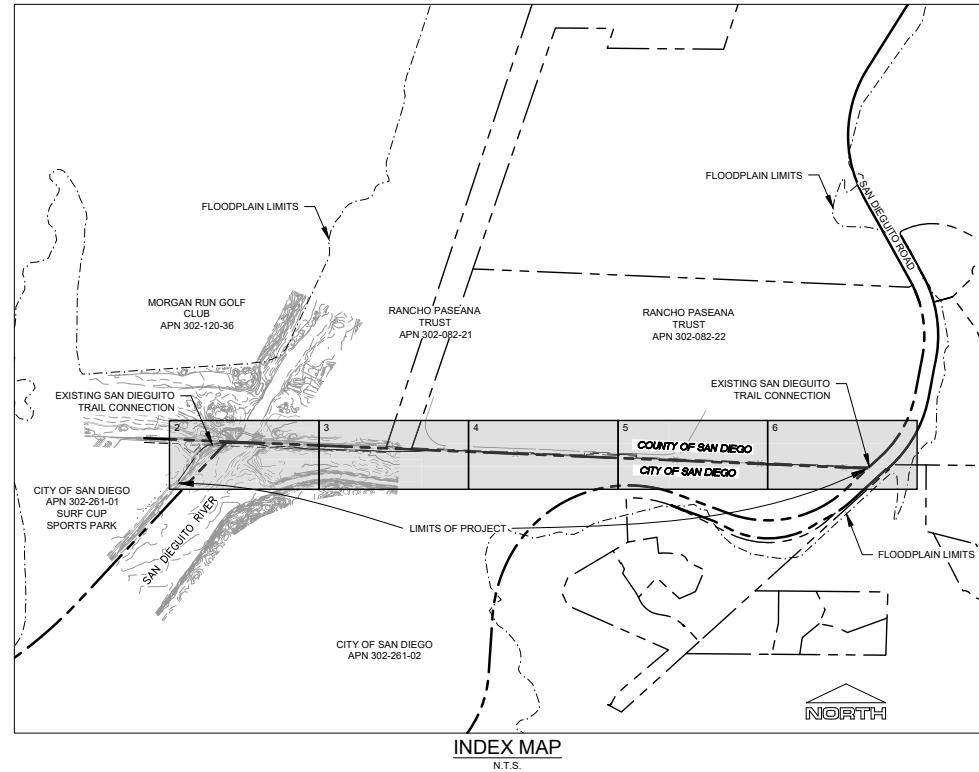
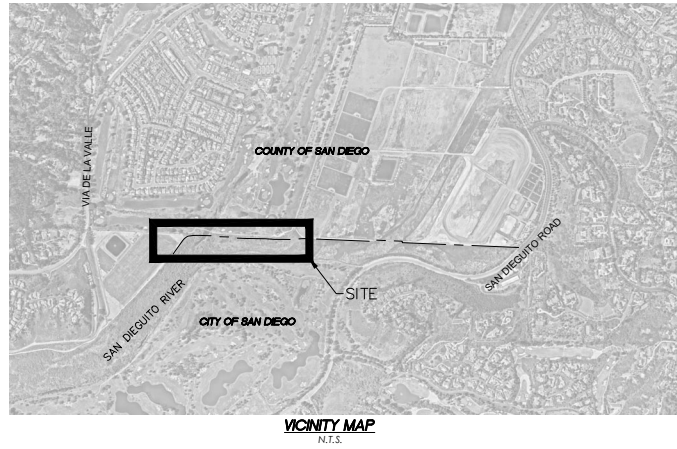


COAST TO CREST TRAIL: OSUNA TRAIL SEGMENT

PROJECT NO. 095226008

SITE DEVELOPMENT PERMIT No. PRJ #1049410



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
---	LODGEPOLE FENCE
---	CHAIN LINK FENCE
---	CHAIN LINK GATE
---	FLOOD PLAIN LIMIT
---	LIMITS OF WORK
---	CONSTRUCTION STAGING AREA

ABBREVIATIONS

R/W	RIGHT OF WAY
PROP.	PROPOSED
EX.	EXISTING
R.D.	ROAD
C.	CENTERLINE
P.	PROPERTY LINE
AC	ACRE
PVT	PRIVATE
TYP	TYPICAL
FS	FINISHED SURFACE

SHEET INDEX

COVER SHEET	SHEET 1
OVERALL SITE PLAN	SHEET 2
GRADING PLAN	SHEET 3
GRADING PLAN	SHEET 4
TRAIL ALIGNMENT DETAIL	SHEET 5
TRAIL ALIGNMENT DETAIL	SHEET 6
TRAIL ALIGNMENT DETAIL	SHEET 7
DETAILS	SHEET 8
REVEGETATION/RESTORATION IRRIGATION PLAN	SHEET 9-10
REVEGETATION/RESTORATION IRRIGATION LEGEND AND DETAILS	SHEET 11
REVEGETATION/RESTORATION IRRIGATION DETAILS	SHEET 12
REVEGETATION/RESTORATION PLANTING PLAN	SHEET 13-14
REVEGETATION/RESTORATION PLANTING LEGEND AND SEED MIXES	SHEET 15
REVEGETATION/RESTORATION PLANTING NOTES	SHEET 16
GENERAL PLAN	SHEET 17
FOUNDATION PLAN	SHEET 18

GRADING TABULATIONS

TOTAL AMOUNT OF SITE TO BE GRADED: 23,900 SF
 TOTAL DISTURBED AREA PER IMPROVEMENTS: 75,200 SF
 EXISTING PERVIOUS AREA: 23,900 SF
 EXISTING IMPERVIOUS AREA: 0 SF
 PROPOSED PERVIOUS AREA: 23,350 SF
 PROPOSED IMPERVIOUS AREA: 550 SF
 AMOUNT OF CUT: 1,130 CY
 AMOUNT OF FILL: 450 CY
 MAXIMUM HEIGHT OF FILL SLOPE(S): 9 FT
 MAXIMUM HEIGHT OF CUT SLOPE(S): 5 FT

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 PLUG ON THE SOUTHEASTERLY CORNER OF THE BRIDGE ALONG EL CAMINO REAL SPANNING THE SAN DIEGUITO RIVER, BEING AN ELEVATION OF 26.205' 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

302-261-01 AND 302-261-02

ENVIRONMENTALLY SENSITIVE LANDS

ADR - ARUNDO DONAX RIPARIAN
 CSM - COASTAL SALT MARSH
 CSS - COASTAL SAGE SCRUB
 CSSB - COASTAL SAGE SCRUB-BACCHARIS DOMINATED
 FWM - FRESHWATER MARSH
 MFS - MULEFAT SCRUB
 NNR - NON-NATIVE RIPARIAN
 ORN - ORNAMENTAL
 OW - OPEN WATER
 DSRW - DISTURBED SOUTHERN RIPARIAN WOODLAND
 SWS - SOUTHERN WILLOW SCRUB
 TS - TAMARISK 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:
 GEOCON INC.
 6960 FLANDERS DRIVE
 SAN DIEGO, CA 92121
 (658) 558-690

RESTORATION AND MITIGATION SPECIALIST:
 DUDKX
 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 DIEGUITO RIVER PARK JPA
 ATTN: SHANNA ANDERSON
 18372 SYCAMORE CREEK ROAD
 ESCONDIDO, CA 92025
 PHONE: (858) 674-2270

PROJECT SUMMARY

THE PURPOSE OF THIS PROJECT IS TO CONSTRUCT AN AT-GRADE TRAIL, CONNECTING A MISSING LINK BETWEEN THE EXISTING SAN DIEGUITO RIVER PARK TRAIL. THE PROJECT WILL CONSTRUCT A PEDESTRIAN BRIDGE OVER THE SAN DIEGUITO RIVER WITHIN A LEASE AGREEMENT BETWEEN THE SAN DIEGUITO RIVER 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 GRADIENT OF 1.5:1. TRAIL WILL CONSIST OF DECOMPOSED GRANITE (DG).
- PERMANENT BEST MANAGEMENT PRACTICES (BMPs) SHALL STORE AND TREAT ALL STORM WATER PRIOR TO BEING DISCHARGED INTO THE CITY STORM WATER SYSTEM. ANY DISCHARGED WATER INTO THE CITY STORM WATER SYSTEM WILL NOT CONTAIN POLLUTANTS OR PARTICULATE.
- NO CONNECTION SHALL BE MADE TO ANY STORM WATER SEWER SYSTEM WITHOUT PROPER BMPs.
- LONG TERM MAINTENANCE OF THE TRAIL WILL BE THE RESPONSIBILITY OF THE SAN DIEGUITO RIVER PARK JPA.
- TRAIL SIGNS "CLOSED FROM DUSK TO DAWN" SHALL BE PROVIDED AT THE TRAIL HEADS.

STANDARD DRAWINGS

THE LATEST VERSION OF THE CITY OF SAN DIEGO STANDARD DRAWINGS ARE TO BE USED FOR PUBLIC IMPROVEMENTS.

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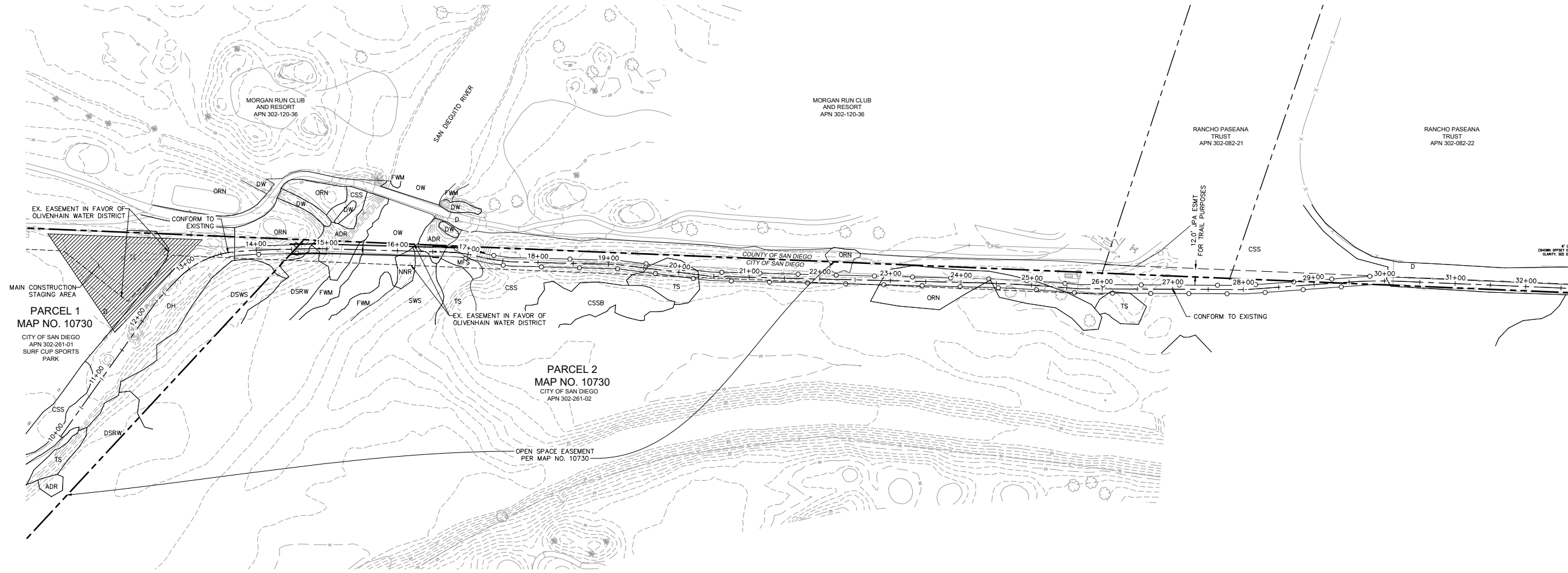
KHA PROJECT	095226008
DATE	4/14/2023
SCALE	AS SHOWN
DESIGNED BY	TK
DRAWN BY	TK
CHECKED BY	MK
LICENSED PROFESSIONAL	JULIANA CUOMO
CALIFORNIA LICENSE NUMBER	882787
EXP. DATE	12/31/2023

COVER SHEET

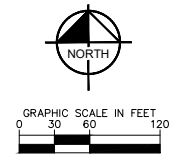
OSUNA TRAIL SEGMENT OF
 THE CREST TO COAST TRAIL
 PREPARED FOR
 SAN DIEGUITO RIVER PARK JPA
 CITY OF SAN DIEGO

Plotted By: shanna.anderson, Date: 4/14/2023, 10:51:08am, K:\SMD_DEVELOPMENT\095226008 - Osuna Trail\CD\Plan Sheets\Osuna Trail_Site.dwg
 This document, together with the documents and drawings incorporated herein by reference, constitute the entire contract for the project. No other documents, specifications, or conditions shall be used in the performance of the project.

