

# FAMOSA SLOUGH ALLEY SLOPE RESTORATION

## CONTRACTOR'S RESPONSIBILITIES

- PURSUANT TO SECTION 4216 OF THE GOVERNMENT CODE, AT LEAST 2 WORKING DAYS PRIOR TO EXCAVATION, YOU MUST CONTACT THE REGIONAL NOTIFICATION CENTER (E.G. UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA) AND OBTAIN AN INQUIRY IDENTIFICATION NUMBER.
- NOTIFY SDG&E AT LEAST 10 WORKING DAYS PRIOR TO EXCAVATING WITHIN 10' OF SDG&E UNDERGROUND HIGH VOLTAGE TRANSMISSION POWER LINES (I.E., 69 KV & HIGHER)
  - THE LOCATIONS OF EXISTING BUILDINGS AS SHOWN ON THE PLAN ARE APPROXIMATE.
  - STORM DRAIN INLETS SHALL REMAIN FUNCTIONAL AT ALL TIMES DURING CONSTRUCTION.
  - UNLESS OTHERWISE NOTED AS PREVIOUSLY POTHOLED (PH), ELEVATIONS SHOWN ON THE PROFILE FOR EXISTING UTILITIES ARE BASED ON A SEARCH OF THE AVAILABLE RECORD INFORMATION ONLY AND ARE SOLELY FOR THE CONTRACTOR'S CONVENIENCE. THE CITY DOES NOT GUARANTEE THAT IT HAS REVIEWED ALL AVAILABLE DATA. THE CONTRACTOR SHALL POTHOLE ALL EXISTING UTILITIES EITHER SHOWN ON THE PLANS OR MARKED IN THE FIELD IN ACCORDANCE WITH THE SPECIFICATIONS SECTION 402-UTILITIES.
  - EXISTING UTILITY CROSSING AS SHOWN ON THE PLANS ARE APPROXIMATE AND ARE NOT REPRESENTATIVE OF ACTUAL LENGTH AND LOCATION OF CONFLICT AREAS. SEE PLAN VIEW.
  - FOR COORDINATION OF THE SHUTDOWN OF MAINS, THE ASSIGNED CONSTRUCTION MANAGEMENT AND FIELD SERVICES SENIOR ENGINEER, AND NOT THE CONTRACTOR, SHOULD CONTACT THE FOLLOWING:
    - TRANSMISSION MAINS (16 INCHES AND LARGER) WATER DISTRIBUTION OPERATIONS SUPERVISOR (619-533-4657)
    - DISTRIBUTION MAINS (LESS THAN 16 INCHES) WATER SYSTEMS TECHNICIAN SUPERVISOR (619-527-3143)
    - WATER FACILITIES (POTABLE WATER RESERVOIRS, PUMP STATIONS, PRESSURE REDUCING STATIONS); WATER PRODUCTION SUPERINTENDENT (619-527-7438) AND SENIOR WATER DISTRIBUTION OPERATIONS SUPERVISOR (619-527-7609)

## CONSTRUCTION STORM WATER PROTECTION NOTES

- TOTAL SITE DISTURBANCE AREA (ACRES) 0.33  
 HYDROLOGIC UNIT/ WATERSHED SAN DIEGO HU/SAN DIEGO RIVER WATERSHED  
 HYDROLOGIC SUBAREA NAME & NO. MISSION SAN DIEGO (907.II)
- THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE
  - MINOR WPCP  
 THE PROJECT IS SUBJECT TO MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) PERMIT NO. R9-2013-0001 AS AMENDED BY R9-2015-0001 AND R9-2015-0100
  - WPCP  
 THE PROJECT IS SUBJECT TO MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) PERMIT NO. R9-2013-0001 AS AMENDED BY R9-2015-0001 AND R9-2015-0100
  - SWPPP  
 THE PROJECT IS SUBJECT TO MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) PERMIT NO. R9-2013-0001 AS AMENDED BY R9-2015-0001 AND R9-2015-0100 AND CONSTRUCTION GENERAL PERMIT (CGP) 2022-0057 DW0  
 TRADITIONAL: RISK LEVEL  1  2  3  
 LUP: RISK TYPE  1  2  3
- CONSTRUCTION SITE PRIORITY
  - ASBS  HIGH  MEDIUM  LOW

## PERMANENT STORM WATER BMP CATEGORY

- PRIORITY DEVELOPMENT PROJECT
- STANDARD DEVELOPMENT PROJECT
- PDP EXEMPT
- NOT SUBJECT TO PERMANENT STORM WATER REQUIREMENTS

## ABBREVIATIONS

ABAND	ABANDON	EX, EXIST	EXISTING	SD	STORM DRAIN
ABAND'D	ABANDONED	E/O	EAST OF	SD&AE	SAN DIEGO & ARIZONA EASTERN RAILROAD
AC	ASBESTOS CEMENT PIPE,	FG	FINISH GRADE	SDTI	SAN DIEGO TROLLEY INC.
	ASPHALT CONCRETE	FL	FLOW LINE	SE	SURFACE ELEVATION
AHD	AHEAD	HGL	HYDRAULIC GRADE LINE	SL	SURVEY LINE
AP	ANGLE POINT	HP	HIGH PRESSURE	SO	STUB OUT
APPROX	APPROXIMATELY	IE	INVERT ELEVATION	S/O	SOUTH OF
AVE	AVENUE	LT	LEFT	STA	STATION
BF	BACKFLOW	MTS	SAN DIEGO METROPOLITAN TRANSIT SYSTEM	SWR	SEWER
BTWN	BETWEEN			TC	TOP OF CURB
CATV	CABLE TV	MTD	MULTIPLE TELEPHONE DUCT	TEL	TELEPHONE
CFS	CUBIC FEET PER SECOND	N/O	NORTH OF	TF	TOP OF FOOTING
CL	CENTER LINE	ORG	ORIGINAL	TG	TOP OF GRATE
CMP	CORRUGATED METAL PIPE	OVRH	OVER HEAD	TW	TOP OF WALL
C.O.	CLEANOUT	PAYMT	PAVEMENT	UNK	UNKNOWN
CONC	CONCRETE	PI	POINT OF INTERSECTION	VC	VITRIFIED CLAY PIPE
CONT	CONTINUED	POC	POINT OF CONNECTION	WM	WATER METER
EB	ENCASED BURIED	PROP	PROPOSED	WTJ	WATER TIGHT JOINTS
EL, ELEV	ELEVATION	PVC	POLYVINYL CHLORIDE	WTR	WATER
ELEC	ELECTRIC	RT	RIGHT	W/O	WEST OF


619-291-0707  
rickengineering.com

5620 FRIARS ROAD  
SAN DIEGO, CA 92110

**RICK**

SAN DIEGO ORANGE RIVERSIDE SACRAMENTO SAN LUIS OBISPO  
SANTA CLARITA PHOENIX TUCSON LAS VEGAS DENVER

CONSTRUCTION CHANGE / ADDENDUM			
CHANGE	DATE	AFFECTED OR ADDED SHEET NUMBERS	APPROVAL NO.

**WARNING**  
  
 IF THIS BAR DOES NOT MEASURE 1' THEN DRAWING IS NOT TO SCALE.



MATERIALS	MANUFACTURER
PIPE CL 235 (WATER)	-
PIPE SDR 35 (SEWER)	-
GATE VALVES	-
FIRE HYDRANTS	-
SEWER MANHOLES	-
REHABILITATE SEWER MANHOLES	-
REHABILITATE SEWER MAIN	-

CONSULTANT	
RICK	5620 FRIARS ROAD, SAN DIEGO, CA 92110
619-291-0707	SREKANI@RICKENGINEERING.COM
XX/XX/XXXX	

## FIELD DATA

TOPOGRAPHY SOURCE: PRELIMINARY SURVEY AND FIELD NOTES FOR FAMOSA SLOUGH PREPARED BY O'DAY DATED 05/07/24

**BENCHMARK:**  
 EBP CAMULOS ST & VALETA ST  
 Elev. 71.776  
 MSL, BASED ON NGVD 29 FEET AS SHOWN IN THE CITY OF SAN DIEGO BENCH BOOK

**FIELD NOTES:**  
 BASIS OF BEARING / COORDINATES: THE BASIS OF BEARINGS FOR THIS PROJECT WAS DERIVED FROM A PREVIOUS STATIC GPS SURVEY, USING ROS 14492 NAD 83 FEET, ZONE 6 (EPOCH1991.35)

UTILIZING RTK/GPS FIELD PROCEDURES WITH A CITY OF SAN DIEGO GPS NETWORK BROADCAST OF 2019.20  
 CONSTRAINING TO A SINGLE POINT SOLUTION OF CONSTRAINING TO GPS PT. 214; ROTATING TO GPS PT. 236. I.E. N49° 37' 07" W

## SHEET INDEX

SHEET NO.	DISCIPLINE CODE	TITLE	LIMITS
GENERAL			
1	G01	COVER SHEET	
2	G02	DETAILS	
3	G03	KEY MAP	
CIVIL			
4	CO1	FAMOSA SLOUGH IMP & SD	MONTALVO ST TO EXISTING ALLEY
5	CO2	FAMOSA SLOUGH GRADING	MONTALVO ST TO EXISTING ALLEY
LANDSCAPE			
6	LO1	PLANTING NOTES	
7	LO2	PLANTING LEGEND	
8	LO3	PLANTING PLAN	
9	LO4	IRRIGATION NOTES AND LEGEND	
10	LO5	IRRIGATION PLAN	
11	LO6	IRRIGATION DETAILS	
12	LO7	IRRIGATION DETAILS	

## MONUMENTATION/SURVEY NOTES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR SURVEY MONUMENTS AND/OR VERTICAL CONTROL BENCHMARKS WHICH ARE DISTURBED OR DESTROYED BY CONSTRUCTION. A LICENSED LAND SURVEYOR OR LICENSED CIVIL ENGINEER AUTHORIZED TO PRACTICE LAND SURVEYING IN THE STATE OF CALIFORNIA SHALL FIELD LOCATE, REFERENCE, AND/OR PRESERVE ALL HISTORICAL OR CONTROLLING MONUMENTS PRIOR ANY EARTHWORK, DEMOLITION OR SURFACE IMPROVEMENTS. IF DESTROYED, A LICENSED LAND SURVEYOR SHALL REPLACE SUCH MONUMENT(S) WITH APPROPRIATE MONUMENTS. WHEN SETTING SURVEY MONUMENTS USED FOR RE-ESTABLISHMENT OF THE DISTURBED CONTROLLING SURVEY MONUMENTS AS REQUIRED BY SECTIONS 6730.2 AND 8771 OF THE BUSINESS AND PROFESSIONS CODE OF THE STATE OF CALIFORNIA. A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FILED BY THE LICENSED LAND SURVEYOR OR CIVIL ENGINEER AS REQUIRED BY THE PROFESSIONAL LAND SURVEYORS ACT (BUSINESS AND PROFESSIONS CODE SECTION 8771). IF ANY VERTICAL CONTROL IS TO BE DISTURBED OR DESTROYED, THE CITY OF SAN DIEGO FIELD SURVEY SECTION SHALL BE NOTIFIED IN WRITING AT LEAST 7 DAYS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF REPLACING AND VERTICAL CONTROL BENCHMARKS DESTROYED BY THE CONSTRUCTION.

## DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS. I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE CITY OF SAN DIEGO IS CONFINED TO A REVIEW ONLY AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR PROJECT DESIGN.

RICK ENGINEERING COMPANY  
 5620 FRIARS RD, SAN DIEGO, CA 92110  
 (619) 291-0707

KAREN VAN ERT  
 RCE 56991  
 EXP. 6/30/25

DATE:

## DISCIPLINE CODE

- G GENERAL
- C CIVIL
- L LANDSCAPE

## WORK TO BE DONE

CONSTRUCTION OF FAMOSA SLOUGH SLOPE DRAINAGE REPAIR AT MONTALVO STREET TO EXISTING ALLEY CONSISTS OF SLOPE REPAIR, APPROXIMATELY 300 LINEAR FEET OF STORM DRAIN AND STORM DRAIN IMPROVEMENTS INCLUDING 4 CLEANOUTS, 1 CATCH BASIN, INLET, AND 1 HEADWALL. THE PROPOSED SLOPE REPAIR AND GRADING ALSO REQUIRES THE CONSTRUCTION OF A 47 LINEAR FOOT RETAINING WALL. ALL GRADING AND STORM DRAIN IMPROVEMENTS AND ALL OTHER WORK AND APPURTENANCES TO BE CONSTRUCTED IN ACCORDANCE WITH THESE SPECIFICATIONS AND DRAWINGS NUMBERED 0101249-01-D THROUGH 0101249-10-D, CITY OF SAN DIEGO STANDARD DRAWINGS AND STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION "THE GREEN BOOK" AND "THE WHITE BOOK".

## LEGEND

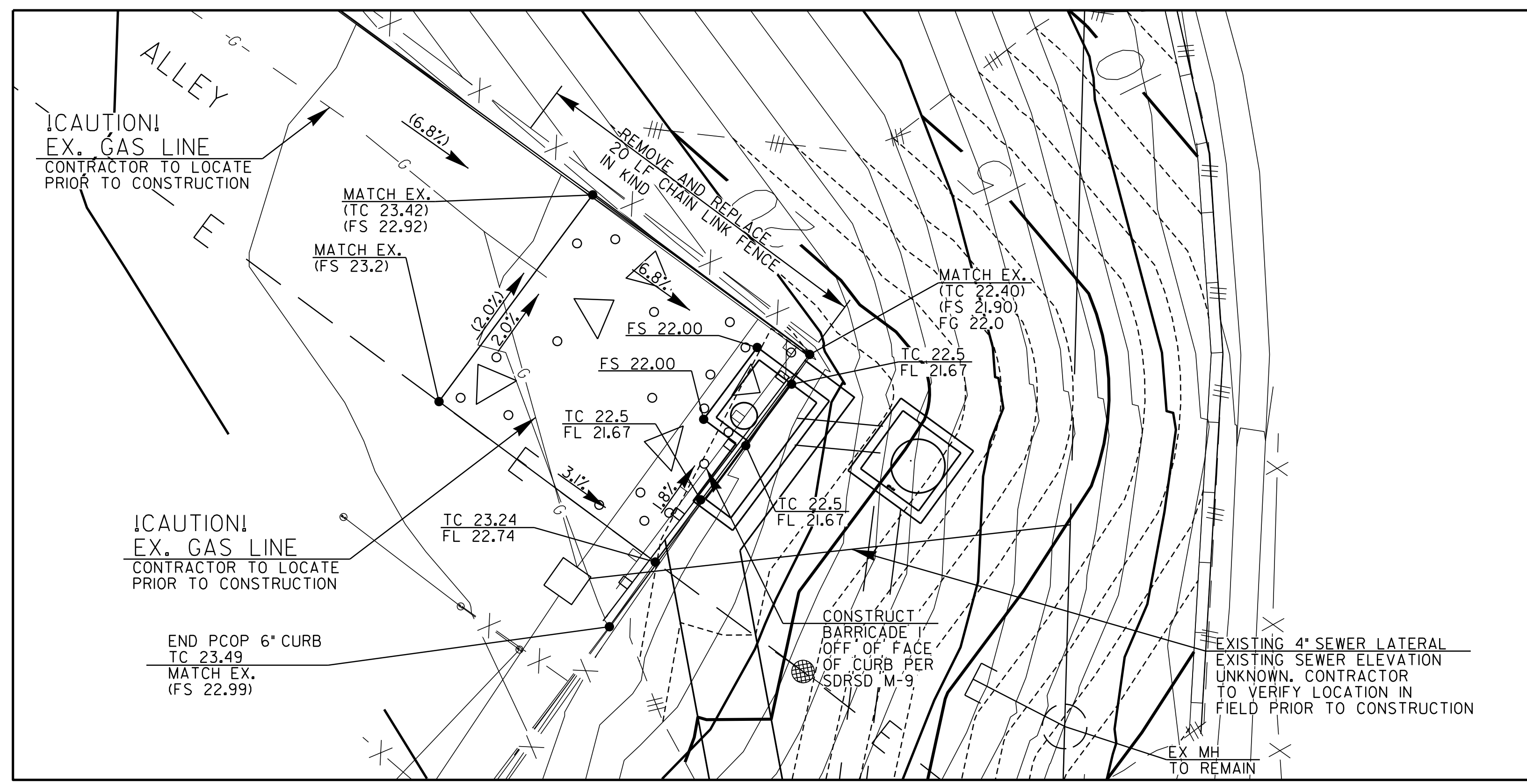
PROPOSED IMPROVEMENTS	STANDARD DRAWINGS	SYMBOL
DAYLIGHT LINE		
CONTOUR		
STORM DRAIN	D-61, SDD-110	
TYPE A C.O.	D-9, SDD-114	
TYPE F CATCH BASIN	SDD-119	
CURB INLET TYPE A	SDD-102, SDD-114, SDD-115, M-1	
RETAINING WALL	SDRS D C-04, SDC-103, SDG-105	
WING TYPE HEADWALLS	D-34	
CONCRETE SIDEWALK-REMOVE AND REPLACE	SDG-156	
6" CURB AND GUTTER TYPE G	SDG-151	
PROPERTY LINE/RIGHT OF WAY		
TEMPORARY CONSTRUCTION LIMITS		
<b>EXISTING IMPROVEMENTS</b>		
EX WATER MAIN & VALVES		
EX WATER METER		
EX SEWER MAIN & MANHOLES		
EX GROUND (PROFILE)		
EX PAVEMENT (PROFILE)		
EX MAJOR CONTOUR		
EX MINOR CONTOUR		
EX TREE/BUSH		
EX SIGN		
EX RETAINING WALL		
EX WOOD RETAINING WALL		
EX FENCE		
EX BARRICADE		
EX CURB AND GUTTER		
EX SURVEY MONUMENT		

