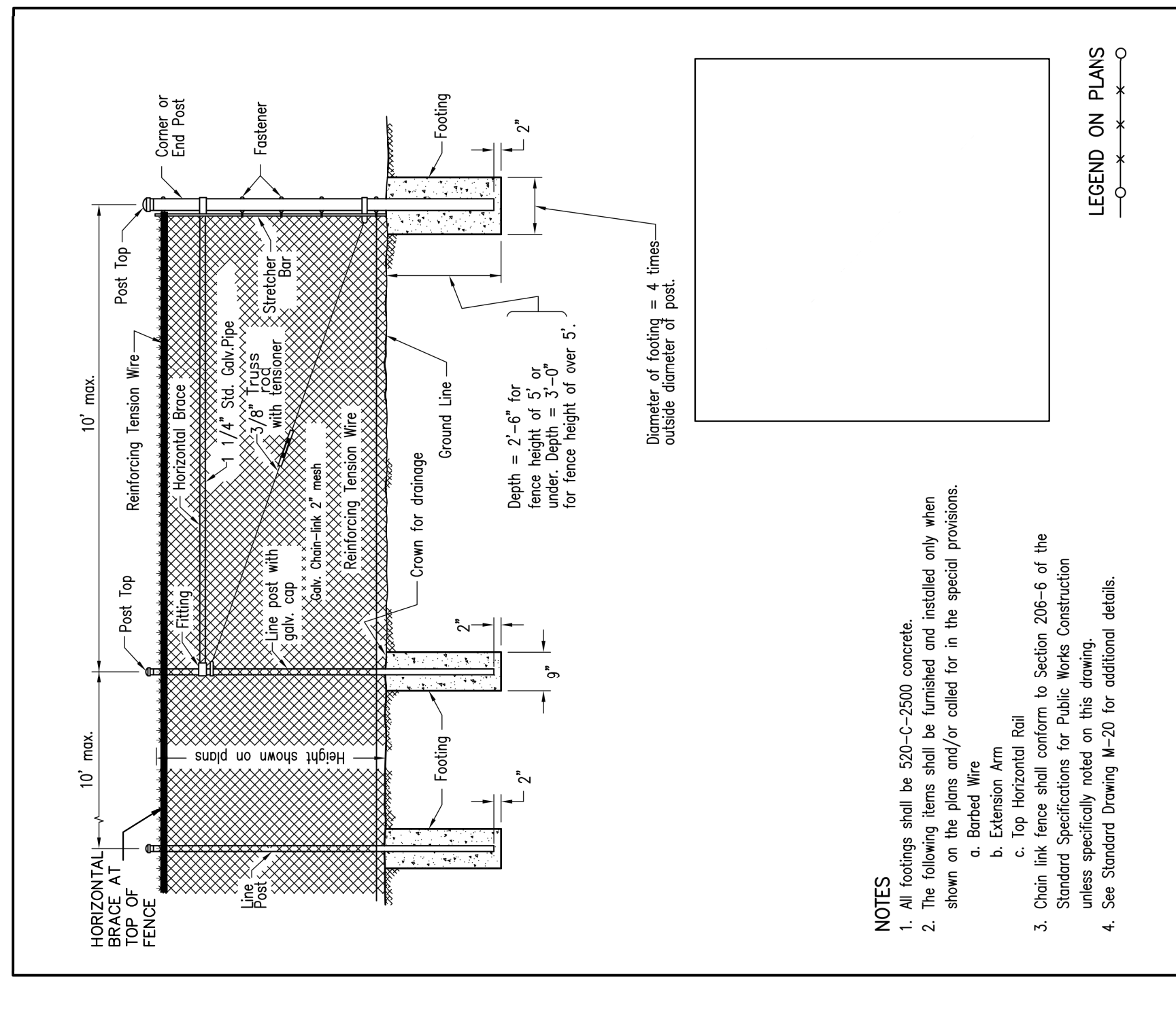
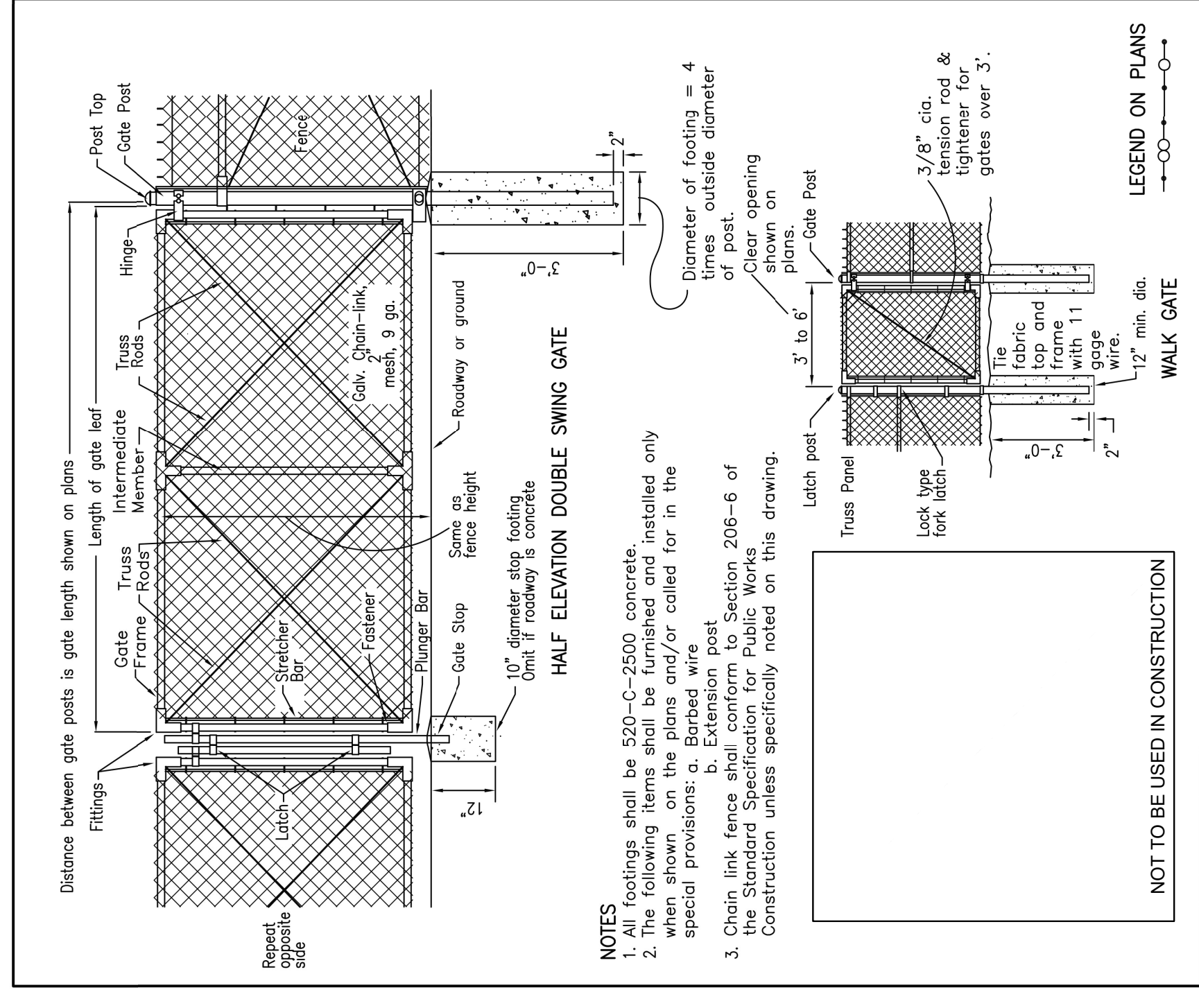
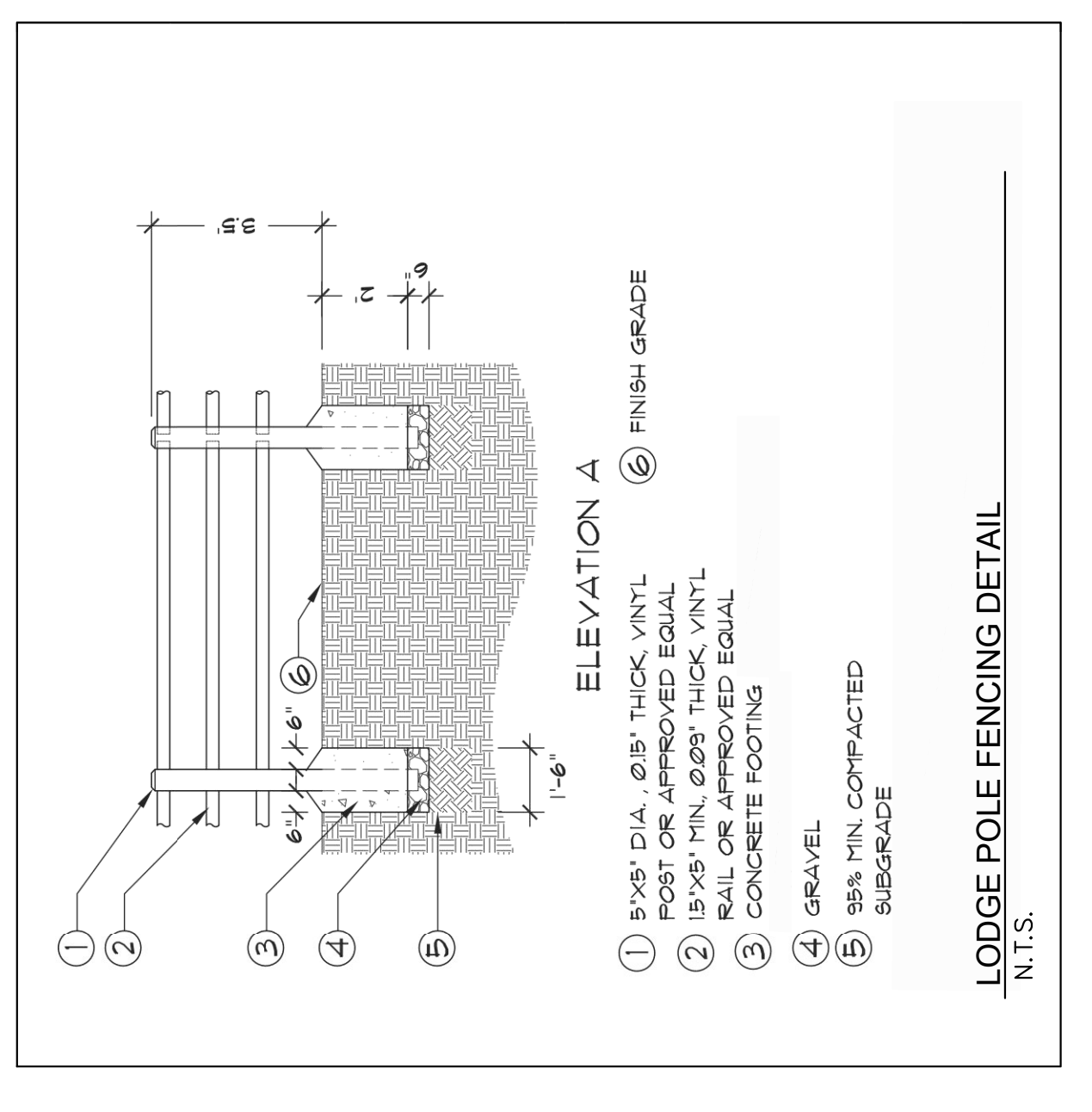
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 JILIANA CLONK
 CALIFORNIA LICENSE NUMBER #52787
 CHECKED BY TK
 DRAWN BY TK
 MK
 EXP. DATE 12/31/2023

DETAILS

KRM PROJECT 094228008
 DATE 3/6/2024
 SCALE AS SHOWN
 DESIGNED BY TK
 DRAWN BY TK
 CHECKED BY MK
 EXP. DATE 12/31/2023

OSUNA TRAIL SEGMENT OF THE CREST TO COAST TRAIL PREPARED FOR SAN DIEGUITO RIVER JPA

CITY OF SAN DIEGO
 SHEET NUMBER 8 OF 18



NO.	REVISIONS	DATE	BY

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 PHONE: 619.234.9411

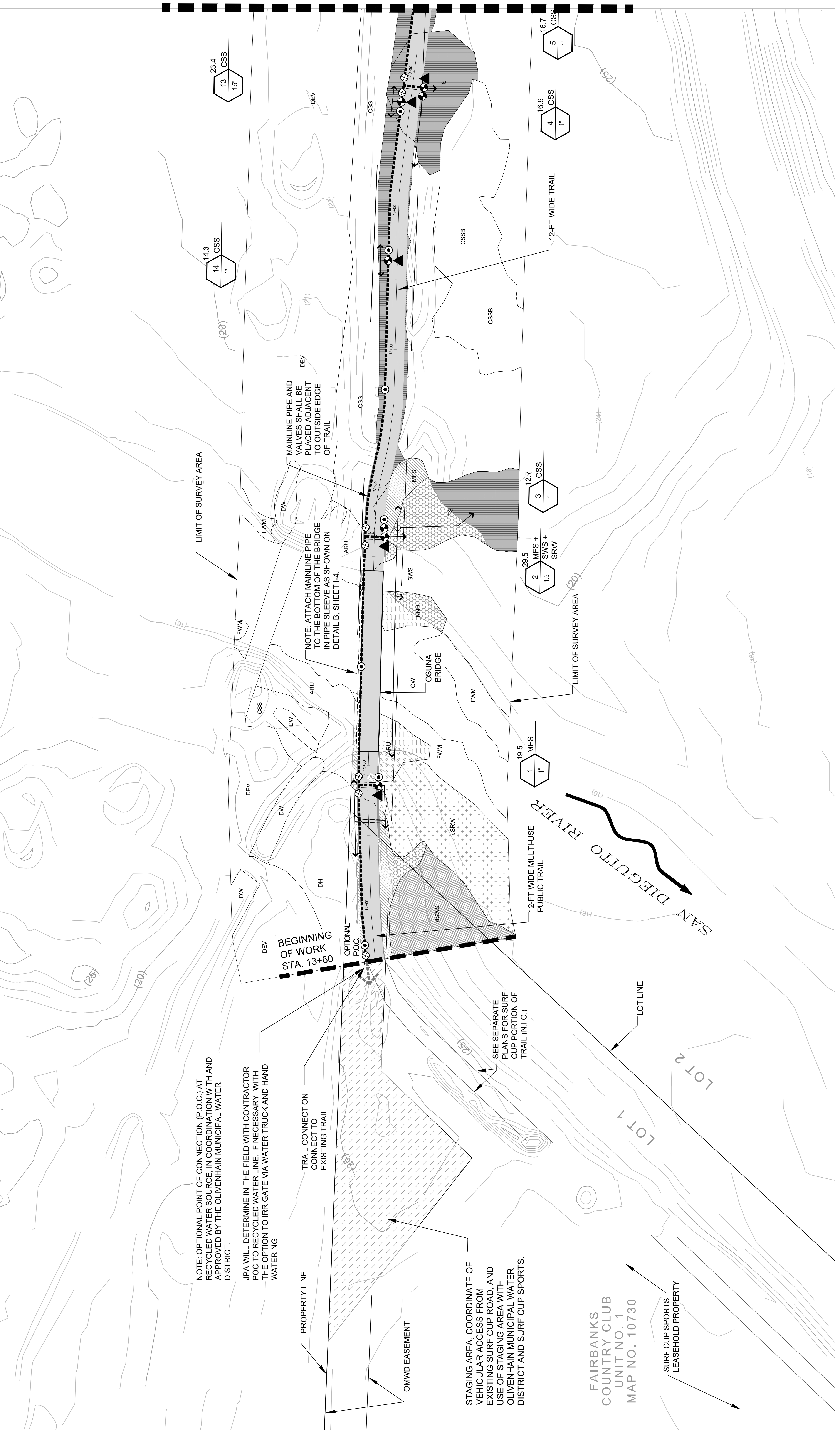
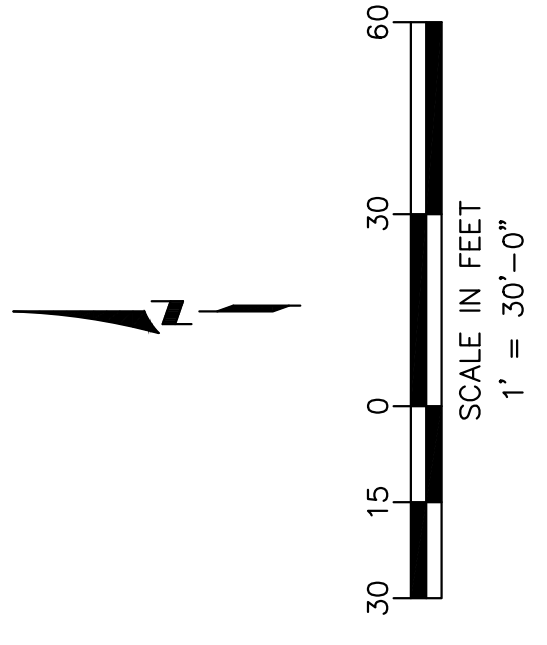
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 LICENSED PROFESSIONAL
 KHA PROJECT # 092226008
 DATE FEBRUARY 14, 2024
 SCALE AS SHOWN
 DESIGNED BY TK
 DRAWN BY TK
 CHECKED BY MK
 DATE

**REVEGETATION/RESTORATION
 IRRIGATION PLAN**

OSUNA SEGMENT OF THE
 COAST TO CREST TRAIL
 PREPARED FOR
 SAN DIEGUITO RIVER PARK JPA
 CITY OF SAN DIEGO
 SHEET NUMBER
 9 OF 18

PRELIMINARY
 NOT FOR
 CONSTRUCTION
 REVISED 2/14/2024

DUDEK
 605 Third Street
 Encinitas, CA 92024
 T: (760) 942-5147



PLANTING LEGEND

REVEGETATION AREAS

	FRESHWATER MARSH WETLAND (FWM)		SOUTHERN WILLOW SCRUB (SWS)
	MULEFAT SCRUB (MFS)		COASTAL SAGE SCRUB (CSS)
	SOUTHERN WILLOW SCRUB (SWS)		SOUTHERN RIPARIAN WOODLAND (SRW)
	FRESHWATER MARSH WETLAND (FWM)		SOUTHERN RIPARIAN WOODLAND (SRW)
	MULEFAT SCRUB (MFS)		SOUTHERN RIPARIAN WOODLAND (SRW)
	SOUTHERN WILLOW SCRUB (SWS)		SOUTHERN RIPARIAN WOODLAND (SRW)
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	SOUTHERN WILLOW SCRUB (SWS)		SOUTHERN RIPARIAN WOODLAND (SRW)
	SOUTHERN WILLOW SCRUB (SWS)		SOUTHERN RIPARIAN WOODLAND (SRW)
	SOUTHERN WILLOW SCRUB (SWS)		SOUTHERN RIPARIAN WOODLAND (SRW)

SEE SHEETS P-1 & P-2 FOR PLANTING PLANS
 SEE SHEETS P-3 & P-4 FOR PLANT LISTS AND PLANTING NOTES & DETAILS.