Prepared by: [Name], Title: [Title], Date: [Date], Project: [Project Name], Location: [Location], Scale: [Scale], Drawing No.: [Drawing No.], Revision: [Revision], Author: [Author], Checker: [Checker], Date: [Date], Project: [Project Name], Location: [Location], Scale: [Scale], Drawing No.: [Drawing No.], Revision: [Revision], Author: [Author], Checker: [Checker], Date: [Date]



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



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

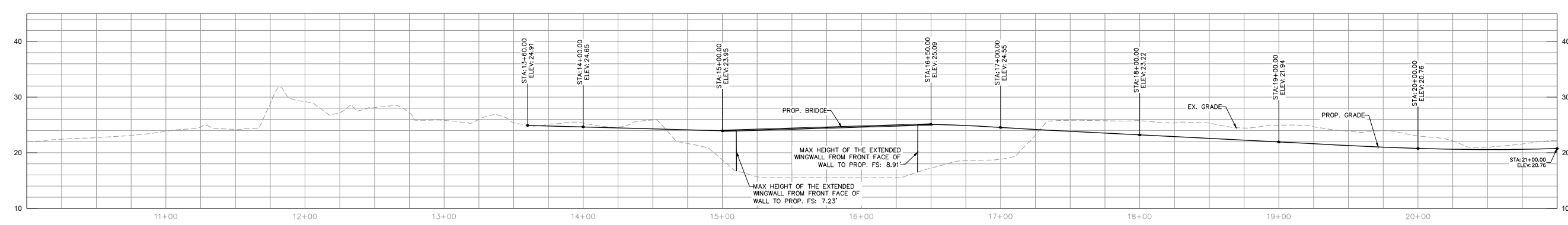
OVERALL SITE PLAN

KVA PROJECT	06/22/2008
DATE	4/14/2023
SCALE	AS SHOWN
DESIGNED BY	TK
DRAWN BY	TK
CHECKED BY	MK
LICENSED PROFESSIONAL	JULIANA OLMO
CALIFORNIA LICENSE NUMBER	882787
EXP. DATE	12/31/2023

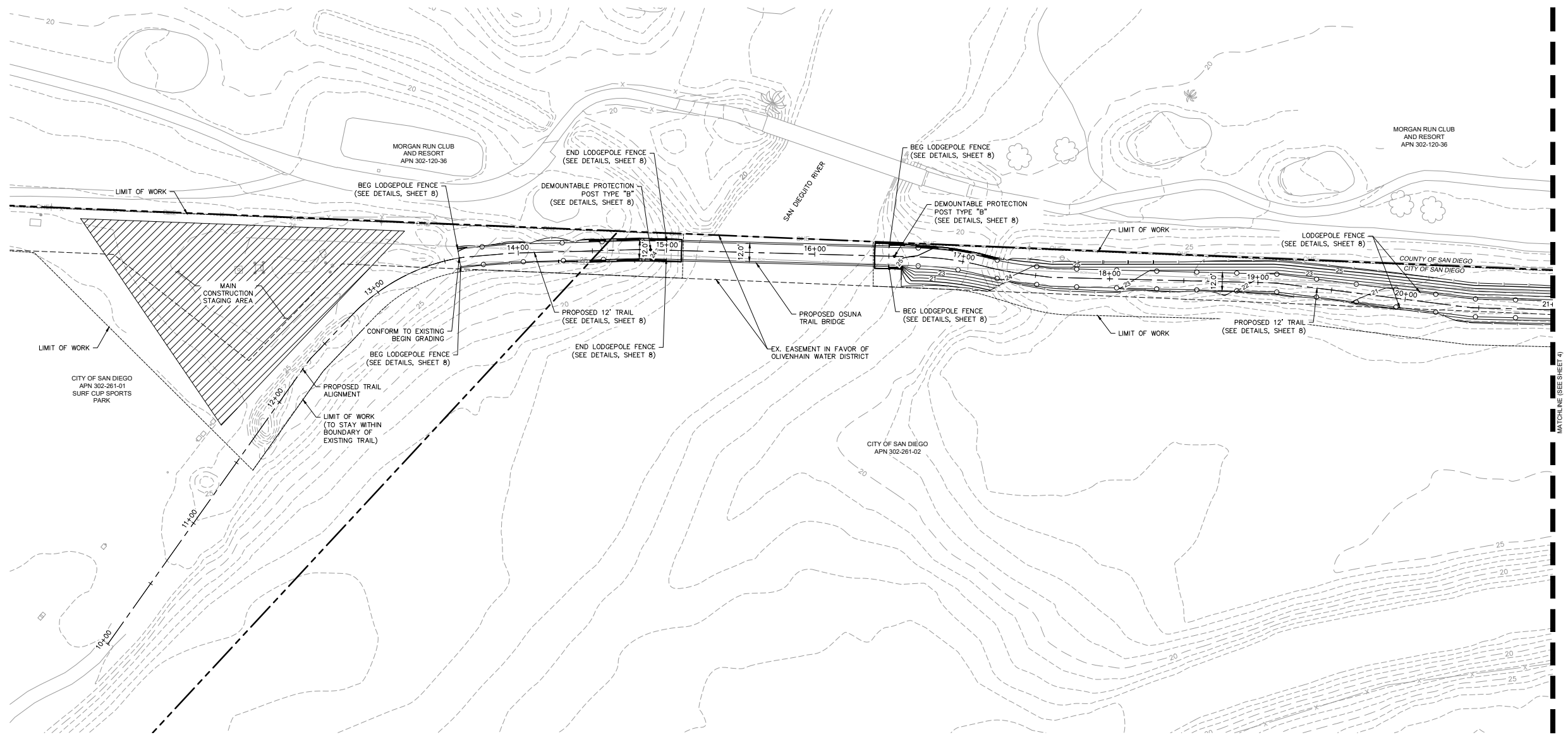
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 401 B STREET, SUITE 200, CA 92101
 PHONE 619-294-8411
 WWW.KIMLEY-HORN.COM

No.	REVISIONS	DATE	BY

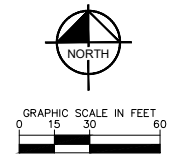
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 This document, together with the records and plans submitted herewith, shall constitute the entire contract for the work herein. No other conditions, specifications, or drawings shall be used in the absence of those shown hereon. The contractor shall be responsible for obtaining all necessary permits and approvals from the appropriate authorities. The contractor shall be responsible for obtaining all necessary permits and approvals from the appropriate authorities. The contractor shall be responsible for obtaining all necessary permits and approvals from the appropriate authorities.



Osuna: STA 10+00.0 TO 21+00
 HORZ: 1" = 30'
 VERT: 1" = 8'

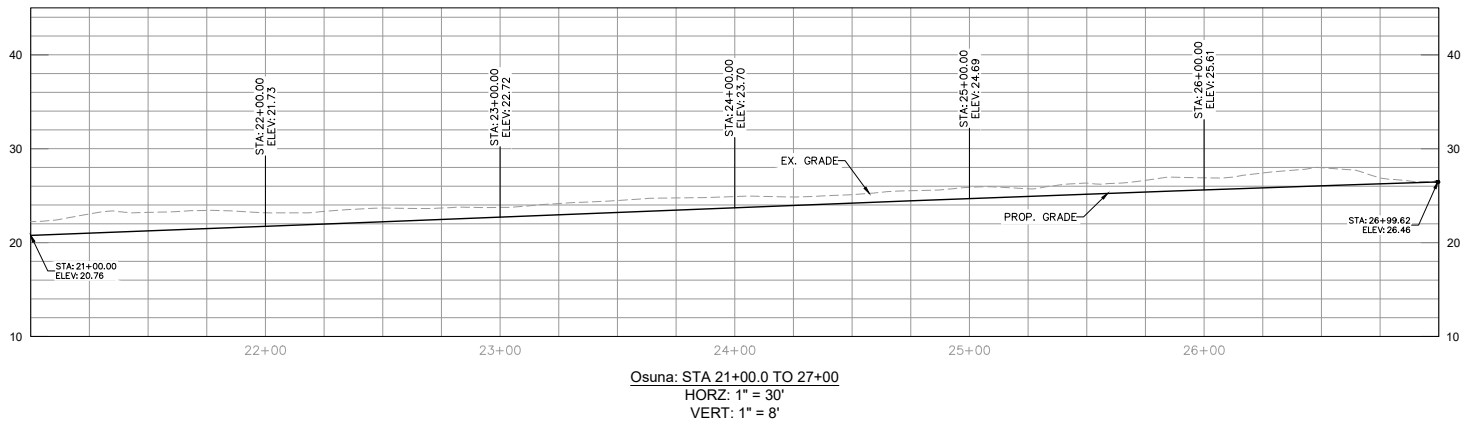


GENERAL NOTES
 1. SEE SHEET 1 FOR FLOOD PLAIN LIMITS.

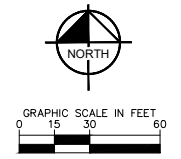


		LICENSED PROFESSIONAL JULIANA OLMO CALIFORNIA LICENSE NUMBER: 882787 EXP. DATE: 12/31/2023	
KHA PROJECT: 06220008 DATE: 4/14/2023 SCALE: AS SHOWN DESIGNED BY: TK DRAWN BY: TK CHECKED BY: MK	GRADING PLAN		
OSUNA TRAIL SEGMENT OF THE CREST TO COAST TRAIL PREPARED FOR SAN DIEGUITO RIVER PARK JPA CITY OF SAN DIEGO		CA	
SHEET NUMBER 3 OF 18		REVISIONS No. DATE BY	

Plotted By: huser, Title: huser, Sheet Size: 11x17, Sheet Number: 4 of 18, Date: 4/14/2023, 8:51:36am, K:\SAND_LEV\05220208 - Osuna Ridge\CAD\Plan Sheets\Osuna Plan Set.dwg
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GENERAL NOTES
 1. SEE SHEET 1 FOR FLOOD PLAIN LIMITS.

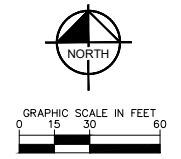


GRADING PLAN		LICENSED PROFESSIONAL JULIANA OCHOA CALIFORNIA LICENSE NUMBER: 882787 EXP. DATE: 12/31/2023	
KHA PROJECT: 06220008	DATE: 4/14/2023	SCALE: AS SHOWN	DRAWN BY: TK
			CHECKED BY: MK
OSUNA TRAIL SEGMENT OF THE CREST TO COAST TRAIL PREPARED FOR SAN DIEGUITO RIVER PARK JPA CITY OF SAN DIEGO		CA SHEET NUMBER 4 OF 18	
		KIMLEY-HORN © 2023 KIMLEY-HORN AND ASSOCIATES, INC. 4015 FREDERICKS BLVD., SUITE 100, SAN DIEGO, CA 92101 PHONE: 619-294-8411 WWW.KIMLEY-HORN.COM	
		REVISIONS No. DATE BY	

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



**OSUNA TRAIL SEGMENT OF
 THE CREST TO COAST TRAIL**
 PREPARED FOR
SAN DIEGUITO RIVER PARK JPA
 CITY OF SAN DIEGO CA

TRAIL ALIGNMENT DETAIL

KHA PROJECT	06220008
DATE	4/14/2023
SCALE	AS SHOWN
DESIGNED BY	TK
DRAWN BY	TK
CHECKED BY	MK
EDP DATE	12/31/2023

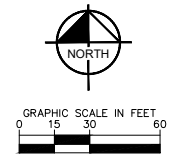
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REVISIONS	No.	DATE	BY

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 This document, together with the contracts and separate correspondence, forms an integral part of the contract documents for the project. It is to be read in conjunction with the contract documents and specifications. It is the responsibility of the user to ensure that the correct version of the drawing is used.