## PLANS FOR THE CONSTRUCTION OF FAMOSA ALLEY SLOPE RESTORATION COVER SHEET

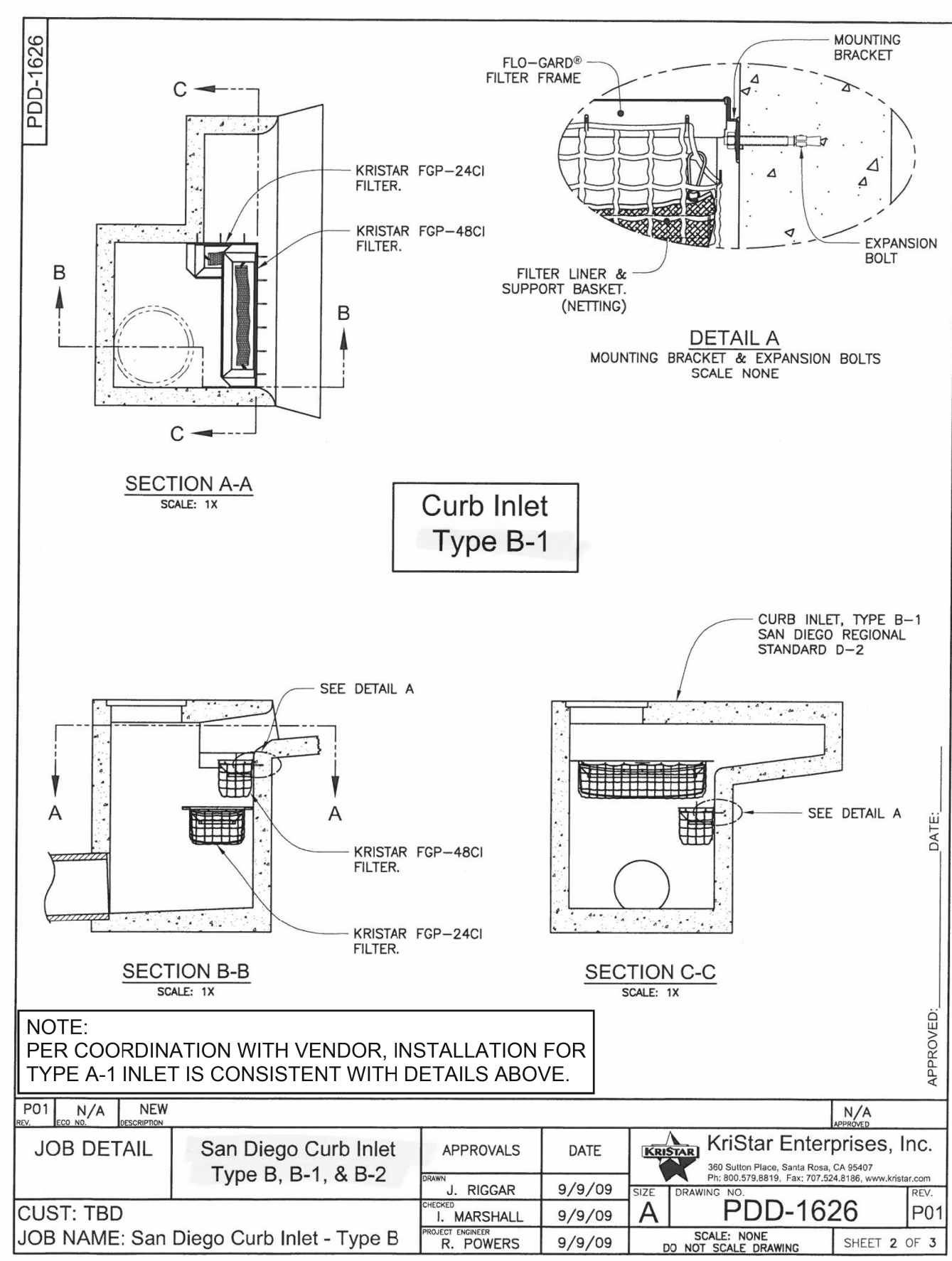
CITY OF SAN DIEGO, CALIFORNIA STORM WATER DEPARTMENT <b>SHEET 1 OF 12 SHEETS</b>		WATER WBS: B-22130
SUBMITTED BY: FOR CITY ENGINEER: KRISTOPHER ECKERT PRINT DOC NAME: KRISTOPHER ECKERT DATE: C13754 RCE#		ANTHONY SALVANI PROJECT MANAGER
DESCRIPTION: ORIGINAL		BRADEN CRANE PROJECT ENGINEER
BY: XX/XX	APPROVED: [Signature]	DATE: [Date]
FILED: [ ]	FILED: [ ]	FILED: [ ]
DRAWING NO. 210-1695 CCS27 COORDINATE 1850-6255 CCS83 COORDINATE		G01
CONTRACTOR: RICK ENGINEERING COMPANY INSPECTOR: [ ]		NTP DATE: [ ] NOC DATE: [ ] 0101249-01-D

100% SUBMITTAL

FAMOSA SLOUGH ALLEY SLOPE RESTORATION



ALLEY PRECISE GRADING DETAIL  
SCALE: 1"=5'



SPECIFIER CHART					
MODEL NO.	Curb Opening Width	Storage Capacity - Cu. Ft.	Filtered Flow Rate - GPM/GFS	Bypass Flow Rate - GPM/GFS	
FGP-24CI	24" (24")	305	338 / 7.5	2,513 / 5.6	
FGP-30CI	25" (30")	1,20	450 / 1.00	3,008 / 6.7	
FGP-36CI	3.0' (36")	1,50	563 / 1.25	3,547 / 7.9	
FGP-42CI	3.5' (42")	1,80	675 / 1.50	3,951 / 8.8	
FGP-48CI	4.0' (48")	2,10	788 / 1.76	4,445 / 9.9	
FGP-5.0CI	5.0' (60")	2,40	900 / 2.00	5,208 / 11.6	
FGP-6.0CI	6.0' (72")	3,05	1,106 / 2.51	6,186 / 13.8	
FGP-7.0CI	7.0' (84")	3,65	1,350 / 3.01	7,139 / 15.6	
FGP-8.0CI	8.0' (96")	4,25	1,576 / 3.51	8,082 / 18.0	
FGP-10.0CI	10.0' (120")	4,85	1,800 / 4.01	9,833 / 21.9	
FGP-12.0CI	12.0' (144")	6,10	2,252 / 5.02	11,764 / 26.2	
FGP-14.0CI	14.0' (168")	7,30	2,700 / 6.02	13,515 / 30.1	
FGP-16.0CI	16.0' (192")	8,55	3,152 / 7.02	15,446 / 34.4	
FGP-18.0CI	18.0' (216")	9,85	3,606 / 7.78	17,152 / 38.2	
FGP-21.0CI	21.0' (252")	10,95	4,050 / 9.02	19,091 / 44.2	
FGP-28.0CI	28.0' (336")	14,60	5,400 / 12.03	26,311 / 58.6	

NOTES:

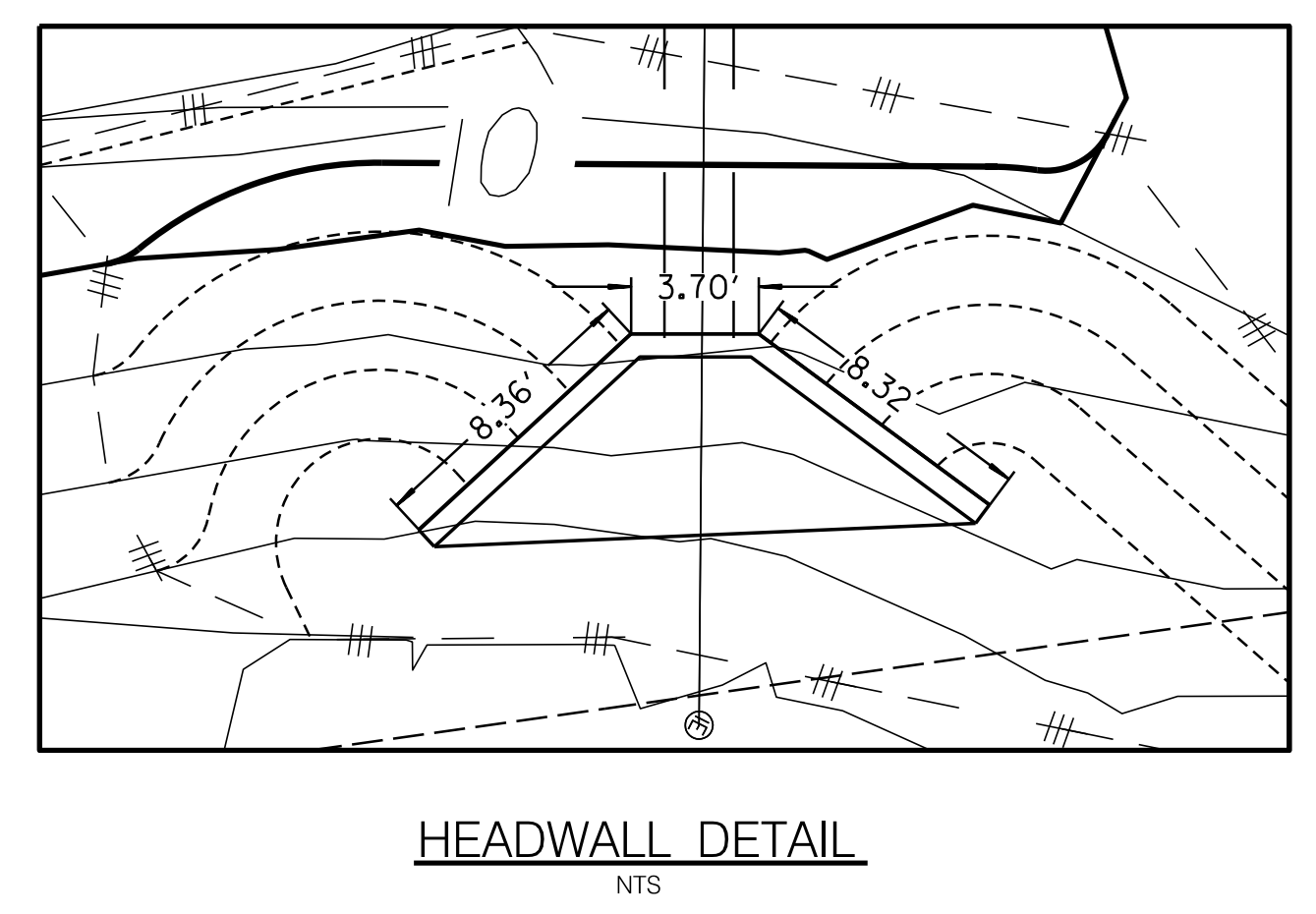
- FloGard®+PLUS filter inserts shall be installed across the entire width of curb opening. Storage capacity and clean flow rates are based on full width installation.
- Filter insert shall be attached to the catch basin with stainless steel expansion anchor bolts & washers (3/8" x 2-1/2" minimum length.) See Detail A.
- FloGard®+PLUS filter inserts are designed with a debris tap/energy dissipator for the retention of floatables and collected sediments.
- Filter support frame shall be constructed from stainless steel Type 304.
- Filter liner shall be constructed from durable polypropylene woven, monofilament, geotextile. Filter liner shall not allow the retention of water between storm events.
- Filter inserts are supplied with "dip-in" filter pouches utilizing FOSSIL ROCK™ filter medium for the collection and retention of petroleum hydrocarbons (oils & greases).
- FloGard®+PLUS filter inserts and FOSSIL ROCK™ filter medium pouches must be maintained in accordance with manufacturer recommendations.
- FloGard®+PLUS filter inserts are available in standard lengths of 24", 30", 36", 42" & 48" and may be installed in various length combinations (end to end) to fit length of noted catch basin.
- Clean flow rates are "calculated" based on liner flow rate of 140 gallons per minute per square foot of material; a factor of .50 has been applied to allow for anticipated sediment & debris loading. An additional safety factor of between .25 & .50 may be applied to allow for site specific sediment loading.
- Storage capacity reflects maximum solids collection prior to impending "initial" filtering bypass. The "ultimate" high-flow bypass will not become impeded due to maximum solids loading.

DETAIL A: MOUNTING BRACKET & EXPANSION BOLTS. SCALE: 6/1.

SECTION B-B: TOP VIEW. SCALE: 1/1.

SECTION A-A: SIDE VIEW. SCALE: 1/1.

Labels: FLO-GARD®+PLUS FILTER FRAME, MOUNTING BRACKET, EXPANSION BOLT, FILTER LINER & SUPPORT BASKET, RUBBER GASKETS, CURB INLET FILTER ASSEMBLY, CURB OPENING, CATCH BASIN, FOSSIL ROCK™ ABSORBENT POUCH, FLO-GARD® CURB INLET FILTER ASSEMBLY, CURB OPENING, FILTER LINER & SUPPORT BASKET, OUTLET.



HEADWALL DETAIL  
NTS

PLANS FOR THE CONSTRUCTION OF  
FAMOSA ALLEY SLOPE RESTORATION  
DETAILS

CITY OF SAN DIEGO, CALIFORNIA  
STORM WATER DEPARTMENT  
SHEET 2 OF 12 SHEETS

WATER WBS: B-22130

APPROVED: FOR CITY ENGINEER: KRISTOPHER ECKERT  
DATE: C13754  
PRINT DCE NAME: RCE#

PROJECT MANAGER: ANTHONY SALVANI  
PROJECT ENGINEER: BRADEN CRANE

210-1695  
CCS27 COORDINATE  
1850-6255  
CCS83 COORDINATE

CONTRACTOR: RICK  
INSPECTOR: \_\_\_\_\_

NTP DATE: \_\_\_\_\_  
NOC DATE: \_\_\_\_\_

0101249-02-D

DRAWING NO. G02

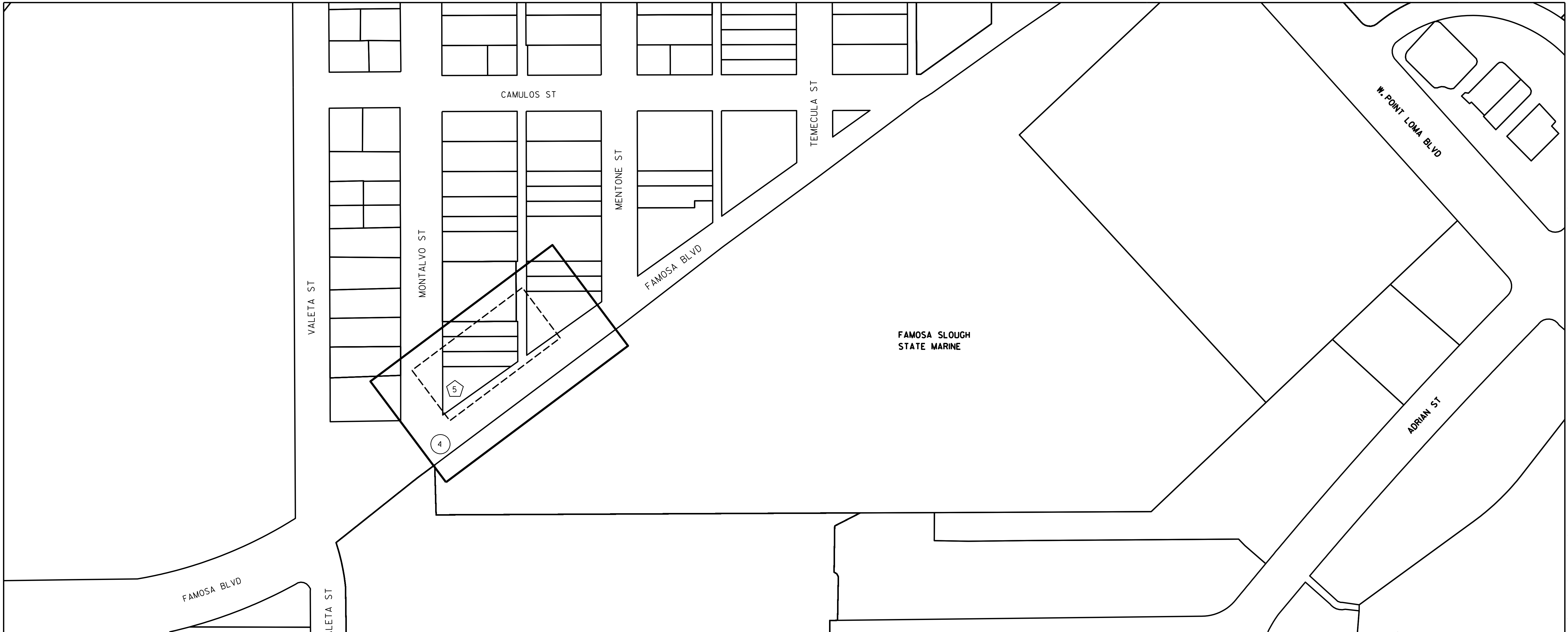
**RICK** 619-291-0707 rickengineering.com

5620 FRIARS ROAD SAN DIEGO, CA 92110

SAN DIEGO ORANGE RIVERSIDE SACRAMENTO SAN LUIS OBISPO  
SANTA CLARITA PHOENIX TUCSON LAS VEGAS DENVER

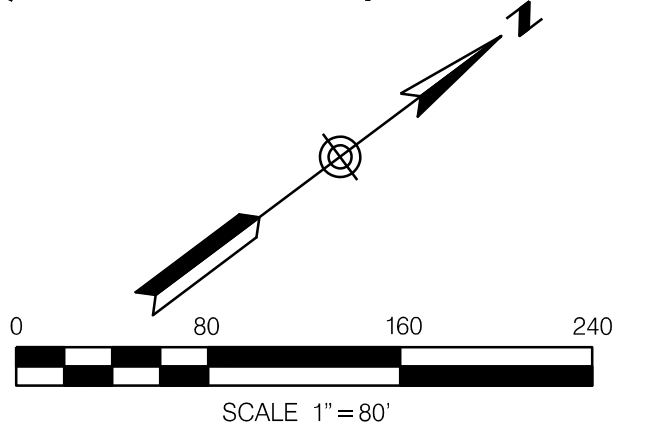
\*NOTE: OR APPROVED EQUAL

100% SUBMITTAL



LOCATION MAP  
NO SCALE

LEGEND	SYMBOL
PROPOSED IMPROVEMENT AND STORM DRAIN SHEET NUMBER	(#)
PROPOSED IMPROVEMENT & STORM DRAIN SHEET LIMITS	—
PROPOSED GRADING SHEET NUMBER	#
PROPOSED GRADING SHEET LIMITS	- - -
STREET ROW/PROPERTY LINE	—