Prepared By: John Zink, David J. Dudek, License No. 44597, Mechanical, State of California, dated 01/15/2018 to 01/15/2025. Project: San Diego River Park Osuna Trail Rejuvenation Plan. Date: February 14, 2024. Time: 03:27:23 PM. P:\300\Environment\1325 San Diego River Park Osuna Trail Rejuvenation Plan.dwg. Scale: As Shown. Drawing No.: 1325-IR-IRR-01. Title: IRRIGATION PLAN. Author: David J. Dudek. Date: February 14, 2024. Time: 03:27:23 PM. P:\300\Environment\1325 San Diego River Park Osuna Trail Rejuvenation Plan.dwg. Scale: As Shown. Drawing No.: 1325-IR-IRR-01. Title: IRRIGATION PLAN. Author: David J. Dudek. Date: February 14, 2024. Time: 03:27:23 PM.

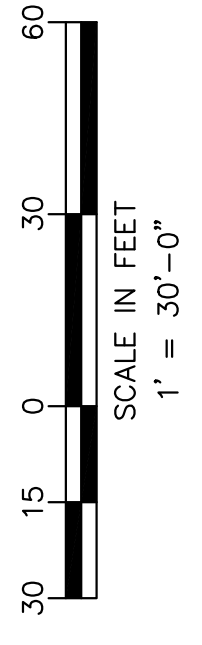
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SCALE	AS SHOWN
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DRAWN BY	TK
CHECKED BY	MR
DATE	
LIC PROJ #	092226008
STATE LICENSE NUMBER	
LIC PROF #	
DATE	

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PHONE: 619-234-9411
WWW.KIMLEY-HORN.COM

NO.	REVISIONS	DATE	BY

PRELIMINARY
NOT FOR
CONSTRUCTION
REVISED 2/14/2024

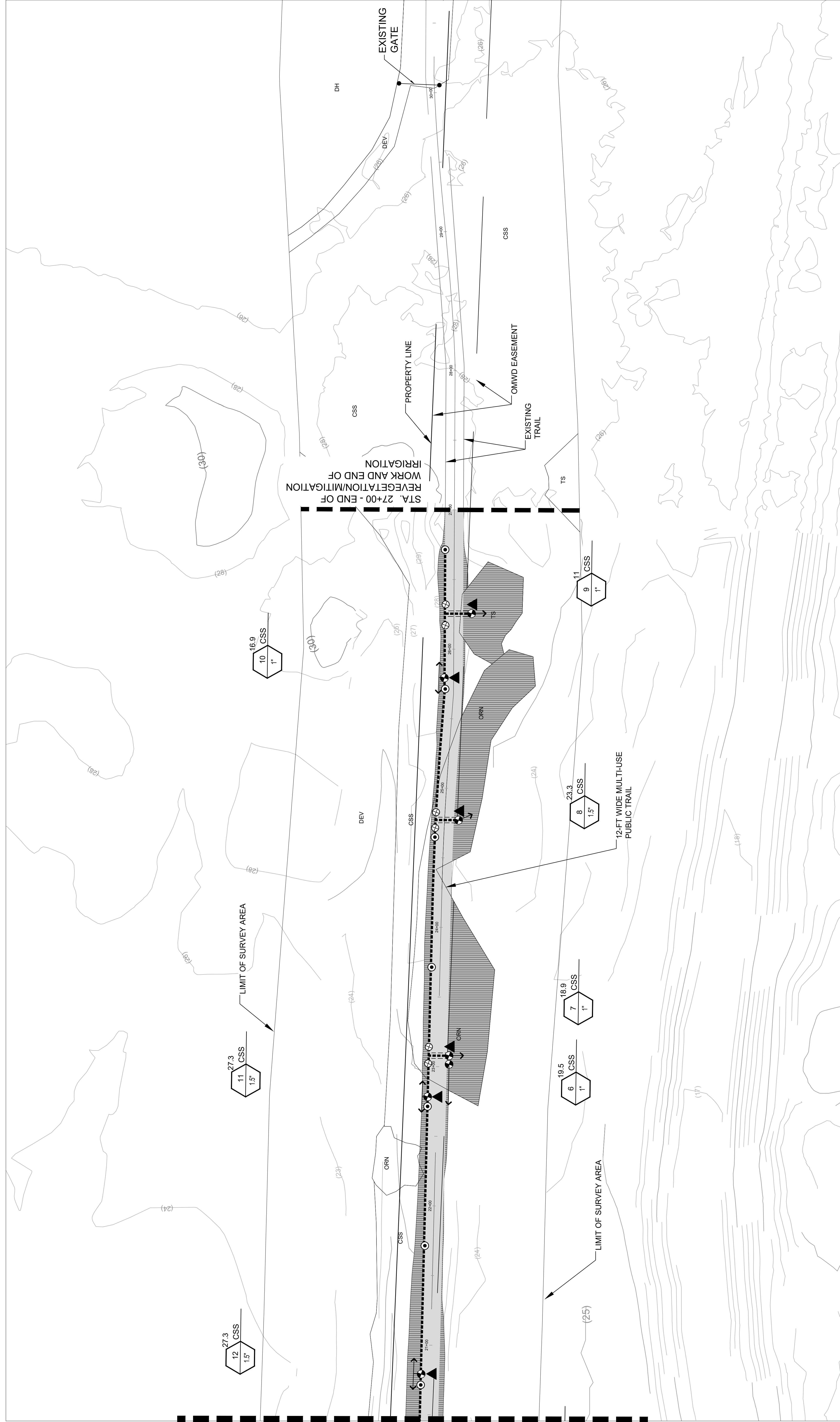
DUDEK
605 Third Street
Encinitas, CA 92024
T: (760) 942-5147



PLANTING LEGEND

	FRESHWATER MARSH WETLAND (FWM)		SOUTHERN WILLOW SCRUB (SWS)
	CONTAINER PLANTS + SEEDING		SOUTHERN RIPARIAN WOODLAND (SRW)
	MULEFAT SCRUB (MFS)		COASTAL SAGE SCRUB (CSS)
	CONTAINER PLANTS + SEEDING		ENHANCEMENT SEEDING ONLY
	SOUTHERN WILLOW SCRUB (SWS)		SOUTHERN RIPARIAN WOODLAND (SRW)
	ENHANCEMENT SEEDING ONLY		

SEE SHEETS P-1 & P-2 FOR PLANTING PLANS
SEE SHEETS P-3 & P-4 FOR PLANT LISTS AND PLANTING NOTES & DETAILS.



MATCHLINE, SEE SHEET I-1

SPRINKLER HEAD LEGEND (Proposed Irrigation Sprinkler Heads*)
 SYMBOL MANUF. MODEL NO. DESCRIPTION

DETAIL ARC RADIUS PSI GPM NOTES

NOT SHOWN	HUNTER	PGJ-00-R-1.5	ROTOR (SHRUB HEAD), RECLAIMED ID	C/1-4	90	30'	40	1.3	PROVIDE IN-LINE DRAIN CHECK VALVE ON RISER
NOT SHOWN	HUNTER	PGJ-00-R-3.0	ROTOR (SHRUB HEAD), RECLAIMED ID	C/1-4	180	30'	40	2.5	PROVIDE IN-LINE DRAIN CHECK VALVE ON RISER
NOT SHOWN	HUNTER	PGJ-00-R-5.0	ROTOR (SHRUB HEAD), RECLAIMED ID	C/1-4	360	30'	40	5.0	PROVIDE IN-LINE DRAIN CHECK VALVE ON RISER

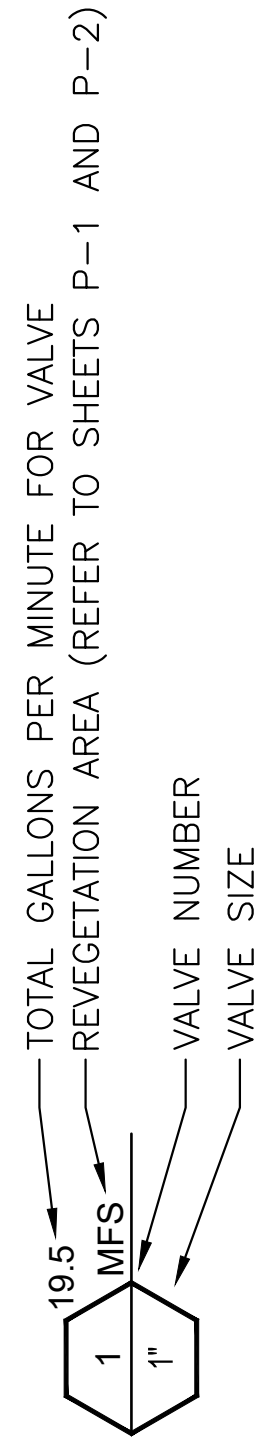
NOTE: ACTUAL ARCS MAY VARY SLIGHTLY BASED ON SITE CONFIGURATION. ADJUST RADI TO OBTAIN HEAD TO HEAD COVERAGE.
 * SPRINKLER HEADS SHALL BE OPERATED USING RECYCLED WATER. HEADS SHALL BE ADJUSTED SO THAT THEY DO NOT SPRAY OVER OPEN WATER.

IRRIGATION EQUIPMENT LEGEND

SYMBOL	MANUF.	MODEL NO.	DESCRIPTION	DETAIL REMARKS
P.O.C. ↓	N/A	N/A	POINT OF CONNECTION (P.O.C.)	N/A
⊗	KBI	BLOCKED TRUE UNION BALL VALVE	PVC SCH 80 BALL VALVE - LINE SIZE	FOR ISOLATION OF PIPES; INSTALL BELOW GRADE
⊙	HUNTER	IBV-151G REMOTE CONTROL VALVE	CONTROL VALVE WITH DC-LATCHING SOLENOID	CONTROL VALVE FOR OPERATION OF SPRINKLER SYSTEMS; INSTALL BELOW GRADE; SIZE AS NOTED
⊙	RAINBIRD	44-RC WITH 44DK VALVE KEY	QUICK COUPLING WITH RUBBER CAP AND VALVE KEY	INSTALL BELOW GRADE
NOT SHOWN	KBI	KC SERIES	IN-LINE SPRING CHECK VALVE	INSTALL DRAIN CHECK VALVE ON IRRIGATION HEAD RISER
-----	PRESSURE MAINLINE	CLASS 315 PVC-UV (BELLOW GRADE)	PVC IRRIGATION MAINLINE - 3" DIAMETER, UNLESS OTHERWISE NOTED	INSTALL 18" MINIMUM BELOW GRADE. PLACE IN PVC SLEEVE 24" BELOW GRADE AT ALL TRAIL CROSSINGS. SIZE PER LATERAL PIPE SIZING TABLE. GRADE AT MAINLINE ON THE DOWNSTREAM SIDE OF THE BRIDGE AT THE RIVER CROSSING
---	LATERAL LINE	SCH 40 PVC-UV (ON GRADE)	UV RESISTANT PVC LATERAL LINE	STAKE ON GRADE AT 10' O.C. AND AT ALL CORNERS. STAKES SHALL GRADE AND AT ALL TRAIL CROSSINGS
----	SLEEVING	SCH 40 PVC	SLEEVING AT ROAD AND TRAIL CROSSINGS. LINE TO BE 2X PIPE SIZE IT WILL CARRY	STAKE SLEEVES TO BOTTOM OF TRENCHES. WITH BRAT REBAR STAKES. STAKES SHALL BE 48" O/C & EXTEND 18" INTO SOIL. SLEEVING SHALL BE 24" BELOW GRADE
▲	HUNTER	NODE-200_OR -400 BATTERY-OPERATED CONTROLLER	2 OR 4 STATION CONTROLLER AS NOTED FOR A GIVEN LOCATION	CONTROLLER FOR OPERATION OF SPRINKLER SYSTEMS. SIZE AS NOTED; INSTALL ON-GRADE IN LOCKING VALVE BOX - LOCK BOX TOP SHUT; SEE DETAIL FOR MORE INFORMATION

NOTE: ALL IRRIGATION COMPONENTS SHALL BE RECYCLED WATER COMPLIANT MATERIALS.
 REFER TO DETAILS ON SHEETS 1-7 AND 1-8 FOR ADDITIONAL REQUIREMENTS.

TYPICAL VALVE CALL-OUT REFERENCE:



TEMPORARY IRRIGATION SYSTEM NOTES:

- THE IRRIGATION SYSTEM SHALL BE SERVED FROM A RECYCLED WATER SOURCE PROVIDED BY THE OLIVENHAIN MUNICIPAL WATER DISTRICT (OMWD) AND THE JPA, WITH ALL COMPONENTS SHALL BE INSTALLED PER THE OMWD RECYCLED WATER USE REQUIREMENTS.
- THE IRRIGATION SYSTEM DESIGN IS PARTIALLY DIAGRAMATIC AND DOES NOT SHOW ALL OFFSETS, APPURTENANCES, AND EQUIPMENT NEEDED FOR A COMPLETE SYSTEM. CONTRACTOR SHALL SUPPLY ALL MATERIALS FOR A FUNCTIONAL SYSTEM.
- IRRIGATION SYSTEM IS BASED ON AN ANTICIPATED OPERATING PRESSURE OF 80 P.S.I. AND A MAXIMUM FLOW DEMAND OF 60 GALLONS PER MINUTE PER VALVE AND AT ANY ONE TIME. THE CONTRACTOR SHALL VERIFY THE EXISTING WATER PRESSURE BEFORE THE START OF CONSTRUCTION, AND SHALL REPORT ANY DEFICIENCIES TO THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST. AND THE ACTUAL PRESSURE READING AT THE POINT OF CONNECTION TO THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST.
- THE CONTRACTOR SHALL TEMPORARILY IRRIGATE ALL REVEGETATION AREAS ON A REGULAR BASIS, AND AS DIRECTED BY THE PROJECT BIOLOGIST, TO SUPPLEMENT NATURAL PRECIPITATION AND TO HELP ASSESS SEED GERMINATION AND CONTAINER PLANT SURVIVAL THROUGHOUT THE PLANT ESTABLISHMENT PERIOD (PEP) AND THROUGHOUT THE ENTIRE 5 YEAR MAINTENANCE AND MONITORING PERIOD, OR AS DETERMINED BY THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST.
- THE REVEGETATION INTENT IS TO PROVIDE PERSISTENT VEGETATION THAT CAN SUSTAIN ITSELF IN PERPETUITY. TEMPORARY IRRIGATION AND WATERING APPLICATIONS SHALL BE CONDUCTED TO ESTABLISH HEALTHY AND VIGOROUS PLANTS THAT ARE NOT IRRIGATION-DEPENDENT AT THE END OF THE PLANT ESTABLISHMENT PERIOD. THE INSTALLED IRRIGATION SYSTEM SHALL BE FULLY OPERATIONAL THROUGH THE PLANT ESTABLISHMENT PERIOD. WATER SHALL BE APPLIED IN A WAY TO ALLOW FOR THE WEANING OFF OF PLANTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLEMENTAL WATERING BY HAND TO WATER-IN THE PLANTS AT THE TIME OF PLANTING AND TO SUPPLEMENT THE IRRIGATION SYSTEM TO ASSURE PLANT SURVIVAL AND SEED GERMINATION.
- THE OPTIMAL TIME FOR PLANTING AND SEEDING IS BETWEEN OCTOBER 1 AND FEBRUARY 15. DURING THE RAINY SEASON, IF NEEDED, THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST SHALL PROVIDE THE CONTRACTOR FOR A PERIOD SUFFICIENT TO ESTABLISH PLANT MATERIAL AND TO PROVIDE VEGETATIVE COVER TO PREVENT SOIL EROSION. THE AMOUNT OF IRRIGATION MUST BE ADJUSTED WHEN WARRANTED BY SITE CONDITIONS AND NATURAL PRECIPITATION. THE PROJECT BIOLOGIST AND CONTRACTOR SHALL MONITOR SITE CONDITIONS TO DETERMINE SUCCESS AND ADDED REQUIREMENTS FOR TEMPORARY IRRIGATION, AND SHALL COORDINATE WITH THE JPA DESIGNATED REPRESENTATIVE.
- IRRIGATION SHALL BE PERFORMED IN A MANNER THAT AVOIDS RUNOFF, SEEPAGE, AND OVERSPRAY ONTO ADJACENT PROPERTIES, OPEN WATER NON-IRRIGATED AREAS, AND TRAIL SURFACES. THE WATER DELIVERY RATE SHALL BE MATCHED TO THE SLOPE GRADIENT AND THE PERCOLATION RATE OF THE SOIL. THE IRRIGATION SYSTEM SHALL DELIVER WATER SUFFICIENTLY AND UNIFORMLY AND SHALL BE APPROPRIATE TO THE NEEDS OF THE PLANT MATERIALS.
- OVERWATERING AS EVIDENCED BY SOGGY SOILS, CONTINUALLY WET SURFACES, STANDING WATER, RUNOFF ON TO TRAILS OR NATURAL DRAINAGES AND OTHER SIMILAR CONDITIONS SHALL BE MANAGED AND PREVENTED.
- TEMPORARY IRRIGATION MATERIALS CROSSING THE TRAIL SHALL BE PLACED BELOW-GROUND IN A SLEEVE SO THAT THEY CAN BE DRIVEN OR WALKED OVER, AND DO NOT IMPEDE ACCESS.
- THESE IRRIGATION PLANS ARE DESIGNED AS A TEMPORARY SYSTEM TO BE DISCONNECTED FROM THE WATER SOURCE AND REMOVED FROM THE PROPERTY AFTER SUITABLE ESTABLISHMENT OF NATIVE VEGETATION HAS BEEN ACHIEVED, AS DETERMINED BY THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST.
- ALL ABOVE-GROUND COMPONENTS (INCLUDING ALL CONTROLLERS, VALVES, QUICK COUPLERS, PIPE, SPRINKLER HEADS, ETC.) SHALL BE COMPLETELY REMOVED FROM THE PROPERTY BEFORE THE END OF THE 5 YEAR MAINTENANCE PERIOD, BUT ONLY FOLLOWING APPROVAL FROM THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST. BEFORE REMOVAL OF THE ABOVE-GROUND COMPONENTS, THE IRRIGATION POINT-OF-CONNECTION SHALL BE DISCONNECTED FROM THE WATER SOURCE SO THAT THE SYSTEM IS NON-PERFORMABLE. ALL BELOW-GRADE PIPE AND TRAIL UNDERGROUND. PLACE AT THE TIME WHEN THE IRRIGATION SYSTEM IS DISCONNECTED, CUT AND CAP PIPE WITHIN SLEEVES, AND ABANDON SAID PIPE AND SLEEVES IN PLACE, AND LEFT UNDERGROUND.
- THE INITIAL IRRIGATION SCHEDULE AND MAXIMUM RUN TIME SHALL BE DETERMINED BY MEASURING THE TIME OF OPERATION THAT RESULTS IN RUNOFF FROM VARIOUS AREAS OF THE ORGATED AREAS. HAS DETERMINED WHICH VALVE BE CONDUCED. THE TIME RECORDED SHALL BE THE MAXIMUM RUN TIME FOR EACH LOWERED THE WATER RUNOFF OBSERVED. INCH OF WATER BEING APPLIED TO THE MITIGATION SITE PER IRRIGATION CYCLE. THE IRRIGATION SCHEDULE AND MAXIMUM RUN TIME SHALL BE REVIEWED AT AN INTERVAL ESTABLISHED BY AND ADJUSTED AS APPROPRIATE PER THE RECOMMENDATION OF THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLEMENTAL WATERING BY WAY OF A WATER TRUCK OR OTHER APPROVED METHOD TO WATER THE PLANTS AT THE TIME OF PLANTING AND/OR TO SUPPLEMENT THE IRRIGATION SYSTEM TO ASSURE PLANT SURVIVAL AND SEED GERMINATION.
- THE TEMPORARY SYSTEM SHALL BE DEACTIVATED AFTER SUITABLE ESTABLISHMENT OF NATIVE VEGETATION HAS BEEN ACHIEVED, AS DETERMINED BY THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST. AT THAT TIME, ALL ABOVE-GROUND COMPONENTS SHALL BE REMOVED FROM THE SITE AT THE END OF THE LONG-TERM MAINTENANCE PERIOD UPON APPROVAL FROM THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST.

NO.	REVISIONS	DATE	BY

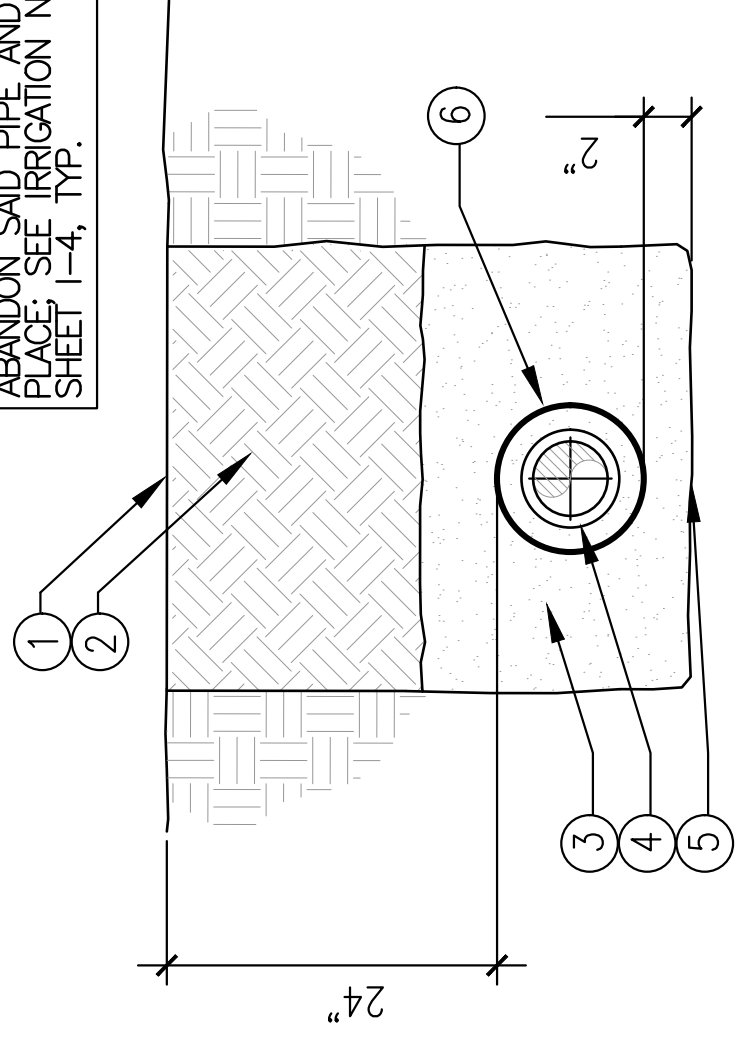
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 WWW.KIMLEY-HORN.COM
 PHONE: 619-234-8411

Kimley»Horn
 LICENSED PROFESSIONAL
 DATE: FEBRUARY 14, 2024
 SCALE: AS SHOWN
 DESIGNED BY: TK
 DRAWN BY: TK
 CHECKED BY: MK
 DATE: _____
 STATE LICENSE NUMBER: _____
 LIC PROJ # _____
 LIC PROJ 1 _____

REVEGETATION/RESTORATION IRRIGATION LEGEND AND DETAILS

OSUNA SEGMENT OF THE COAST TO CREST TRAIL PREPARED FOR SAN DIEGUITO RIVER PARK JPA
 CITY OF SAN DIEGO
 SHEET NUMBER: 11 OF 18
 I-3
DUDEK
 605 Third Street
 Encinitas, CA 92024
 T: (760) 942-5147
 PRELIMINARY NOT FOR CONSTRUCTION REVISED 2/14/2024

AT THE TIME WHEN THE IRRIGATION SYSTEM IS DISCONNECTED, CUT AND CAP PIPE WITHIN SLEEVES, AND ABANDON SAID PIPE AND SLEEVES IN PLACE, AND LEFT UNDERGROUND. PLACE AT THE TIME WHEN THE IRRIGATION SYSTEM IS DISCONNECTED, CUT AND CAP PIPE WITHIN SLEEVES, AND ABANDON SAID PIPE AND SLEEVES IN PLACE, AND LEFT UNDERGROUND.



ITEM	DESCRIPTION
1	FINISH GRADE, TOP OF TRAIL
2	EXISTING MAINTENANCE ROAD AND NATIVE SOIL BACKFILL FREE OF ROCKS AND DEBRIS. SATURATE AND COMPACT BACKFILL TO 95% RELATIVE DENSITY
3	CLEAN BACKFILL OVER AND AROUND PIPE. NO ROCKS OR DEBRIS
4	PVC IRRIGATION PIPE INSIDE SLEEVE
5	LEVEL AND COMPACT TRENCH BED BEFORE PIPE PLACEMENT
6	PVC SLEEVE PIPE

A IRRIGATION PIPE SLEEVING AT ROAD OR TRAIL CROSSINGS
 NO SCALE

WATERING:

- CONTAINER PLANTS AND SEEDING SHALL BE WATERED BY THE CONTRACTOR BY WAY OF A TEMPORARY IRRIGATION SYSTEM; REFER TO IRRIGATION PLAN.
- WATERING SHALL BE PROVIDED BY THE CONTRACTOR FOR A PERIOD SUFFICIENT TO ESTABLISH PLANT MATERIAL AND PROVIDE VEGETATIVE COVER, AS REQUIRED OF THE SUCCESS CRITERIA.
- WATER DELIVERY SHALL PROVIDE EVEN AND THOROUGHLY SOAK SEEDED SLOPES AND PLANTING BASINS FOR THE TOP 2" OF THE SURFACE SOIL BUT AVOID EXCESSIVE RUNOFF. MULTIPLE CASES MAY BE REQUIRED THROUGHOUT THE SOAK SOAK SOAK WATERING. IF IDENTIFIED BY THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST MAY REQUIRE PERIODIC DIRECT WATER DELIVERY SHALL EVENLY AND THOROUGHLY SOAK SEEDED SLOPES AND PLANTING BASINS FOR THE TOP 2" OF THE SURFACE SOIL BUT AVOID EXCESSIVE RUNOFF. MULTIPLE CASES MAY BE REQUIRED THROUGHOUT THE SOAK SOAK SOAK WATERING. IF IDENTIFIED BY THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST MAY REQUIRE PERIODIC DIRECT HOSE HAND WATERING OF CONTAINER PLANTING BASINS (SEE NOTES, BELOW).
- WATER DELIVERY SHALL BE APPLIED IN A MANNER TO AVOID FORCE THAT MAY DAMAGE CONTAINER PLANTS AND NATIVE SEEDLINGS OR DISPLACE/ERODE SEED COVER AND ROADS OR NATIVE VEGETATED AREAS).
- THE CONTRACTOR'S WATERING SHALL REQUIRE DIRECT MONITORING AND APPROVAL DURING THE FIRST APPLICATION BY THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST.
- HAND WATERING VIA HOSE SHALL BE REQUIRED FOR CONTAINER PLANTS FOR THE FOLLOWING:
 - WITHIN TWO-HOURS BEFORE CONTAINER PLANT INSTALLATION. ALL EXCAVATED PLANTING HOLES SHALL BE FILLED COMPLETELY WITH WATER AND ALLOWED TO PERCOLATE IN WITHIN ONE-HOUR. FOLLOWING CONTAINER PLANT INSTALLATION AND CONTINUING AT AN EVERY THREE-DAY INTERVAL UNTIL HYDROSEED IS APPLIED. EACH CONTAINER PLANT SHALL BE THOROUGHLY HAND WATERED WITH 1.5 GALLONS ALLOWING WATER TO PERCOLATE INTO THE SOIL AND NOT OVERTOP BASIN. BE REQUIRED IF THE IRRIGATION SYSTEM INADEQUATELY SUPPORTS CONTAINER PLANT SURVIVAL. SEE NOTES ABOVE.
 - CARE WILL BE TAKEN NOT TO DRAG HOSES OVER CONTAINER PLANTS OR PLANTING BASINS.
- FOLLOWING SEEDING, WATERING SHALL BE CONDUCTED DAILY FOR THE FIRST TWO WEEKS FOLLOWING APPLICATION. THEN THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST WILL INSPECT AND PROVIDE RECOMMENDATIONS FOR INCREASE OR DECREASE IN WATERING FREQUENCY OR METHOD. THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST WILL PROVIDE DAILY RECOMMENDATIONS DURING EACH WEEK OF THE SEEDING PERIOD. EVALUATION CRITERIA WILL BE DETERMINED BY THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST. PROLONGED DROUGHT OR EXTENDED PERIODS OF HEAT. CONTRACTOR SHALL PROVIDE WATERING AVAILABILITY FOR THE DURATION OF THE MAINTENANCE PERIOD, AS NEEDED.
- WATERING SHALL NOT BE REQUIRED FOR 72-HOURS FOLLOWING A RAIN EVENT GREATER THAN 0.2 INCHES. UNLESS REQUIRED BY THE RE IN CONSULTATION OF THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST.

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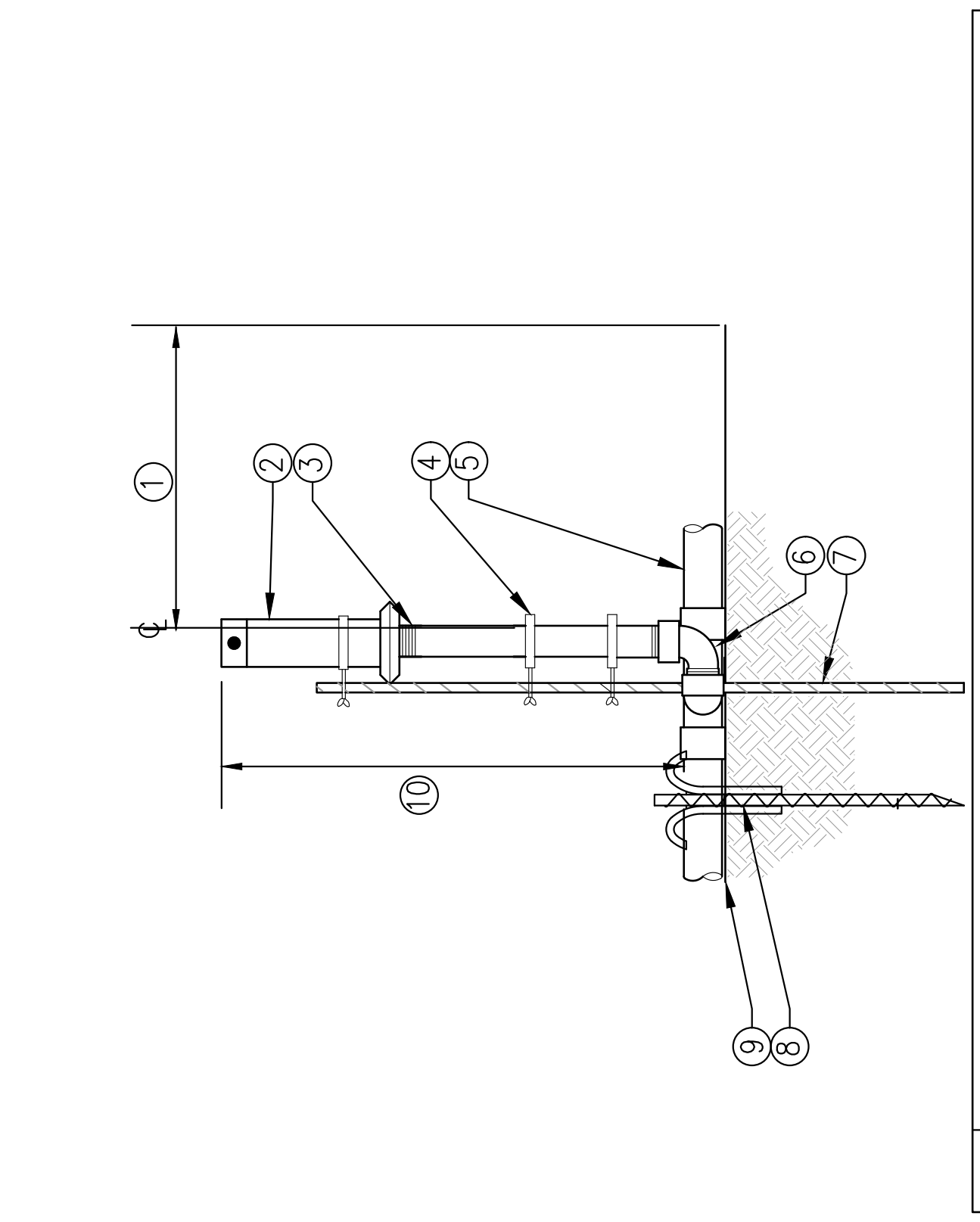
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 095226008
 DATE FEBRUARY 14, 2024
 SCALE AS SHOWN
 DESIGNED BY TK
 DRAWN BY TK
 CHECKED BY MK
 DATE