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



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

TRAIL ALIGNMENT DETAIL

KVA PROJECT	06/22/2008
DATE	4/14/2023
SCALE	AS SHOWN
DESIGNED BY	TK
DRAWN BY	TK
CHECKED BY	MK
LICENSED PROFESSIONAL	JULIANA OLINDO
CALIFORNIA LICENSE NUMBER	882787
EXP. DATE	12/31/2023

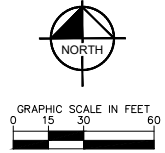
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 PHONE 619-294-8411
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No.	REVISIONS	DATE	BY

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



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

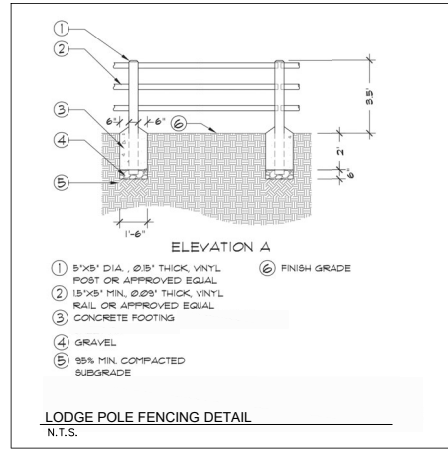
SHEET NUMBER
 7 OF 18

TRAIL ALIGNMENT DETAIL

KHA PROJECT	06/22/2008	LICENSED PROFESSIONAL	JULIANA OLINDO
DATE	4/14/2023	DESIGNED BY	TK
SCALE	AS SHOWN	DRAWN BY	TK
CHECKED BY	MK	DATE	12/31/2023

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No.	REVISIONS	DATE	BY



LEGEND ON PLANS

1. 1 1/2" DIA. 1/2" THICK VINYL POST OR APPROVED EQUAL

2. 1 1/2" DIA. 1/2" THICK VINYL RAIL OR APPROVED EQUAL

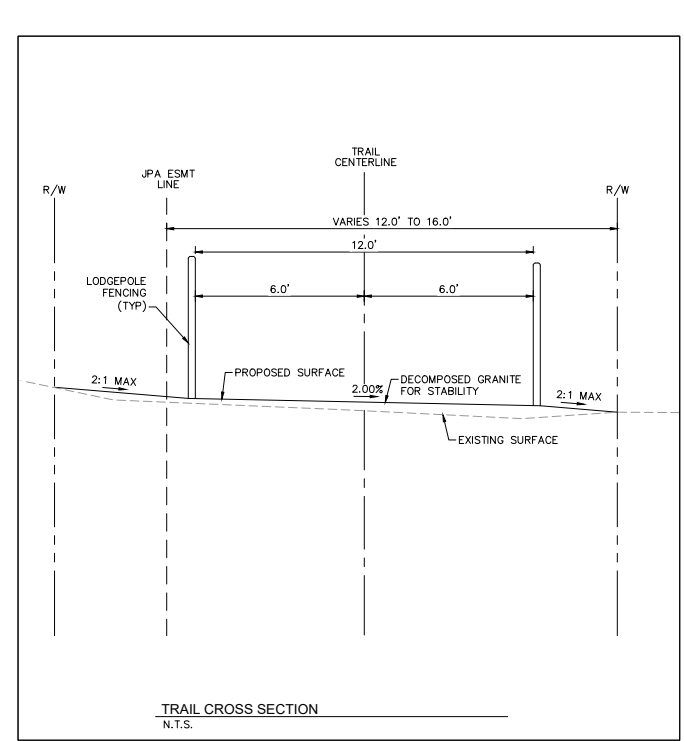
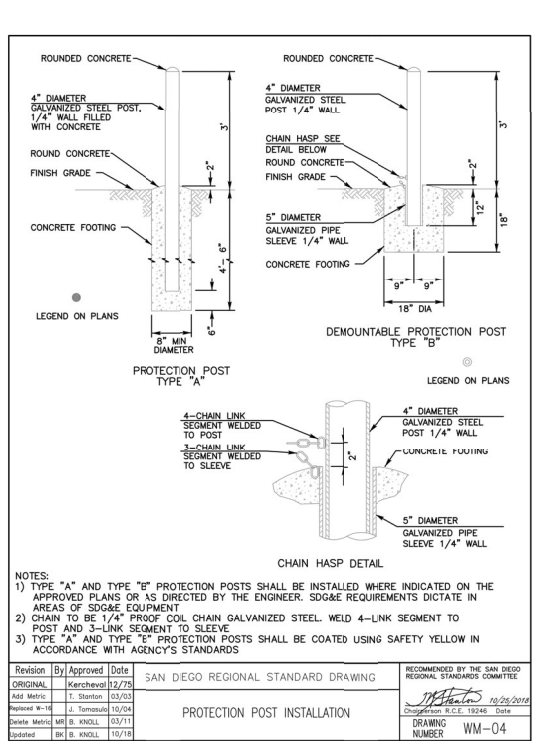
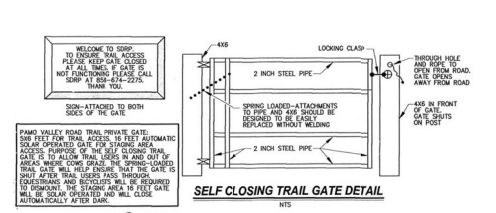
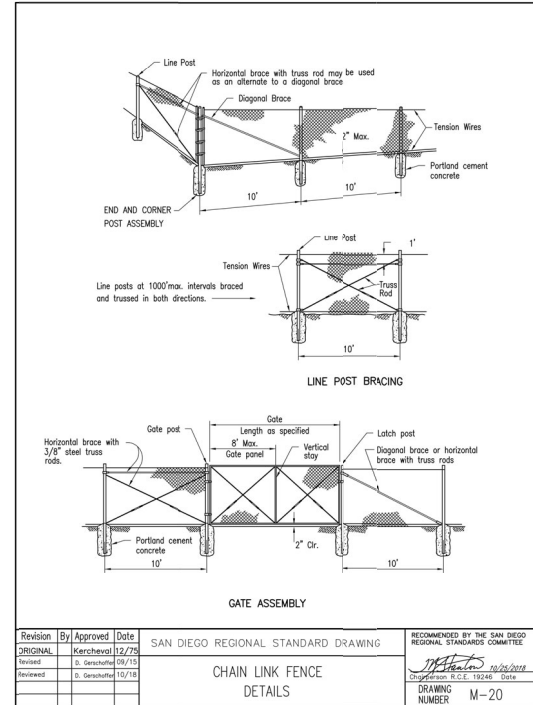
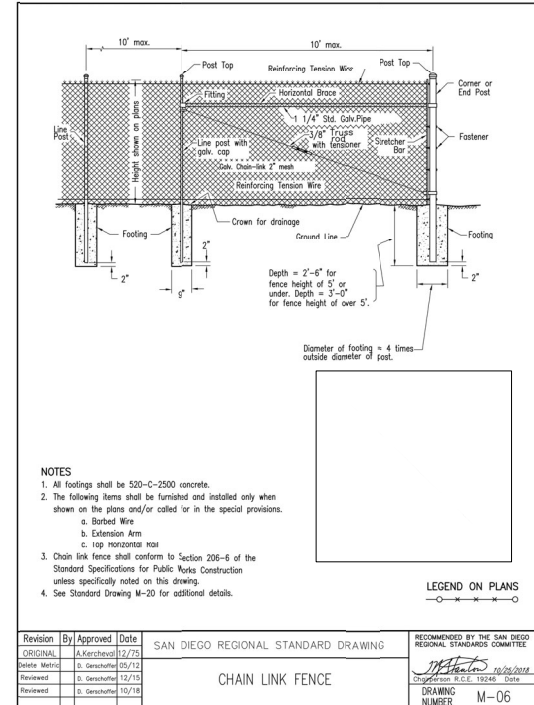
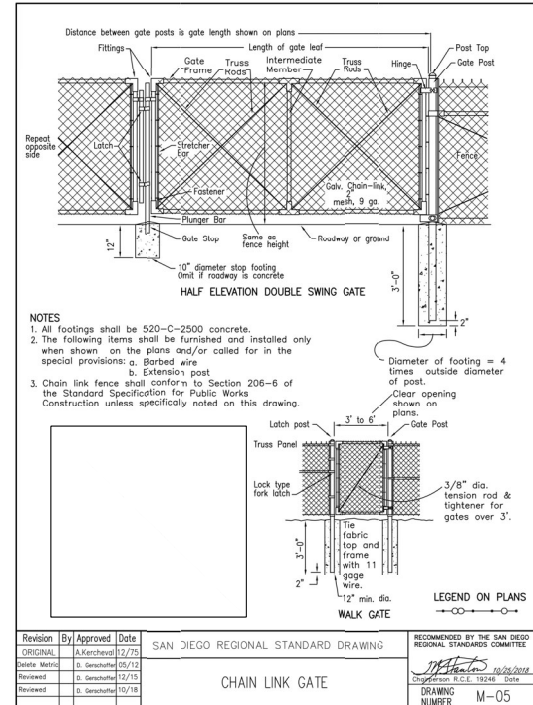
3. CONCRETE FOOTING

4. GRAVEL

5. 95% MIN. COMPACTED SUBGRADE

LODGE POLE FENCING DETAIL
N.T.S.

Revision	By	Approved	Date
ORIGINAL	A. Karchewski		12/7/15
Revised	D. Sanchez		05/12
Revised	D. Sanchez		12/15
Revised	D. Sanchez		10/18



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

DETAILS

REVISIONS

No.	REVISIONS	DATE	BY

PROFESSIONAL

LICENSED PROFESSIONAL

KHA PROJECT 06220008

DATE 4/14/2023

SCALE AS SHOWN

DESIGNED BY TK

DRAWN BY TK

CHECKED BY MK

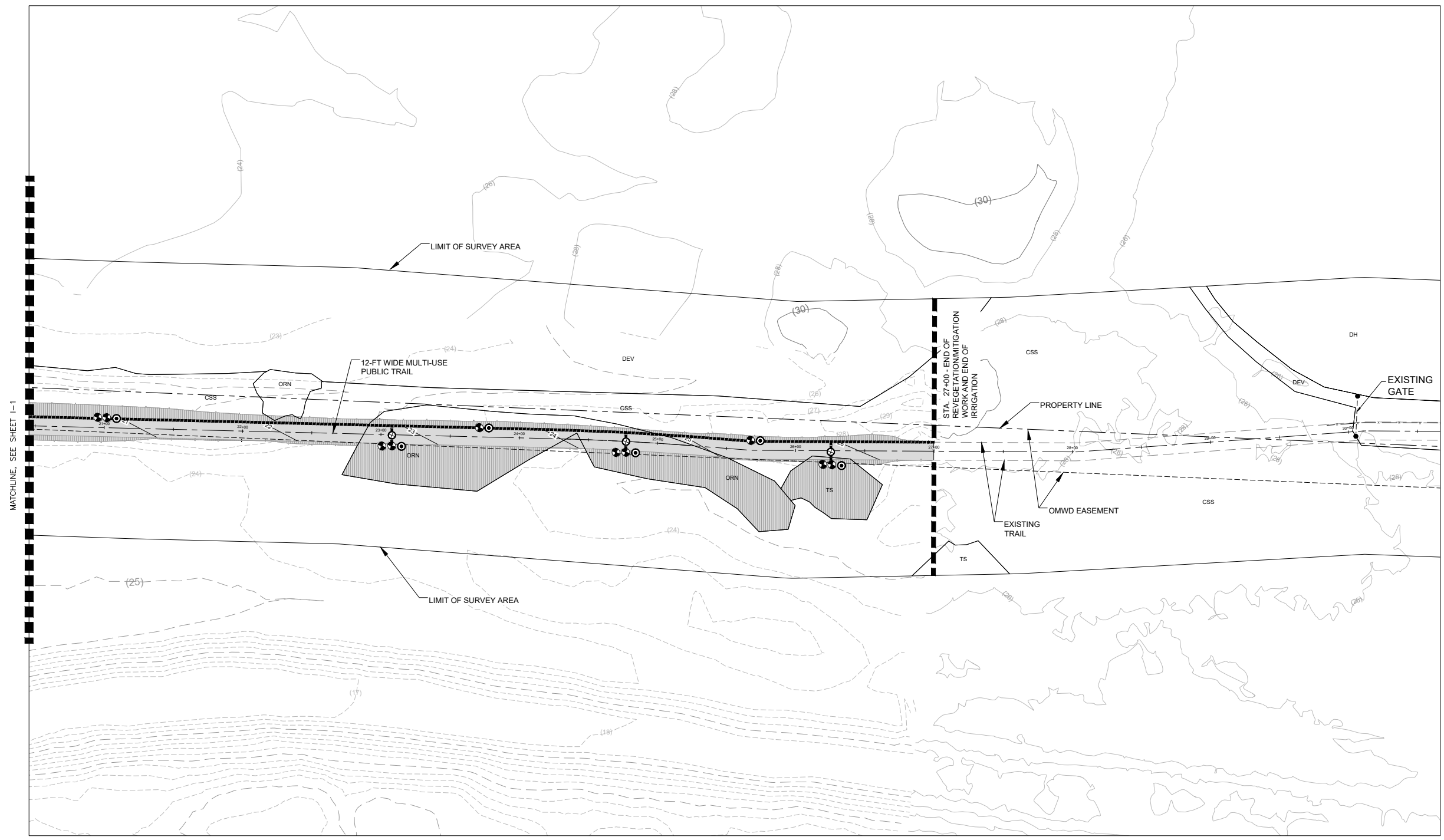
EDP DATE 12/31/2023

JULIA OJEDA

CALIFORNIA LICENSE NUMBER 882787

CA

SHEET NUMBER 8 OF 18



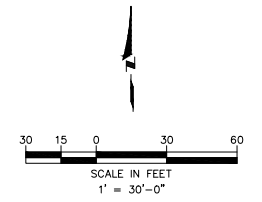
MATCHLINE, SEE SHEET I-1

PRELIMINARY
NOT FOR
CONSTRUCTION
REVISED 3/16/2023

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



I-2



REVEGETATION/RESTORATION
IRRIGATION PLAN

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

SHEET NUMBER
10 OF 18

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PHONE: 619-234-8411
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KIMLEY-HORN PROJECT		LICENSING INFORMATION	
PROJECT NO.	DATE	LIC. NO.	LIC. STATE
10422004	3/16/2023	23123	CA
SCALE	AS SHOWN	STATE LICENSE NUMBER	LIC. STATE
DESIGNED BY	TK	10422004	CA
DRAWN BY	TK		
CHECKED BY	MK		