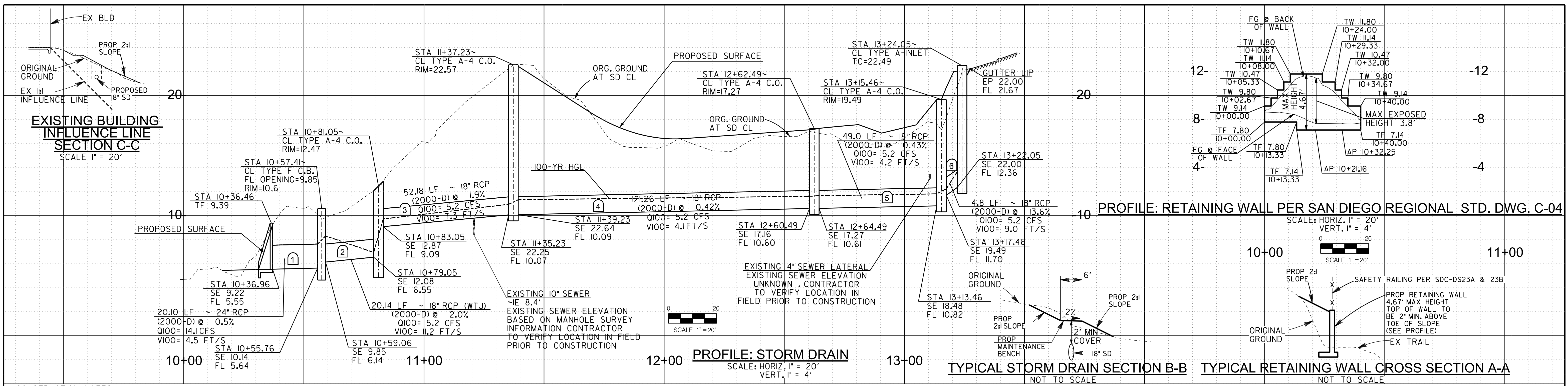


PLANS FOR THE CONSTRUCTION OF  
FAMOSA ALLEY SLOPE RESTORATION  
KEY MAP

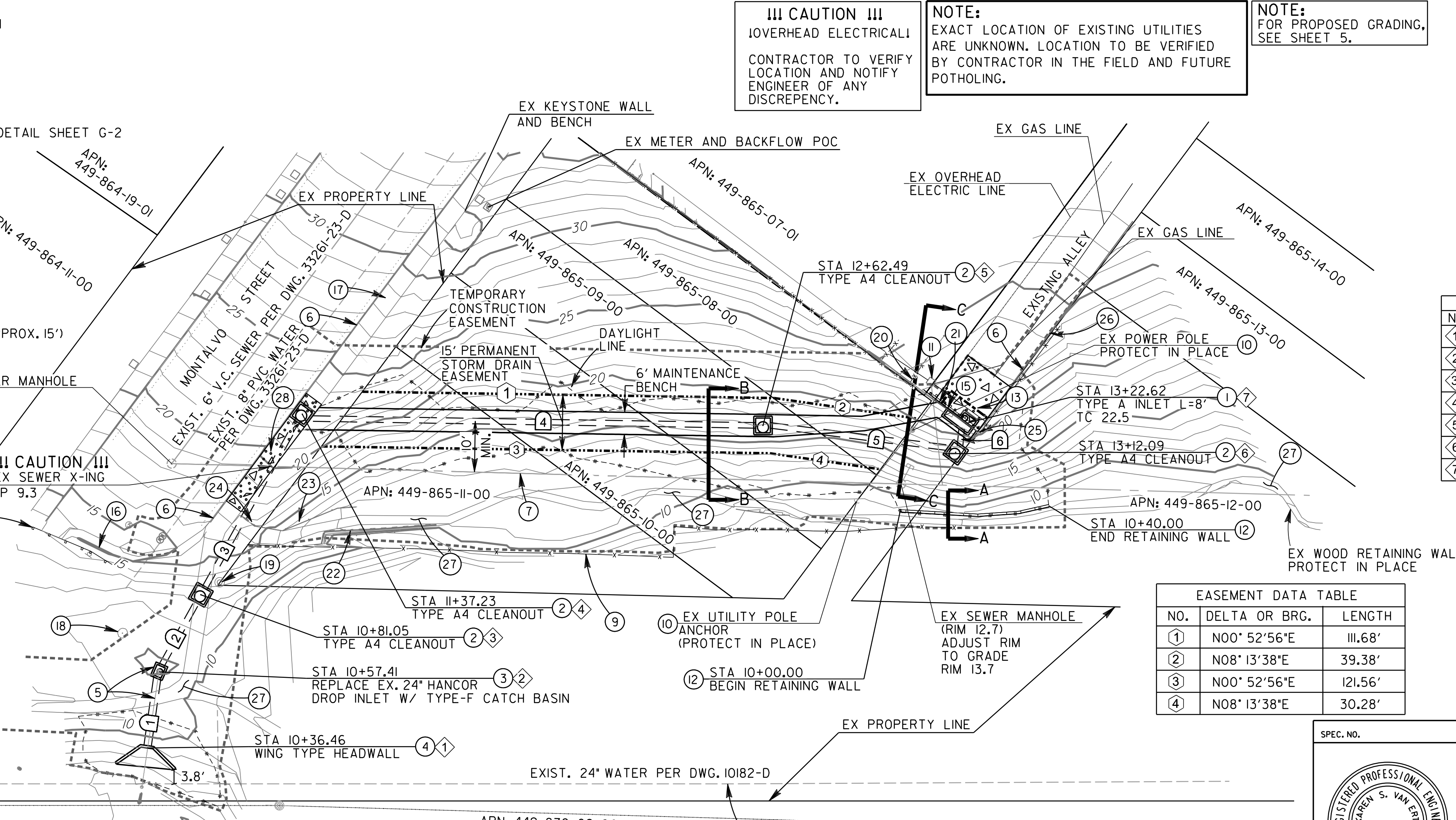
CITY OF SAN DIEGO, CALIFORNIA STORM WATER DEPARTMENT <b>SHEET 3 OF 12 SHEETS</b>		WATER WBS: B-22130
APPROVED:		SUBMITTED BY: <b>ANTHONY SALVANI</b> PROJECT MANAGER
FOR CITY ENGINEER <b>KRISTOPHER ECKERT</b> PRINT DCE NAME	DATE C13754 RCE#	CHECKED BY: <b>BRADEN CRANE</b> PROJECT ENGINEER
DESCRIPTION	BY	APPROVED
ORIGINAL	RICK	
CONTRACTOR		NTP DATE
INSPECTOR		NOC DATE
		DRAWING NO. <b>0101249-03-D</b>

**RICK** 619-291-0707 rickengineering.com 5620 FRIARS ROAD SAN DIEGO, CA 92110

SAN DIEGO ORANGE RIVERSIDE SACRAMENTO SAN LUIS OBISPO  
SANTA CLARITA PHOENIX TUCSON LAS VEGAS DENVER



- CONSTRUCTION NOTES**
- 1 CONSTRUCT TYPE-A INLET PER SDD-II5 WITH STORM DRAIN STENCILING PER COUNTY OF SAN DIEGO BMP DESIGN MANUAL 4.2.2 & WITH TRASH CAPTURE INSERT PER DETAIL SGEET G-2
  - 2 CONSTRUCT TYPE A-4 CLEANOUT PER D-09
  - 3 CONSTRUCT TYPE-F CATCH BASIN PER SDD-II9
  - 4 CONSTRUCT MODIFIED WING TYPE HEADWALL PER D-34 & DETAIL SHEET G-2
  - 5 REMOVE EXISTING 12\"/>



**STORM DRAIN DATA TABLE**

NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
1	N81° 58' 22\"/>			

\* USE WATER TIGHT JOINTS

**STORM DRAIN STRUCTURE DATA TABLE**

NO.	STA	NORTHING	EASTING	REMARKS
1	10+36.46	1853451.4036	6260547.6313	HEADWALL
2	10+57.41	1853454.7010	6260526.8310	TYPE F CATCH BASIN
3	10+81.05	1853466.0265	6260506.0853	A4 CLEANOUT
4	11+37.23	1853493.5254	6260457.1173	A4 CLEANOUT
5	12+62.49	1853618.3895	6260460.1629	A4 CLEANOUT
6	13+12.09	1853667.1378	6260467.8672	A4 CLEANOUT
7	13+22.62	1853673.2940	6260459.6420	TYPE A INLET

**EARTHWORK QUANTITIES**

	CUT	FILL
FILL		175 CY
CUT	15 CY	
IMPORT		160 CY

PLANS FOR THE CONSTRUCTION OF  
FAMOSA ALLEY SLOPE RESTORATION  
IMPROVEMENTS: MONTALVO ST TO EXISTING ALLEY

CITY OF SAN DIEGO, CALIFORNIA  
STORM WATER DEPARTMENT  
**SHEET 4 OF 12 SHEETS**

WATER WBS: B-22130

FOR CITY ENGINEER: KRISTOPHER ECKERT  
DATE: C13754  
PRINT JOB NAME: RCE#

PROJECT MANAGER: ANTHONY SALVANI  
PROJECT ENGINEER: BRADEN CRANE

DESCRIPTION: ORIGINAL  
BY: RICK  
APPROVED: [Signature]  
DATE: [Date]  
FILMED: [Date]

210-1695  
CCS27 COORDINATE  
1850-6255  
CCS83 COORDINATE

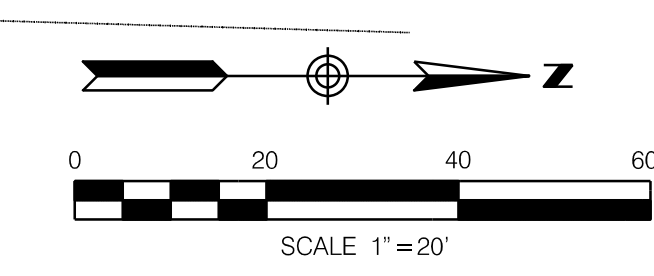
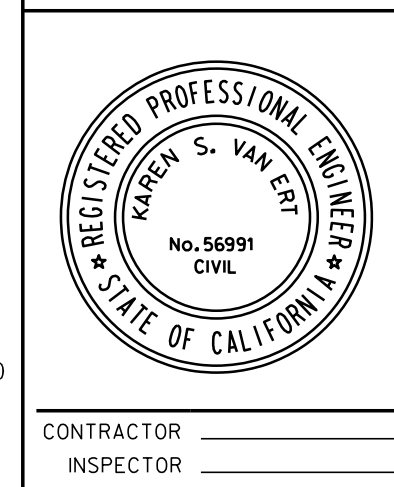
DRAWING NO. C01

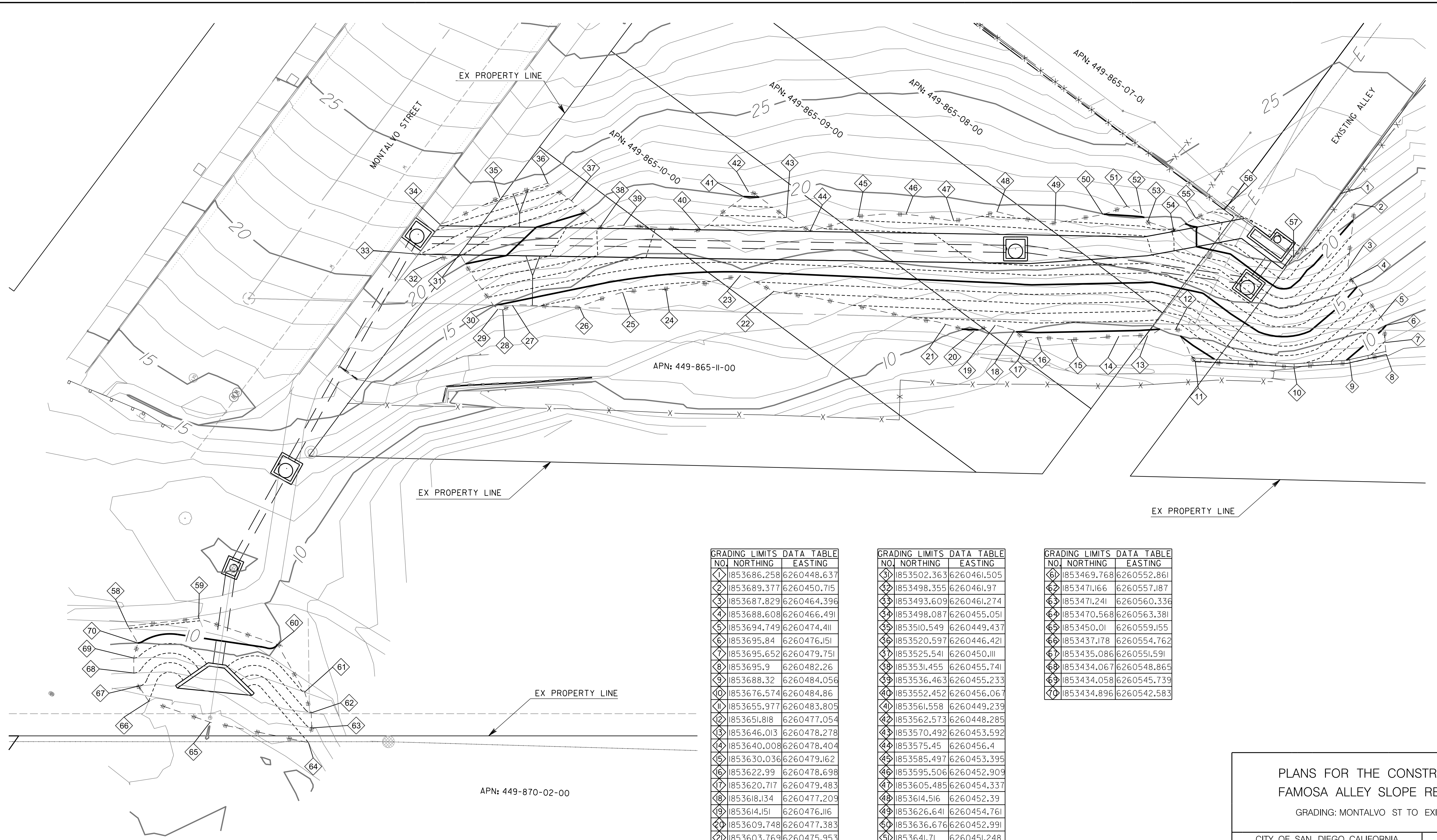
CONTRACTOR: [Name]  
INSPECTOR: [Name]  
NTP DATE: [Date]  
NOC DATE: [Date]

0101249-04-D

**RICK** 619-291-0707 rickengineering.com  
5620 FRIARS ROAD SAN DIEGO, CA 92110

SAN DIEGO ORANGE RIVERSIDE SACRAMENTO SAN LUIS OBISPO  
SANTA CLARITA PHOENIX TUCSON LAS VEGAS DENVER



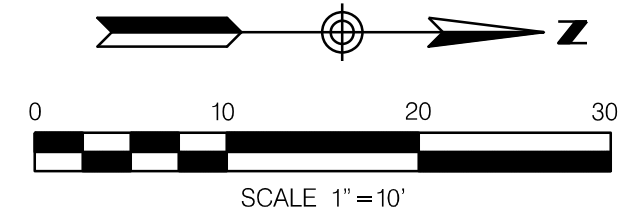


GRADING LIMITS DATA TABLE		
NO.	NORTHING	EASTING
1	1853686.258	6260448.637
2	1853689.377	6260450.715
3	1853687.829	6260464.396
4	1853688.608	6260466.491
5	1853694.749	6260474.411
6	1853695.84	6260476.151
7	1853695.652	6260479.751
8	1853695.9	6260482.26
9	1853688.32	6260484.056
10	1853676.574	6260484.86
11	1853655.977	6260483.805
12	1853651.818	6260477.054
13	1853646.013	6260478.278
14	1853640.008	6260478.404
15	1853630.036	6260479.162
16	1853622.99	6260478.698
17	1853620.717	6260479.483
18	1853618.134	6260477.209
19	1853614.151	6260476.116
20	1853609.748	6260477.383
21	1853603.769	6260475.953
22	1853567.872	6260469.042
23	1853560.923	6260465.663
24	1853545.259	6260468.539
25	1853536.247	6260469.25
26	1853527.199	6260472.254
27	1853513.202	6260471.966
28	1853511.187	6260472.925
29	1853510.19	6260472.754
30	1853509.203	6260471.872

GRADING LIMITS DATA TABLE		
NO.	NORTHING	EASTING
31	1853502.363	6260461.505
32	1853498.355	6260461.97
33	1853493.609	6260461.274
34	1853498.087	6260455.051
35	1853510.549	6260449.437
36	1853520.597	6260446.421
37	1853525.541	6260450.111
38	1853531.455	6260455.741
39	1853536.463	6260455.233
40	1853552.452	6260456.067
41	1853561.558	6260449.239
42	1853562.573	6260448.285
43	1853570.492	6260453.592
44	1853575.45	6260456.4
45	1853585.497	6260453.395
46	1853595.506	6260452.909
47	1853605.485	6260454.337
48	1853614.516	6260452.39
49	1853626.641	6260454.761
50	1853636.676	6260452.991
51	1853641.71	6260451.248
52	1853644.77	6260452.861
53	1853646.025	6260454.495
54	1853651.43	6260456.23
55	1853656.045	6260453.689
56	1853663.779	6260451.926
57	1853676.508	6260461.891
58	1853432.822	6260539.046
59	1853447.63	6260537.451
60	1853464.131	6260542.904

GRADING LIMITS DATA TABLE		
NO.	NORTHING	EASTING
61	1853469.768	6260552.861
62	1853471.166	6260557.187
63	1853471.241	6260560.336
64	1853470.568	6260563.381
65	1853450.01	6260559.155
66	1853437.178	6260554.762
67	1853435.086	6260551.591
68	1853434.067	6260548.865
69	1853434.058	6260545.739
70	1853434.896	6260542.583

**RICK** 619-291-0707 rickengineering.com  
 5620 FRIARS ROAD SAN DIEGO, CA 92110  
 SAN DIEGO ORANGE RIVERSIDE SACRAMENTO SAN LUIS OBISPO  
 SANTA CLARITA PHOENIX TUCSON LAS VEGAS DENVER



**PLANS FOR THE CONSTRUCTION OF  
 FAMOSA ALLEY SLOPE RESTORATION**  
 GRADING: MONTALVO ST TO EXISTING ALLEY

CITY OF SAN DIEGO, CALIFORNIA STORM WATER DEPARTMENT <b>SHEET 5 OF 12 SHEETS</b>		WATER WBS B-22130
FOR CITY ENGINEER <b>KRISTOPHER ECKERT</b> PRINT DCE NAME		DATE C13754 RCE#
SUBMITTED BY: <b>ANTHONY SALVANI</b> PROJECT MANAGER		
CHECKED BY: <b>BRADEN CRANE</b> PROJECT ENGINEER		
DESCRIPTION		BY
ORIGINAL	RICK	
APPROVED	DATE	FILED
DRAWING NO.		C02
CONTRACTOR		NTP DATE
INSPECTOR		NOC DATE