REVEGETATION/RESTORATION
 IRRIGATION DETAILS

OSUNA SEGMENT OF THE
 COAST TO CREST TRAIL
 PREPARED FOR
 SAN DIEGO TO RIVER PARK JPA
 CITY OF SAN DIEGO
 SHEET NUMBER
 12 OF 18

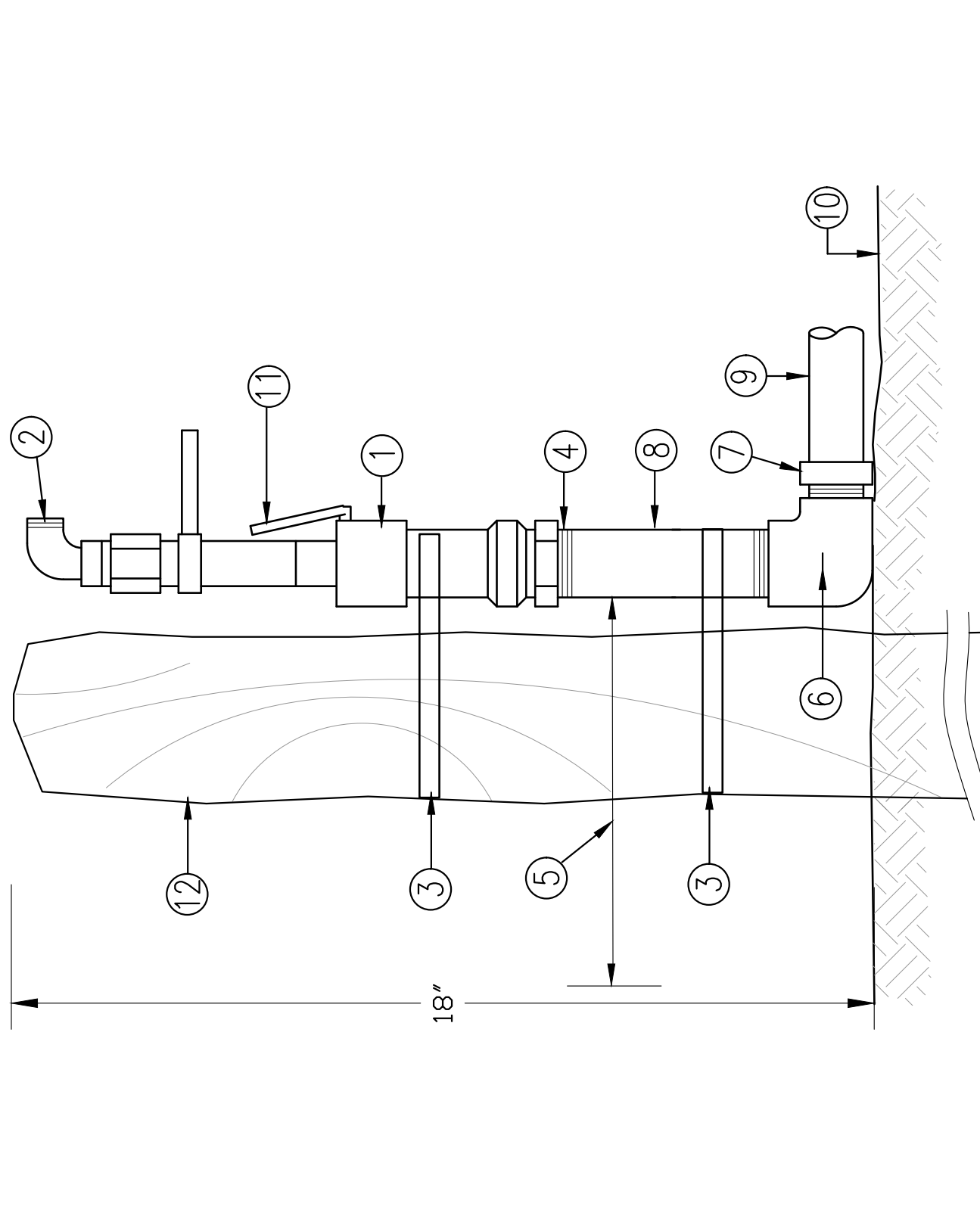
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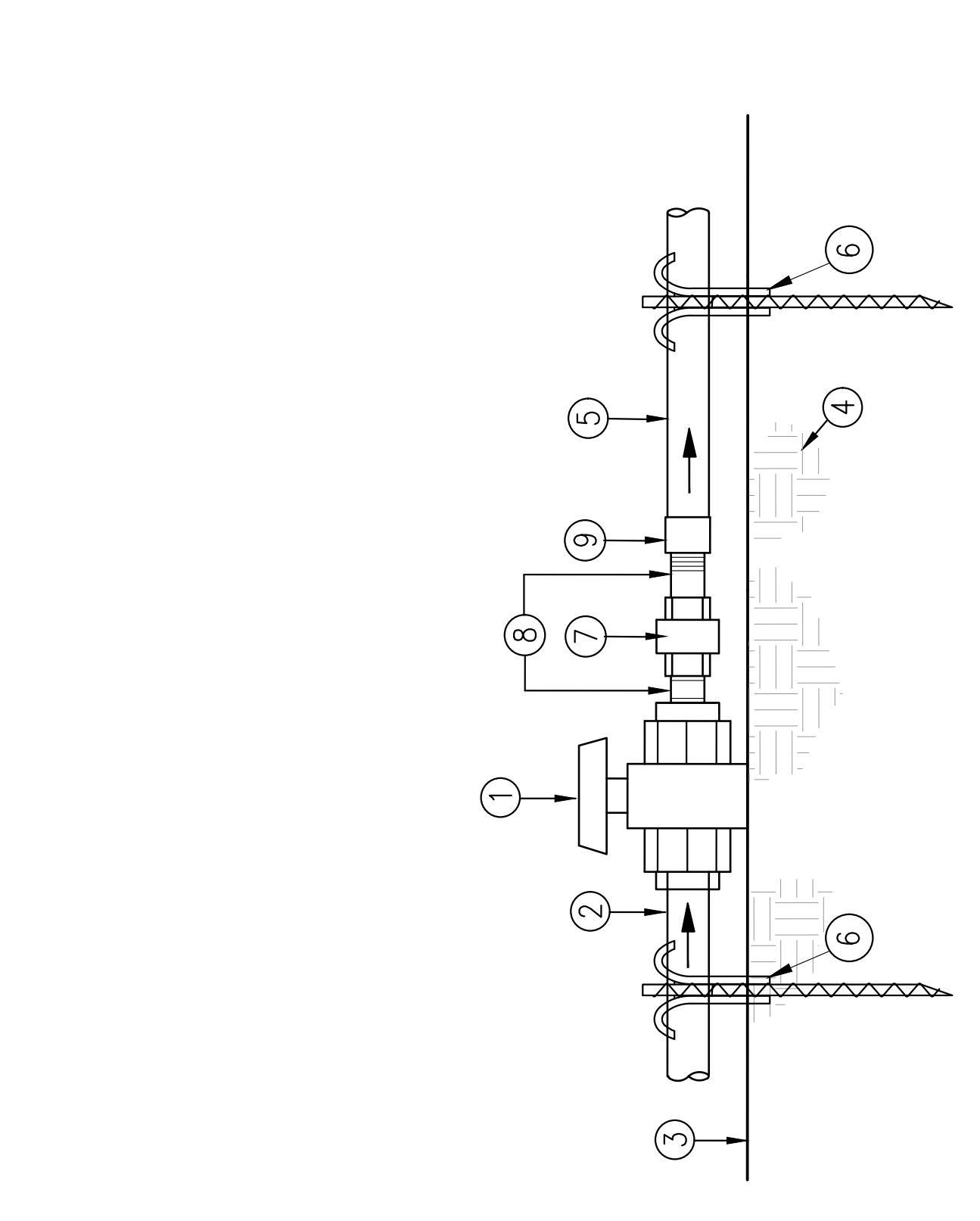
ITEM	DESCRIPTION
1	18" (MIN.) FROM EDGE OF ROAD (WHERE APPLICABLE)
2	ROD END SPRINKLER (RECYCLED WATER)
3	24" SCH 80 PVC RISER (RECYCLED WATER)
4	RUBBER GASKET TO SECURE HEAD AND RISER TO STAKE - MIN. 3"
5	PVC LATERAL LINE ON GRADE
6	SWING JOINT ASSEMBLY ATTACHED TO PVC PIPE FITTING (max. street ell)
7	42#3 REBAR STAKE (min. 18" into grade)
8	PIPE ANCHOR (SEE DETAIL D, SHEET P-9)
9	EXISTING GRADE
10	30" MIN ABOVE FINISH GRADE

C SPRINKLER HEAD
 NO SCALE



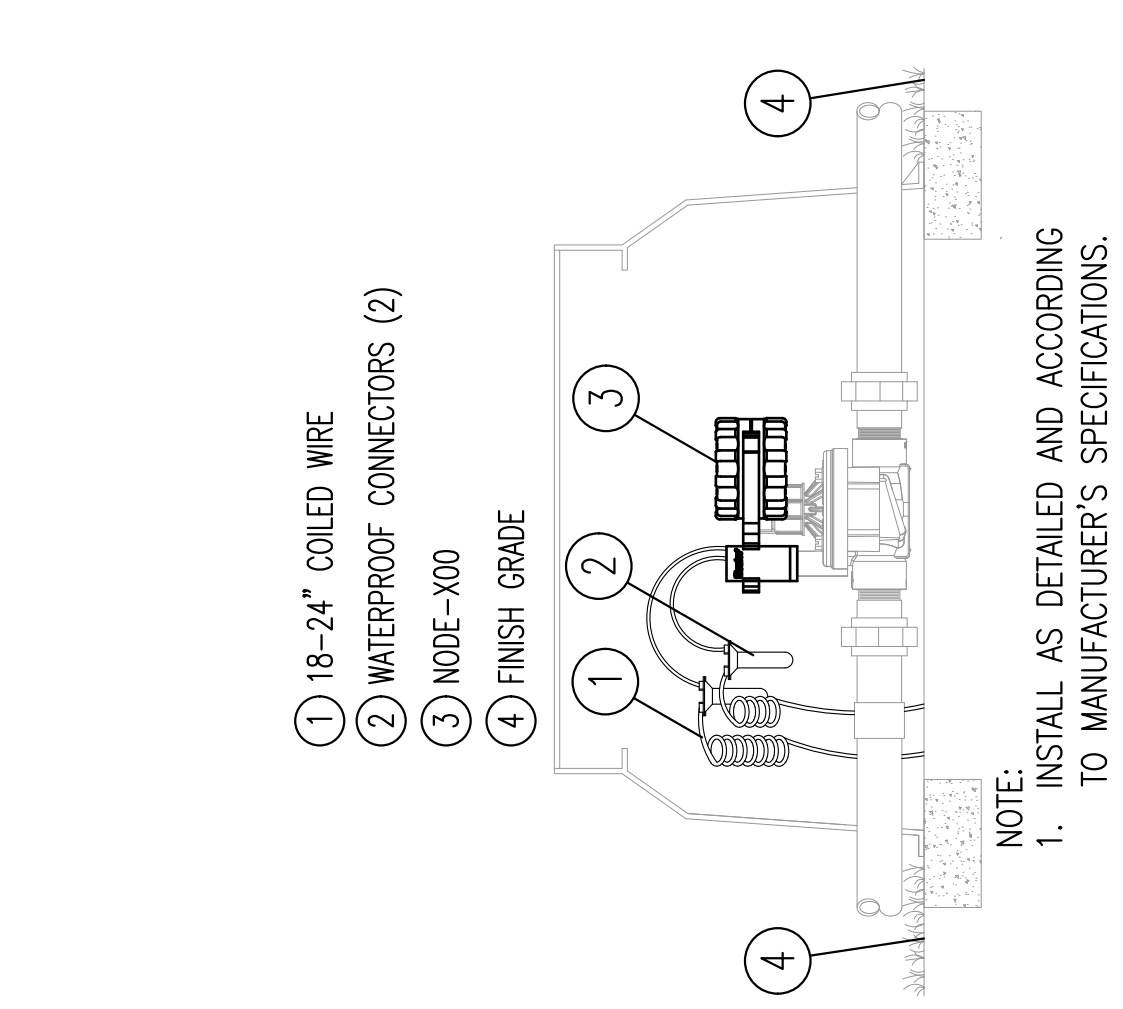
ITEM NO	DESCRIPTION
1	QUICK COUPLER VALVE
2	QUICK COUPLER KEY W/ SWIVEL HOSE END
3	FINISH GRADE
4	BEYOND THE VALVE THROTTLES
5	4" MIN. FROM EDGE OF CURBS, TRAILS, PATHS, ETC.
6	3" SCH 80 NIPPLE
7	PVC SCH 80 W/ MALE ADAPTER
8	3" SCH 80 NIPPLE
9	MAIN LINE PIPE
10	BRICK SUPPORTS (4)
11	RUBBER COVER
12	36" LONG X 6" DIA. (MIN.) PREFER POST AT ALL QUICK COUPLING VALVES NEXT TO TRAILS, PATHS AND ROADS.

B QUICK COUPLING VALVE
 NO SCALE

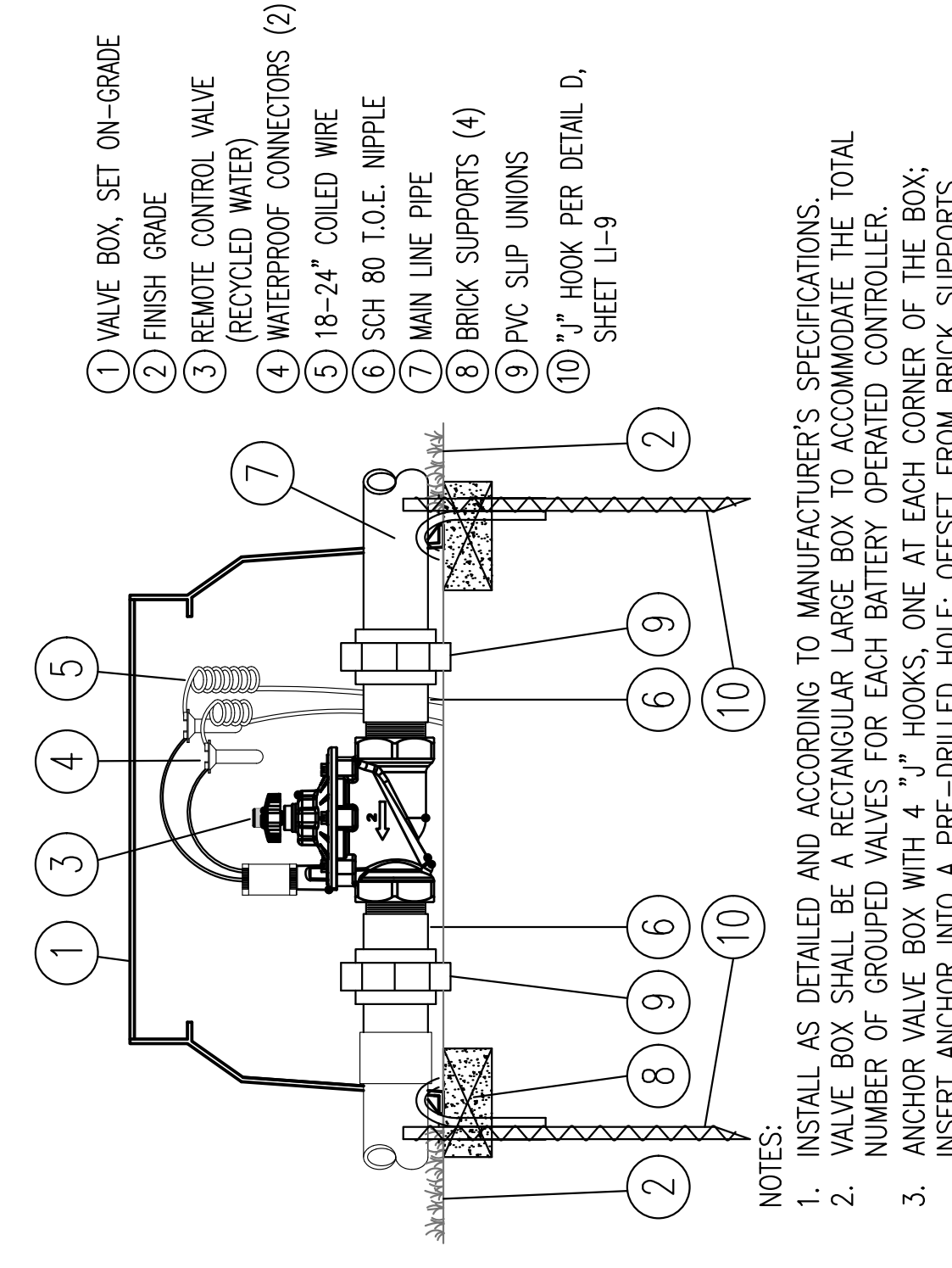


ITEM	DESCRIPTION
1	PVC SCH 80 BALL VALVE W/ INTEGRAL UNION, SEE LEGEND (RECYCLED WATER)
2	PVC MAIN LINE PIPE FROM P.O.C.
3	FINISH GRADE
4	SUBGRADE
5	PVC MAIN LINE OR PVC LATERAL PIPE TO SPRAY SPRINKLER HEADS/BUBBLERS
6	PIPE ANCHOR (SEE DETAIL D, SHEET U-9)
7	UNION - THREADED (PVC)
8	SHORT NIPPLES PVC SCH 80 (TYP)
9	PVC SCH 80 FEMALE ADAPTER (TYP)