No.	REVISIONS	DATE	BY










Prepared by: [Name], Licensed Professional Engineer, License No. 23123, State of California. This drawing is the property of Kimley-Horn and Associates, Inc. and is loaned to the City of San Diego for the purpose of the project. It is not to be used for any other project without the written consent of Kimley-Horn and Associates, Inc.

SPRINKLER HEAD LEGEND (Proposed Irrigation Sprinkler Heads)

SYMBOL	MANUF.	MODEL NO.	DESCRIPTION	DETAIL	ARC	RADIUS	PSI	GPM	NOTES
⊙	HUNTER	PGJ-00-1.5	ROTOR (SHRUB HEAD)	C/LI-9	90	30'	40	1.3	PROVIDE IN-LINE DRAIN CHECK VALVE ON RISER
⊙	HUNTER	PGJ-00-3.0	ROTOR (SHRUB HEAD)	C/LI-9	180	30'	40	2.5	PROVIDE IN-LINE DRAIN CHECK VALVE ON RISER
⊙	HUNTER	PGJ-00-5.0	ROTOR (SHRUB HEAD)	C/LI-9	360	30'	40	5.0	PROVIDE IN-LINE DRAIN CHECK VALVE ON RISER

NOTE: ACTUAL ARCS MAY VARY SLIGHTLY BASED ON SITE CONFIGURATION. ADJUST RADII TO OBTAIN HEAD TO HEAD COVERAGE.

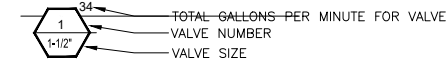
IRRIGATION EQUIPMENT LEGEND

SYMBOL	MANUF.	MODEL NO.	DESCRIPTION	DETAIL	REMARKS
P.O.C. 	N/A	N/A	POINT OF CONNECTION (P.O.C.)	N/A	CONNECT TO RECYCLED WATER SOURCE AT LOCATION SPECIFIED BY OMWD.
	FEBCO	825Y	REDUCED PRESSURE BACKFLOW PREVENTER	E/LI-9	INSTALL RECYCLED WATER LABELS/TAGS ON UNIT. INSTALL ACCORDING TO CITY STANDARDS, & MANUFACTURER'S RECOMMENDATIONS
	KBI	BLOCKED TRUE UNION BALL VALVE	PVC SCH 80 BALL VALVE - LINE SIZE	A/LI-9	FOR ISOLATION OF PIPES; INSTALL BELOW GRADE
	HUNTER	IBV-151G REMOTE CONTROL VALVE	CONTROL VALVE WITH DC-LATCHING SOLENOID	F/LI-9	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	B/LI-9	INSTALL BELOW GRADE
N/A	KBI	KC SERIES	IN-LINE SPRING CHECK VALVE		INSTALL DRAIN CHECK VALVE ON IRRIGATION HEAD RISER
	PRESSURE MAINLINE	CLASS 315 PVC-UV (BELOW GRADE)	PVC IRRIGATION MAINLINE - 3" DIAMETER, UNLESS OTHERWISE NOTED	D/LI-9	INSTALL 18" MINIMUM BELOW GRADE; PLACE IN PVC SLEEVE 24" BELOW GRADE AT ALL TRAIL CROSSINGS; SIZE PER LATERAL PIPE SIZING TABLE; INSTALL 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	D/LI-9	STAKE ON GRADE AT 10' O.C. AND AT ALL CORNERS; STAKES SHALL EXTEND 24" (MIN.) INTO SUBGRADE; PLACE IN PVC SLEEVE 24" BELOW GRADE AT ALL TRAIL CROSSINGS
	SLEEVING	SCH 40 PVC	SLEEVING AT ROAD AND TRAIL CROSSINGS. LINE TO BE 2X PIPE SIZE IT WILL CARRY	A/LI-8	STAKE SLEEVES TO BOTTOM OF TRENCHES, WITH BENT 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	G/LI-9	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.

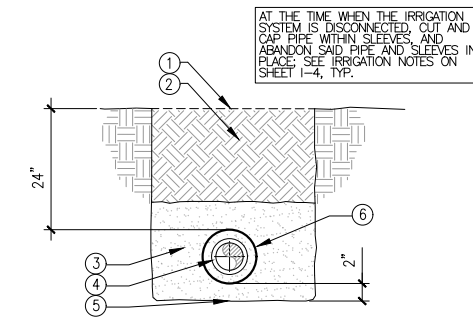
REFER TO DETAILS ON SHEETS I-7 AND I-8 FOR ADDITIONAL REQUIREMENTS.

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), WITH ALL COMPONENTS INSTALLED PER THE omwd RECYCLED WATER USE REQUIREMENTS.
- THE IRRIGATION SYSTEM DESIGN IS PARTIALLY DIAGRAMMATIC AND DOES NOT SHOW ALL OFFSETS, APPURTENANCES, AND EQUIPMENT NEEDED FOR A COMPLETE SYSTEM.
- THE CONTRACTOR SHALL INSTALL A TEMPORARY IRRIGATION SYSTEM FOR THE AREAS INDICATED ON THE DRAWINGS. CONTRACTOR SHALL PROVIDE ALL IRRIGATION MATERIALS, EQUIPMENT AND APPURTENANCES. THE IRRIGATION WATER SOURCE SHALL BE OFF OF THE EXISTING TURF IRRIGATION SUPPLY LINE; FIELD VERIFY LOCATION (SHOWN ON PLAN) WITH THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST.
- THE IRRIGATION SYSTEM IS BASED ON AN ANTICIPATED OPERATING PRESSURE OF 110 P.S.I. AND A MAXIMUM FLOW DEMAND OF 60 GALLONS PER MINUTE PER VALVE. AND AT ANY ONE TIME, THE CONTRACTOR SHALL VERIFY WATER PRESSURE BEFORE THE START OF CONSTRUCTION AND SHALL REPORT ANY DIFFERENCE BETWEEN THE WATER PRESSURE SHOWN ON THE DRAWINGS 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 ASSURE 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 PLANTS. 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 RECOMMEND ALL ADDITIONAL TEMPORARY IRRIGATION MEASURES. THE TEMPORARY IRRIGATION METHOD APPROVED BY THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST, SHALL BE PROVIDED BY 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, NON-IRRIGATED AREAS, AND TRAIL.
- 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 PAVEMENT, STANDING WATER, RUNOFF IN STREET GUTTERS OR NATURAL DRAINAGES AND OTHER SIMILAR CONDITIONS SHALL BE MANAGED AND PREVENTED.
- TEMPORARY IRRIGATION MATERIALS CROSSING THE TRAIL SHALL BE PLACED BELOW-GROUND AND SLEEVED SO THAT THEY CAN BE DRIVEN OR WALKED OVER, AND DO NOT IMPEDE ACCESS TO UTILITIES (E.G., MANHOLES, DRAIN PIPE) OR RECREATIONAL AREAS.
- 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 INOPERABLE. ALL BELOW-GRADE PIPE SHALL BE ABANDONED IN 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 IRRIGATED AREA. A RUNOFF TEST SHALL BE CONDUCTED FOR EACH VALVE ON THE SYSTEM. THE VALVE SHALL BE TURNED ON AND ALLOWED TO OPERATE UNTIL RUNOFF IS OBSERVED OR 30 MINUTES HAS ELAPSED, WHICHEVER IS THE SHORTER TIME. THE TIME RECORDED SHALL BE THE MAXIMUM RUN TIME FOR EACH VALVE. THIS WILL RESULT IN NO MORE THAN 0.1 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 CITY REPRESENTATIVE AND PROJECT BIOLOGIST.



ITEM	DESCRIPTION
1	FINISH GRADE, TOP OF EXISTING MAINTENANCE ROAD
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

PRELIMINARY
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REVISED 3/16/2023

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605 Third Street
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I-3

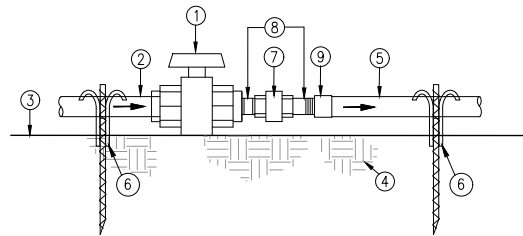
NO.	REVISIONS	DATE	BY

Kimley-Horn
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401 B STREET, SUITE 606, SAN DIEGO, CA 92101
PHONE: 619-234-8411
WWW.KIMLEY-HORN.COM

LICENSING PROFESSIONAL	LE-PROF 1	DATE	
RVA PROJECT	DATE		
SCALE	AS SHOWN	DESIGNED BY	TK
CHECKED BY	TK	DATE	

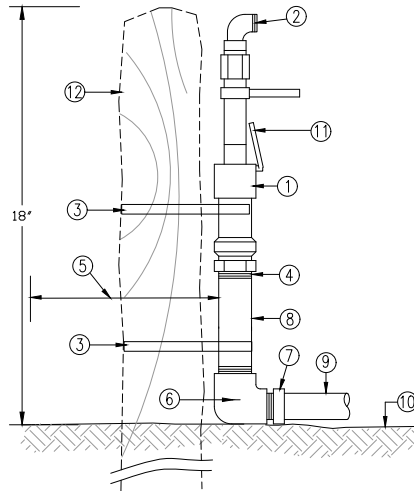
REVEGETATION/RESTORATION
IRRIGATION LEGEND AND DETAILS

OSUNA SEGMENT OF THE
COAST TO CREST TRAIL
PREPARED FOR
SAN DIEGUITO RIVER PARK JPA
CITY OF SAN DIEGO, CA



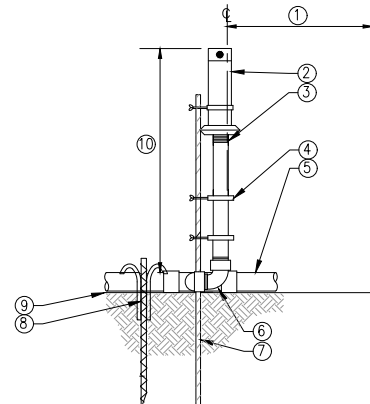
ITEM	DESCRIPTION
1	PVC SCH 80 BALL VALVE W/INTEGRAL UNION, SEE LEGEND
2	PVC MAINLINE PIPE FROM P.O.C.
3	FINISH GRADE
4	SUBGRADE
5	PVC MAIN LINE OR PVC LATERAL PIPE TO SPRAY SPRINKLER HEADS/BUBBLERS
6	PIPE ANCHOR (SEE DETAIL D, SHEET U-9)
7	UNION - THREADED (PVC)
8	SHORT NIPPLES PVC SCH 80 (TYP)
9	PVC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

A SHUT OFF VALVE (ISOLATION VALVE)
NO SCALE



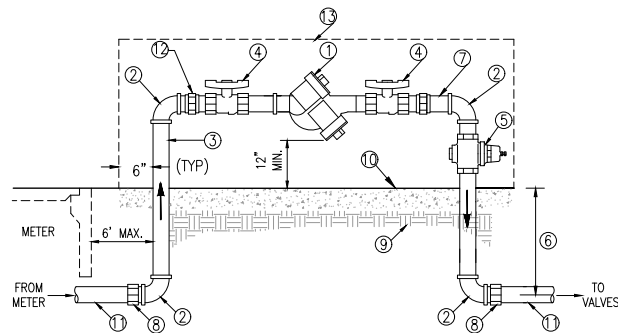
ITEM NO.	DESCRIPTION
1	QUICK COUPLER VALVE
2	QUICK COUPLER KEY W/SWIVEL HOSE END
3	SAFETY STEEL STRAP, CIRCLE & NAIL TO PDSY.
4	PELTON TAPE ALL THREADS
5	4" (MIN.) FROM EDGE OF CURBS, TRAILS, PATHS, ETC.
6	1/2" PVC SCH 40 THREADED TEE
7	PVC SCH 40 MALE ADAPTER
8	1" SCH 80 NIPPLE
9	1/2" PVC SCH 40 LATERAL PIPE
10	FINISH GRADE OF PLANTING AREA
11	RUBBER COVER
12	3/8" LONG X 8" DIA. (MIN.) PEELER POST AT ALL QUICK COUPLING VALVES NEXT TO TRAILS, PATHS AND ROADS.