**0101249-05-D**

**100% SUBMITTAL**

## REVEGETATION NOTES

### GENERAL REVEGETATION NOTES:

- REVEGETATION OF THE PROJECT AREA SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE CITY OF SAN DIEGO WHITEBOOK, CITY LANDSCAPE STANDARDS, AND CITY SPECIFICATIONS UNDER THE DIRECTION OF THE RESIDENT ENGINEER (RE) AND PROJECT BIOLOGIST.
  - THE UPPER EIGHT INCHES (8") OF TOPSOIL FROM THE SITE SHALL BE SALVAGED, IF SOIL IS REMOVED, AND/OR AS DIRECTED BY THE RE AND PROJECT BIOLOGIST. PROJECT BIOLOGIST SHALL ENSURE THAT SOIL WILL BE STOCKPILED WITHIN THE LIMITS OF THE PROJECT, NO MORE THAN THREE FEET HIGH WHEN POSSIBLE. BMPs, SILT FENCING, AND/OR COVER SHALL BE INSTALLED AROUND THE STOCKPILE TO PREVENT EROSION AND AS A BARRIER TO PRECLUDE ANY UNAUTHORIZED ACCESS, OR AS RECOMMENDED BY THE PROJECT BIOLOGIST.
  - PRIOR TO REVEGETATION AND/OR PLANT INSTALLATION, THE PROJECT BIOLOGIST SHALL PROVIDE WRITTEN RECOMMENDATIONS TO THE RE AS TO THE SALVAGED SOIL RELOCATION, RE-COMPACT (E.G. MAX 75 PERCENT WITHIN THE TOP 8 INCHES), AND/OR PREPARATION FOR REVEGETATION PURPOSES TO BE DONE BY THE CONTRACTOR. IF TOPSOIL CANNOT BE SALVAGED, CLEAN AND WEED-FREE CLASS "A" TOPSOIL WILL BE PROVIDED AND INSTALLED BY CONTRACTOR.
  - ALL EROSION CONTROL MEASURES (I.E. JUTE NETTING, STRAW WADDLES, GRAVEL BAGS) WILL BE INSTALLED IMMEDIATELY FOLLOWING THE COMPLETION OF CONSTRUCTION ACTIVITIES. REVEGETATION ACTIVITIES SUCH AS INSTALLATION OF CONTAINER PLANTS, HYDROSEED APPLICATION, AND TEMPORARY IRRIGATION SHOULD BE CONDUCTED DURING THE RAINY SEASON (OCTOBER TO APRIL) FOLLOWING COMPLETION OF CONSTRUCTION ACTIVITIES.
  - THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING AND REPLACING ALL BMPs THROUGHOUT THE 120 DAY PEP AND 25 MONTH MAINTENANCE AND MONITORING PERIOD. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THE PROJECT AREA IS FREE OF EROSION THROUGHOUT THE 120 DAY PEP AND 25 MONTH MAINTENANCE AND MONITORING PERIOD, AND IS RESPONSIBLE FOR REPAIRING ALL SOIL EROSION.
  - ORANGE CONSTRUCTION FENCE (OR IF IN A WILDLIFE AREA, A YELLOW ROPE BARRIER AS DIRECTED BY THE RE) SHALL BE INSTALLED TO PREVENT UNAUTHORIZED ACCESS TO THE PROJECT AREA. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE FENCE/BARRIER THROUGHOUT THE DURATION OF THE PROJECT, FROM THE INSTALLATION OF ALL REVEGETATION PLANT MATERIALS THROUGH THE 120 DAY PEP, AND UNTIL THE END OF THE 25 MONTHS MAINTENANCE AND MONITORING PERIOD. FOLLOWING ACCEPTANCE OF THE 25 MONTHS MAINTENANCE AND MONITORING PERIOD BY THE CITY REPRESENTATIVE AND PROJECT BIOLOGIST THE CONTRACTOR SHALL REMOVE ALL FENCING.
  - CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND PROPERLY DISPOSING OF ALL TRASH AND/OR DEBRIS FROM THE PROJECT AREA THROUGHOUT THE DURATION OF THE PROJECT.
  - CONTRACTOR SHALL REMOVE ALL TEMPORARY IRRIGATION LINES, NON-BIODEGRADABLE (PLASTIC MESH) BMPs (E.G. SILT FENCING, STRAW WADDLES, GRAVEL BAGS, ETC.) AND ALL APPURTENANCES FOLLOWING ACCEPTANCE OF REVEGETATION BY THE RE AND THE CITY REPRESENTATIVE.
- WEED ABATEMENT**
- THE PROJECT BIOLOGIST SHALL INSPECT THE REVEGETATION SITE FOR WEED COVERAGE PRIOR TO PLANTING AND THROUGHOUT THE PROJECT. THE PROJECT AREA SHALL BE CLEAN AND FREE OF ALL WEED/INVASIVE PLANT MATERIAL PRIOR TO INSTALLATION OF CONTAINER PLANTS AND SEED.
  - INVASIVE PLANT SPECIES INCLUDING, BUT NOT LIMITED TO THOSE LISTED IN THE CITY'S LANDSCAPE STANDARDS AND CALIFORNIA INVASIVE PLANT COUNCIL INVASIVE PLANT INVENTORY DATABASE, ARE PROHIBITED AND SHALL BE ERADICATED AND REMOVED BY CONTRACTOR.
  - THE CONTRACTOR SHALL VERIFY WEEDS TO BE REMOVED WITH PROJECT BIOLOGIST PRIOR TO PROCEEDING.
  - THROUGHOUT THE DURATION OF THE REVEGETATION PROJECT, ALL AREAS WHERE WEED REMOVAL CREATES BARE AREAS IN EXCESS OF 25-FOOT X 25-FOOT (7.6 METERS X 7.6 METERS) SHALL BE REPLANTED AT THE DIRECTION OF THE PROJECT BIOLOGIST VIA THE ENGINEER.
  - PULLED WEEDS AND DEBRIS SHALL BE TRANSPORTED AND DISPOSED OF LEGALLY OFFSITE IMMEDIATELY TO PREVENT ANY SEED DISPERSAL ON THE SITE.
  - HERBICIDES SHALL BE APPLIED UNDER THE DIRECTION OF THE BIOLOGIST AND SHALL CONTAIN GREEN DYE.
  - ALL WEEDY SPECIES SHOULD BE CLEARED APPROXIMATELY TWO WEEKS FOLLOWING HERBICIDE APPLICATION.
  - WEED SEEDLINGS AND SPROUTS SHALL BE REMOVED BEFORE ATTAINING 6-INCHES IN HEIGHT AND/OR BEFORE PRODUCING SEED.
- TEMPORARY IRRIGATION [UNDER THE DIRECTION OF THE RE AND PROJECT BIOLOGIST, TEMPORARY IRRIGATION WILL BE APPLIED AS FOLLOWS]:**
- HYDROSEED AND/OR CONTAINER PLANTS SHALL BE PLANTED BETWEEN OCTOBER 1 AND FEBRUARY 15 DURING RAINY SEASON, TO GREATEST EXTENT POSSIBLE.
  - HYDROSEED AND/OR CONTAINER PLANTS PLANTED FEBRUARY 15 - OCTOBER 1 SHALL REQUIRE A COMPREHENSIVE IRRIGATION PLAN AND APPROVAL BY CITY REPRESENTATIVE AND PROJECT BIOLOGIST. CONTRACTOR SHALL PREPARE AND

- UNDER-WATERING, OR OTHER DEFICIENCY AT THE TIME OF DELIVERY WILL BE REJECTED.
  - CONTAINER PLANTS WILL BE PLACED BY THE CONTRACTOR FOR THE REVIEW AND APPROVAL BY THE PROJECT BIOLOGIST IN THE REVEGETATION AREAS. CONTAINER PLANTS SHALL BE ARRANGED BY THE CONTRACTOR IN A NATURALLY RANDOM MANNER, OBSERVING MINIMUM SPACING AS INDICATED IN THE PLANTING PALETTE.
- MAINTENANCE REQUIREMENTS:**
- REVEGETATION AREA SHALL BE MAINTAINED FOR A PERIOD OF NOT LESS THAN 25 MONTHS (TABLE 1) OR AS DETERMINED BY THE RE AND PROJECT BIOLOGIST. ALL REVEGETATED AREAS SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL FINAL APPROVAL BY THE CITY. THE MAINTENANCE PERIOD BEGINS ON THE FIRST DAY FOLLOWING ACCEPTANCE (AT THE END OF 120 DAY PEP) AND MAY BE EXTENDED AT THE DETERMINATION OF THE CITY REPRESENTATIVE AND RE.
  - THE 120 DAY PEP BEGINS FOLLOWING COMPLETION OF HYDROSEED APPLICATION AND PLANT INSTALLATION. THE COMPLETION OF THE 120 DAY PEP WILL BE DETERMINED BY THE CITY REPRESENTATIVE IN CONSULTATION WITH THE PROJECT BIOLOGIST. ONCE IT HAS BEEN DETERMINED THAT THE 120 PEP HAS BEEN SUCCESSFULLY COMPLETED, THE 25 MONTH MAINTENANCE MONITORING PERIOD WILL BEGIN. COMPLETION OF THE 25 MONTH MAINTENANCE AND MONITORING PERIOD WILL BE DETERMINED BY THE CITY REPRESENTATIVE IN CONSULTATION WITH THE PROJECT BIOLOGIST.
  - PRIOR TO FINAL APPROVAL, THE CITY REPRESENTATIVE MAY REQUIRE CORRECTIVE ACTION INCLUDING BUT NOT LIMITED TO WEED ERADICATION AND REMOVAL, REPLANTING, THE PROVISION OR MODIFICATION OR IRRIGATION SYSTEMS, AND THE REPAIR OF ANY SOIL EROSION OR SLOPE SLIPPAGE, IN CONSULTATION WITH THE PROJECT BIOLOGIST.
  - WEEDING, HERBICIDE, AND/OR PESTICIDE APPLICATION SHALL BE DONE REGULARLY BY CONTRACTOR. WEEDING SHALL BE DONE AT A MINIMUM OF BI-WEEKLY UNTIL THE END OF THE 120 DAY PEP, AND MONTHLY THROUGHOUT THE 25 MONTHS OF MAINTENANCE. WEEDS SHALL BE PROPERLY DISPOSED OF OFFSITE. CONTRACTOR SHALL OBTAIN APPROVAL FROM CITY REPRESENTATIVE AND PROJECT BIOLOGIST PRIOR TO HERBICIDE/PESTICIDE APPLICATION, AND SHALL APPLY HERBICIDE/PESTICIDE PER MANUFACTURER'S RECOMMENDATION AND ANY STATE OR CALIFORNIA GUIDELINES. CONTRACTOR MUST POSSESS A VALID STATE PESTICIDE AND/OR HERBICIDE LICENSE AT ALL TIMES.
  - CONTRACTOR SHALL CONTROL WEEDS AS IDENTIFIED BY THE PROJECT BIOLOGIST SUCH THAT NO WEED COVER EXCEEDS 5% OF THE PROJECT SITE, BEFORE THEY EXCEED TWELVE INCHES (6") IN HEIGHT, AND BEFORE THEY SET SEED. AREAS WHERE WEEDING CREATES IN EXCESS OF 25 SQUARE FEET OF BARE SOIL SHALL BE REPLANTED AND MAINTAINED BY CONTRACTOR.
  - IN AREAS WHERE NON-NATIVE GRASSLANDS (NNG) HAVE BEEN DISTURBED, ALL COVERAGE REQUIREMENTS CAN BE ACHIEVED BY ESTABLISHMENT OF NATIVE OR NON-NATIVE GRASSES OR FORBS THAT 1) ARE NOT LISTED IN THE CITY OF SAN DIEGO LANDSCAPE STANDARDS AS INVASIVE PLANT SPECIES AND 2) ARE NOT RATED BY THE CALIFORNIA INVASIVE PLANT COUNCIL (CAL-IPC) AS HIGHLY INVASIVE.
- BRUSH MANAGEMENT ZONE REVEGETATION REQUIREMENTS**
- THE MAXIMUM PERFORMANCE STANDARD FOR NATIVE SHRUB COVER WILL NOT EXCEED FIFTY (50) PERCENT AFTER 2 YEARS.
  - FIFTY PERCENT OF THE REVEGETATED AREAS WITHIN 100 FEET OF STRUCTURES SHALL BE PLANTED WITH MATERIAL THAT DOES NOT GROW TALLER THAN 24 INCHES. THE REMAINING PLANTING AREA MAY BE PLANTED WITH TALLER MATERIAL, BUT THIS MATERIAL SHALL BE MAINTAINED IN ACCORDANCE WITH THE REQUIREMENTS FOR EXISTING PLANT MATERIAL IN ZONE TWO, PER SDMC 142.0412(H)(5)(D).
  - ONLY LOW-FLOW, LOW-GALLONAGE SPRAY HEADS MAY BE USED IN ZONE TWO.
  - BRUSH MANAGEMENT ZONES SHALL BE MAINTAINED AND CONSISTENT WITH SECTION 142.0412, BRUSH MANAGEMENT REGULATION, OF THE LAND DEVELOPMENT CODE AND SECTION III OF THE LAND DEVELOPMENT MANUAL.

### SEED MIXES:

- THE SEED MIX SHOWN IN THE TABLE(S) SHALL BE APPLIED IN ALL NON-HARDSCAPED AREAS DISTURBED BY THE PROJECT. THE SEED SHALL BE INSTALLED VIA HYDROSEED METHODS, UNLESS OTHERWISE DIRECTED BY THE PROJECT BIOLOGIST. SEED APPLIED BETWEEN NOVEMBER - MARCH SHALL BE COVERED BY CONTRACTOR WITH SUITABLE BIODEGRADABLE COVER AS APPROVED BY THE PROJECT BIOLOGIST.
- ALL SEEDS SHALL MEET THE MINIMUM % PURE LIVE SEED (PLS) AS NOTED IN TABLES. IF MINIMUM % PLS COUNT CANNOT BE MET CONTRACTOR TO COORDINATE AND OBTAIN WRITTEN APPROVAL FROM THE PROJECT BIOLOGIST FOR ALTERNATIVE COMPLIANCE.
- ALL SEEDS SHALL ORIGINATE FROM SAN DIEGO COUNTY AND NO MORE THAN 25-MILES FROM THE COAST. CONTRACTOR SHALL RETAIN AND SUBMIT ALL SEED TAGS FOR SEED PRODUCTS TO BE USED TO THE RE AND PROJECT BIOLOGIST PRIOR TO APPLICATION. IF SEED CANNOT BE PROCURED THAT MEETS THIS CRITERIA, THE CONTRACTOR SHALL PROVIDE EVIDENCE THAT THE SEED IS NOT AVAILABLE AND NOTIFY THE CITY REPRESENTATIVE AND THE PROJECT BIOLOGIST FOR ALTERNATIVE COMPLIANCE.

### CONTAINER PLANT PROCEDURES:

- PLANTING PITS FOR CONTAINER PLANTS SHALL BE APPROXIMATELY 1.5 TIMES AS DEEP AND 3 TIMES AS WIDE AS THE CONTAINER SIZE. ALL PLANTING PITS SHALL BE FILLED WITH WATER AND ALLOWED TO COMPLETELY DRAIN PRIOR TO PLANT INSTALLATION. AFTER THE PLANTING PITS HAVE BEEN PRESOAKED, THE CONTRACTOR SHALL BACKFILL THE HOLE TO THE APPROPRIATE PLANTING DEPTH AND SET PLANTS IN THE CENTER OF THE HOLE, BACKFILL THE HOLE, AND THOROUGHLY APPLY MORE WATER.
- A WATERING BASIN, APPROXIMATELY TWICE THE SIZE OF THE PLANT CANOPY SHALL BE CREATED. THE CONTRACTOR SHALL APPLY 2-INCHES OF WEED FREE MULCH INSIDE THE WATERING BASIN.
- STAKES SHALL BE INSTALLED ON ALL TREES FOR STABILIZATION.
- ALL PLANTS SHALL HAVE ORIGINATED FROM SEED OR CUTTINGS OBTAINED FROM COASTAL SAN DIEGO COUNTY WITHIN 25 MILES OF THE COASTLINE. ALL PLANTS SHALL HAVE BEEN GROWN UNDER CLIMATIC AND IN SOIL CONDITIONS COMPARABLE TO THOSE OF THE PROJECT SITE. SUBSTITUTIONS SHALL NOT BE PERMITTED WITHOUT PRIOR AUTHORIZATION FROM THE CITY REPRESENTATIVE AND/OR PROJECT BIOLOGIST. CONTAINER PLANTS SHALL BE PROCURED FROM A NURSERY QUALIFIED TO PROPAGATE AND CARE FOR PLANT SPECIES.
- CONTAINER PLANT MATERIAL MUST BE DELIVERED TO THE PROJECT SITE AT THE APPROPRIATE TIME, IN A HEALTHY AND VIGOROUS CONDITION AND LABELED CLEARLY. THE PROJECT BIOLOGIST WILL REJECT PLANT MATERIAL DELIVERED PRIOR TO ITS PLANTING DATE. SPECIMENS SHOWING EVIDENCE OF DISEASE, MISHANDLING, DEFECTS OR DAMAGE, OVER OR

## PLANTING NOTES

- THE PLANTING PLAN IS DIAGRAMMATIC. PLANT SYMBOLS TAKE PRECEDENCE OVER PLANT QUANTITIES SPECIFIED. FINAL LOCATION OF ALL PLANT MATERIAL SHALL BE SPOTTED BY OWNER'S AUTHORIZED REPRESENTATIVE, PRIOR TO PLANTING.
- QUANTITIES SHOWN ON THE PLANTING PLAN ARE FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF DISCREPANCIES BETWEEN QUANTITIES AND SYMBOLS SHOWN.
- PRIOR TO PLANTING, IRRIGATION SYSTEM SHALL BE FULLY OPERATIONAL AND ALL PLANTING AREAS SHALL BE THOROUGHLY SOAKED.
- NOTIFY LANDSCAPE ARCHITECT OF ALL LANDSCAPE INSPECTIONS. PROVIDE 48 HOURS NOTICE PRIOR TO EACH INSPECTION.
- WHERE IN-THE-FIELD CONFLICTS ARISE BETWEEN PLANT AND UTILITY LOCATIONS, THE CONTRACTOR SHALL MAKE THE NECESSARY ADJUSTMENTS TO PLANT PLACEMENT WITH THE APPROVAL OF THE LANDSCAPE ARCHITECT IN ORDER TO ACHIEVE OPTIMUM DESIGN INTENT.
- GRADES SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF PLANT MATERIALS. PERFORM FINE GRADING IN ALL PLANTING AREAS AND COORDINATE FINISH GRADE TO ALLOW MULCH DEPTH AS INDICATED IN SPECIFICATIONS. PROVIDE SURVEYED STAKING OF SLOPES, PER DRAWINGS. FOR FIELD REVIEW BY LANDSCAPE ARCHITECT.
- DIMENSIONS FOR PLACEMENT AND LAYOUT OF PLANT MATERIALS SHOWN ON DRAWINGS ARE APPROXIMATE. PLANT CENTERS, AS DRAWN, TAKE PRECEDENCE OVER ANY NOTED SPACING. LAYOUT OF PLANT MATERIALS SHALL BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF PLANT MATERIALS IN CONFORMANCE WITH SPECIFICATIONS. CONTRACTOR TO PROVIDE PLANT LAYOUT MARKING OF PLANT CENTERS FOR FIELD REVIEW BY LANDSCAPE ARCHITECT.
- CONTRACTOR SHALL ORDER PLANT MATERIAL TO ENSURE ADEQUATE QUANTITIES AND SIZES OF PLANT MATERIAL WILL BE AVAILABLE, IN CONFORMANCE WITH DRAWINGS AND SPECIFICATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE PLANT ESTABLISHMENT OF THE ENTIRE SITE FOR THE DURATION OF THE CONTRACT AND PLANT ESTABLISHMENT PERIOD, AS INDICATED IN SPECIFICATIONS. THIS INCLUDES, BUT IS NOT LIMITED TO ALL WATERING, MOWING, EDGING, TRIMMING, PRUNING, WEEDING, FERTILIZING, LEAF/DEBRIS REMOVAL AND MAINTENANCE OF BOTH EXISTING AND NEW PLANT MATERIAL IN HEALTHY GROWING CONDITIONS AND NEAT AND ATTRACTIVE IN APPEARANCE. REPLACE ALL DEAD AND/OR DAMAGED PLANT MATERIAL ON A WEEKLY BASIS.
- CONTRACTOR SHALL CONFIRM SOURCE OF ALL PLANT MATERIAL AND PROVIDE REQUIRED PLANT MATERIAL SUBMITTALS. ALL PLANT MATERIAL OF SAME SPECIES SHALL BE FROM A SINGLE SOURCE.
- WOOD MULCH SHALL BE 3" THICK SPREAD UNIFORMLY ON ALL PLANTING AREAS. REFER TO WHITE BOOK SECTION 800 FOR WOOD MULCH TYPE.