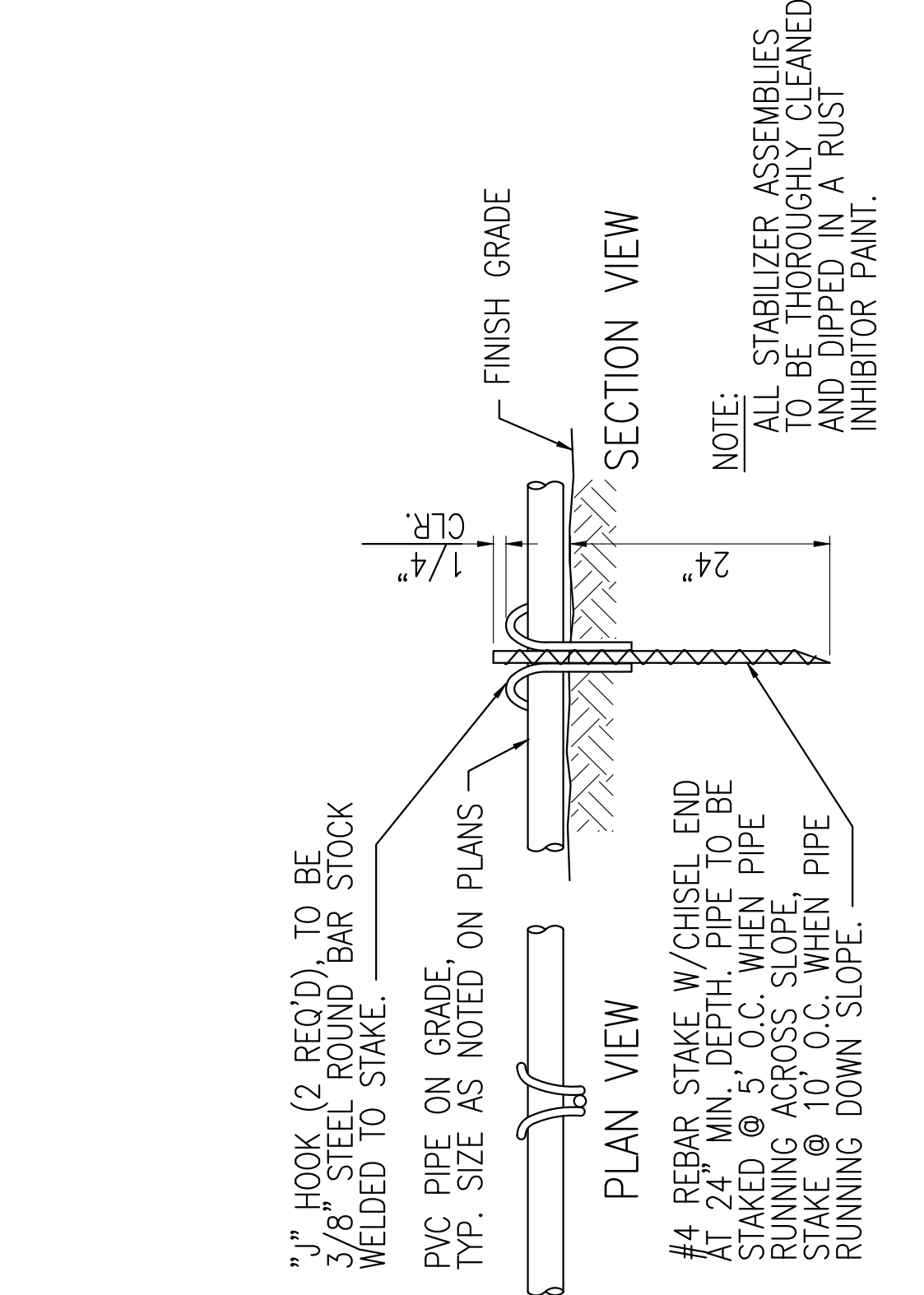
A SHUT OFF VALVE (ISOLATION VALVE)
 NO SCALE



F BATTERY OPERATED CONTROLLER
 NO SCALE



E REMOTE CONTROL VALVE
 NO SCALE



D ON-GRADE PIPE ANCHORING
 NO SCALE

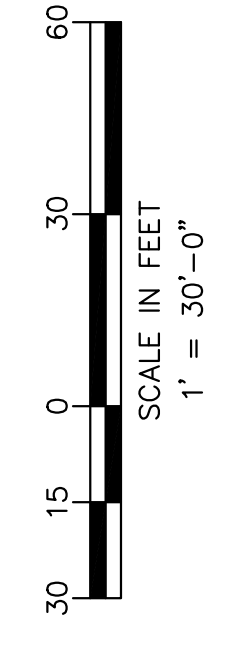
NOTE:
 ALL IRRIGATION COMPONENTS SHALL BE RECYCLED WATER COMPLIANT.

Prepared By: John Zink, David Skirvin, Layouid-14, DETALS February 14, 2024 03:28:35pm P:\3000\Environment\1325 San Diego\San Diego River Park\Osuna Trail\Irrigation\Revegetation\Revegetation Details.dwg
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 Design By: TK, Date: February 14, 2024 03:28:35pm P:\3000\Environment\1325 San Diego\San Diego River Park\Osuna Trail\Irrigation\Revegetation\Revegetation Details.dwg
 Project: 1325 SAN DIEGO RIVER PARK OSUNA TRAIL IRRIGATION REVEGETATION DETAILS

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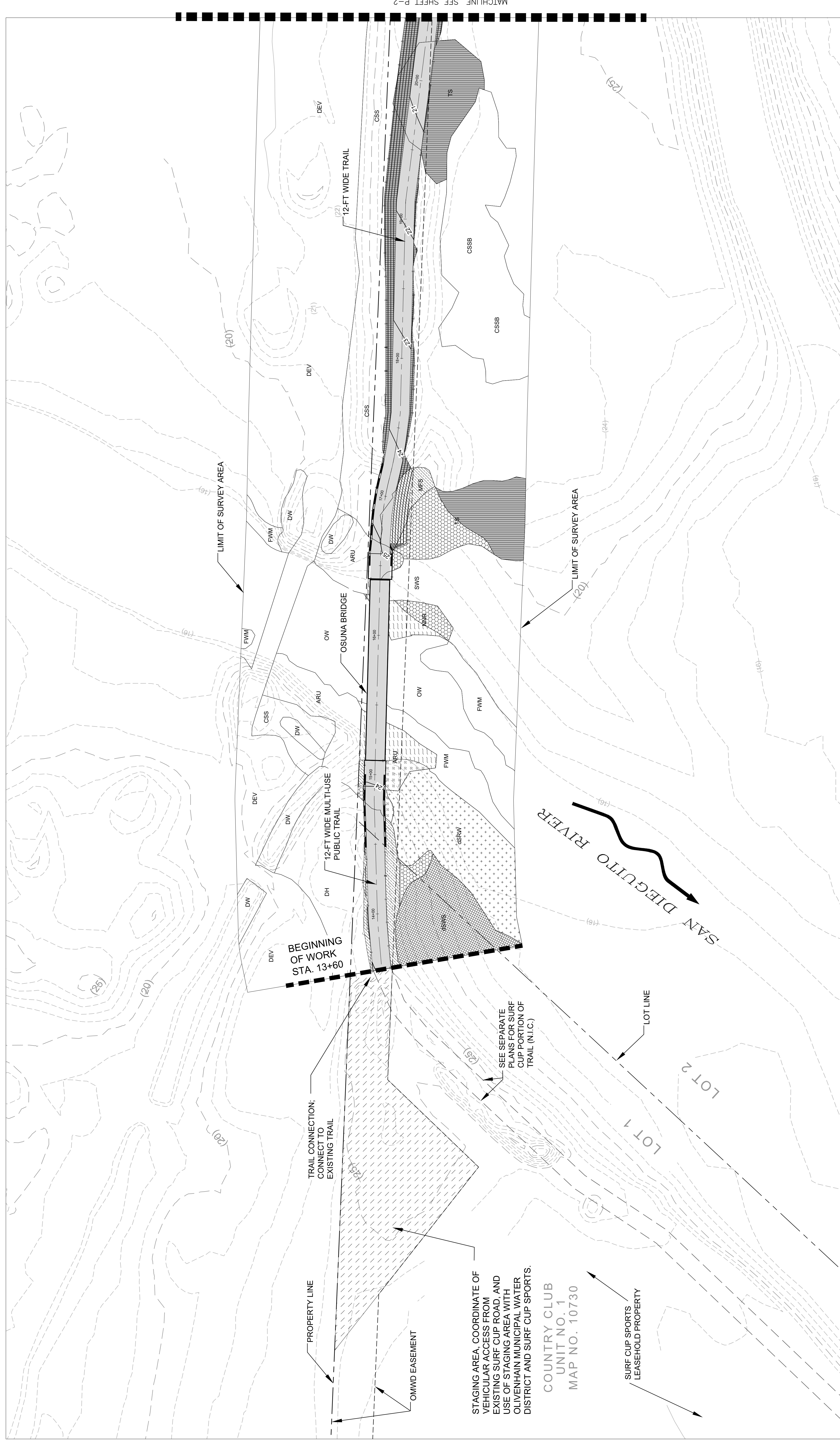


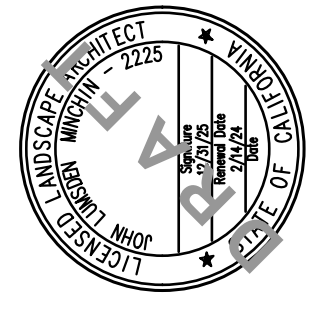
PLANTING LEGEND

REVEGETATION AREAS

	FRESHWATER MARSH WETLAND (FWM) (0.05 AC.) CONTAINER PLANTS + SEEDING
	MULEFAT SCRUB (MFS) (0.05 AC.) CONTAINER PLANTS + SEEDING
	SOUTHERN WILLOW SCRUB (SWS) ENHANCEMENT (0.08 AC.) SEEDING ONLY
	SOUTHERN RIPARIAN WOODLAND (SRW) ENHANCEMENT (0.13 AC.) SEEDING ONLY
	SOUTHERN WILLOW SCRUB (SWS) REVEGETATION/RESTORATION (0.06 AC.) CONTAINER PLANTS + SEEDING
	SOUTHERN RIPARIAN WOODLAND (SRW) REVEGETATION/RESTORATION (0.01 AC.) CONTAINER PLANTS + SEEDING
	COASTAL SAGE SCRUB (CSS) (0.49 AC.) CONTAINER PLANTS + SEEDING

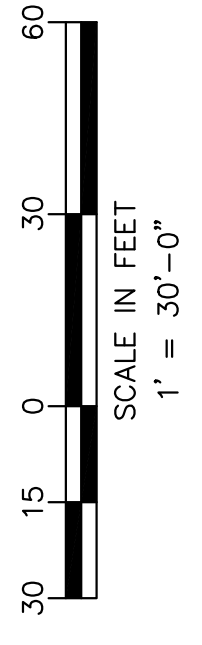
SEE SHEETS P-3 & P-4 FOR
MATERIALS PLANTING
NOTES & DETAILS.





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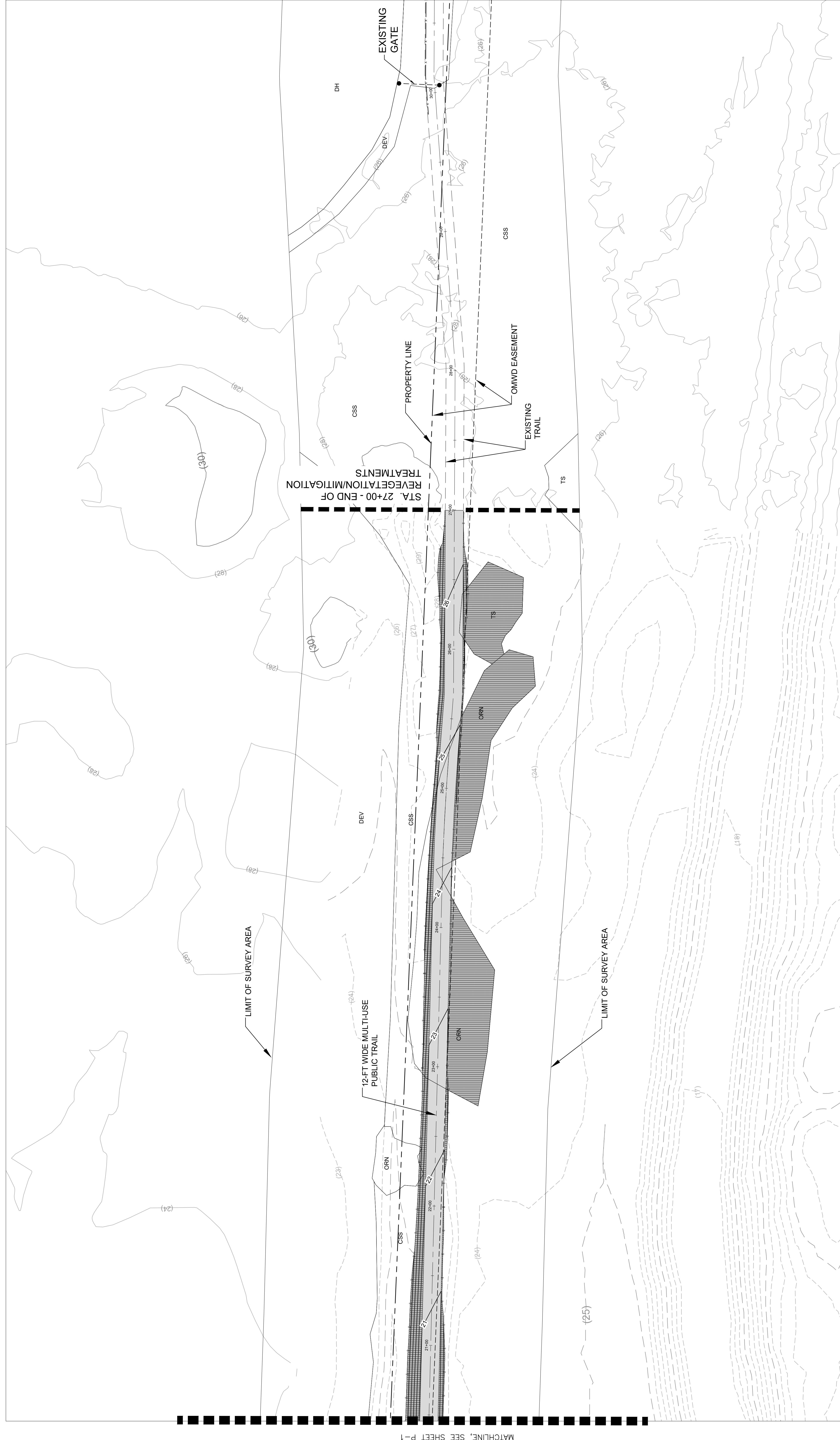


REVEGETATION/RESTORATION
PLANTING PLAN

KHA PROJECT LICENSED PROFESSIONAL
095228008
DATE FEBRUARY 14, 2024
SCALE AS SHOWN
DESIGNED BY TK
DRAWN BY TK
CHECKED BY MKR
DATE

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PLANTING LEGEND

REVEGETATION AREAS

	FRESHWATER MARSH WETLAND (FWM) (0.05 AC.) CONTAINER PLANTS + SEEDING		SOUTHERN WILLOW SCRUB (SWS) REVEGETATION/RESTORATION (0.06 AC.) CONTAINER PLANTS + SEEDING
	MULEFAT SCRUB (MFS) (0.05 AC.) CONTAINER PLANTS + SEEDING		SOUTHERN RIPARIAN WOODLAND (SRW) REVEGETATION/RESTORATION (0.01 AC.) CONTAINER PLANTS + SEEDING
	SOUTHERN WILLOW SCRUB (SWS) ENHANCEMENT (0.08 AC.) SEEDING ONLY		COASTAL SAGE SCRUB (CSS) (0.49 AC.) CONTAINER PLANTS + SEEDING
	SOUTHERN RIPARIAN WOODLAND (SRW) ENHANCEMENT (0.13 AC.) SEEDING ONLY		

SEE SHEETS P-3 & P-4 FOR
ADDITIONAL PLANTING
NOTES & DETAILS.