B QUICK COUPLING VALVE
NO SCALE



ITEM	DESCRIPTION
1	18" (MIN.) FROM EDGE OF ROAD (where applicable)
2	ROTOR HEAD SPRINKLER
3	24" SCH. 80 PVC RISER
4	RUBBER TWIST TIE TO SECURE HEAD AND RISER TO STAKE -MIN. 3
5	PVC LATERAL LINE ON GRADE
6	SWING JOINT ASSEMBLY ATTACHED TO PVC PIPE FITTING (maxlex street ells)
7	42" #3 REBAR STAKE (min 18" into grade)
8	PIPE ANCHOR (SEE DETAIL D, SHEET U-9)
9	EXISTING GRADE
10	30" MIN ABOVE FINISH GRADE

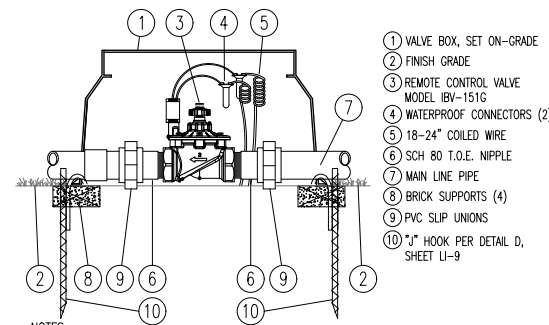
C SPRINKLER HEAD
NO SCALE



NOTE:
1. THERE SHALL BE NO FITTINGS OR CONNECTIONS TO OTHER FACILITIES BETWEEN THE METER AND BACKFLOW ASSEMBLY.

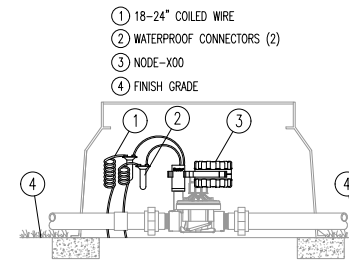
ITEM	DESCRIPTION
1	REDUCED PRESSURE BACKFLOW PREVENTOR (RPBP), SEE LEGEND
2	RED BRASS 90 ELBOW
3	RED BRASS RISER
4	RESILIENT SEATED BALL VALVE (part of RPBP assembly)
5	PRESSURE REGULATOR
6	18" MIN. DEPTH
7	SHORT RED BRASS NIPPLES (AS REQUIRED)
8	PVC SCH 80 FEMALE ADAPTER TO MAINLINE
9	COMPACT SUBGRADE TO 90%
10	4" THICK X 12" WIDE CONCRETE (2000 P.S.I. PAD, W/ 2% CROSS PITCH)
11	PVC MAINLINE, SEE LEGEND (P.O.C. @ WATER METER)
12	RED BRASS UNION
13	LOCKING STEEL ENCLOSURE, SEE LEGEND

E BACKFLOW PREVENTER
NO SCALE



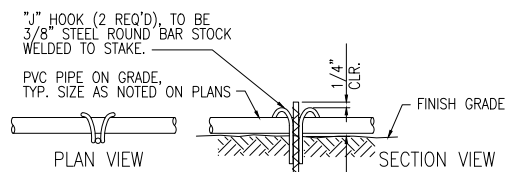
NOTES:
1. INSTALL AS DETAILED AND ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
2. VALVE BOX SHALL BE A RECTANGULAR LARGE BOX TO ACCOMMODATE THE TOTAL NUMBER OF GROUPED VALVES FOR EACH BATTERY OPERATED CONTROLLER.
3. ANCHOR VALVE BOX WITH 4 "J" HOOKS, ONE AT EACH CORNER OF THE BOX; INSERT ANCHOR INTO A PRE-DRILLED HOLE; OFFSET FROM BRICK SUPPORTS.

F REMOTE CONTROL VALVE
NO SCALE



NOTE:
1. INSTALL AS DETAILED AND ACCORDING TO MANUFACTURER'S SPECIFICATIONS.

G BATTERY OPERATED CONTROLLER
NO SCALE



NOTE:
ALL STABILIZER ASSEMBLIES TO BE THOROUGHLY CLEANED AND DIPPED IN A RUST INHIBITOR PAINT.

D ON-GRADE PIPE ANCHORING
NO SCALE

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CONSTRUCTION
REVISED 3/16/2023

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Encinitas, CA 92024
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I-4

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

REVEGETATION/RESTORATION
IRRIGATION DETAILS

LICENSED PROFESSIONAL

DATE: 3/16/2023

SCALE: AS SHOWN

DESIGNED BY: JPA

CHECKED BY: MK

DATE:

CA

SHEET NUMBER
12 OF 18

Kimley-Horn

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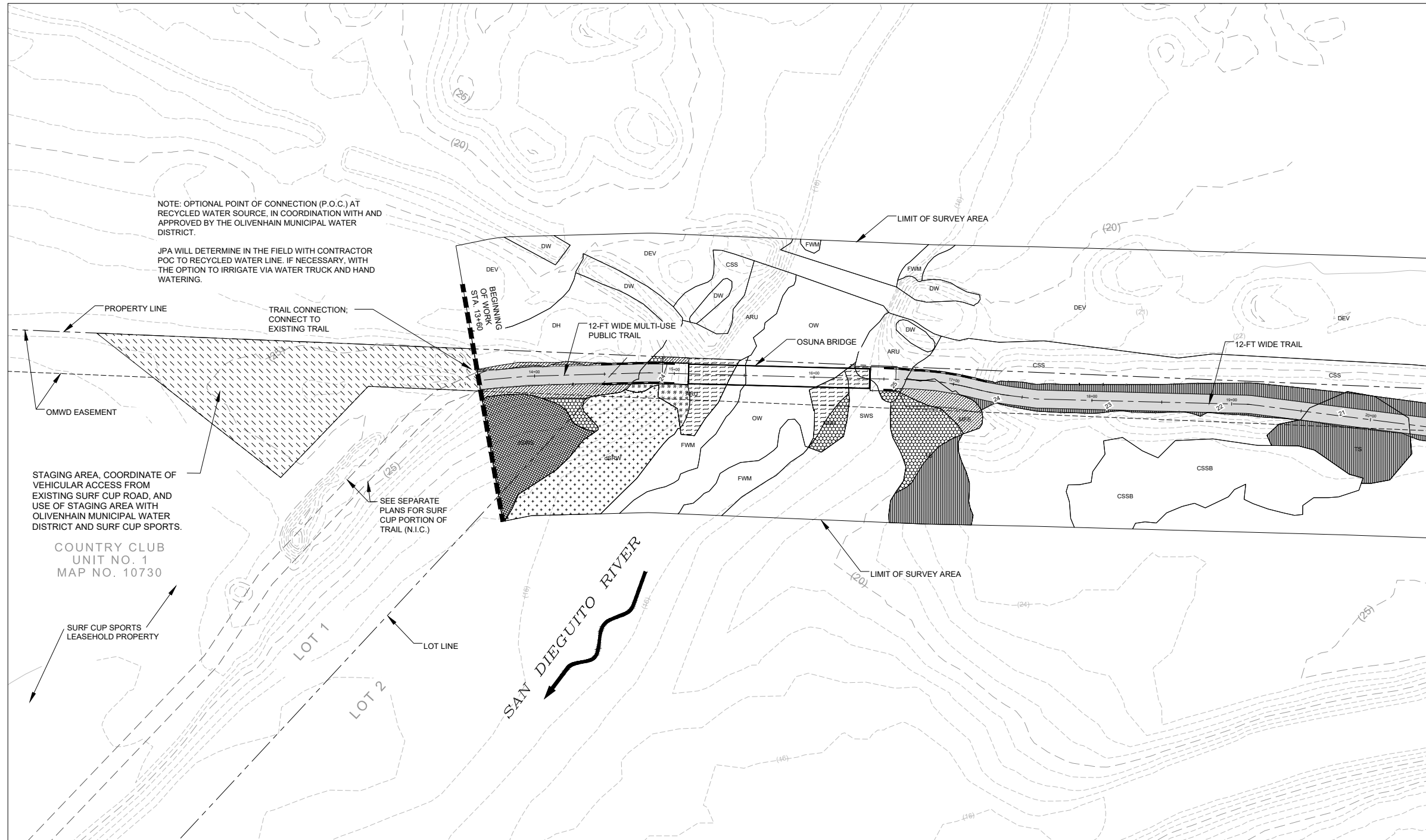
REVISIONS

No.

DATE

BY

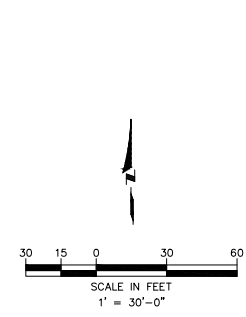
Prepared by: JPA, Checked by: MK, Date: 3/16/2023, Scale: AS SHOWN, Project: OSUNA SEGMENT OF THE COAST TO CREST TRAIL, PREPARED FOR SAN DIEGUITO RIVER PARK JPA, SHEET 12 OF 18.



MATCHLINE, SEE SHEET P-2

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 (0.09 AC.) CONTAINER PLANTS + SEEDING
	SOUTHERN RIPARIAN WOODLAND (SRW) ENHANCEMENT (0.13 AC.) CONTAINER PLANTS + SEEDING
	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 PLANT LISTS AND PLANTING NOTES & DETAILS.



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CONSTRUCTION
REVISED 3/16/2023

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P-1

REVEGETATION/RESTORATION
PLANTING PLAN

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

SHEET NUMBER
13 OF 18

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

KIMLEY-HORN PROJECT NO. 23020004	DATE 3/16/2023	LIC. PROF. #
SCALE AS SHOWN	DRAWN BY TJK	STATE LICENSE NUMBER
CHECKED BY MK	DATE	LIC. PROF. #

NO.	REVISIONS	DATE	BY

Prepared by: [Name], Licensed Professional Engineer, State of California, License No. [Number].
 Checked by: [Name], Licensed Professional Engineer, State of California, License No. [Number].
 Date: 3/16/2023. Scale: As Shown. Project: San Dieguito River Park, Osuna Trail Segment, Coast to Crest Trail Planting Plan.