TABLE 1: SUMMARY AND SCHEDULE FOR MAINTENANCE, MONITORING AND REPORTING FOR PROJECT

PERIOD	CONTRACTOR RESPONSIBILITIES	PROJECT BIOLOGIST RESPONSIBILITIES	REPORTING AND SUBMITTALS
Installation	Contractor is responsible for preparation of site, implementation of the revegetation plan, and installation of container plants and seed as shown on the plans or as directed by the Project Biologist.	Project Biologist is responsible for monitoring installation, as needed, to ensure successful installation and implementation of the revegetation plan.	Project Biologist to submit memo to City Representative within 7 days of installation completion. Contractor to notify MMC.
120 Day PEP	Contractor is responsible for all necessary maintenance (watering, weed abatement, replacement planting, maintain BMP's) to ensure establishment of vegetation and site remains erosion free. Maintenance activities shall occur as-needed, but not less than bi-weekly.	Project Biologist is responsible for monitoring revegetation and providing maintenance recommendations. Monitoring shall occur bi-weekly for the first two months, then monthly thereafter.	Contractor to notify MMC prior to the completion of the 120 Day PEP for site inspection. Project Biologist to submit monitoring memo to City Representative following each site visit and completion memo within 7 days of completion.
25 Month Maintenance and Monitoring (Diegan Coastal Sage Scrub)	Contractor is responsible for all necessary maintenance (watering, weed abatement, replacement planting, maintain BMP's) to meet success criteria. Maintenance activities shall occur as-needed, but not less than monthly.	Project Biologist is responsible for monitoring revegetation and providing maintenance recommendations. Monitoring shall occur quarterly.	Project Biologist to submit quarterly monitoring memo to City Representative. Prior to completion of the 25 Month, Contractor to contact MMC for final site visit. Project Biologist to submit final memo within 14 days of completion of the 25 Month monitoring period.
60 Month Maintenance and Monitoring (Southern Willow Scrub, Mulefat, and Southern Coastal Saltmarsh)	Contractor is responsible for all necessary maintenance (watering, weed abatement, replacement planting, maintain BMP's) to meet success criteria. Maintenance activities shall occur as-needed, but not less than monthly.	Project Biologist is responsible for monitoring revegetation and providing maintenance recommendations. Monitoring shall occur quarterly.	Project Biologist to submit quarterly monitoring memo to City Representative. Prior to completion of the 60 Month, Contractor to contact MMC for final site visit. Project Biologist to submit final memo within 14 days of completion of the 60 Month monitoring period.

### Notes:

- If success criteria are not met, the Maintenance and Monitoring (M&M) Program will be extended as required. Maintenance and monitoring with reporting shall continue as needed.

## LANDSCAPE NOTES

- ALL LANDSCAPE AND IRRIGATION SHALL CONFORM TO THE STANDARDS OF THE CITY-WIDE LANDSCAPE REGULATIONS AND THE CITY OF SAN DIEGO LAND DEVELOPMENT MANUAL LANDSCAPE STANDARDS AND ALL OTHER LANDSCAPE RELATED CITY AND REGIONAL STANDARDS.
- PLANTING, PER SECTION 800 OF THE WHITEBOOK STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
- PROTECT IN PLACE EXISTING TREES AND RESIDENTIAL LANDSCAPES ADJACENT TO WORK AREAS. IF DAMAGED, REPLACE IN KIND. SEE CIVIL PLANS FOR ALL EXISTING TREES AND PALMS TO BE REMOVED OR TO BE PROTECTED IN PLACE. THE FOLLOWING PROTECTION MEASURES WILL BE PROVIDED BY THE CONTRACTOR.
- SEE CIVIL PLANS FOR ALL UTILITY, CONSTRUCTION ACCESS AND SURFACE IMPROVEMENTS.
- SEE CIVIL PLANS FOR ALL VERTICAL AND HORIZONTAL CONTROL.
- PROTECT IN PLACE SURVEY MONUMENTS PER CIVIL PLANS.

## MINIMUM TREE/LARGE SHRUB SEPARATION DISTANCE

PER SECTION 142.0409. TABLE 142-04E OF THE LANDSCAPE REGULATIONS:

IMPROVEMENT	MIN. DISTANCE TO STREET TREE
TRAFFIC SIGNALS (STOP SIGN)	20'
UNDERGROUND UTILITY LINES	5' (10' FOR SEWER)
ABOVE GROUND UTILITY STRUCTURES	10'
DRIVEWAYS (ENTRIES)	10'
10' (5' ON RESIDENTIAL STREETS RATED AT 25 MPH OR LOWER)	
INTERSECTIONS (INTERSECTING CURB LINES OF TWO STREETS)	25'

## PLANS FOR THE CONSTRUCTION OF FAMOSA ALLEY SLOPE RESTORATION

### PLANTING NOTES

SPEC. NO.		CITY OF SAN DIEGO, CALIFORNIA STORM WATER DEPARTMENT SHEET 6 OF 12 SHEETS		WATER WBS B-22130	
APPROVED:		DATE		SUBMITTED BY:	
FOR CITY ENGINEER KRISTOPHER ECKERT PRINT DCE NAME		C73754 RCE#		ANTHONY SALVANI PROJECT MANAGER	
DESCRIPTION		BY	APPROVED	DATE	FILMED
ORIGINAL		RICK			
DRAWING NO.		210-1695		CCS27 COORDINATE	
		1850-6255		CCS83 COORDINATE	
CONTRACTOR		NTP DATE		DRAWING NO.	
INSPECTOR		NOC DATE		0101249-06-D	

# 100% SUBMITTAL

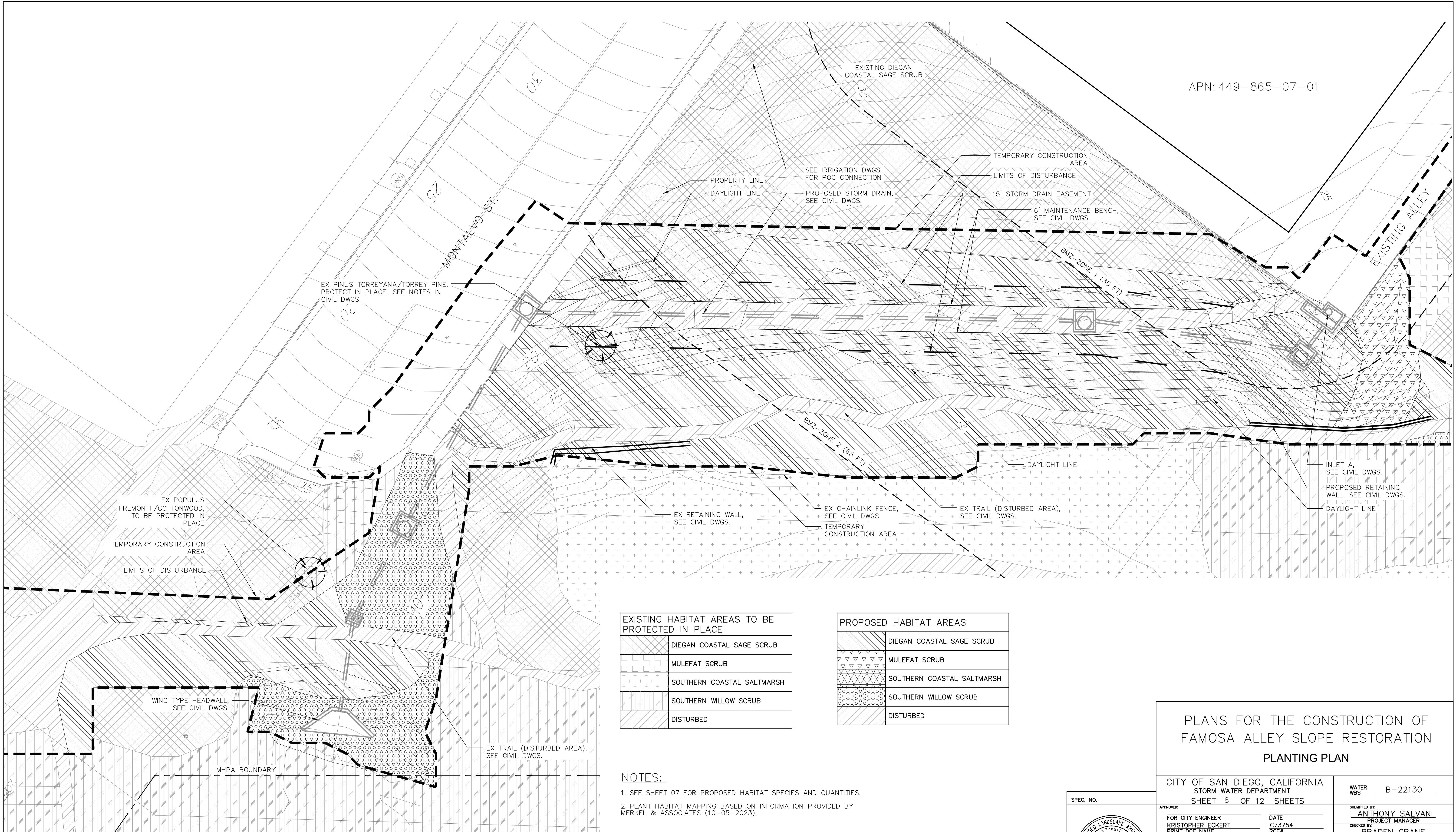
**619-291-0707**  
**rickengineering.com**  
**5620 FRIARS ROAD**  
**SAN DIEGO, CA 92110**

**RICK** SAN DIEGO ORANGE RIVERSIDE SACRAMENTO SAN LUIS OBISPO  
SANTA CLARITA PHOENIX TUCSON LAS VEGAS DENVER

FAMOSA SLOUGH ALLEY SLOPE RESTORATION



APN: 449-865-07-01



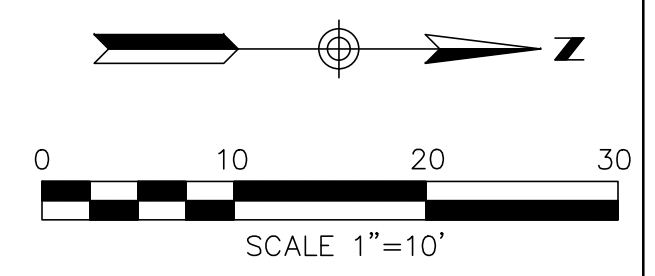
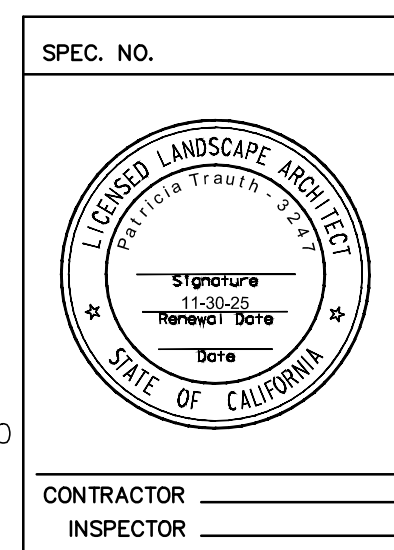
EXISTING HABITAT AREAS TO BE PROTECTED IN PLACE	
	DIEGAN COASTAL SAGE SCRUB
	MULEFAT SCRUB
	SOUTHERN COASTAL SALTMARSH
	SOUTHERN WILLOW SCRUB
	DISTURBED

PROPOSED HABITAT AREAS	
	DIEGAN COASTAL SAGE SCRUB
	MULEFAT SCRUB
	SOUTHERN COASTAL SALTMARSH
	SOUTHERN WILLOW SCRUB
	DISTURBED

- NOTES:**
- SEE SHEET 07 FOR PROPOSED HABITAT SPECIES AND QUANTITIES.
  - PLANT HABITAT MAPPING BASED ON INFORMATION PROVIDED BY MERKEL & ASSOCIATES (10-05-2023).

PLANS FOR THE CONSTRUCTION OF  
FAMOSA ALLEY SLOPE RESTORATION  
PLANTING PLAN

CITY OF SAN DIEGO, CALIFORNIA STORM WATER DEPARTMENT SHEET 8 OF 12 SHEETS		WATER WBS B-22130
FOR CITY ENGINEER KRISTOPHER ECKERT PRINT DCE NAME		DATE C23754 RCE#
SUBMITTED BY ANTHONY SALVANI PROJECT MANAGER		CHECKED BY BRADEN CRANE PROJECT ENGINEER
DESCRIPTION		BY
ORIGINAL	RICK	
APPROVED		DATE
FILMED		
COORDINATE		
CCS27 COORDINATE		210-1695
CCS83 COORDINATE		1850-6255
DRAWING NO.		L03
CONTRACTOR		NTP DATE
INSPECTOR		NOC DATE



**RICK** 619-291-0707 rickengineering.com 5620 FRIARS ROAD SAN DIEGO, CA 92110

SAN DIEGO ORANGE RIVERSIDE SACRAMENTO SAN LUIS OBISPO  
SANTA CLARITA PHOENIX TUCSON LAS VEGAS DENVER

100% SUBMITTAL

C:\RICK\Projects\151660\151660\_Storm\151660\_Storm\151660\_Landscape\151660-Landscape.dwg, 9/24/2025 3:28 PM

**NOZZLE LEGEND (POTABLE WATER)**

SYMBOL	Q	H	F	MANF.	MODEL NO. / DESCRIPTION	GPM Q	GPM H	GPM F	PRECIP	PSI	RADIUS FT.	DETAIL
①	②	③	HUNTER	SHRUB ROTOR HEADPROS-00-PRS40-CV W/ MP800SR / SHRUB ROTOR HEAD, RISER HEIGHT 12" WITH CHECKVALVE(HC50F50M) (ADJUST HEIGHT OF RISER AS VEGETATION DICTATES)	.16	.32	.56	.8	40	8	SDI-101 (MOD)	
④	⑤	⑥	HUNTER	SHRUB ROTOR HEADPROS-00-PRS40-CV W/ MP800SR / SHRUB ROTOR HEAD, RISER HEIGHT 12" WITH CHECKVALVE(HC50F50M) (ADJUST HEIGHT OF RISER AS VEGETATION DICTATES)	.21	.42	.84	.45	40	10	SDI-101 (MOD)	
⑦	⑧	⑨	HUNTER	SHRUB ROTOR HEADPROS-00-PRS40-CV W/ MP800SR / SHRUB ROTOR HEAD, RISER HEIGHT 12" WITH CHECKVALVE(HC50F50M) (ADJUST HEIGHT OF RISER AS VEGETATION DICTATES)	.4	.74	1.47	.45	40	20	SDI-101 (MOD)	
⑩	⑪	⑫	HUNTER	SHRUB ROTOR HEADPROS-00-PRS40-CV W/ MP800SR / SHRUB ROTOR HEAD, RISER HEIGHT 12" WITH CHECKVALVE(HC50F50M) (ADJUST HEIGHT OF RISER AS VEGETATION DICTATES)	.86	1.82	3.64	.45	40	30	SDI-101 (MOD)	
⑬	⑭		HUNTER	SHRUB ROTOR HEADPROS-00-PRS40-CV W/ MP800SR / SHRUB ROTOR HEAD, RISER HEIGHT 12" WITH CHECKVALVE(HC50F50M) (ADJUST HEIGHT OF RISER AS VEGETATION DICTATES)	1.28,	2.86		.45	40	35	SDI-101 (MOD)	

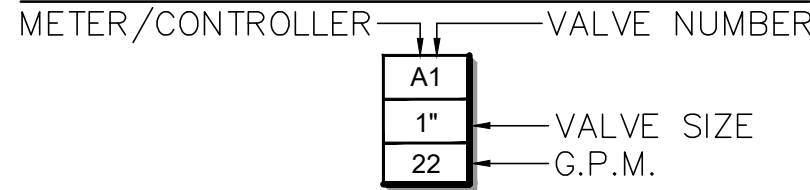
**NOTES:**

1. ALL SPRAY HEADS TO BE INSTALLED 12" MIN AWAY FROM SIDEWALK, CURB, FENCE OR WALL, DRIVEWAY ETC..
2. WHEN INSTALLING SPRINKLER HEADS USING NOZZLES THAT REQUIRE ARC PATTERNS OTHER THAN THE STANDARD ARC PATTERNS (360', 180', 120', 90', ETC.) THE CONTRACTOR SHALL USE VARIABLE ARC OR ADJUSTABLE NOZZLES. RADIUS OF ADJUSTABLE NOZZLES SELECTED TO MATCH SITE CONDITIONS.
3. WITHIN RESTORATION AREA ONLY ALL HEADS SHALL BE INSTALLED ON A RISER W/ SWING JOINT, TYP. SEE DETAIL SD-101(MOD).
4. WHEN INSTALLING SPRINKLER HEADS ADJUST NOZZLES AND RADIUS OF THROW TO ACHIEVE HEAD-TO-HEAD COVERAGE AND TO MATCH SITE CONDITIONS.

**PIPE SIZING CHART**

MAINLINE PIPE SIZING CHART (CL315-NOT TO EXCEED 5FT./SEC)		LATERAL PIPE SIZING CHART (SCH40-NOT TO EXCEED 5FT./SEC)	
SIZE	GPM	SIZE	GPM
1"	9-12	3/4"	0-8
1-1/4"	18-24	1"	9-12
1-1/2"	25-32	1-1/4"	13-22
2"	33-50	1-1/2"	23-30
2-1/2"	51-70	2"	31-50
3"	71-103	2-1/2"	51-75