MATCHLINE, SEE SHEET P-1

NATIVE CONTAINER PLANT AND SEED SOURCES:

- CONTRACTOR SHALL SUPPLY SEED AND CONTAINER PLANTS IDENTIFIED ON THIS SHEET, AND PER THE RECOMMENDATION AND UNDER THE DIRECTION OF THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST. THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST SHALL BE RESPONSIBLE FOR OBTAINING PERMITS, MAINTENANCE AND MONITORING PERIOD, SUCCESS CRITERIA IN THE EVENT THAT ADDITIONAL CONTAINER PLANTS OR SEEDING IS NEEDED TO SUPPLEMENT THE QUANTITY SHOWN.
- CONTAINER PLANTS SHALL BE PROCURED FROM A NATIVE PLANT NURSERY QUALIFIED TO PROPAGATE AND CARE FOR NATIVE PLANT SPECIES. SEED SHALL BE PROCURED FROM A NATIVE SEED SUPPLIER QUALIFIED TO COLLECT, STORE AND PROPAGATE NATIVE PLANT SPECIES.
- SOURCE OF ALL PROPAGULES FOR ALL NATIVE CONTAINER PLANT MATERIALS AND SEED SHALL HAVE ORIGINATED FROM WITHIN THE SAN DIEGO COUNTY COASTAL AREAS TO THE EXTENT PRACTICAL (MAXIMUM OF WITHIN A 25 MILE RADIUS), OR CONTRACTOR SHALL PROVIDE EVIDENCE THAT THE SEED AND/OR CONTAINER PLANTS ARE NOT AVAILABLE. THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST WILL PROVIDE SUBSTITUTION OR ALTERNATIVE COMPLIANCE.
- CONTAINER PLANT MATERIAL MUST BE DELIVERED TO THE PROJECT SITE AT THE APPROPRIATE TIME, IN A HEALTHY AND VIGOROUS CONDITION. ALL PLANTS SHALL BE INSTALLED ACCORDING TO THE DIRECTION OF THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST. THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST SHALL BE RESPONSIBLE FOR OBTAINING PERMITS, MAINTENANCE AND MONITORING PERIOD, SUCCESS CRITERIA IN THE EVENT THAT ADDITIONAL CONTAINER PLANTS OR SEEDING IS NEEDED TO SUPPLEMENT THE QUANTITY SHOWN.
- CONTRACTOR SHALL SUBMIT ALL SEED TAGS FOR SEED PRODUCTS TO BE USED WITHIN THE PROJECT TO THE RE AND PROJECT BIOLOGIST FOR APPROVAL PRIOR TO APPLICATION. ALL SEED TAGS FROM MATERIALS ACTUALLY APPLIED SHALL BE RETAINED BY THE CONTRACTOR AND SHALL BE TURNED OVER TO THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST IN ORDER TO VERIFY COMPLIANCE WITH THE SPECIFIED MATERIALS.
- ALL SEEDS SHALL MEET THE MINIMUM % PURE LIVE SEED (PLS) AS NOTED IN TABLES. IF THE MINIMUM % PLS COUNT CANNOT BE MET WITHIN 10 DAYS, CONTRACTOR SHALL OBTAIN ALTERNATIVE SEED FROM THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST FOR ALTERNATIVE COMPLIANCE.

HYDROSEEDING NOTES

- SEEDING SHALL OCCUR ONLY AFTER THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST HAVE OBSERVED AND APPROVED THE INSTALLATION OF THE CONTAINER PLANTS. ONLY AS DIRECTED BY THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST: TYPE 9 MULCH (WOOD FIBER) OR BONDED FIBER (STABILIZING EMULSION, ECOLOGY CONTROLS, M-BINDER OR APPROVED EQUAL) BINDER AT A MINIMUM RATE OF 160 LBS PER ACRE. THE BINDER SHALL BE AN ORGANIC DERIVATIVE OR PROCESSED ORGANIC ADHESIVE, OR AS DIRECTED BY THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST TO BE APPLIED BETWEEN DECEMBER - FEBRUARY.
- A WETTING AGENT CONSISTING OF ONE TON PER ACRE AGRICULTURAL GYPSUM (95% ALKYL POLYETHYLENE GLYCOL ETHER OR AS APPROVED EQUAL) SHALL BE APPLIED ACCORDING TO THE RECOMMENDATION OF THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST. EQUIPMENT USED FOR THE APPLICATION OF THE HYDROSEED SLURRY MUST BE CALIBRATED TO APPLY THE SLURRY AT THE DESIGNATED RATE. HOVENEQUIS MIX THE SLURRY. THE SLURRY MIX SHALL BE DYED GREEN. THE EQUIPMENT MUST HAVE A PUMP CAPABLE OF APPLYING SLURRY UNIFORMLY AT THE RATES INDICATED.
- TYPE 9 MULCH (WOOD FIBER) OR 9M AND HYDROPOST COMPOST (STABILIZING EMULSION, ECOLOGY CONTROLS, M-BINDER OR APPROVED EQUAL) BINDER AT A MINIMUM RATE OF 160 LBS PER ACRE. THE BINDER SHALL BE AN ORGANIC DERIVATIVE OR PROCESSED ORGANIC ADHESIVE, OR AS DIRECTED BY THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST TO BE APPLIED BETWEEN DECEMBER - FEBRUARY.
- A WETTING AGENT CONSISTING OF ONE TON PER ACRE AGRICULTURAL GYPSUM (95% ALKYL POLYETHYLENE GLYCOL ETHER OR AS APPROVED EQUAL) SHALL BE APPLIED ACCORDING TO THE RECOMMENDATION OF THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST. EQUIPMENT USED FOR THE APPLICATION OF THE HYDROSEED SLURRY MUST BE CALIBRATED TO APPLY THE SLURRY AT THE DESIGNATED RATE. HOVENEQUIS MIX THE SLURRY. THE SLURRY MIX SHALL BE DYED GREEN. THE EQUIPMENT MUST HAVE A PUMP CAPABLE OF APPLYING SLURRY UNIFORMLY AT THE RATES INDICATED.

CONTAINER PLANT PALETTE
COASTAL SAGE SCRUB
RESTORATION/REVEGETATION AREA: 21,142 SF (0.49 Ac)

SYMBOL	BOTANICAL NAME	COMMON NAME	CONTAINER SIZE	SPACING (ON CENTER)	PERCENT COMPOSITION	QUANTITY	DETAILS
	ARTEMISA CALIFORNICA	COASTAL SAGEBRUSH	1 GAL	6' O.C.	40%	235	(A) P-4
	ENCELIA CALIFORNICA	CALIFORNIA BUSH SUNFLOWER	1 GAL	4' O.C.	15%	198	(B) P-4
	ERIOGONUM FASCICULATUM	CALIFORNIA BUCKWHEAT	1 GAL	8' O.C.	15%	50	
	ISOMERIS ARBOREA	BLADDERPOD	1 GAL	6' O.C.	15%	88	
	SALVIA MELLIFERA	BLACK SAGE	1 GAL	8' O.C.	15%	50	
					100% TOTAL	620	
						TOTAL	

NOTES:
1. COMPOSITION ASSUMES 70% COVER BY CONTAINER PLANTS AND 30% COVER BY SEEDED SPECIES.
2. ALL PLANTS SHALL BE INSTALLED ACCORDING TO THE DIRECTION OF THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST.
3. ALL PLANT MATERIAL SOURCES SHALL BE FROM COASTAL SAN DIEGO COUNTY.

SEED MIX TYPE 1 (UPLAND CSS RESTORATION)
COASTAL SAGE SCRUB
RESTORATION/REVEGETATION AREA: 21,142 SF (0.49 Ac)

SYMBOL	BOTANICAL NAME	COMMON NAME	PLS	LBS/ACRE
	ADIRISSON GABOR (LOTUS SCORPARIUS)	DEERWEED	85	0.5
	ARTEMISA CALIFORNICA	COASTAL SAGEBRUSH	10	2.0
	BACCHARIS SALICIFOLIA	BIG SALTBUSH	50	2.0
	JUNCUS ACUTUS SPP. LEOPOLDII	NARROW-LEAVE WILLOW	2	4.0
	SALIX EXIGUA	BUSH RUE	20	1.0
	SCHENOPLECTUS CALIFORNICUS	BUSH SUNFLOWER	20	5.0
	ENCELIA CALIFORNICA	YERBA SANTA	20	1.5
	ERIODICTYON CRASSIFOLIUM	CALIFORNIA BUCKWHEAT	10	2.0
	ERIOPHYLLUM CONFERTIFOLIUM	GOLDEN YARROW	25	0.5
	ESCHSCHOLZIA CALIFORNICA	CALIFORNIA POPPY	85	2.5
	ISOCOMA MENZIESII	COAST GOLDENBUSH	2	1.5
	LUPINUS SUCCULENTUS	ARROYO LUPINE	90	1.5
	MIMULUS AURANTIACUS	STICKY MONKEYFLOWER	75	2.0
	SALVIA APINANA	WHITE SAGE	25	0.5
	SALVIA MELLIFERA	BLACK SAGE	40	0.5
	STIPA (MASELLA) PULCHRA (DE-ANNED)	PURPLE NEEDLEGRASS	75	3.0
			TOTALS:	30.0

SEED MIX TYPE 2 (WETLAND RESTORATION AND ENHANCEMENT AREAS)
SWS, SRW, AND MFS
REVEGETATION AREA: 14,646 SF (0.34 Ac)

SYMBOLS	BOTANICAL NAME	COMMON NAME	PLS	LBS/ACRE
	ANEMOPSIS CALIFORNICA	YERBA MANSA	50	1.5
	AMEROSIA PSILOSTACHYA	WESTERN RAGWEED	6	3.0
	ARTEMISA DOUGLASIANA	DOUGLAS MUGWORT	10	2.0
	ARTEMISA PALMERI	PALMER'S SAGEWORT	10	2.5
	ELYMUS CONDENSATUS	Giant Wild Rye	70	1.0
	HELIOTROPUM CURASSAVICUM	SALT HELIOTROPE	12	1.0
	OTHER ELATA SPP. HOOKERI	EVENING PRIMROSE	80	2.0
	PLUCHEA ODOATA	WASH FLEABANE	15	
			TOTALS:	15.0

SEED MIX NOTES
** SEED TAGS SHALL BE SUBMITTED TO THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST BEFORE APPLICATION OF SEED.
** THE SEED MIX IS COMPRISED OF NATIVE AND NON-NATIVE PLANT SPECIES. ANY POTENTIAL SUBSTITUTIONS MUST BE APPROVED BY THE PROJECT BIOLOGIST BEFORE APPLICATION OF SEED.
** SOIL SHALL BE PREPARED WITHIN 3 DAYS OF SEEDING TO A DEPTH OF 6 INCHES, OR AS RECOMMENDED BY THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST.
** REFER TO NOTES ON THIS SHEET FOR HYDROSEED MATERIALS, PROCEDURES AND REQUIREMENTS.
*** %PLS IS THE MINIMUM PERCENT PURE LIVE SEED PER POUND OF SEED. THE PERCENTAGE IS CALCULATED BY MULTIPLYING THE PERCENT SEED PURITY BY PERCENT SEED GERMINATION, WHICH SHALL BE THE METHOD USED BY THE PROJECT BIOLOGIST TO DETERMINE SEED QUALITY, UNLESS THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST SPECIFICALLY REQUESTS THE %PLS METHOD TO BE USED. IF THE POUNDAGE OF SEED TO MEET THE DIFFERENCE IF SOME SPECIES ARE NOT AVAILABLE AT THE TIME OF SEEDING, THEN SUBSTITUTIONS MAY BE CONSIDERED IN CONSULTATION WITH THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST.

CONTAINER PLANT PALETTE
FRESHWATER MARSH WETLAND (FWM)
RESTORATION / REVEGETATION AREA: 2,145 SF (0.05 Ac)

SYMBOL	BOTANICAL NAME	COMMON NAME	CONTAINER SIZE	SPACING (ON CENTER)	PERCENT COMPOSITION	QUANTITY	DETAILS
	ANEMOPSIS CALIFORNICA	YERBA MANSA	ROSE POTS	3' O.C. (GROUPS OF 10)	30%	70	(A) P-4
	JUNCUS ACUTUS SPP. LEOPOLDII	SPINY RUSH	1 GAL	3' O.C. (GROUPS OF 5)	30%	70	
	SCHENOPLECTUS CALIFORNICUS	CALIFORNIA BULRUSH	1 GAL	3' O.C. (GROUPS OF 10)	40%	100	(B) P-4
					100% TOTAL	240	
						TOTAL	

NOTES:
1. COMPOSITION ASSUMES 70% COVER BY CONTAINER PLANTS AND 30% COVER BY SEEDED SPECIES.
2. ALL PLANTS SHALL BE INSTALLED ACCORDING TO THE DIRECTION OF THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST.
3. ALL PLANT MATERIAL SOURCES SHALL BE FROM COASTAL SAN DIEGO COUNTY.

CONTAINER PLANT PALETTE
SOUTHERN WILLOW SCRUB (SWS)
WETLAND RESTORATION/REVEGETATION AREA: 2,683 SF (0.06 Ac)

SYMBOLS	BOTANICAL NAME	COMMON NAME	CONTAINER SIZE	SPACING (ON CENTER)	PERCENT COMPOSITION	QUANTITY	DETAILS
	BACCHARIS SALICIFOLIA	MULE FAT	1 GAL	6' O.C.	15%	11	(A) P-4
	JUNCUS ACUTUS SPP. LEOPOLDII	SPINY RUSH	1 GAL	3' O.C. (GROUPS OF 5)	10%	30	
	SALIX EXIGUA	NARROW-LEAVE WILLOW	DEEP 1 GAL	8' O.C.	20%	8	
	SALIX GOODINGII	BLACK WILLOW	DEEP 1 GAL	15' O.C.	20%	2	
	SALIX LASIOLEPIS	ARROYO WILLOW	DEEP 1 GAL	10' O.C.	20%	5	
					15% TOTAL	25	(B) P-4
	ARTEMISA DOUGLASIANA	DOUGLAS MUGWORT	1 GAL	4' O.C. (GROUPS OF 5)	100%	82	
						TOTAL	

NOTES:
1. ALL PLANTS SHALL BE INSTALLED ACCORDING TO THE DIRECTION OF THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST.
2. ALL PLANT MATERIAL SOURCES SHALL BE FROM COASTAL SAN DIEGO COUNTY.

CONTAINER PLANT PALETTE
SOUTHERN RIPARIAN WOODLAND (SRW)
WETLAND RESTORATION/REVEGETATION AREA: 407 SF (0.01 Ac)

SYMBOLS	BOTANICAL NAME	COMMON NAME	CONTAINER SIZE	SPACING (ON CENTER)	PERCENT COMPOSITION	QUANTITY	DETAILS
	BACCHARIS SALICIFOLIA	MULE FAT	1 GAL	6' O.C.	10%	1	(A) P-4
	JUNCUS ACUTUS SPP. LEOPOLDII	SPINY RUSH	1 GAL	3' O.C. (GROUP OF 3)	6%	3	
	SALIX EXIGUA	NARROW-LEAVE WILLOW	DEEP 1 GAL	8' O.C.	20%	1	
	SALIX GOODINGII	BLACK WILLOW	DEEP 1 GAL	15' O.C.	30%	1	
	SALIX LASIOLEPIS	ARROYO WILLOW	DEEP 1 GAL	10' O.C.	24%	1	
					10% TOTAL	3	(B) P-4
	ARTEMISA DOUGLASIANA	DOUGLAS MUGWORT	1 GAL	4' O.C. (GROUP OF 3)	100%	9	
						TOTAL	

NOTES:
1. ALL PLANTS SHALL BE INSTALLED ACCORDING TO THE DIRECTION OF THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST.
2. ALL PLANT MATERIAL SOURCES SHALL BE FROM COASTAL SAN DIEGO COUNTY.