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)	DETAILS
	ANEMOPSIS CALIFORNICA	YERBA MANSA	ROSE POTS	3' O/C (GROUP OF 10)	
	JUNCUS ACUTUS SSP. LEOPOLDII	SPINY RUSH	1 GAL	3' O/C (GROUP OF 10)	
	SCHOENOPLECTUS CALIFORNICUS	CALIFORNIA BULRUSH	1 GAL	3' O/C (GROUP OF 10)	
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 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: 6,603 SF (0.15 Ac)					
SYMBOLS	BOTANICAL NAME	COMMON NAME	CONTAINER SIZE	SPACING (ON CENTER)	DETAILS
TREES (OVERSTORY) PLANTS					
	BACCHARIS SALICIFOLIA	MULE FAT	1 GAL	6' O.C.	
	JUNCUS ACUTUS SSP. LEOPOLDII	SPINY RUSH	1 GAL	6' O.C.	
	SALIX EXIGUA	NARROW-LEAVE WILLOW	DEEP 1 GAL	10' O.C.O.	
	SALIX GOODINGII	BLACK WILLOW	DEEP 1 GAL	20' O.C.	
	SALIX LASIOLEPIS	ARROYO WILLOW	DEEP 1 GAL	15' O.C.	
UNDERSTORY PLANTS					
	ARTEMISIA DOUGLASIANA	DOUGLAS MUGWORT	1 GAL	4' O/C (GROUPS OF 3-5)	
NOTES: 1. ALL PLANTS SHALL BE INSTALLED ACCORDING TO THE DIRECTION OF THE 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: 6,070 SF (0.14 Ac)					
SYMBOLS	BOTANICAL NAME	COMMON NAME	CONTAINER SIZE	SPACING (ON CENTER)	DETAILS
TREES (OVERSTORY) PLANTS					
	BACCHARIS SALICIFOLIA	MULE FAT	1 GAL	6' O.C.	
	JUNCUS ACUTUS SSP. LEOPOLDII	SPINY RUSH	1 GAL	6' O.C.	
	SALIX EXIGUA	NARROW-LEAVE WILLOW	DEEP 1 GAL	10' O.C.O.	
	SALIX GOODINGII	BLACK WILLOW	DEEP 1 GAL	20' O.C.	
	SALIX LASIOLEPIS	ARROYO WILLOW	DEEP 1 GAL	15' O.C.	
UNDERSTORY PLANTS					
	ARTEMISIA DOUGLASIANA	DOUGLAS MUGWORT	1 GAL	4' O/C (GROUPS OF 3-5)	
NOTES: 1. ALL PLANTS SHALL BE INSTALLED ACCORDING TO THE DIRECTION OF THE 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)	DETAILS
	BACCHARIS SALICIFOLIA	MULE FAT	1 GAL	6' O.C.	
	SALIX EXIGUA	NARROW-LEAVE WILLOW	DEEP 1 GAL	10' O.C.O.	
	ARTEMISIA DOUGLASIANA	DOUGLAS MUGWORT	1 GAL	4' O/C (GROUPS OF 3-5)	
	ROSA CALIFORNICA	CALIFORNIA ROSE	1 GAL	4' O.C.	

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)	DETAILS
	ARTEMISIA CALIFORNICA	COASTAL SAGEBRUSH	1 GAL	6' O/C	
	ENCELIA CALIFORNICA	CALIFORNIA BUSH SUNFLOWER	1 GAL	4' O/C	
	ERIOGONUM FASCICULATUM	CALIFORNIA BUCKWHEAT	1 GAL	8' O/C	
	ISOMERIS ARBOREA	BLADDERPOD	1 GAL	6' O/C	
	SALVIA MELLIFERA	BLACK SAGE	1 GAL	8' O/C	
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 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		
	ACMISPON GLABOR (LOTUS SCORPARIUS)	DEERWEED	85	0.5		
	ARTEMISIA CALIFORNICA	COASTAL SAGEBRUSH	10	2.0		
	ATRIPLEX LENTIFORMIS	BIG SALTBUCH	50	2.0		
	BACCHARIS PILULARIS SSP. CONSANGUINEA	COYOTE BRUSH	2	4.0		
	CNEORIDIUM DUMOSUM	BUSH RUE	40	1.0		
	ENCELIA CALIFORNICA	BUSH SUNFLOWER	25	5.0		
	ERIODICTYON CRASSIFOLIUM	YERBA SANTA	20	2.0		
	ERIOGONUM FASCICULATUM	CALIFORNIA BUCKWHEAT	10	1.5		
	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 APIANA	WHITE SAGE	25	0.5		
	SALVIA MELLIFERA	BLACK SAGE	40	0.5		
	STIPA (NASELLA) PULCHRA (DE-AWNED)	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		
	AMBROSIA PSILOSTACHYA	WESTERN RAGWEED	6	2.0		
	ARTEMISIA DOUGLASIANA	DOUGLAS MUGWORT	10	2.0		
	ARTEMISIA PALMERI	PALMER'S SAGEWORT	10	2.5		
	ELYMUS CONDENSATUS	GIANT WILD RYE	70	1.0		
	HELIOTROPIMUM CURASSAVICUM	SALT HELIOTROPE	12	1.0		
	OENOTHERA ELATA SSP. HOOKERI	EVENING PRIMROSE	80	2.0		
	PLUCHEA ODORATA	MARSH FLEABANE	15			
	TOTALS:			15.0		

SEED MIX NOTES

- ** SEED TAGS SHALL BE SUBMITTED TO THE 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 PRESOAKED WITHIN 3 DAYS OF SEEDING TO A DEPTH OF 6 INCHES, OR AS RECOMMENDED BY THE 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 BIOLOGIST SPECIFICALLY REQUESTS THE %PLS METHOD TO BE USED IF THE MINIMUM PERCENT PURE LIVE SEED IS NOT AVAILABLE, THEN THE SEED SUPPLIER SHALL INCREASE 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 PROJECT BIOLOGIST.

- HYDROSEEDING NOTES**
- SEEDING SHALL OCCUR ONLY AFTER THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST HAS OBSERVED AND APPROVED THAT THE SITE HAS BEEN PROPERLY PREPARED AND FOLLOWING INSTALLATION OF THE CONTAINER PLANTS.
 - ONLY AS DIRECTED BY THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST: TYPE 9 MULCH (WOOD FIBER) OR BONDED FIBER MATRIX (BFM) SHALL BE APPLIED AT THE MINIMUM RATE OF 1,500 POUNDS PER ACRE; HYDROPOST PREMIUM COMPOST, OR EQUAL, SHALL BE APPLIED AT THE MINIMUM RATE OF 1,000 POUNDS PER ACRE; BIOSOL MIX 7-2-3 ORGANIC FERTILIZER, OR EQUAL, SHALL BE APPLIED AT THE MINIMUM RATE OF 800 POUNDS PER ACRE; AM 120 MYCORRHIZAL INOCULUM, OR EQUAL, SHALL BE APPLIED AT THE MINIMUM RATE OF 60 POUNDS PER ACRE.
 - TYPE 9 MULCH (WOOD FIBER) OR BFM AND HYDROPOST COMPOST SHALL BE UNIFORMLY SPREAD AND "TACKED" WITH TYPE 10 MULCH (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 BY THE BIOLOGIST) SHALL BE APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS, OR AS RECOMMENDED BY THE JPA DESIGNATED REPRESENTATIVE AND PROJECT BIOLOGIST.
 - EQUIPMENT USED FOR THE APPLICATION OF THE HYDROSEED SLURRY MIX SHALL HAVE A BUILT-IN AGITATION SYSTEM TO SUSPEND AND HOMOGENEOUSLY 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.

Kimley Horn
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 401 B STREET, SUITE 606, SAN DIEGO, CA 92101
 PHONE: 619-294-8411
 WWW.KIMLEY-HORN.COM

LICENSED PROFESSIONAL
 DATE: _____
 SCALE: AS SHOWN
 DESIGNED BY: TK
 DRAWN BY: MK
 CHECKED BY: MK
 DATE: _____

REVEGETATION/RESTORATION
 PLANTING LEGEND AND SEED MIXES

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

PRELIMINARY
 NOT FOR
 CONSTRUCTION
 REVISED 3/16/2023

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



Prepared by: [Name], License No. [Number], State of California
 Checked by: [Name], License No. [Number], State of California
 Date: [Date]

GENERAL REVEGETATION NOTES

- 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.
- REVEGETATION SHALL BE ACCOMPLISHED IN A MANNER SO AS TO PROVIDE VISUAL AND HORTICULTURAL COMPATIBILITY WITH ADJACENT NATIVE VEGETATION.
- CONTRACTOR SHALL STAKE THE LIMITS OF THE REVEGETATION AREAS WITH LATH STAKES AND YELLOW FLAGGING TAPE. STAKING SHALL OCCUR AT EVERY 10' O/C AND ALL CHANGES OF DIRECTION, STAKING SHALL BE MAINTAINED IN PLACE THROUGH PROJECT COMPLETION.
- THESE PLANS ARE A GUIDE; FINAL PLANT LAYOUT SHALL BE DETERMINED IN THE FIELD & APPROVED BY THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST.
- ANY PLANTING AREA REVISIONS OR SPECIES SUBSTITUTIONS SHALL REQUIRE REVIEW AND APPROVAL OF THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST.
- INVASIVE PLANT SPECIES INCLUDING BUT NOT LIMITED TO THOSE LISTED IN 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.
- ALL EROSION CONTROL BMP'S SHALL BE INSTALLED THROUGHOUT THE PROJECT AREA ACCORDING TO THE ENGINEERING PLANS AND CITY GUIDELINES. ALL BMP'S SHALL REMAIN IN PLACE, AND/OR SHALL BE RE-INSTALLED AFTER SOIL PREPARATION TO THE SATISFACTION OF THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST. BMP'S SHALL INCLUDE, BUT NOT LIMITED TO SILT FENCING, FIBER ROLLS, AND SOIL TACKIFIER AND FIBER MULCH (APPLIED WITH HYDROSEEDING). ALL PRODUCTS SHALL BE UN-DECAYING, CLEAN AND FREE OF WEEDS, SEEDS, AND DEBRIS.
- EROSION CONTROL BMP'S 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.
- THE PROJECT BIOLOGIST SHALL FIELD MARK ALL LOCATIONS FOR ALL CONTAINER PLANTS IN COORDINATION WITH THE CITY REPRESENTATIVE AND CONTRACTOR.
- PLANTING AND SEEDING SHALL BE CONDUCTED BETWEEN SEPTEMBER 15 AND FEBRUARY 1, DURING 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

- ALL NON NATIVE VEGETATION SHALL BE COMPLETELY REMOVED FROM THE SITE AND ANY REMNANT ROOT BALLS WILL BE TREATED WITH HERBICIDE AS APPROVED BY THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST BEFORE ANY SOIL PREPARATION.
- BEFORE PLANTING OR SEEDING, 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.
- THE FOLLOWING SOIL AMENDMENTS SHALL BE INCORPORATED INTO EXISTING SOILS WHERE CONTAINER PLANTS WILL BE INSTALLED:
 - POTASSIUM SULPHATE (0-0-50): 0.25 POUNDS PER CUBIC YARD
 - TRIPLE SUPER PHOSPHATE (0-45-0): 0.25 POUNDS PER CUBIC YARD
 - AGRICULTURAL GYPSUM: 2 POUNDS PER CUBIC YARD
 - ORGANIC SOIL AMENDMENT: 3 CUBIC YARDS PER CUBIC YARD
- 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

- 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.
- CONTAINER PLANTS SHALL BE PROCURED FROM A NATIVE PLANT NURSERY QUALIFIED TO PROPAGATE AND CARE FOR NATIVE PLANT SPECIES.
- ALL SEEDS SHALL MEET THE MINIMUM % PURE LIVE SEED (PLS) AS NOTED IN THE SEED MIXES. IF THE MINIMUM % PLS COUNT CANNOT BE MET CONTRACTOR SHALL COORDINATE AND OBTAIN WRITTEN APPROVAL FROM THE PROJECT BIOLOGIST FOR ALTERNATIVE COMPLIANCE (I.E. SUBSTITUTION, INCREASED QUANTITY). ANY POTENTIAL SUBSTITUTIONS MUST BE APPROVED BY THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST BEFORE SEED APPLICATION.
- 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 VERIFY COMPLIANCE WITH THE SPECIFIED MATERIALS.
- CONTAINER PLANT MATERIAL MUST BE DELIVERED TO THE PROJECT SITE AT THE APPROPRIATE TIME, IN A HEALTHY AND VIGOROUS CONDITION AND SHALL HAVE AT LEAST ONE LABEL CLEARLY IDENTIFYING 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.
- THE SEED MIX AND CONTAINER PLANTS IDENTIFIED ON THE 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.
- 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.
- SHRUBS SHALL BE LOCATED SO THEY WILL NOT OVERGROW ONTO THE TRAIL UPON MATURITY.
- 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.
- 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