**VALVE CALLOUT**



**GENERAL IRRIGATION NOTES**

1. ALL LOCAL MUNICIPAL AND STATE LAWS, RULES, WATER PURVEYOR LAWS AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS AND THEIR PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR.
2. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, STRUCTURES AND SERVICES BEFORE COMMENCING WORK. THE LOCATIONS OF UTILITIES, STRUCTURES AND SERVICES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. ANY DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE.
3. THE CONTRACTOR SHALL OBTAIN ANY PERTINENT ENGINEERING OR ARCHITECTURAL PLANS BEFORE BEGINNING WORK.
4. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED TO PERFORM THE WORK INDICATED HEREIN BEFORE BEGINNING WORK.
5. THE MAINLINE AND SLEEVING IS DIAGRAMMATIC. ALL PIPING IS FOR DESIGN CLARIFICATION ONLY AND SHALL BE INSTALLED WITHIN LIMIT OF WORK BOUNDARIES AND IN SHRUB PLANTING AREAS WHERE POSSIBLE. AVOID ANY CONFLICTS BETWEEN THE SPRINKLER SYSTEM, PLANTING AND ARCHITECTURAL FEATURES.
6. IRRIGATION EQUIPMENT AS SHOWN IS DIAGRAMMATIC. INSTALL ALL THE IRRIGATION REMOTE CONTROL VALVES, QUICK COUPLERS, MASTER VALVES, FLOW SENSORS, BACKFLOWS, AIR/VACUUM DEVICES, AND BALL VALVES, IN SHRUB PLANTING AREAS APPROVED BY OWNER'S REPRESENTATIVE AND/OR THE LANDSCAPE IRRIGATION DESIGNER.
7. DO NOT WILLFULLY INSTALL ANY EQUIPMENT AS SHOWN ON THE PLANS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN CONDITIONS EXIST THAT WERE NOT EVIDENT AT THE TIME THESE PLANS WERE PREPARED. ANY SUCH CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE PRIOR TO ANY WORK OR THE IRRIGATION CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR ANY FIELD CHANGES DEEMED NECESSARY BY THE OWNER.
8. INSTALL ALL EQUIPMENT AS SHOWN IN THE DETAILS AND SPECIFICATIONS. CONTRACTOR SHALL BE RESPONSIBLE TO COMPLY WITH LOCAL CITY, COUNTY AND STATE REQUIREMENTS FOR BOTH EQUIPMENT AND INSTALLATION.
9. ACTUAL LOCATION FOR THE INSTALLATION OF THE AUTOMATIC CONTROLLER IS TO BE DETERMINED IN THE FIELD BY THE OWNER'S AUTHORIZED REPRESENTATIVE.
10. ALL PIPE UNDER PAVED AREAS, HARDSCAPE, OR AS DIRECTED BY OWNERS REPRESENTATIVE TO BE INSTALLED IN SLEEVING, TWICE THE DIAMETER OF PIPE OR WIRE BUNDLE CARRIED. ALL 2" AND 3" SLEEVING SHALL BE PVC1220 SCH. 40, TYPE 1, GRADE 2 MATERIAL CONFORMING TO ASTM STANDARD D-1785-4. ALL 4" AND LARGER SLEEVING SHALL BE PVC1220 CLASS 200 SDR21, TYPE 1, GRADE 2 MATERIAL CONFORMING TO ASTM STANDARD D-2241. SLEEVES UNDER BROW DITCHES SHALL BE ENCASED IN CONCRETE A MINIMUM OF 6" THICK ON ALL SIDES OF PIPE. SLEEVES TO EXTEND AT LEAST 12" PAST THE EDGE OF PAVING. ALL WIRING SHALL BE SLEEVED UNDER PAVING AND HARDSCAPE. SEPARATE WIRING CONDUITS AND PULL BOX FOR 120V, 24V, FS, MV ETC. PULL BOXES AT EVERY 200' OR 270 DEGREES OF BEND IN CONDUIT.
11. ALL QUICK COUPLER VALVES TO BE INSTALLED IN SHRUB OR GROUND COVER AREAS WHERE POSSIBLE. ALL QUICK COUPLER VALVES TO BE INSTALLED AS SHOWN ON THE INSTALLATION DETAILS. INSTALL ALL QUICK COUPLER VALVES WITHIN 18" OF HARDSCAPE.
12. ALL HEADS ARE TO BE INSTALLED WITH THE NOZZLE, SCREEN AND ARCS SHOWN ON THE PLANS. ALL HEADS ARE TO BE ADJUSTED TO PREVENT OVSERSPRAY ONTO BUILDINGS, WALLS, FENCES AND HARDSCAPE. THIS INCLUDES, BUT IS NOT LIMITED TO, ADJUSTMENT OF DIFFUSER PIN OR ADJUSTMENT SCREW, REPLACEMENT OF PRESSURE COMPENSATING SCREENS, REPLACEMENT OF NOZZLES WITH MORE APPROPRIATE RADIUS UNITS AND THE REPLACEMENT OF NOZZLES WITH ADJUSTABLE ARC UNITS. WHEN VERTICAL OBSTRUCTIONS (PROPS, STREET LIGHTS, TREES, ETC.) INTERFERE WITH THE SPRAY PATTERN OF THE SPRINKLER HEADS PREVENTING PROPER COVERAGE, THE IRRIGATION CONTRACTOR SHALL FIELD ADJUST THE SPRINKLER SYSTEM BY INSTALLING A QUARTER CIRCLE OR HALF CIRCLE SPRINKLER HEAD ON EACH SIDE OF THE OBSTRUCTION SO AS TO PROVIDE PROPER COVERAGE. ALL ADJUSTMENTS SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER.
13. THE IRRIGATION CONTRACTOR SHALL ADJUST THE PRESSURE REGULATOR (PRS) ON EACH ELECTRIC CONTROL VALVE SO THAT THE SPRINKLER HEAD FARTHEST AND HIGHEST IN ELEVATION FROM ITS RESPECTIVE CONTROL VALVE OPERATES WITHIN THE OPERATING PRESSURE SHOWN ON THE IRRIGATION LEGEND, NOT TO EXCEED FIVE (5) PSI ABOVE THE GIVEN OPERATING PRESSURE FROM THE SPECIFIED PRESSURE LOCATED ON THE IRRIGATION LEGEND.
14. THE SPRINKLER SYSTEM DESIGN IS BASED ON THE MINIMUM OPERATING PRESSURE AND THE MAXIMUM FLOW DEMAND SHOWN ON THE IRRIGATION DRAWINGS AT EACH POINT OF CONNECTION. THE IRRIGATION CONTRACTOR SHALL VERIFY WATER PRESSURE PRIOR TO CONSTRUCTION. REPORT ANY DIFFERENCE BETWEEN THE WATER PRESSURE INDICATED ON THE DRAWINGS AND THE ACTUAL PRESSURE READING AT THE IRRIGATION POINT OF CONNECTION TO THE OWNER'S AUTHORIZED REPRESENTATIVE. IN THE EVENT PRESSURE DIFFERENCES ARE NOT REPORTED PRIOR TO START OF CONSTRUCTION, THE IRRIGATION CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS, AND COSTS ASSOCIATED WITH SAID REVISIONS.
15. SHOULD FIELD CONDITIONS REQUIRE PIPE INSTALLATION OTHER THAN THAT SHOWN ON PLANS, THE CONTRACTOR SHALL LIMIT EXCESS FLOW AND SIZE ALL PIPE NOT TO EXCEED A VELOCITY OF 5 FEET PER SECOND (FPS) IN PVC PIPE. FLOW THROUGH ANCILLARY EQUIPMENT, COPPER PIPE SHALL NOT EXCEED A VELOCITY OF 7 1/2 FPS. ALL ADJUSTMENTS SHALL BE MADE AT NO ADDITIONAL COST TO THE OWNER.
16. REFER TO SHEET L01 FOR ADDITIONAL TEMPORARY IRRIGATION NOTES.

**ON-GRADE TEMPORARY IRRIGATION MATERIAL SCHEDULE**

SYMBOL	MANUFACT.	MODEL NO. / DESCRIPTION	DETAIL
Ⓜ		POTABLE LANDSCAPE METER PER CIVIL PLANS.	N/A
⊠	LEIT	SOLAR CONTROLLER (IF NO ELECTRICAL CONNECTION IS AVAILABLE) MODEL XRC-EFT-8 W/SKIT 8821-8 (OR APPROVED EQUAL), STAINLESS STEEL ENCLOSURE ENCL-X, MOUNTING POST MCOLXL MOUNT TO POST. CONTROLLER SHALL HAVE A DESIGNATED RECTANGULAR PULL BOX INSTALLED AT PEDESTAL BASE. W/ RADIO REMOTE HANDSET AND W/ HUNTER MINI-CLIK W/I SS ENCL. (SG-MC). WIRE AS REQUIRED. ALSO USE LEMA 1700S SOLENOIDS & ADAPTER FOR REMOTE CONTROL VALVES AND THE LEIT, SKIT 8821-4 ADAPTOR RAIN SENSOR KIT 8821-4. FINAL LOCATION SHALL BE IN FULL SUN, CONFIRM LOCATION WITH RESIDENT ENGINEER, PRIOR TO INSTALLATION.	SDI-116
8 STATIONS			
⊗⊗⊗⊗	-	BACKFLOW, EXISTING - PROTECT IN PLACE	N/A
▲MV	SUPERIOR	MASTER CONTROL VALVE BRASS 3200 SERIES, 2", NORMALLY CLOSED FOR USE WITH SOLAR CONTROLLER DC LATCHING. MASTER VALVE SHALL BE INSTALLED IN A VALVE BOX WITH LOCKING COVER AND 'MCV' HEAT BRANDED ON COVER.	SDI-111
▲	RAINBIRD	REMOTE CONTROL VALVE (RCV) PEB SERIES 1" PLASTIC WITH DC LATCHING SOLENOID AND PRS DIAL VALVE PRESSURE REGULATOR (150-PEB), SHALL BE INSTALLED IN A VALVE BOX WITH LOCKING COVER AND 'RCV' HEAT BRANDED ON COVER.	SDI-125
●	RAINBIRD	QUICK COUPLER VALVE MODEL 33-DNP INSTALLED IN 10" ROUND VALVE BOX WITH LOCKING COVER AND 'QCV' HEAT BRANDED ON COVER. INSTALL QCV ON A 1" STUB-OUT OFF MAINLINE. EACH QCV SHALL BE ISOLATED FROM THE MAINLINE BY A 1" BALL VALVE.	SDI-105
⊗	SPEARS	LINE SIZE, MODEL NUMBER TU-2000, TRUE UNION PVC BALL VALVE, 2" AND SMALLER USE 3622 EPDM SEALED 1 NON-THREADED SOCKET ENDS, 2" AND LARGER USE 1821 EPDM SEALED SR-THREADED ENDS.	SDRS2 I-11
Ⓟ	N/A	PULL BOXES LOCATED PER PLAN, VERIFY ACTUAL LOCATION IN FIELD. PULL BOXES FOR REMOTE CONTROL VALVE WIRING AS REQUIRED.	SDI-115
NOT SHOWN	AS APPROVED	PULL BOXES FOR WIRE SPLICES SHALL BE LOCATED APPROXIMATELY 500' O.C. AND AT THE ENDS OF ALL SLEEVES UNDER PAVING. PULL BOXES SHALL BE 12" RECTANGULAR WITH LOCKING LID.	SDI-110, 115
—	AS APPROVED	UVR PVC BROWN PIPE LATERAL ON-GRADE (TEMPORARY), 3/4" TO 2" SHALL BE SOLVENT WELD SCH.40 WITH SCH.40 SOLVENT WELD FITTINGS. ALL FITTINGS SHALL HAVE JOINT RESTRAINT J-HOOK.	SDI-120, 123
— — —	AS APPROVED	UVR PVC BROWN PIPE MAINLINES ON-GRADE (TEMPORARY), 1 1/2" AND ABOVE SHALL BE SOLVENT WELD SCH.40 WITH SCH.80 SOLVENT WELD FITTINGS. ALL FITTINGS SHALL HAVE JOINT RESTRAINT J-HOOK.	SDI-120, 123
— — —	AS APPROVED	PVC PIPE AS SLEEVING (2" MIN), TWICE THE DIAMETER OF PIPE OR WIRE BUNDLE CARRIED. PLACE BELOW ALL PAVING, HARDSCAPE, ETC., AND AS DIRECTED BY OWNER'S AUTHORIZED REPRESENTATIVE. ALL SLEEVING SHALL BE PVC1220 SCH. 40, TYPE 1, GRADE 2 MATERIAL CONFORMING TO ASTM STANDARD D-1785-4. SLEEVES UNDER BROW DITCHES SHALL BE ENCASED IN CONCRETE A MINIMUM OF 6" THICK ON ALL SIDES OF PIPE.	SDI-110
NOT SHOWN	AS APPROVED	IRRIGATION CONTROL WIRE SHALL BE #14UF AWG (U.L. APPROVED), COLOR CODE WIRE PER CONTROLLER, A MINIMUM OF THREE SEPARATE SPARE PILOT WIRES TO THE END OF EACH MAINLINE. ROUTE SPARE WIRES INTO EACH VALVE MANIFOLD LOCATION, BUNDLE AND TAPE ALL WIRE AND INSTALL ADJACENT TO ON GRADE MAINLINE IN 1" ELECTRICAL CONDUIT, LEAVE SPARE WIRE ENDS IN THE LAST VALVE MANIFOLD BOX ON THE MAINLINE. IRRIGATION COMMON WIRE SHALL BE #12UF AWG (U.L. APPROVED). SECURE TO GROUND WITH J-HOOKS AT ALL FITTINGS.	-
NOT SHOWN	SPEARS	DS-100 WIRE CONNECTORS & DS-300 SEALANT, USE ON ALL WIRE CONNECTIONS.	A
NOT SHOWN	VALCON	5000 SERIES ADV, USED ON ALL SPRINKLERS WITH LOW HEAD DRAINAGE UNCONTROLLABLE BY FACTORY INTEGRAL SPRINKLER HEAD CHECK VALVE.	N/A
NOT SHOWN	KBI	SPRING TYPE CHECK VALVE, LINE SIZE BY LATERAL LINE, INSTALL DOWNSTREAM OF EACH RCV WHEN RCV IS HIGHER THAN THE SPRINKLER HEADS.	N/A
NOT SHOWN	KBI	SWING TYPE CHECK VALVE, LINE SIZE BY LATERAL LINE, INSTALL DOWNSTREAM OF EACH RCV WHEN RCV IS LOWER THAN THE SPRINKLER HEADS.	N/A

NOTE: ALL VALVE BOXES SHALL BE PLASTIC WITH LOCKING COVER.

**PLANS FOR THE CONSTRUCTION OF FAMOSA ALLEY SLOPE RESTORATION IRRIGATION NOTES AND LEGEND**

CITY OF SAN DIEGO, CALIFORNIA STORM WATER DEPARTMENT SHEET 9 OF 12 SHEETS		WATER WBS B-22130
APPROVED: FOR CITY ENGINEER _____ DATE _____ KRISTOPHER ECKERT C23754 PRINT DCE NAME RCE# _____		SUBMITTED BY: ANTHONY SALVANI PROJECT MANAGER CHECKED BY: BRADEN CRANE PROJECT ENGINEER
DESCRIPTION	BY	APPROVED
ORIGINAL	RICK	
DRAWING NO.		L04
CONTRACTOR _____		NTP DATE _____
INSPECTOR _____		NOC DATE _____

C:\RICK\Projects\19156\19156\_CityofSD\_CityofSD\_StormWater\19156\_FamosaSlough\Landscaping\19156-CoverSheet\19156-114.rvt 9/24/2025 3:28 PM

**619-291-0707**  
rickengineering.com

**5620 FRIARS ROAD**  
SAN DIEGO, CA 92110

SAN DIEGO ORANGE RIVERSIDE SACRAMENTO SAN LUIS OBISPO  
SANTA CLARITA PHOENIX TUCSON LAS VEGAS DENVER

**100% SUBMITTAL**

**FAMOSA SLOUGH ALLEY SLOPE RESTORATION**

**POC/IRRIGATION CONTROLLER "A" (POTABLE WATER)**

**POINT OF CONNECTION (P.O.C.) NOTES:**  
 FIELD VERIFY WATER METER CAPACITY AND EQUIPMENT AVAILABLE.

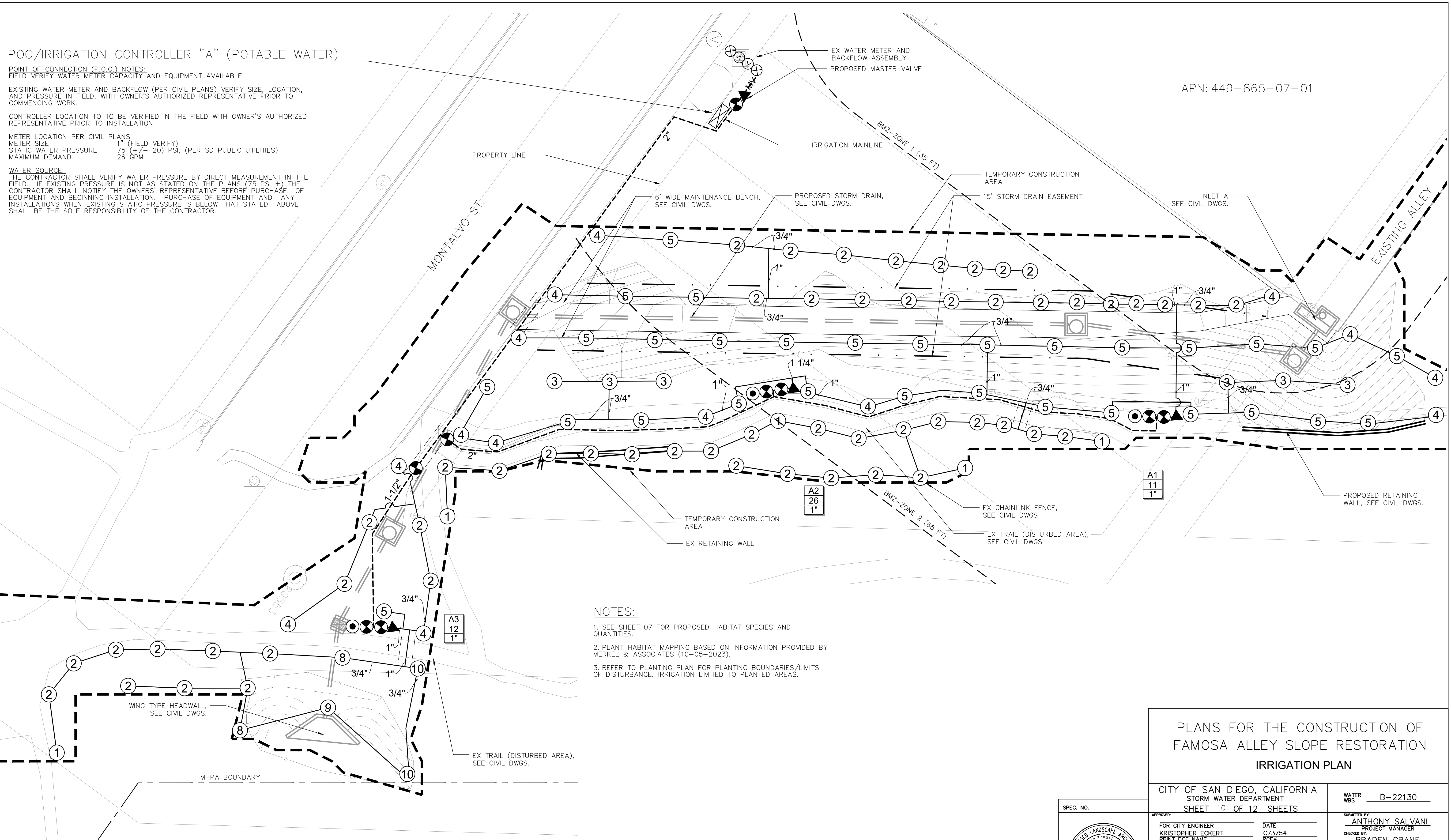
EXISTING WATER METER AND BACKFLOW (PER CIVIL PLANS) VERIFY SIZE, LOCATION, AND PRESSURE IN FIELD, WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO COMMENCING WORK.

CONTROLLER LOCATION TO BE VERIFIED IN THE FIELD WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO INSTALLATION.