CONTAINER PLANT PALETTE
MULEFAT SCRUB (MFS)
RESTORATION/REVEGETATION AREA: 1,975 SF (0.05 Ac)

SYMBOLS	BOTANICAL NAME	COMMON NAME	CONTAINER SIZE	SPACING (ON CENTER)	PERCENT COMPOSITION	QUANTITY	DETAILS
	BACCHARIS SALICIFOLIA	MULE FAT	1 GAL	6' O.C.	35%	19	(A) P-4
	SALIX EXIGUA	NARROW-LEAVE WILLOW	DEEP 1 GAL	8' O.C.	20%	6	
	ARTEMISA DOUGLASIANA	DOUGLAS MUGWORT	1 GAL	4' O.C. (GROUPS OF 5)	20%	25	
	ROSA CALIFORNICA	CALIFORNIA ROSE	1 GAL	4' O.C.	25%	31	
					100% TOTAL	81	
						TOTAL	

NOTES:
1. ALL PLANTS SHALL BE INSTALLED ACCORDING TO THE DIRECTION OF THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST.
2. ALL PLANT MATERIAL SOURCES SHALL BE FROM COASTAL SAN DIEGO COUNTY.

NOTE:
SEE SHEET P-4 FOR PLANTING NOTES AND DETAILS.

GENERAL REVEGETATION NOTES

1. REVEGETATION OF THE PROJECT AREA SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE CITY OF SAN DIEGO LANDSCAPE STANDARDS AND CITY SPECIFICATIONS UNDER THE DIRECTION OF THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST.
2. REVEGETATION SHALL BE ACCOMPLISHED IN A MANNER SO AS TO PROVIDE VISUAL AND HORTICULTURAL COMPATIBILITY WITH ADJACENT NATIVE VEGETATION. CONTRACTOR SHALL STRIKE THE LIMITS OF THE REVEGETATION AREAS WITH LATH STRIKES AND YELLOW FLAGGING TAPE. STAKING SHALL OCCUR AT EVERY 10'-0" AND ALL CHANGES OF DIRECTION. STAKING SHALL BE MAINTAINED IN PLACE THROUGH PROJECT COMPLETION.
3. ALL PLANTING SHALL BE UN-IRRIGATED UNLESS OTHERWISE SPECIFIED. APPROVAL OF THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST.
4. ANY PLANTING AREA REVISIONS OR SPECIES SUBSTITUTIONS SHALL REQUIRE REVIEW AND APPROVAL OF THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST.
5. INVASIVE PLANT SPECIES INCLUDING BUT NOT LIMITED TO THE CITY'S LANDSCAPE STANDARDS ARE PROHIBITED AND SHALL BE ERADICATED AND REMOVED BY CONTRACTOR. ONLY NATIVE PLANT SPECIES SHALL BE USED FOR THIS PROJECT.
6. ALL EROSION CONTROL BMPs SHALL BE INSTALLED THROUGHOUT THE PROJECT AREA ACCORDING TO THE ENGINEERING PLANS AND CITY GUIDELINES. ALL BMPs SHALL REMAIN IN PLACE, AND/OR SHALL BE RE-INSTALLED AFTER SOIL PREPARATION TO THE SATISFACTION OF THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST. ALL PRODUCTS SHALL BE UN-DEBRISING, CLEAN AND FREE OF WEEDS, SEEDS, AND DEBRIS.
7. EROSION CONTROL BMPs OR OTHER SLOPE PROTECTION METHODS EXISTING PRIOR TO WORK, OR PROVIDED BY CONTRACTOR, AS RECOMMENDED BY THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST, SHALL BE REPLACED IN THE EVENT OF SLOPE OR RESTORATION FAILURE.
8. THE PROJECT BIOLOGIST SHALL FIELD MARK AND MONITOR CONTAINER PLANTS IN COORDINATION WITH THE CITY REPRESENTATIVE AND CONTRACTOR. CONTAINER PLANTS SHALL BE FIELD MARKED WITH STAKES AND FLAGGING TAPE THROUGHOUT THE PROJECT PERIOD AND THE RAINY SEASON AND OUTSIDE OF THE NESTING BIRD SEASON, UNLESS OTHERWISE DIRECTED BY THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST.

PRE-PLANTING/SOIL PREPARATION NOTES

1. NON-NATIVE VEGETATION SHALL BE COMPLETELY REMOVED FROM THE SITE AND ANY REMAINING ROOT BALLS WILL BE TREATED WITH HERBICIDE AS APPROVED BY THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST.
2. BEFORE PLANTING OF SEEDS, THE UPPER 6-INCHES OF SOIL WITHIN GRADED AREAS TO BE REVEGETATED SHALL BE DECOMPACTED AND THE PRESCRIBED SOIL AMENDMENTS SHALL BE UNIFORMLY INCORPORATED INTO THE SOIL FOLLOWING INCORPORATION. AMENDED SOILS SHALL BE TRACK WALKED TO A UNIFORM SURFACE AND A MAXIMUM COMPACTION OF 85%. ALL WORK SHALL BE TO THE SATISFACTION OF THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST.
3. THE FOLLOWING SOIL AMENDMENTS SHALL BE INCORPORATED INTO EXISTING SOILS WHERE CONTAINER PLANTS WILL BE INSTALLED:
 - TOPSOIL SUPER PHOSPHATE (20-0-0) 0.25 POUNDS PER CUBIC YARD
 - TOPSOIL SUPER PHOSPHATE (10-64-0) 0.25 POUNDS PER CUBIC YARD
 - ORGANIC SOIL AMENDMENT, 3 CUBIC YARDS PER CUBIC YARD
4. EXISTING NATIVE SLASH (DEAD VEGETATION) PRESENT WITHIN THE PROJECT LIMITS SHALL BE CRUSHED (MULCHED) WITH AMENDED SOILS DURING TRACK WALKING. NATIVE SLASH SHALL BE CLEAN, FREE FROM NON-NATIVE VEGETATION AND INORGANIC DEBRIS BEFORE INCORPORATION. NON-NATIVE DEBRIS SHALL BE REMOVED FROM THE REVEGETATION AREA.

CONTAINER PLANTING AND SEEDING NOTES

1. ALL SEEDS AND CONTAINER PLANTS SHALL HAVE ORIGINATED FROM WITHIN SAN DIEGO COUNTY COASTAL AREAS TO THE EXTENT PRACTICAL, OR AS APPROVED BY THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST, OR CONTRACTOR SHALL PROVIDE EVIDENCE THAT THE SEED AND/OR CONTAINER PLANTS ARE NOT AVAILABLE AND SHALL NOTIFY THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST FOR ALTERNATIVE COMPLIANCE.
2. CONTAINER PLANTS SHALL BE PROCURED FROM A NATIVE PLANT NURSERY QUALIFIED TO PROPAGATE AND CARE FOR NATIVE PLANT SPECIES.
3. CONTRACTOR SHALL COORDINATE AND OBTAIN WRITTEN APPROVAL FROM THE PROJECT BIOLOGIST FOR ALTERNATIVE COMPLIANCE (E.G. SUBSTITUTION, INCREASED QUANTITY). ANY POTENTIAL SUBSTITUTIONS MUST BE APPROVED BY THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST BEFORE SEED APPLICATION.
4. CONTRACTOR SHALL SUBMIT ALL SEED TAGS FOR SEED PRODUCTS TO BE USED WITHIN THE PROJECT TO THE RE AND PROJECT BIOLOGIST FOR APPROVAL BEFORE APPLICATION. ALL SEED TAGS FROM MATERIALS ACTUALLY APPLIED SHALL BE RETAINED BY THE CONTRACTOR AND SHALL BE TURNED OVER TO THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST IN ORDER TO OBTAIN PROJECT SITE AND APPROPRIATE RECIPIED MATERIALS.
5. CONTRACTOR SHALL SUBMIT AT LEAST ONE SAMPLE OF EACH PLANT SPECIES TO BE LABELED CLEARLY WITH BOTANICAL NAME AND COMMON NAME. THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST WILL REJECT ANY PLANT MATERIALS DELIVERED TO THE PROJECT SITE BEFORE THE AGREED UPON PLANTING DATE. PLANTS SHALL NOT BE STORED ON SITE FOR MORE THAN ONE DAY. SPECIMENS SHOWING EVIDENCE OF DISEASE, MISHANDLING, DEFECTS OR DAMAGE, OVER OR UNDER-WATERING, OR OTHER DEFICIENCY AT THE TIME OF DELIVERY WILL BE REJECTED.
6. PLANTING PALETTES SHALL BE APPLIED/INSTALLED IN ALL GRADED AND DISTURBED AREAS, AS SHOWN ON THE PLANTING AND SEEDING PLANS AND AS DIRECTED BY THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST.
7. CONTAINER PLANTS WILL BE PLACED BY THE CONTRACTOR PER THE LOCATIONS SHOWN ON THE PLANTING PLANS, AS SPECIFIED BY THE PLANTING NOTES OR DIRECTED BY THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST, FOR REVIEW AND APPROVAL BEFORE ACTUAL PLANTING. THE SUGGESTED PLANT INSTALLATION PROCEDURE SHALL BE AS SHOWN ON THE PLANTING PLANS, DETAILS AND/OR AS DIRECTED BY THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST.
8. EQUIPMENT USED FOR THE APPLICATION OF THE HYDROSEED SLURRY MIX SHALL HAVE A BUILT-IN AGITATION SYSTEM TO SUSPEND AND HOMOGENOUSLY MIX THE SLURRY. THE EQUIPMENT MUST HAVE A PUMP CAPABLE OF APPLYING SLURRY UNIFORMLY AT THE RATES INDICATED.
9. THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST SHALL CONSIDER THE 120 DAY PEP AND 5 YEAR MAINTENANCE AND MONITORING PERIOD, SUCCESS CRITERIA. IN THE EVENT THAT ADDITIONAL CONTAINER PLANTS OR SEED ARE NEEDED TO SUPPLEMENT THE QUANTITY SHOWN ON THE PLANTING PLANS.

MAINTENANCE REQUIREMENTS

1. THE 120 DAY PLANT ESTABLISHMENT PERIOD (PEP) FOLLOWS SUCCESSFUL COMPLETION OF THE HYDROSEED APPLICATION AND PLANT INSTALLATION. THE PEP AND START OF 5 YEAR MAINTENANCE PERIOD, AS WELL AS ACCEPTANCE FOLLOWING THE MAINTENANCE PERIOD, SHALL BE DETERMINED BY THE CITY REPRESENTATIVE IN CONSULTATION WITH PROJECT BIOLOGIST, SLOPE, AND DISTURBED AREAS FROM THE TRAIL CONSTRUCTION SHALL BE SUBJECT TO A 25 MONTH MAINTENANCE AND MONITORING PERIOD. ALL OTHER REVEGETATION AND MITIGATION AREAS ARE SUBJECT TO THE FIVE YEAR MAINTENANCE AND MONITORING PERIOD.
2. 5 YEAR MAINTENANCE PERIOD SHALL BE CONDUCTED FOR A PERIOD OF NOT LESS THAN 5 YEARS (TABLE 1) OR AS DETERMINED BY THE PROJECT BIOLOGIST. PROJECT DOES NOT MEET THE PERFORMANCE STANDARDS. THE MAINTENANCE PERIOD BEGINS ON THE FIRST DAY FOLLOWING INSTALLATION ACCEPTANCE (AT THE END OF 120 DAY PEP) AND MAY BE EXTENDED AT THE DETERMINATION OF THE CITY REPRESENTATIVE AND THE PROJECT BIOLOGIST.
3. BEFORE FINAL APPROVAL, THE CITY REPRESENTATIVE MAY REQUEST CORRECTIVE ACTION BE TAKEN, INCLUDING BUT NOT LIMITED TO, WEED ERADICATION AND THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST.
4. WEEDING, HERBICIDE, AND/OR PESTICIDE APPLICATION SHALL BE DONE REGULARLY BY THE CONTRACTOR. WEEDING SHALL BE DONE AT A MINIMUM OF BI-WEEKLY UNTIL THE END OF THE 120 DAY PEP, AND THEREAFTER PERIODICALLY THROUGHOUT THE 5 YEAR MAINTENANCE PERIOD. WEEDS SHALL BE REMOVED AND PROPERLY DISPOSED OF OFFSITE. CONTRACTOR SHALL OBTAIN APPROVAL FROM CITY REPRESENTATIVE AND PROJECT BIOLOGIST BEFORE HERBICIDE/PESTICIDE APPLICATIONS, AND SHALL APPLY HERBICIDE/PESTICIDE PER MANUFACTURER'S RECOMMENDATIONS AND PER ANY STATE OF CALIFORNIA CONTRACTOR SHALL OBTAIN APPROVAL FROM THE PROJECT BIOLOGIST AND CITIES COVER SHALL EXCEED 10% OF THE PROJECT SITE BEFORE THEY EXCEED 12-INCHES IN HEIGHT, AND BEFORE THEY SET SEED AREAS WHERE WEEDING CREATES IN EXCESS OF 50 SQUARE FEET OF BARE SOIL.
5. DISTURBANCE SHALL BE REPLANTED/RESEEDED AND MAINTAINED BY CONTRACTOR PER THE DIRECTION OF THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST. LANDSCAPE STANDARDS AS INVASIVE PLANT SPECIES AND 2) BY THE CALIFORNIA INVASIVE PLANT CONTROL (CAL-IPC) AS HIGHLY INVASIVE.
6. VEGETATION COVER, PLANT SURVIVAL AND MAX. INVASIVE SPECIES COVER SHALL BE REQUIRED TO MEET ESTABLISHED SUCCESS CRITERIA (TABLE 2). FOR THE 120 DAY PLANT ESTABLISHMENT PERIOD (PEP), THE PROJECT BIOLOGIST AND CITY REPRESENTATIVE MAY APPROVE A LESSER % COVER AS ACCEPTABLE BASED ON SITE CONDITIONS.
7. IRRIGATION SHALL BE PROVIDED FOR A PERIOD SUFFICIENT TO ESTABLISH PLANT MATERIAL AND TO PROVIDE VEGETATIVE COVER THAT PREVENTS SOIL EROSION. THE AMOUNT OF IRRIGATION MUST BE ADJUSTED WHEN WARRANTED BY SITE CONDITIONS. THE PROJECT BIOLOGIST AND CONTRACTOR SHALL MONITOR TO DETERMINE SUCCESS AND ESTABLISHMENT OF NATIVE CONTAINER PLANT AND HYDROSEEDED SPECIES.
8. IRRIGATION SHALL DELIVER WATER SUFFICIENTLY AND UNIFORMLY AND SHALL BE APPROPRIATE TO THE NEEDS OF THE PLANT MATERIALS. RECOMMENDED REFERENCE MATERIALS FOR IRRIGATION SYSTEMS DESIGN ARE LISTED IN THE APPENDIX "A" OF THE CITY'S LANDSCAPE STANDARDS.
9. THE IRRIGATION SYSTEM IS CONSIDERED TEMPORARY AND WILL BE USED UNTIL THE PLANTINGS ARE ESTABLISHED. THE ENTIRE SYSTEM SHALL BE DISCONNECTED AND ALL IRRIGATION SYSTEMS SHALL BE REMOVED BY THE CONTRACTOR PER THE DIRECTION OF THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST.
10. CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE IRRIGATION SYSTEM OPERATIONAL THROUGH THE DURATION OF THE CONTRACT PERIOD. ANY CONTAINER PLANT MORTALITY DUE TO IMPROPER WATERING OR NEGLECTED EQUIPMENT SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
11. CONTRACTOR SHALL CORRECT ALL SOIL EROSION, AND SHALL REPAIR AND/OR REPLACE ALL ABOVE GROUND EROSION CONTROL BMPs DAMAGED DURING THE PEP AND THROUGHOUT THE 5 YEAR MAINTENANCE AND MONITORING PERIOD. ANY ABOVE GROUND EROSION CONTROL MEASURES SUCH AS BUT NOT LIMITED TO STANDING WATER SHALL BE REMOVED BY THE CONTRACTOR FOLLOWING ACCEPTANCE OF THE 5 YEAR MAINTENANCE AND MONITORING PERIOD BY THE PROJECT BIOLOGIST.
12. REPLACEMENT OF CONTAINER PLANTS (IN KIND) SHALL BE MONITORED AND MAINTAINED FOR A PERIOD OF NO LESS THAN 120 DAYS FOLLOWING INITIAL OR REMEDIAL PLANTING TO ENSURE SUCCESSFUL ESTABLISHMENT OF PLANTINGS PER CONTRACT SPECIFICATIONS.
13. ORANGE CONSTRUCTION FENCE OR OTHER PERIMETER BARRIER (I.E., YELLOW ROPE BARRIER, IF APPROVED BY THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST) SHALL BE MAINTAINED UNTIL THE END OF THE 5 YEAR MAINTENANCE PERIOD. FOLLOWING ACCEPTANCE OF THE 5 YEAR MAINTENANCE AND MONITORING PERIOD BY THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST, THE CONTRACTOR SHALL REMOVE ALL PERIMETER BARRIERS AT THE END OF THE 5 YEAR PERIOD.
14. THE CONTRACTOR SHALL REMOVE ALL TRASH AND/OR DEBRIS FROM THE REVEGETATION SITE BEFORE AND FOLLOWING THE REVEGETATION INSTALLATION, AND UNTIL THE END OF THE 5 YEAR MAINTENANCE AND MONITORING PERIOD. CONTRACTOR SHALL DISCONNECT AND REMOVE THE TEMPORARY IRRIGATION SYSTEM FOLLOWING ACCEPTANCE OF THE REVEGETATION BY THE CITY REPRESENTATIVE AND THE PROJECT BIOLOGIST; REFER TO IRRIGATION NOTES FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