- 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 SUBJECT TO THE TRAIL CONSTRUCTION SCHEDULE. 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.
- BEFORE FINAL APPROVAL, THE CITY REPRESENTATIVE MAY REQUIRE CORRECTIVE ACTION BE TAKEN, INCLUDING BUT NOT LIMITED TO, WEED ERADICATION AND REMOVAL, REPLANTING, THE MODIFICATION TO THE IRRIGATION SYSTEMS, AND THE REPAIR OF ANY SOIL EROSION OR SLOPE SLIPPAGE, IN CONSULTATION WITH THE CITY REPRESENTATIVE AND THE PROJECT BIOLOGIST.
- 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 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 GUIDELINES. CONTRACTOR MUST POSSESS A VALID STATE PESTICIDE AND/OR HERBICIDE LICENSE AT ALL TIMES.
- CONTRACTOR SHALL CONTROL ALL WEEDS AS IDENTIFIED BY THE PROJECT BIOLOGIST; NO WEED 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 DISTURBANCE SHALL BE REPLANTED/RESEEDED AND MAINTAINED BY CONTRACTOR PER THE DIRECTION OF THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST.
- EXOTIC/NON-NATIVE INVASIVE PLANT SPECIES SHALL BE REMOVED AND/OR TREATED AND SHALL INCLUDE THOSE LISTED IN THE CITY OF SAN DIEGO LANDSCAPE STANDARDS AS INVASIVE PLANT SPECIES AND 2) BY THE CALIFORNIA INVASIVE PLANT COUNCIL (CAL-IPC) AS HIGHLY INVASIVE.
- VEGETATION COVER, PLANT SURVIVAL AND MAX. INVASIVE SPECIES COVER SHALL BE REQUIRED TO MEET ESTABLISHED SUCCESS CRITERIA (TABLE 2), FOR THE FOLLOWING MILESTONE PERIODS: 120-DAYS FOLLOWING INSTALLATION, AT THE END OF YEAR 1 AND AT THE END OF THE 5 YEARS, FOLLOWING COMPLETION OF THE 120 DAY PLANT ESTABLISHMENT PERIOD (PEP), THE PROJECT BIOLOGIST AND CITY REPRESENTATIVE MAY APPROVE LESSER % COVER AS ACCEPTABLE BASED ON SITE CONDITIONS.
- 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 ADDED REQUIREMENT FOR TEMPORARY IRRIGATION. IRRIGATION MAY NOT BE REQUIRED IF SEASONAL RAINFALL PROVIDES SUITABLE CONDITIONS FOR THE GERMINATION AND ESTABLISHMENT OF NATIVE CONTAINER PLANT AND HYDROSEEDED SPECIES.
- 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.
- THE IRRIGATION SYSTEM IS CONSIDERED TEMPORARY AND WILL BE USED UNTIL THE PLANTINGS ARE ESTABLISHED; THE ENTIRE SYSTEM SHALL BE DISCONNECTED AND ALL ABOVEGROUND COMPONENTS SHALL BE REMOVED BEFORE THE END OF THE 5 YEAR MAINTENANCE PERIOD; REFER TO IRRIGATION NOTES FOR ADDITIONAL REQUIREMENTS. (SEE TABLE 3 FOR THE RECOMMENDED SCHEDULE FOR TAPERING-OFF THE IRRIGATION SYSTEM OPERATION).
- 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 CONTRACTORS EXPENSE.
- CONTRACTOR SHALL CORRECT ALL SOIL EROSION, AND SHALL REPAIR AND/OR REPLACE ALL ABOVE GROUND EROSION CONTROL BMP'S 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 SILT FENCING, GRAVEL BAGS, AND FIBER ROLLS SHALL BE REMOVED BY THE CONTRACTOR FOLLOWING ACCEPTANCE OF THE 5 YEAR MAINTENANCE AND MONITORING PERIOD BY THE PROJECT BIOLOGIST.
- 1:1 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.
- ORANGE CONSTRUCTION FENCE OR OTHER PERIMETER BARRIER (I.E., YELLOW ROPE BARRIER), IF APPROVED BY THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST, SHALL BE INSTALLED AND MAINTAINED BY CONTRACTOR FROM THE INSTALLATION OF ALL REVEGETATION PLANT MATERIALS THROUGH THE PEP, AND 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.
- 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 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 HYDROSEED AREAS ¹	PLANT SURVIVAL CONTAINER PLANTS ¹	TOTAL PLANT COVERAGE ^{2,3}		NON-NATIVE COVER
			WETLAND	UPLAND	
120 DAYS	20%	100%	85%	75%	<10% WEEDS AT ANY TIME 0% INVASIVE EXOTICS
YEAR 1	50%	100%	85%	75%	<10% WEEDS AT ANY TIME 0% INVASIVE EXOTICS
YEAR 2	65%	90%	85%	75%	<10% WEEDS AT ANY TIME 0% INVASIVE EXOTICS
YEAR 3 ⁴	75%	80%	85%	75%	<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

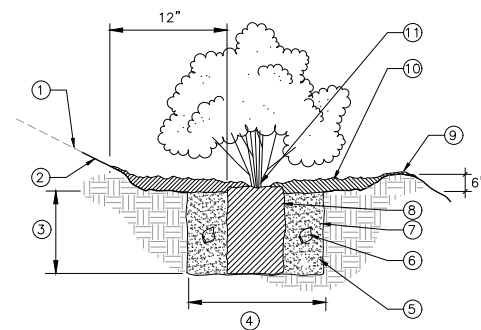
¹ Container plants not meeting plant survival success criteria, as verified and recommended by the Project Biologist, shall be replaced in like kind and size and maintained at contractor's expense until the success criteria has been met. Percent survival is based upon the quantity of container plants 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 Whitebook. Soil coverage includes, but is not limited to, plant cover, hydromulch or other biodegradable organic materials. At the discretion of the project biologist, organic composted mulch and /or recruited non-native grass species not listed as highly invasive on the CAL-IPC invasive plant list can be used to meet the % vegetation coverage for erosion control (e.g.: wild Oat (Avena sp.), brome 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 transect and visual analysis.

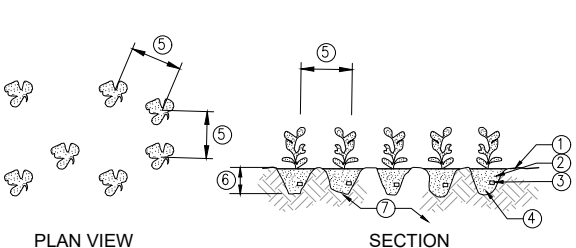


ITEM	DESCRIPTION
1	GRADE AT SLOPE
2	FINISH GRADE
3	DEPTH OF ROOT BALL
4	TWO TIMES WIDTH OF ROOT BALL
5	WATER AND TAMP BACKFILL MIX WELL
6	2 CONTROLLED RELEASE FERTILIZER PACKETS TO BE INCLUDED IN BACKFILL MIX (PER SPECS.)
7	SCARIFY SIDES OF PLANTING PIT
8	ROOT BALL
9	WATERING BASIN 6" ABOVE FINISH GRADE
10	3" THICK SHREDDED BARK MULCH LAYER 18" RADIUS HOLD BACK 3" FROM ROOT CROWN
11	ROOT CROWN OF SHRUB 1" ABOVE FINISH GRADE

THIS DETAIL APPLIES TO 1 OR 5 GALLON, OR TREEPOT4 CONTAINER PLANTS.

(A) NATIVE CONTAINER PLANTING

NO SCALE



PLAN VIEW SECTION

ITEM	DESCRIPTION
1	FINISH GRADE
2	ROOT BALL
3	1" 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	DEPTH OF ROOT BALL
7	AMENDED SOIL (PER SOIL PREPARATION NOTES)

(B) NATIVE CONTAINER PLANT LAYOUT

NO SCALE

TABLE 2. PLANTING MAINTENANCE MONITORING AND REPORTING SCHEDULE

PERIOD	ACTIVITY FOR PROJECT BIOLOGIST/CONTRACTOR	BIOLOGIST SITE VISIT FREQUENCY	SUBMITTALS/CHECKLIST	REPORTING FREQUENCY
REVEGETATION INSTALLATION	PROJECT BIOLOGIST WILL BE RESPONSIBLE FOR MONITORING/LANDSCAPE. CONTRACTOR WILL BE RESPONSIBLE FOR INSTALLATION AND MAINTENANCE.	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. CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE ON AN AS-NEEDED BASIS.	MONTHS 1 & 2 - EVERY TWO WEEKS (BIWEEKLY) MONTHS 3 & 4 - AT LEAST ONCE A MONTH	REPORTS PREPARED BY THE BIOLOGIST (BASED ON THE REVEGETATION PLAN CRITERIA)	AT EACH BIOLOGICAL MONITORING SITE VISIT AND AT THE END OF THE PEP***
5 YEAR LONG-TERM MAINTENANCE & MONITORING	PROJECT BIOLOGIST WILL BE RESPONSIBLE FOR MONITORING/LANDSCAPE. CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE ON AN AS-NEEDED BASIS; SEE TABLE 3 FOR MAINTENANCE TASKS.	EVERY 2 MONTHS (BI-MONTHLY) DURING YEARS 1 & 2 AND THEN 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 ***** ANNUAL 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	AS NEEDED	AS NEEDED	QUARTERLY	QUARTERLY	QUARTERLY
TRASH REMOVAL	AS NEEDED	QUARTERLY	QUARTERLY	QUARTERLY	QUARTERLY
IRRIGATION	AS NEEDED	AS NEEDED	TAPER-OFF	OFF	OFF

MONITORING REQUIREMENTS

- 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 ENDOUR 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.)
- 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 PLOTS; THE IRRIGATION SYSTEMS ARE INTEGRAL TO THE PLANTING TO WORK TO FACILITATE PLANT ESTABLISHMENT.

LONG TERM MAINTENANCE OF THE TRAIL WILL BE THE RESPONSIBILITY OF THE SAN DIEGUITO RIVER PARK JPA.

PRELIMINARY
NOT FOR
CONSTRUCTION
REVISED 3/16/2023

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



P-4

Kimley Horn
© 2023 KIMLEY-HORN AND ASSOCIATES, INC.
401 B STREET, SUITE 600, SAN DIEGO, CA 92101
PHONE 619-238-9411
WWW.KIMLEY-HORN.COM