METER LOCATION PER CIVIL PLANS  
 METER SIZE 1" (FIELD VERIFY)  
 STATIC WATER PRESSURE 75 (+/- 20) PSI, (PER SD PUBLIC UTILITIES)  
 MAXIMUM DEMAND 26 GPM

**WATER SOURCE:**  
 THE CONTRACTOR SHALL VERIFY WATER PRESSURE BY DIRECT MEASUREMENT IN THE FIELD. IF EXISTING PRESSURE IS NOT AS STATED ON THE PLANS (75 PSI ±) THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE BEFORE PURCHASE OF EQUIPMENT AND BEGINNING INSTALLATION. PURCHASE OF EQUIPMENT AND ANY INSTALLATIONS WHEN EXISTING STATIC PRESSURE IS BELOW THAT STATED ABOVE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

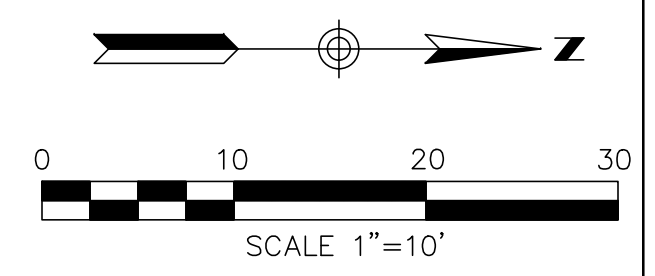
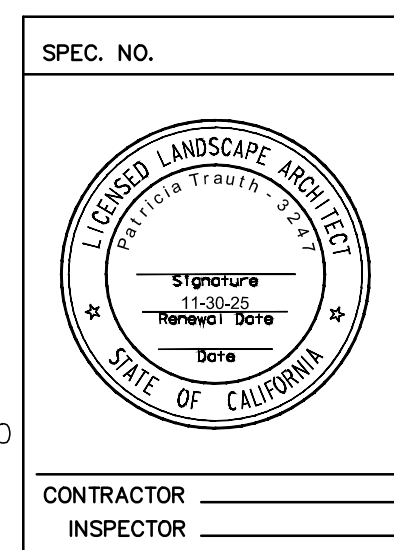
APN: 449-865-07-01



- NOTES:**
- SEE SHEET 07 FOR PROPOSED HABITAT SPECIES AND QUANTITIES.
  - PLANT HABITAT MAPPING BASED ON INFORMATION PROVIDED BY MERKEL & ASSOCIATES (10-05-2023).
  - REFER TO PLANTING PLAN FOR PLANTING BOUNDARIES/LIMITS OF DISTURBANCE. IRRIGATION LIMITED TO PLANTED AREAS.

**PLANS FOR THE CONSTRUCTION OF FAMOSAL SLOUGH ALLEY SLOPE RESTORATION**  
**IRRIGATION PLAN**

CITY OF SAN DIEGO, CALIFORNIA STORM WATER DEPARTMENT SHEET 10 OF 12 SHEETS		WATER WBS: B-22130
APPROVED: FOR CITY ENGINEER KRISTOPHER ECKERT DATE: C23754 PRINT DCE NAME: RCE#		SUBMITTED BY: ANTHONY SALVANI PROJECT MANAGER CHECKED BY: BRADEN CRANE PROJECT ENGINEER
DESCRIPTION	BY	APPROVED
ORIGINAL	RICK	
DRAWING NO. L05		
CONTRACTOR INSPECTOR		NTP DATE NOC DATE



**RICK** 619-291-0707 rickengineering.com  
 5620 FRIARS ROAD SAN DIEGO, CA 92110

SAN DIEGO ORANGE RIVERSIDE SACRAMENTO SAN LUIS OBISPO  
 SANTA CLARITA PHOENIX TUCSON LAS VEGAS DENVER

**100% SUBMITTAL**

FAMOSAL SLOUGH ALLEY SLOPE RESTORATION

C:\RICK\Projects\19756\_CityofSD\_StormWater\19756\_Landscaping\19756-1.dwg, 9/24/2025 5:28 PM

PRESSURE LOSS CALCULATION

Pressure loss for: POC: A - RCV A-2 (Spray) Potable Water							
RCV DEMAND (SINGLE MAXIMUM)		26	GPM				
METER ELEVATION		33	FEET				
VALVE ELEVATION		12	FEET				
DIFFERENCE IN ELEVATION		21	FEET				
PRESSURE AVAILABLE AT POC					75	PSI	
<b>System Friction Loss:</b>							
	QTY.	GPM	SIZE	LENGTH	PSI LOSS	VALUE	
SERVICE LINE FITTINGS	1	26.00	2"	20'	0.16	-0.16	PSI
METER	1	26.00	1"		3.00	-3.00	PSI
BACKFLOW	1	26.00	1"		11.00	-11.00	PSI
MASTER CONTROL VALVE	1	26.00	2"		0.80	-0.80	PSI
MAINLINE (2" CLASS 40)		26.00	2.5"	190.00	0.80	-1.52	PSI
ISOLATION VALVES	3	VAR	2.5"		0.50	-1.50	PSI
RCV SINGLE STATION	1	26.00	1.5"		3.00	-3.00	PSI
LATERALS (10% OF PSI REQ'D)			VAR	4.00		-4.00	PSI
SUBTOTAL						-24.98	PSI
10% OF SUBTOTAL FOR FITTINGS						-2.50	PSI
TOTAL FRICTION LOSS						-27.48	PSI
<b>Irrig. Head Requirements:</b>							
		GPM				VALUE	
EMITTER OPERATING PRESSURE	40	PSI				-40.00	PSI
ELEV. HEAD LOSS FROM SPRINKLER	0	FEET				0.00	PSI
ELEV. HEAD GAIN FROM SPRINKLER	0	FEET				0.00	PSI
<b>RCV Requirements:</b>							
		GPM				VALUE	
ELEV. HEAD LOSS FROM METER TO RCV	0	FEET				0.00	PSI
ELEV. HEAD GAIN FROM METER TO RCV	21	FEET				9.09	PSI
<b>Overall Totals:</b>							
						VALUE	
PUMP BOOST (CONFIRM W/ PUMP MFR.)						0.00	PSI
REMAINING PRESSURE						16.62	PSI
SURPLUS - %						22.15%	
DESIGN PRESSURE						40.00	PSI

WATER USE CALCULATION

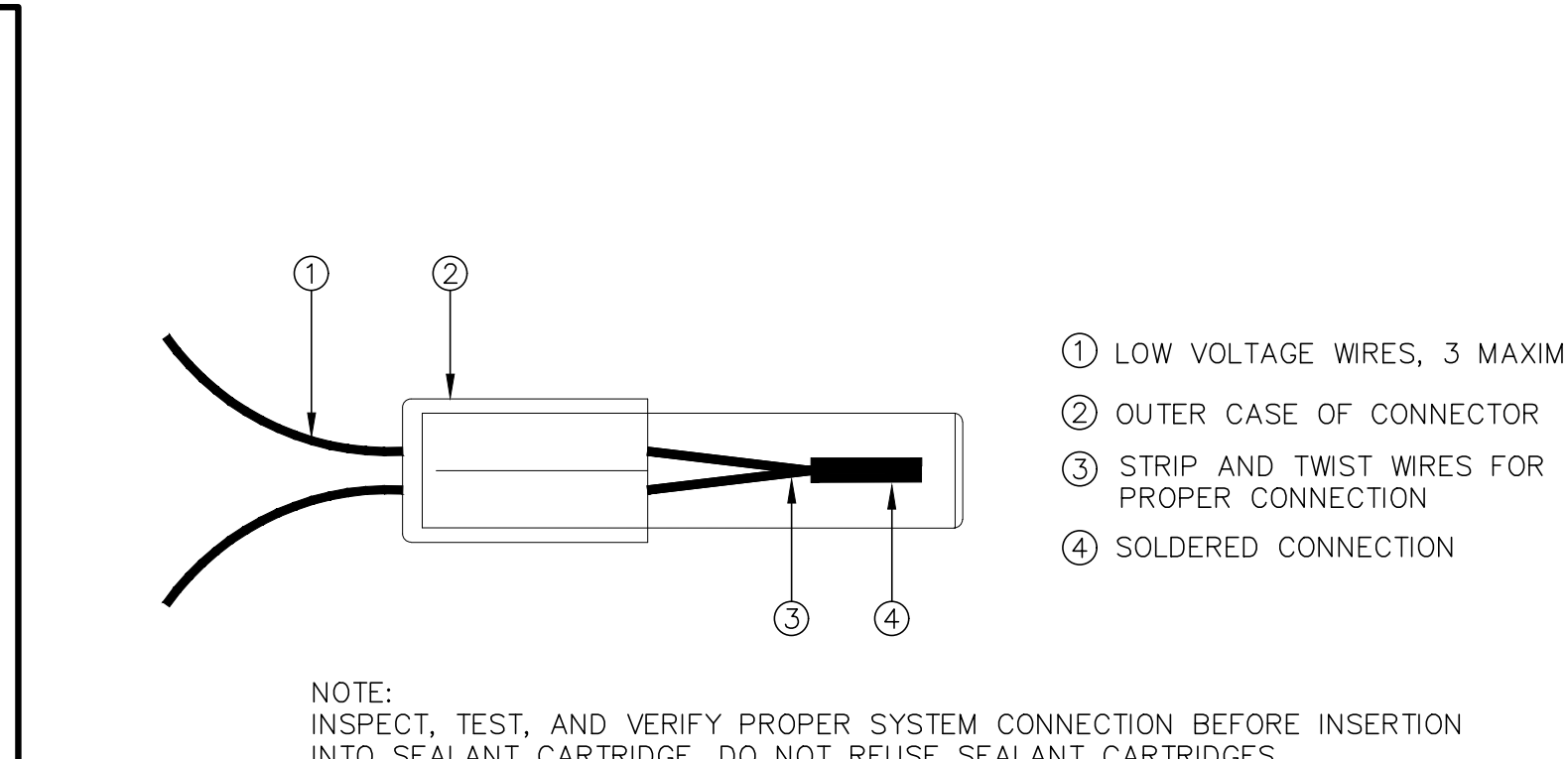
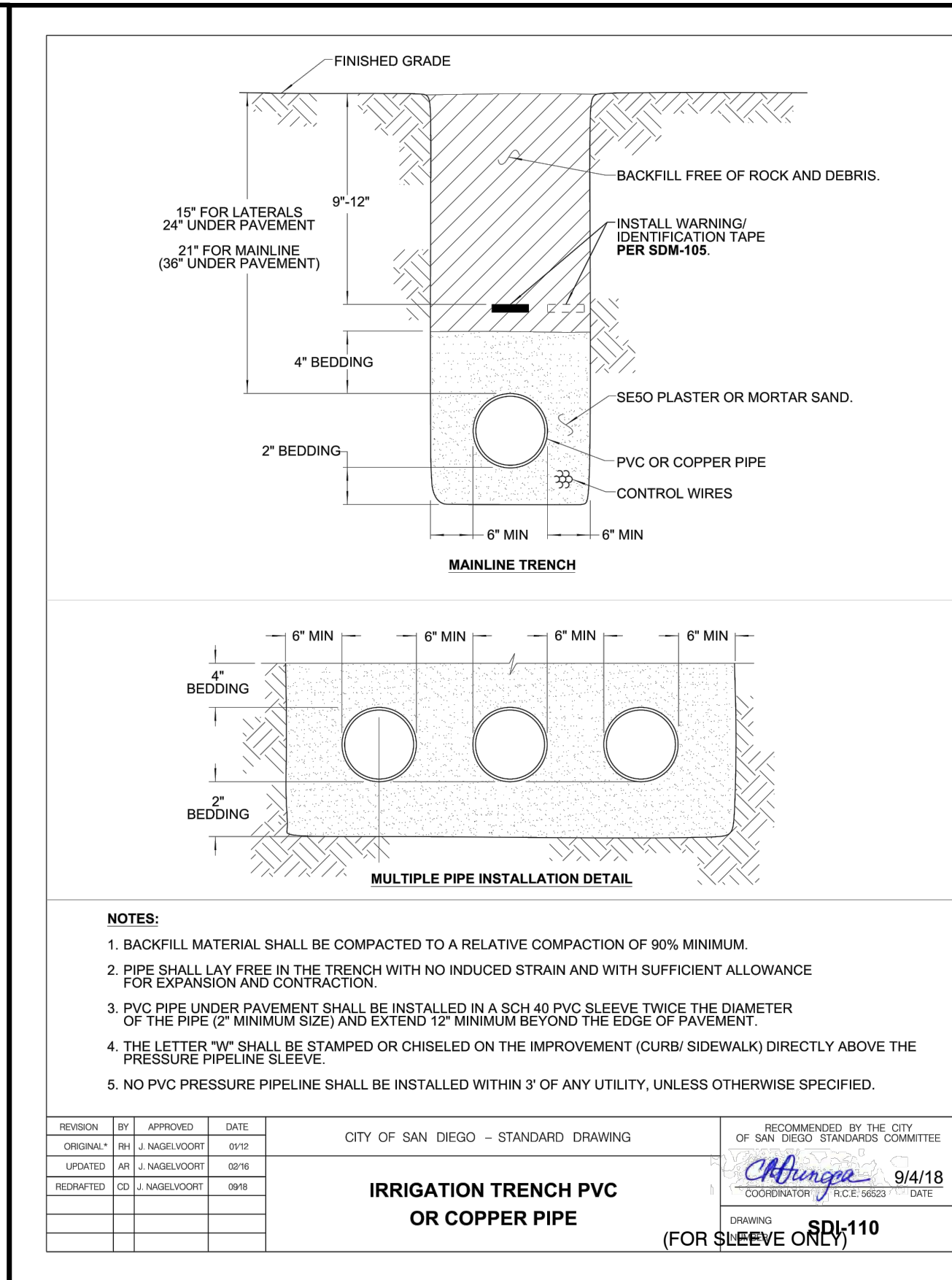
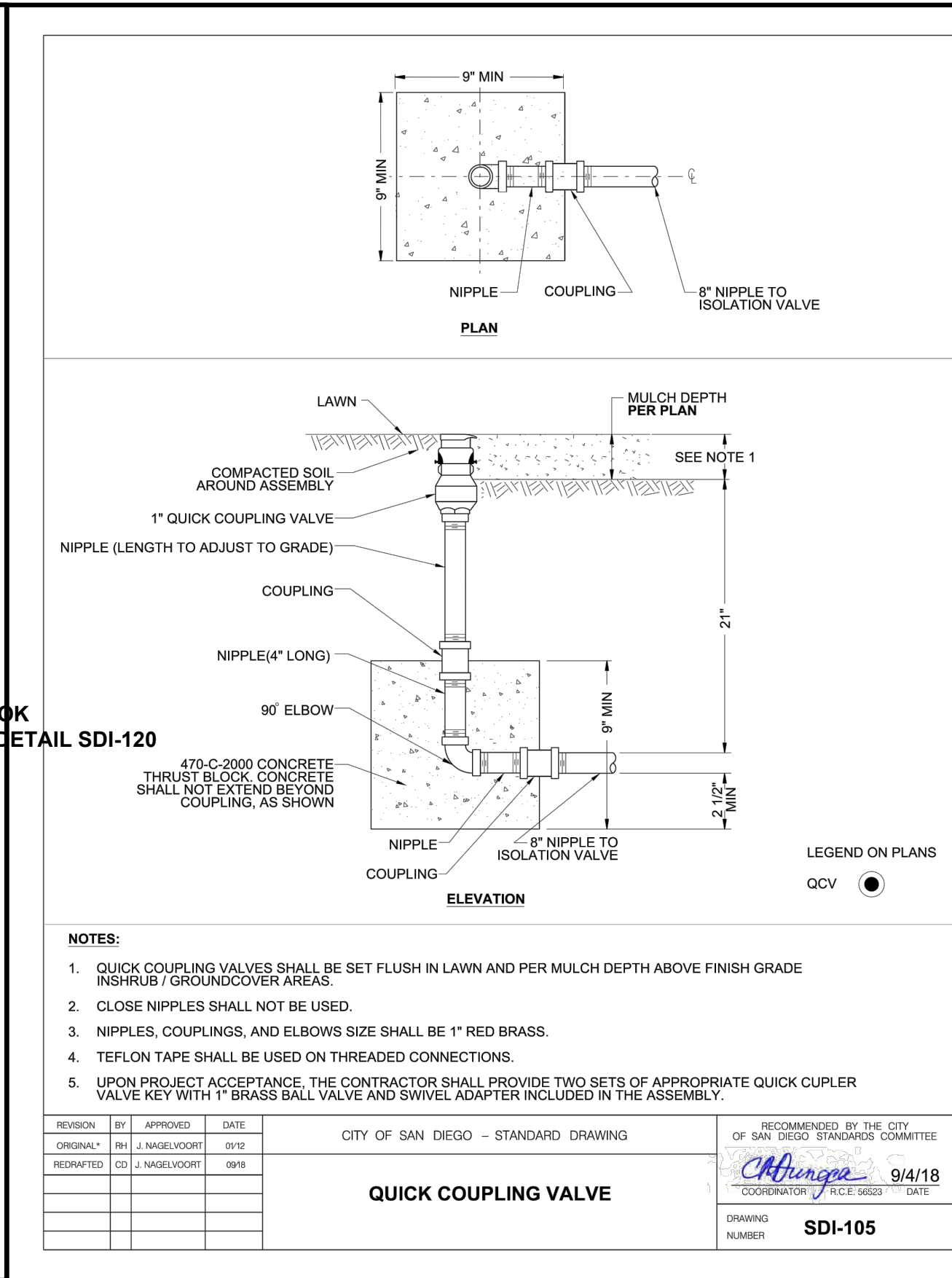
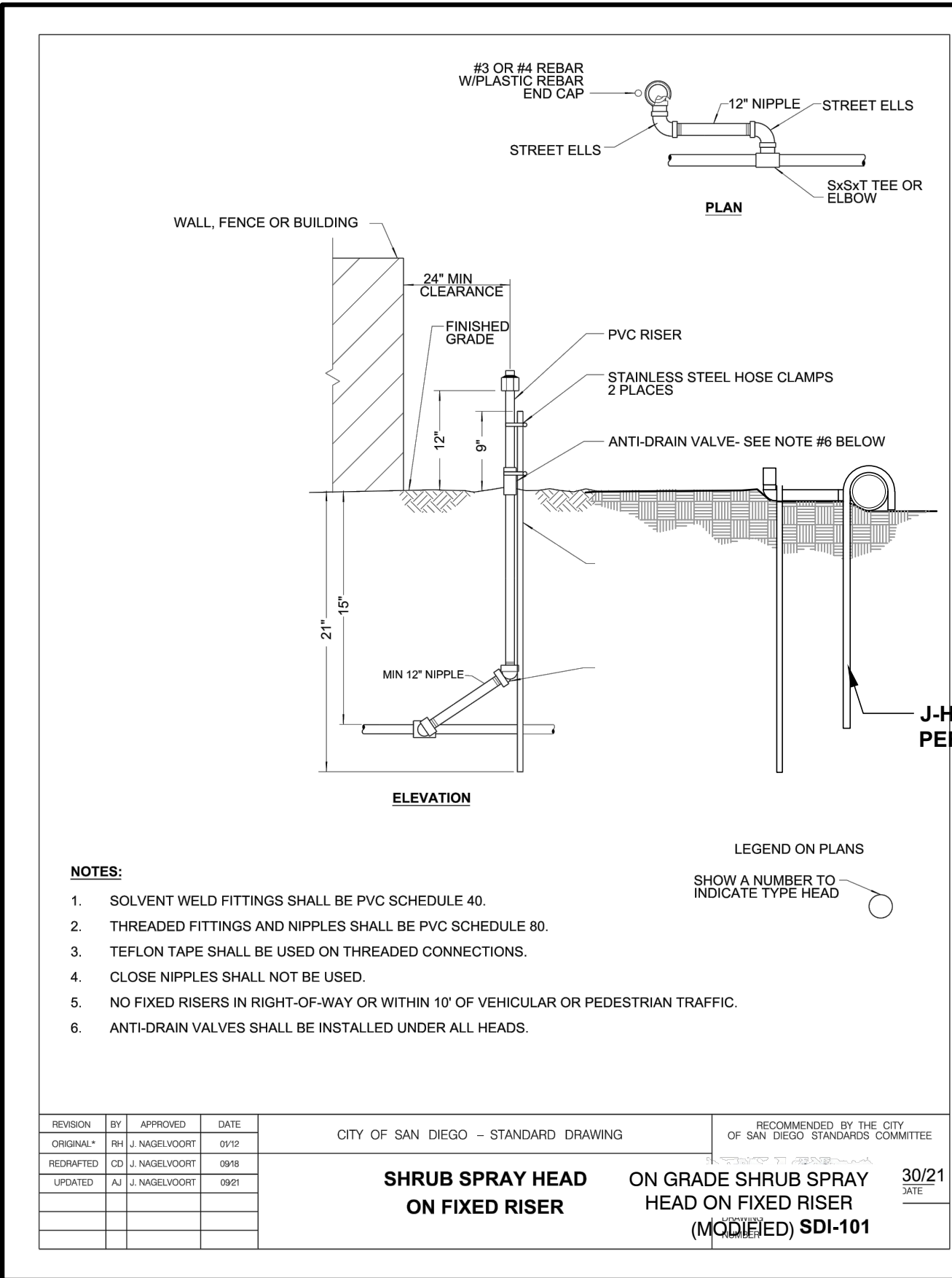
Hydrozone # / Planting Description <sup>(a)</sup>	Plant Factor (PF)	Irrigation Method <sup>(b)</sup>	Irrigation Efficiency (IE) <sup>(c)</sup>	ETAF (PF/IE)	Landscape Area In Square Feet	ETAF x Area	Estimated Total Water Use (ETWU) <sup>(d)</sup>
<b>Regular Landscape Areas</b>							
#1 Low Water Use	0.2	Drip	0.90	0.222	11,567	2,570.44	82,233.66
#2 Moderate Water	0.3	Rotators	0.70	0.429	33,224	14,238.86	455,529.52
#3 Low Water Use	0.2	Bubblers	0.85	0.235	8,145	1,916.47	61,311.73
#							
#							
#							
					(A)	(B)	
<b>Totals</b>					<b>52,936.00</b>	<b>18,725.77</b>	<b>599,074.90</b>
<b>Special Landscape Areas</b>							
# Turf					1.0	6,818	218,121.46
# Basin					1.0	18,733	599,306.14
#							
#							
					(C)	(D)	
<b>Totals</b>					<b>25,551.00</b>	<b>25,551.00</b>	<b>817,427.59</b>
Estimated Total Water Use (ETWU) Total							1,416,502.50
Maximum Water Allowance (MAWA) <sup>(e)</sup>							1,528,709.57
Irrigation Efficiency (IE) Average**							0.817

\*\*Average Irrigation Efficiency for overall irrigation system shall meet or exceed 0.75 (total of all efficiency ratings divided by number of hydrozones).