TABLE 1. MMRP SUCCESS CRITERIA/STANDARDS

PARAMETER	% NATIVE SPECIES VEGETATION COVER ¹ HYDROSEED AREAS ²	PLANT SURVIVAL CONTAINER PLANTS ³	TOTAL PLANT COVERAGE ^{2,3}		NON-NATIVE COVER
			WETLAND	UPLAND	
120 DAYS	20%	100%	70%	60%	<10% WEEDS AT ANY TIME 0% INVASIVE EXOTICS
YEAR 1	50%	100%	75%	65%	<10% WEEDS AT ANY TIME 0% INVASIVE EXOTICS
YEAR 2	65%	90%	80%	70%	<10% WEEDS AT ANY TIME 0% INVASIVE EXOTICS
YEAR 3 ⁴	75%	80%	80%	70%	<10% WEEDS AT ANY TIME 0% INVASIVE EXOTICS
YEAR 4 ⁴	85%	80%	85%	75%	<10% WEEDS AT ANY TIME 0% INVASIVE EXOTICS
YEAR 5 ⁴	90%	80%	85%	75%	<10% WEEDS AT ANY TIME 0% INVASIVE EXOTICS

- 1 Container plants not meeting plant survival success criteria, as verified and recommended by the Project Biologist, shall be replaced in like kind and size and maintained at contractor's expense until the success criteria has been met. Percent survival is based upon the quantity of container plants initially installed.
- 2 Wetland and upland coverage shall be as indicated on Table 1 above. Bare areas greater than 25-feet x 25-feet shall be reseeded according to the City's landscape standards. At the time of planting, the contractor shall conduct a site assessment for non-native grass species or other undesirable plants and/or recruited non-native grass species for erosion control (e.g., wild oat (Avena sp.), bromo grasses (Bromus madritensis), Bromus diandrus), ryegrass (Lolium sp.), Filaree (Erodium sp.) are acceptable for erosion control.
- 3 Recruited non-native grass species can count towards the vegetation cover.
- 4 The project irrigation shall be tapered off during year 3, shall be turned-off in year 4, and by year 5 plant materials shall have survived two dry seasons without irrigation.
- 5 Percent native cover shall be based upon visual analysis in years 1 & 2 visual and transect monitoring in years 3 -5.

TABLE 2. PLANTING MAINTENANCE MONITORING AND REPORTING SCHEDULE

PERIOD	ACTIVITY FOR PROJECT BIOLOGIST/CONTRACTOR	BIOLOGIST SITE VISIT FREQUENCY	SUBMITTALS/ CHECKLIST	REPORTING SCHEDULE
REVEGETATION INSTALLATION	PROJECT BIOLOGIST WILL BE RESPONSIBLE FOR MONITORING/LANDSCAPE RESPONSIBILITY FOR MAINTENANCE AND REPORTING	AS NEEDED OR AT LEAST ONCE EVERY TWO WEEKS (BI-WEEKLY)	REPORTS PREPARED BY THE BIOLOGIST (BASED ON THE REVEGETATION PLAN CRITERIA)	AT EACH BIOLOGICAL MONITORING SITE VISIT AND UPON SUCCESSFUL INSTALLATION COMPLETION (AS DETERMINED BY THE PROJECT BIOLOGIST)
120 DAY PEP	PROJECT BIOLOGIST WILL BE RESPONSIBLE FOR MONITORING/LANDSCAPE RESPONSIBILITY FOR MAINTENANCE ON AN AS-NEEDED BASIS	MONTHS 1, 2, 3 & 4 - EVERY TWO WEEKS (BIWEEKLY) MONTH 5 - AT LEAST ONCE A MONTH	REPORTS PREPARED BY THE BIOLOGIST (BASED ON THE REVEGETATION PLAN CRITERIA)	AT EACH BIOLOGICAL MONITORING SITE VISIT PEP***
5 YEAR LONG-TERM MAINTENANCE & MONITORING	PROJECT BIOLOGIST WILL BE RESPONSIBLE FOR MONITORING/LANDSCAPE RESPONSIBILITY FOR MAINTENANCE ON AN AS-NEEDED BASIS; SEE TABLE 3 FOR MAINTENANCE TASKS	EVERY 2 MONTHS DURING YEARS 1 & 2, EVERY 3 MONTHS (QUARTERLY) DURING YEARS 3-5	ANNUAL MONITORING REPORTS PREPARED BY THE BIOLOGIST (BASED ON THE REVEGETATION PLAN CRITERIA) AT THE END OF EACH YEAR	SITE OBSERVATION REPORTS AFTER EACH VISIT YEAR 1*** QUARTERLY REPORTS YEARS 1-5 YEAR 5****

NOTE: IF 5 YEAR SUCCESS CRITERIA ARE NOT MET, THE MAINTENANCE, MONITORING AND REPORTING PROGRAM (MMRP) WILL BE EXTENDED AS REQUIRED. QUARTERLY MAINTENANCE AND MONITORING WITH YEARLY REPORTING SHALL CONTINUE AS NEEDED.
 ***PEP, ANNUAL AND 5 YEAR FINAL REPORT(S) REQUIRED TO INCLUDE SUCCESS CRITERIA ACHIEVEMENT INFORMATION.

INSPECTION REPORTS SHALL BE SENT TO CITY PARKS & RECREATION DEPARTMENT, SENIOR PLANNER.

TABLE 3. MAINTENANCE TASK SCHEDULE

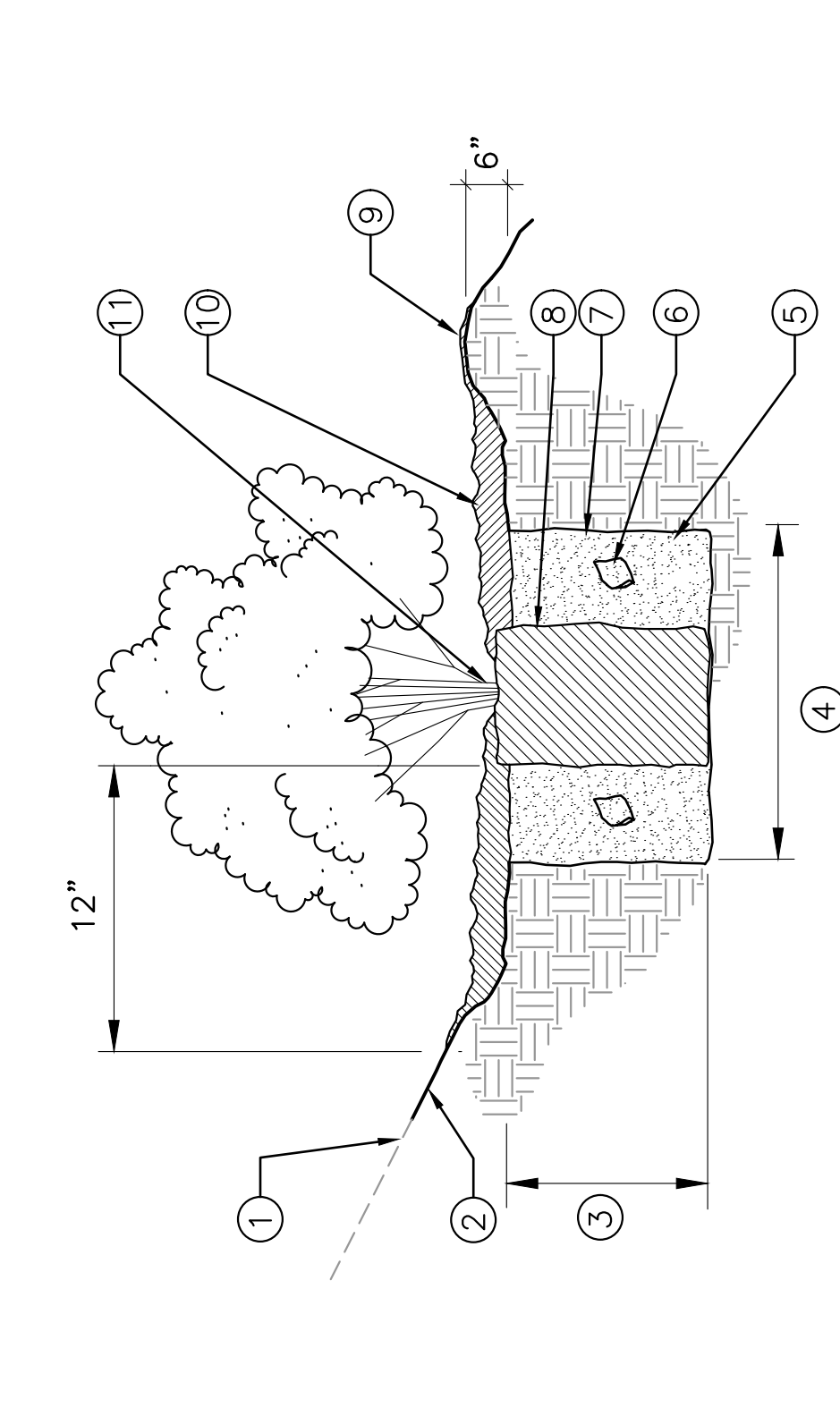
TASK	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
WEED CONTROL	MONTHLY AS NEEDED	QUARTERLY	QUARTERLY	QUARTERLY	QUARTERLY
TRASH REMOVAL	MONTHLY AS NEEDED	QUARTERLY	QUARTERLY	QUARTERLY	QUARTERLY
IRRIGATION	MONTHLY AS NEEDED	QUARTERLY	TAPER-OFF	OFF	OFF

MONITORING REQUIREMENTS

1. THE PROJECT BIOLOGIST SHALL MONITOR THE PROJECT DURING TRAIL CONSTRUCTION AND RESTORATION/REVEGETATION ACTIVITIES AND SHALL OBSERVE THE SITE DURING THE 5-YEAR RESTORATION/MONITORING PERIOD AS REQUIRED TO ENSURE THAT THE TRAIL CONSTRUCTION AND POST-CONSTRUCTION ACTIVITIES DO NOT ENCRUSH INTO BIOLOGICALLY SENSITIVE AREAS (WETLANDS) (NOTE: THE EXCEPTION TO THIS ARE THE WETLAND ENHANCEMENT AREAS, WHERE NON-NATIVE/EXOTIC SPECIES WILL BE REMOVED TO ENHANCE EXISTING WETLAND VEGETATION).
2. FINAL INSPECTION IS REQUIRED BY THE CITY OF SAN DIEGO WITH ATTENDANCE AND APPROVAL BY THE PARKS AND RECREATION DEPARTMENT PRIOR TO ACCEPTANCE OF THE REVEGETATION/MITIGATION PROGRAM AS COMPLETE.

REFER TO SHEETS 9 THROUGH 12 (SHEETS 1-1 THROUGH 1-4) FOR IRRIGATION PLANS. THE IRRIGATION SYSTEMS ARE INTEGRAL TO THE PLANTING TO WORK TO FACILITATE PLANT ESTABLISHMENT.

LONG TERM MAINTENANCE OF THE TRAIL WILL BE THE SAN DIEGO RIVER PARK JPA OR THEIR RESPONSIBILITY OF THE SAN DIEGO RIVER PARK JPA OR THEIR DESIGNATED REPRESENTATIVE.

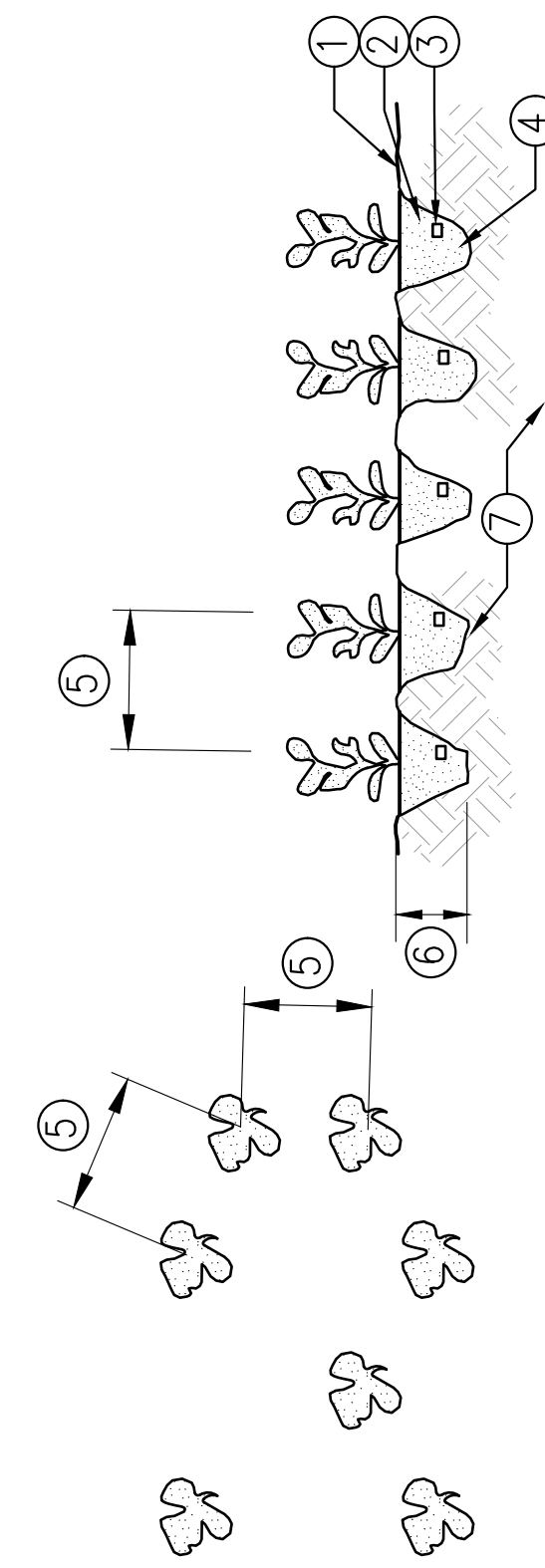


ITEM	DESCRIPTION
1	GRADE AT SLOPE
2	FINISH GRADE
3	DEPTHS WITHIN ROOT BALL
4	WATER AND TAMP BACKFILL MIX WELL
5	CONTROLLED RELEASE FERTILIZER PACKETS TO BE INCLUDED IN BACKFILL MIX (PER SPECS.)
6	SCARIFY SIDES OF PLANTING PIT
7	ROOT BALL
8	WATERING BASIN 6" ABOVE FINISH GRADE
9	1/2" DRAINAGE BARK LAYER
10	HOLD BACK 3" FROM ROOT CROWN
11	ROOT CROWN OF SHRUB 1" ABOVE FINISH GRADE

THIS DETAIL APPLIES TO ROSE POT, 1 GALLON, OR DEEP 1 GALLON CONTAINER PLANTS.

A NATIVE CONTAINER PLANTING

NO SCALE



B NATIVE CONTAINER PLANT LAYOUT

NO SCALE

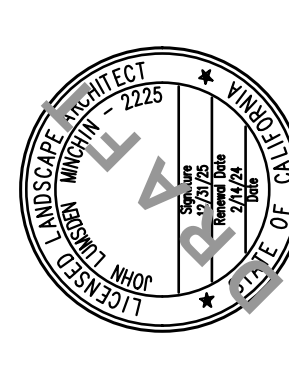
ITEM	DESCRIPTION
1	FINISH GRADE
2	ROOT BALL
3	CONTROLLED RELEASE FERTILIZER PACKETS TO BE INCLUDED IN BACKFILL MIX (PER SPECS.)
4	WATER AND TAMP BACKFILL MIX WELL
5	SEE PLANTING LEGEND FOR AVERAGE SPACING (SET PLANTS RANDOMLY IN FIELD)
6	1/2" DRAINAGE BARK LAYER
7	AMENDED SOIL (PER SOIL PREPARATION NOTES)

OSUNA SEGMENT OF THE COAST TO CREST TRAIL PREPARED FOR SAN DIEGO RIVER PARK JPA

REVEGETATION/RESTORATION PLANTING NOTES AND DETAILS

PRELIMINARY NOT FOR CONSTRUCTION REVISED 2/14/2024

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NO.	REVISIONS	DATE	BY

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STATE LICENSE NUMBER: LIC PROF # 1
DATE: FEBRUARY 14, 2024
SCALE: AS SHOWN
DESIGNED BY: TK
CHECKED BY: MK
KHA PROJECT: 090228008
LICENSED PROFESSIONAL