LICENSED PROFESSIONAL

KIMLEY-HORN PROJECT NO. 2022-05-003203N

DATE 3/16/2023

SCALE AS SHOWN

DESIGNED BY JPA

DRAWN BY JPA

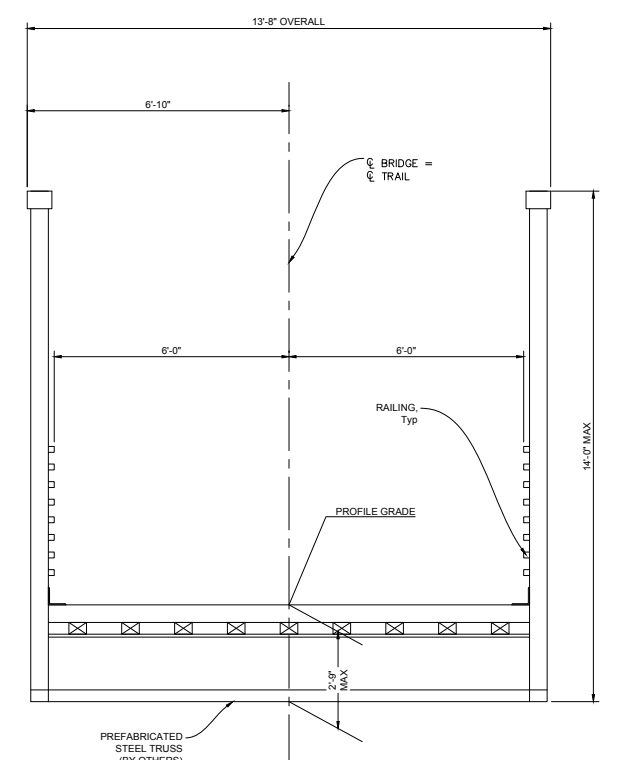
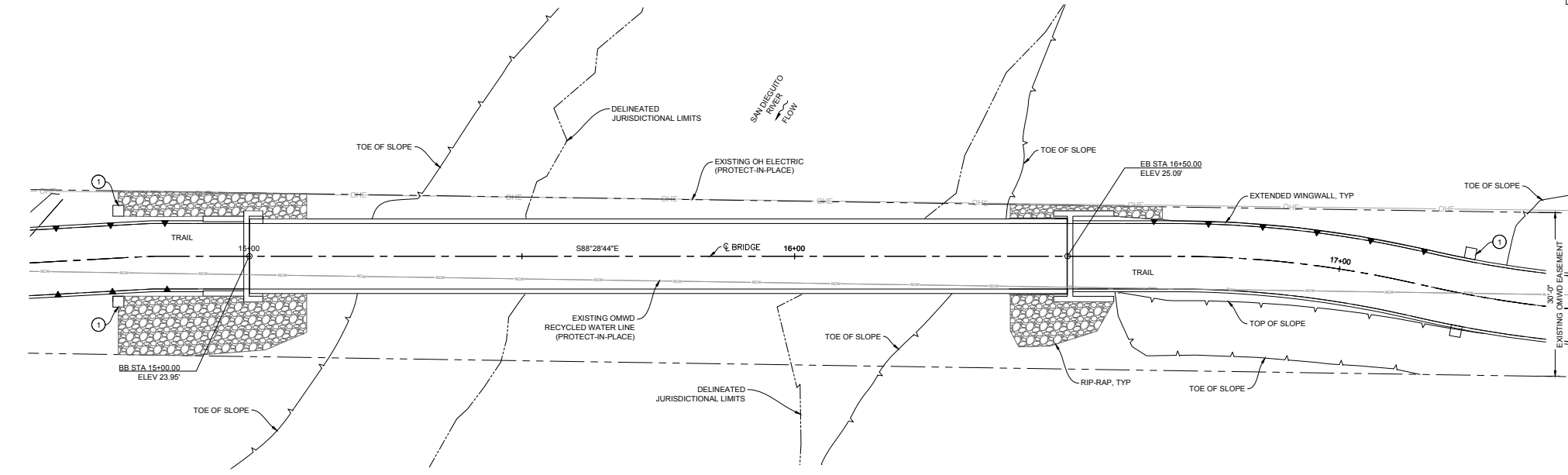
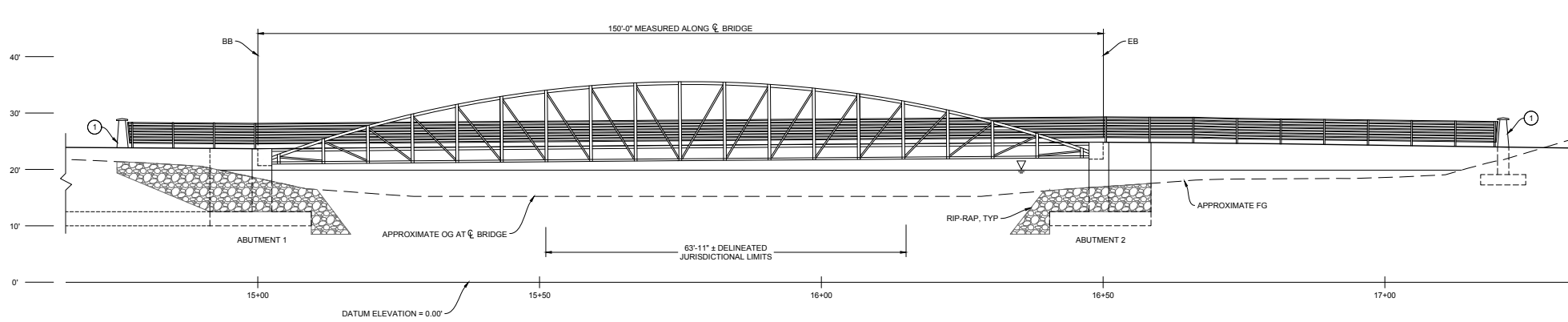
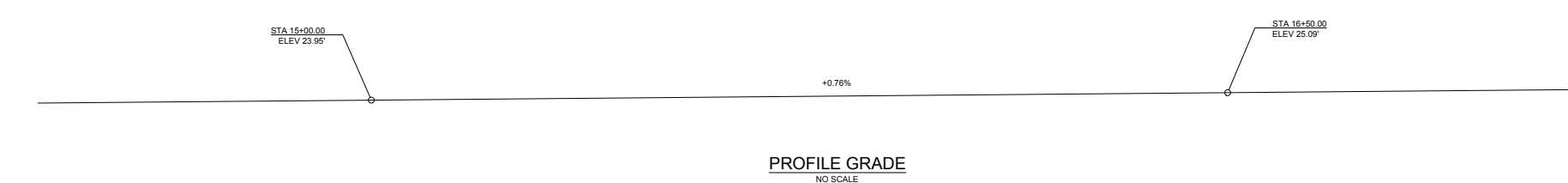
CHECKED BY JPA

DATE

REVEGETATION/RESTORATION
PLANTING NOTES AND DETAILS

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

Plotted By: P. Kelly, Date: 03/15/2023, Time: 04:28:15pm, K:\SMD_CDR\03022023\03 - Osuna Bridge\CD\Plan Sheets\Osuna Bridge_General Plan.dwg, Plot Scale: 1/8" = 1'-0", Plot Date: 03/15/2023, Plot Time: 04:28:15pm, Plot User: P. Kelly, Plot Device: HP DesignJet T1300, Plot Path: C:\Users\pkelly\AppData\Local\Temp\1\1300\1300_031523_042815.dwg, Plot Source: HP DesignJet T1300, Plot Resolution: 300 dots per inch, Plot Orientation: Landscape, Plot Color: Black, Plot Lineweight: As Shown, Plot Background: None, Plot Plotter: HP DesignJet T1300, Plot PlotterDriver: HP DesignJet T1300 PCL6, Plot PlotterParameters: None, Plot SheetCount: 1, Plot SheetIndex: 1, Plot SheetTotal: 1, Plot SheetName: Osuna Bridge_General Plan.dwg, Plot SheetPath: C:\Users\pkelly\AppData\Local\Temp\1\1300\1300_031523_042815.dwg, Plot SheetSize: 11x17, Plot SheetOrientation: Portrait, Plot SheetScale: 1/8" = 1'-0", Plot SheetUnits: Feet, Plot SheetLanguage: English, Plot SheetVersion: 1.0, Plot SheetAuthor: P. Kelly, Plot SheetCreated: 03/15/2023 04:28:15pm, Plot SheetModified: 03/15/2023 04:28:15pm, Plot SheetPrinted: 03/15/2023 04:28:15pm, Plot SheetPlotter: HP DesignJet T1300, Plot SheetPlotterDriver: HP DesignJet T1300 PCL6, Plot SheetPlotterParameters: None, Plot SheetPlotterVersion: 1.0, Plot SheetPlotterLanguage: English, Plot SheetPlotterVersion: 1.0, Plot SheetPlotterLanguage: English, Plot SheetPlotterVersion: 1.0, Plot SheetPlotterLanguage: English



LEGEND:

- ① PILASTER WITH STONE FACADE AND PRECAST CAP
- ▽ 10-YEAR WATER SURFACE ELEVATION: 20.15'

NOTES:

1. 50-YEAR AND 100-YEAR STORM EVENTS WILL OVERTOP BRIDGE

No.	REVISIONS	DATE	BY

Kimley»Horn
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 401 B STREET, SUITE 200, SAN DIEGO, CA 92101
 PHONE: 619-224-8411
 WWW.KIMLEY-HORN.COM

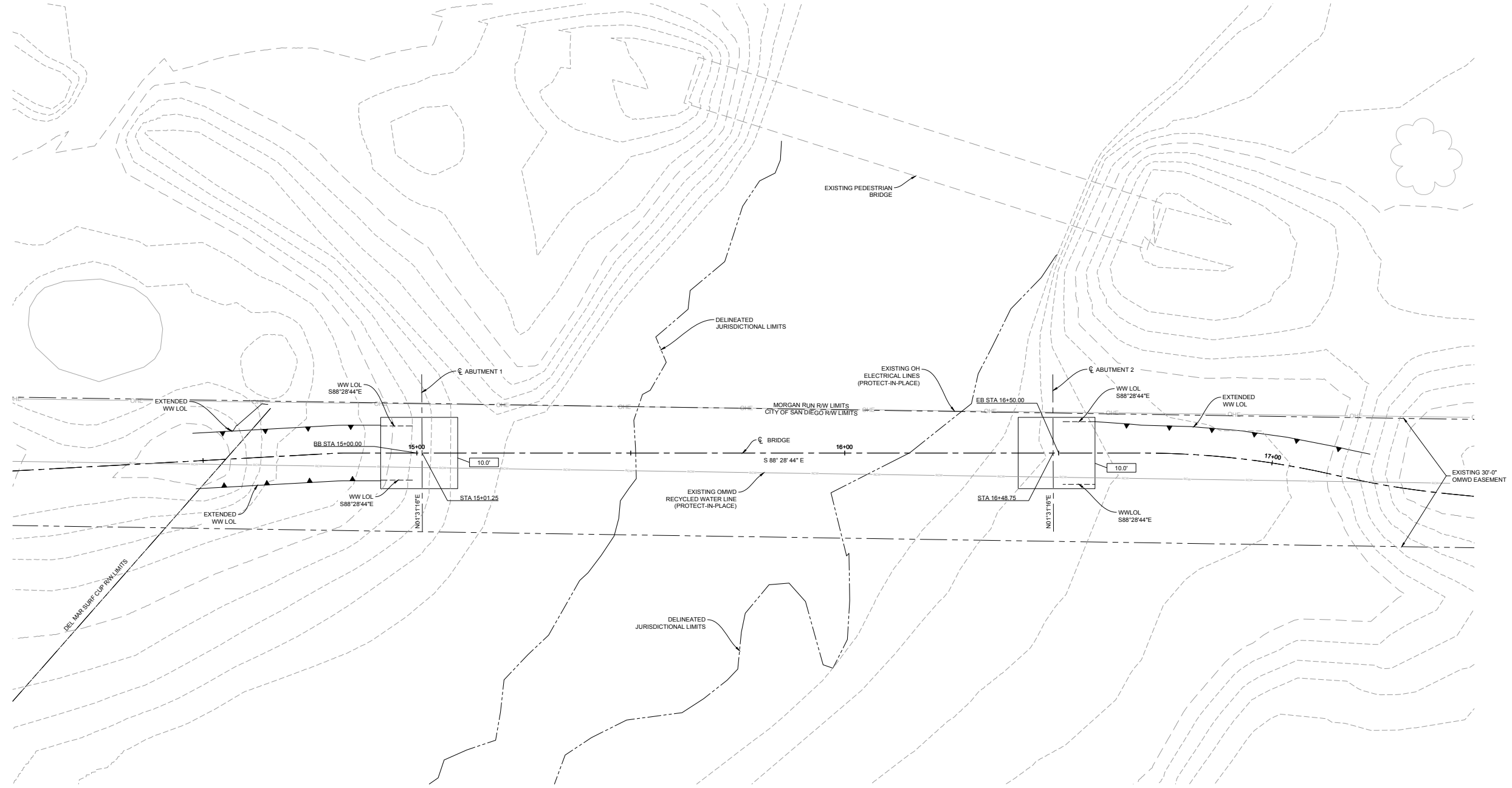
KHA PROJECT		LICENSED PROFESSIONAL	
06220008	06/22/2008	JULIANA OLMO	JULIANA OLMO
3/15/2023	AS SHOWN	TK	TK
DESIGNED BY	DRAWN BY	CHECKED BY	DATE
TK	TK	MK	

GENERAL PLAN

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

SHEET NUMBER
17 OF 18

Plotted By: P. Kraljic, Kraljic, Sheet Size: 11x17, Layout: Foundation Plan, March 15, 2023, 04:29:47 PM, K:\S\NO_LAYOUT\Foundation Plan - Morgan Run Bridge\CD\Plan Sheets\Structure\BB Bridge GP.dwg
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FOUNDATION PLAN
 1" = 10'-0"

LEGEND:
 XXX' - INDICATES BOTTOM OF CONCRETE FOOTING ELEVATION

FOUNDATION PLAN		OSUNA TRAIL SEGMENT OF THE CREST TO COAST TRAIL PREPARED FOR SAN DIEGUITO RIVER PARK JPA <small>CITY OF SAN DIEGO</small>		CA
KHA PROJECT 0622008	LICENSED PROFESSIONAL JULIANA OJEDA	DATE 3/15/2023	SCALE AS SHOWN	DESIGNED BY TK
DRAWN BY MK	CHECKED BY MK	DATE 3/15/2023	CAUTION LICENSE NUMBER 862787	DATE 3/15/2023
© 2023 KIMLEY-HORN AND ASSOCIATES, INC. 401 B STREET, SUITE 200, SAN DIEGO, CA 92101 PHONE: 619-294-8111 WWW.KIMLEY-HORN.COM				
				REVISIONS No. _____ DATE _____ BY _____
SHEET NUMBER 18 OF 18				