ETAF CALCULATIONS

Average ETAF for Regular Landscape Areas must be 0.42 or below for residential and non-residential areas. Provide Totals based on information calculated in Worksheet above.

Regular Landscape Areas		Totals	All Landscape Areas		Totals
Total ETAF x Area	(B) =	18,725.77	Total ETAF x Area	(B+D) =	44,276.77
Total Area	(A) =	52,936.00	Total Area	(A+C) =	78,487.00
Average ETAF	(B) ÷ (A) =	0.35	Site wide ETAF	(B+D) ÷ (A+C) =	0.56



**A WIRE CONNECTOR**  
NOT TO SCALE

PLANS FOR THE CONSTRUCTION OF FAMOSA ALLEY SLOPE RESTORATION IRRIGATION CALCULATIONS AND DETAIL 1

CITY OF SAN DIEGO, CALIFORNIA  
STORM WATER DEPARTMENT  
SHEET 11 OF 12 SHEETS

WATER WBS: B-22130

APPROVED: FOR CITY ENGINEER KRISTOPHER ECKERT  
DATE: C23754  
PRINT DCE NAME: RCE#

SUBMITTED BY: ANTHONY SALVANI  
PROJECT MANAGER  
CHECKED BY: BRADEN CRANE  
PROJECT ENGINEER

DESCRIPTION: ORIGINAL  
BY: RICK  
APPROVED: [Signature]  
DATE: [Date]  
FILMED: [Date]

COORDINATES: 210-1695  
CCS27 COORDINATE: 1850-6255  
CCS83 COORDINATE

DRAWING NO. 0101249-11-D

CONTRACTOR: [Blank]  
INSPECTOR: [Blank]  
NTP DATE: [Blank]  
NOC DATE: [Blank]

C:\RICK\Projects\19756\_CityofSD\_CityofSD\_StormWater\19756\_FamosaSlope\19756-10.dwg 9/24/2025 3:29 PM

100% SUBMITTAL

FAMOSA SLOUGH ALLEY SLOPE RESTORATION

**MASTER VALVE**

UNMORTARED STANDARD BRICKS (4) FOUNDATION ON COMPACTED SUBGRADE (USE 6 BRICKS FOR OVERSIZED BOXES)

CONCRETE VALVE BOX

MASTER VALVE CENTERED IN BOX

PLAN

CONCRETE RECTANGULAR VALVE BOX WITH CAST IRON, SELF-LOCKING LID, PAINT "MV" AND CONTROLLER ID LETTER ON LID

FINISHED GRADE

MULCH DEPTH PER PLAN

CONTROL WIRES 24" LEAD LENGTH (COILED WITH ID TAG)

PVC SCH 80 UNION

1" MIN BETWEEN TOP OF PIPE AND VALVE BOX KNOCK OUTS (BOTH SIDES)

TO FLOW SENSOR

SCH 80 (LENGTH 10 x PIPE DIAMETER MIN FROM ADAPTER TO FLOW SENSOR)

FLOWSENSOR WIRE WITH 2 EXPANSION LOOP

CONDUIT/SWEEP FOR FLOW SENSOR AND MASTER VALVE WIRES

LEGEND ON PLANS

3" MIN

2" MIN

COMPACT SOIL AROUND VALVE BOX

MAIN FROM WATER SOURCE

4" MIN DEPTH

RED BRASS COUPLING (TYP)

SCH 80 PVC MALE ADAPTER

ELBOW WITH CONCRETE THRUST BLOCK 9" x 9" x 2"

CONDUIT/SWEEP FOR FLOW SENSOR AND MASTER VALVE WIRES

LEGEND ON PLANS

▽ MV

**NOTES:**

- SPLICING SHALL BE MADE IN VALVE BOXES AND PULL BOXES ONLY. SEE STANDARD DRAWING SDI-115 FOR SPLICE / SOLDERING NOTES.
- SPLICES SHALL BE SOLDERED WITH A PROPERLY SET MECHANICAL SPLICE CONNECTOR, ENTIRELY ENCLOSED IN SELF-CURING RESIN AND SHALL BE COMPLETELY WATER-PROOF.
- SEAL CONDUIT OPENINGS WITH ELECTRICAL CONDUIT SEALANT AS APPROVED BY THE ENGINEER.
- PVC CONDUIT SHALL BE 1" MINIMUM.
- VALVE / CONTROLLER IDENTIFICATION SHALL BE LABELED OUTSIDE ON THE VALVE BOX LID AND TAGGED INSIDE THE BOX ON THE VALVE.
- KNOCK OUTS SHALL NOT BE ENLARGED.
- INSTALL ONLY ONE VALVE PER BOX.
- VALVE BOXES SHALL BE SET PERPENDICULAR TO HARDSCAPE, ABOVE FINISHED GRADE IN SHRUB / GROUNDCOVER AREAS, PER MULCH DEPTH. IF NECESSARY TO BE SET IN TURF, VALVE BOXES SHALL BE SET FLUSH WITH FINISHED GRADE.
- CLOSE NIPPLES SHALL NOT BE USED.
- NIPPLES, ELBOWS, AND FITTINGS SHALL BE THREADED RED BRASS, FROM COUPLING THROUGH THE MASTER VALVE. PIPE AND FITTINGS DOWNSTREAM SHALL BE SCH 80 PVC.
- TEFLON TAPE SHALL BE USED ON THREADED CONNECTION.

REVISION	BY	APPROVED	DATE
ORIGINAL	RM	J. NAGELVOORT	09/18
REDESIGNED	CD	J. NAGELVOORT	09/18

CITY OF SAN DIEGO - STANDARD DRAWING

RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE

*Chapman* 9/4/18

COORDINATOR R.C.E. 5623 DATE

DRAWING NUMBER SDI-111

**ELECTRICAL PULL BOX FOR DIRECT BURIAL CONTROL WIRES AND SPLICING NOTES**

UNMORTARED STANDARD BRICKS (4) FOUNDATION ON COMPACTED SUBGRADE (USE 6 BRICKS FOR OVERSIZED BOXES)

WIRE RUN

CONCRETE PULL BOX

PLAN VIEW

FINISHED GRADE

LOCKABLE HINGED CAST IRON OR CONCRETE TOP IMPRINTED "ELECTRIC"

4" MIN

LOOP 24" MIN OF CONTROL WIRES INTO PULL BOXES

BEDDING MATERIAL

ELEVATION

LEGEND ON PLANS

▽ PB

**NOTES:**

- INSTALL PULL BOXES AS SHOWN ON PLANS AND AT EACH END OF PIPE SLEEVES RUNNING UNDER PAVEMENT.
- PULL BOX COVER SHALL BE PERMANENTLY MARKED "ELECTRIC".
- CONDUCTORS FOR EACH CONTROLLER CLOCK SHALL BE HARNESS SEPARATELY AND AT SUFFICIENT INTERVALS TO MAINTAIN A DEFINITE BUNDLE.
- SPLICES SHALL ONLY BE MADE IN PULL BOXES, WITH A PROPERLY SET MECHANICAL SPLICE CONNECTOR, SOLDERED WITH METALLIC ALLOY, ENTIRELY ENCLOSED IN SELF-CURING RESIN AND SHALL BE COMPLETELY WATER-PROOF.
- SPARE WIRE ENDS SHALL BE INSULATED IN THE SAME MANNER AS WIRE SPLICES.
- MINIMUM SIZE PULL BOX SHALL BE AS SHOWN ABOVE. LARGER BOXES MAY BE NECESSARY TO MEET 4" CLEARANCE REQUIRED.
- NO SPLICES SHALL BE PERMITTED ON WIRE RUNS OF LESS THAN 300'.
- THE LETTER "E" SHALL BE STAMPED OR CHISELED ON THE IMPROVEMENT (CURB-SIDEWALK) DIRECTLY ABOVE THE CONTROL WIRE.
- BEDDING MATERIAL SHALL BE SE 50 PLASTER OR MORTAR SAND.

REVISION	BY	APPROVED	DATE
ORIGINAL	RM	J. NAGELVOORT	09/18
UPDATED	JM	J. NAGELVOORT	09/18
REDESIGNED	CD	J. NAGELVOORT	09/18

CITY OF SAN DIEGO - STANDARD DRAWING

RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE

*Chapman* 9/4/18

COORDINATOR R.C.E. 5623 DATE

DRAWING NUMBER SDI-115

**SOLAR IRRIGATION CONTROLLER**

ELECTRICAL PULL BOX

FRONT OF CONTROLLER

3' MAX 18"

CONTROLLER ON THE COLUMN

CONCRETE PAD

HEAVY-DUTY STAINLESS STEEL ENCLOSURE WITH LIGHT ACCESS THROUGH GRID ON TOP AND INTERNAL CLAMP FOR COLUMN

HIGH SECURITY STAINLESS STEEL DISC LOCK

SOLAR IRRIGATION CONTROLLER

GALV STEEL COLUMN PER MANUFACTURER SPECS

RAIN SENSOR ENCLOSED IN STAINLESS STEEL VANDAL RESISTANT ENCLOSURE, MOUNT ON POST MIN 30" ABOVE GRADE

FINISH GRADE CONCRETE PAD TO SLOPE AWAY FROM CONTROLLER COLUMN

12"x12"x12" CONCRETE ANCHORS 520-C-2500

ELEVATION

24" SERVICE LOOP IN PULL BOX

SWEEP CONDUIT INTO PULL BOX

3' MAX 18"

LEGEND ON PLANS

▽ SDI-116

**NOTES:**

- PROVIDE SOLENOID ADAPTOR TO SUPPORT SOLAR CLOCK FUNCTION ON VALVE.
- MAXIMUM RUN OF CONTROL WIRE TO REMOTE CONTROL VALVE (RCV) IS 1500' UNLESS OTHERWISE SPECIFIED.
- SEAL CONDUIT OPENINGS WITH ELECTRICAL SEALANT.

REVISION	BY	APPROVED	DATE
ORIGINAL	RM	J. NAGELVOORT	09/18
REDESIGNED	CD	J. NAGELVOORT	09/18

CITY OF SAN DIEGO - STANDARD DRAWING

RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE

*Chapman* 9/4/18

COORDINATOR R.C.E. 5623 DATE

DRAWING NUMBER SDI-116

**ON-GRADE PIPE STABILIZATION TEMPORARY INSTALLATION**

UV RESISTANT PVC PIPE

FINISHED GRADE

SIDE VIEW

#3 OR #4 REBAR BENT AS SHOWN OR PRE-BENT STABILIZERS

**NOTE:**

STABILIZERS SHALL BE PLACED NO GREATER THAN 10' APART AT EACH RISER AND AT ALL FITTINGS.

REVISION	BY	APPROVED	DATE
ORIGINAL	RM	J. NAGELVOORT	09/18
REDESIGNED	CD	J. NAGELVOORT	09/18

CITY OF SAN DIEGO - STANDARD DRAWING

RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE

*Chapman* 9/4/18

COORDINATOR R.C.E. 5623 DATE

DRAWING NUMBER SDI-120

**SWING JOINT AND PIPE INSTALLATION ON SLOPES ABOVE GROUND PIPE INSTALLATIONS**

ON-GRADE PIPE STABILIZER

SHORT NIPPLE

SCH 40 UV RESISTANT PVC PIPE

ON-GRADE PIPE STABILIZER

PLAN

ON-GRADE PIPE STABILIZER

SHORT NIPPLE

90° ELLS

ON-GRADE PIPE STABILIZER

SWING JOINT

ON-GRADE PIPE STABILIZER

SWING JOINT

SCH 40 UV RESISTANT PVC PIPE

ELEVATION

LEGEND ON PLANS

**NOTE:**

SWING JOINTS SHALL BE USED AT EACH CHANGE OF GRADE.

REVISION	BY	APPROVED	DATE
ORIGINAL	RM	J. NAGELVOORT	09/18
REDESIGNED	CD	J. NAGELVOORT	09/18

CITY OF SAN DIEGO - STANDARD DRAWING

RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE

*Chapman* 9/4/18

COORDINATOR R.C.E. 5623 DATE

DRAWING NUMBER SDI-123

**REMOTE CONTROL VALVE MANIFOLD ASSEMBLY WITH PVC PIPE (TEMPORARY SYSTEMS)**

PVC MAINLINE

PVC TEE (LINE SIZE)

SCH 40 PVC TEE OR ELL AT TERMINAL END, TYPICAL

MAINLINE DEPTH

BALL VALVE AND PLASTIC ROUND VALVE BOX

PLASTIC ROUND VALVE BOX FOR QUICK COUPLING VALVE

USE SCH PVC 80 NIPPLES FOR MANIFOLD CONNECTIONS TO CONTROL VALVES.

TEE UP TO MANIFOLD DEPTH

18" TYPICAL

18" TYPICAL

18" TYPICAL

18" TYPICAL

PLASTIC RCV RECTANGULAR VALVE BOX FOR CONTROL VALVES.

**NOTES:**

- PVC PIPE USED IN MANIFOLD ASSEMBLIES SHALL BE THE SAME CLASS AS SPECIFIED FOR THE MAINLINE.
- VALVE BOXES SHALL BE HEAT BRANDED WITH CONTROLLER AND VALVE IDENTIFICATION.

REVISION	BY	APPROVED	DATE
ORIGINAL	RM	J. NAGELVOORT	09/18
REDESIGNED	CD	J. NAGELVOORT	09/18

CITY OF SAN DIEGO - STANDARD DRAWING

RECOMMENDED BY THE CITY OF SAN DIEGO STANDARDS COMMITTEE

*Chapman* 9/4/18

COORDINATOR R.C.E. 5623 DATE

DRAWING NUMBER SDI-125

**ISOLATION BALL VALVE 2" AND SMALLER**

TOP OF MULCH

MULCH DEPTH PER PLANS

2" IN PLANTING AREAS

1" MINIMUM 3" MINIMUM

FLUSH IN TURF AREAS

FINISH GRADE

ROUND LOCKING VALVE BOX. REFER TO PLANS OR SPECIFICATIONS.

FILTER FABRIC AROUND VALVE BOX. FABRIC SHALL COVER ALL OPENINGS OF THE BOX.

BALL VALVE. REFER TO LEGEND.

SCH 40 PVC MALE ADAPTER. LINE SIZE

BRICK SUPPORTS. 4 REQUIRED.

4" MIN 3/8" PEA GRAVEL

2" MIN

SCH 40 PVC AS DECREE ELBOW TO MAINLINE DEPTH.

EXTEND PVC STRAIGHT OUT OF BALL VALVE WHEN USED IN MANIFOLDS.

**NOTES:**

- TEFLON TAPE, 3/4" WIDE, SHALL BE USED ON ALL THREADED CONNECTIONS
- CLOSE NIPPLES SHALL NOT BE USED.
- ALL PVC PIPE USED IN MANIFOLD ASSEMBLIES SHALL BE OF THE SAME CLASS AS SPECIFIED FOR THE MAINLINE.
- ALL PLASTIC VALVE BOXES SHALL BE HEAT BRANDED WITH THE APPROPRIATE IDENTIFICATION. REFER TO PLANS AND SPECIFICATIONS.
- DO NOT CUT ADDITIONAL HOLES IN VALVE BOXES.
- ADD SINGLE UNIONS ON EACH SIDE OF VALVE WHEN TRUE UNION BALL VALVES ARE NOT USED.

Revision	By	Approved	Date
ORIGINAL	Kerchell	12/7/75	
Reviewed	KA N. Batta	10/15	
Reviewed	EM T. Stanton	10/18	
Reviewed	SP S. Engsted	03/22	

SAN DIEGO REGIONAL STANDARD DRAWING

RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE

*Chapman* 03/24/2022

Coordinator R.C.E. 52241 DATE

DRAWING NUMBER I-11

PLANS FOR THE CONSTRUCTION OF FAMOSA ALLEY SLOPE RESTORATION

IRRIGATION DETAIL 2

CITY OF SAN DIEGO, CALIFORNIA  
STORM WATER DEPARTMENT  
SHEET 12 OF 12 SHEETS

WATER WBS B-22130

APPROVED: FOR CITY ENGINEER KRISTOPHER ECKERT PRINT DCE NAME DATE C23754 RCE#

SUBMITTED BY: ANTHONY SALVANI PROJECT MANAGER CHECKED BY: BRADEN CRANE PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

210-1695  
CCS27 COORDINATE  
1850-6255  
CCS83 COORDINATE

DRAWING NO. L07

CONTRACTOR INSPECTOR NTP DATE NOC DATE 0101249-12-D

**RICK** 619-291-0707 rickengineering.com 5620 FRIARS ROAD SAN DIEGO, CA 92110

SAN DIEGO ORANGE RIVERSIDE SACRAMENTO SAN LUIS OBISPO SANTA CLARITA PHOENIX TUCSON LAS VEGAS DENVER

100% SUBMITTAL

C:\RICK\Projects\19756\19756\_StormWater\19756\_FamosaSlough\Landscaping\19756-10.dwg, 9/14/2025 3:29 PM