MAPLE CANYON RESTORATION – PHASE 1

CONTRACTOR'S RESPONSIBILITIES

1. 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.
2. 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)
3. EXCAVATE AROUND WATER METER BOX (CITY PROPERTY SIDE) TO DETERMINE IN ADVANCE, THE SIZE OF EACH SERVICE BEFORE TAPPING MAIN.
4. KEEP EXISTING MAINS IN SERVICE IN LIEU OF HIGH-LINING, UNLESS OTHERWISE SPECIFIED SHOWN ON PLANS.
5. THE LOCATIONS OF EXISTING BUILDINGS AS SHOWN ON THE PLAN ARE APPROXIMATE.
6. STORM DRAIN INLETS SHALL REMAIN FUNCTIONAL AT ALL TIMES DURING CONSTRUCTION.
7. 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 5-UTILITIES.
8. EXISTING UTILITY CROSSINGS AS SHOWN ON THE PLANS ARE APPROXIMATE AND ARE NOT REPRESENTATIVE OF ACTUAL LENGTH AND LOCATION OF CONFLICT AREAS.
9. ALL ADVANCE METERING INFRASTRUCTURE (AMI) DEVICES ATTACHED TO THE WATER METER OR LOCATED IN OR NEAR WATER METER BOXES, COFFINS, OR VAULTS SHALL BE PROTECTED AT ALL TIMES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
10. THE CONTRACTOR SHALL ENFORCE ALL SAFETY MEASURES. THE CONTRACTOR SHALL DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING SHORING AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE, AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS.
11. LOCATION AND ELEVATION OF IMPROVEMENTS TO BE MET BY WORK TO BE DONE SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO CONSTRUCTION OF NEW WORK.
12. IF THERE IS ANY QUESTION REGARDING THESE PLANS OR FIELD STAKES, THE CONTRACTOR SHALL REQUEST AN INTERPRETATION BEFORE DOING ANY WORK BY CALLING THE CITY RESIDENT ENGINEER. THE CONTRACTOR SHALL ALSO TAKE THE NECESSARY STEPS TO PROTECT THE PROJECT AND ADJACENT PROPERTY FROM ANY EROSION AND SILTATION THAT RESULTS FROM THEIR OPERATIONS BY APPROPRIATE MEANS (SAND BAGS, HAY BALES, DIKES, SHORING, ETC.) UNTIL SUCH TIME THAT THE PROJECT IS COMPLETED AND ACCEPTED FOR MAINTENANCE BY WHATEVER OWNER, AGENCY OR ASSOCIATION IS TO BE ULTIMATELY RESPONSIBLE FOR MAINTENANCE.
13. CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN HEREON AND ANY OTHER EXISTING LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.

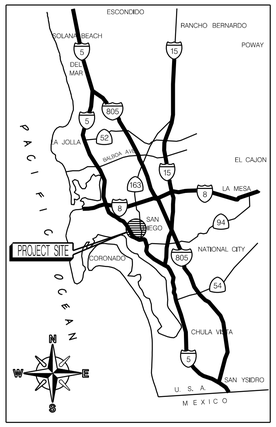
CONTRACTOR'S NOTE

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD CITY OF SAN DIEGO HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF CITY OF SAN DIEGO PROFESSIONALS.

CONSTRUCTION STORM WATER PROTECTION NOTES

1. TOTAL SITE DISTURBANCE AREA (ACRES) 5.91
   HYDROLOGIC UNIT/ WATERSHED PUEBLO SAN DIEGO
   HYDROLOGIC SUBAREA NAME & NO. LINDBERGH (908.21)
2. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE
   ☐ WPCP
   THE PROJECT IS SUBJECT TO MUNICIPAL STORM WATER PERMIT NO. R9-2013-0001 AS AMENDED BY R9-2015-0001 AND R9-2015-0100
   ☒ SWPPP
   THE PROJECT IS SUBJECT TO MUNICIPAL STORM WATER PERMIT NO. R9-2013-0001 AS AMENDED BY R9-2015-0001 AND R9-2015-0100 AND CONSTRUCTION GENERAL PERMIT ORDER 2009-0009-DWQ AS AMENDED BY ORDER 2010-0014-DWQ AND 2012-0006-DWQ
   TRADITIONAL: RISK LEVEL 1 ☐ 2 ☐ 3 ☐
   LUP: RISK TYPE 1 ☐ 2 ☒ 3 ☐
3. CONSTRUCTION SITE PRIORITY
   ☐ ASBS ☒ HIGH ☐ MEDIUM ☐ LOW

RICK ENGINEERING COMPANY
San Diego
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619-291-0707
(FAX) 619-291-4165
rickengineering.com
Riverside - Orange - Sacramento - San Luis Obispo - Phoenix - Tucson - Denver



VICINITY MAP
NOT TO SCALE

FIELD DATA

TOPOGRAPHY SOURCE:
BASED ON SURVEY PERFORMED BY RICK ENGINEERING COMPANY BETWEEN 02/06/2019 TO 05/14/2019, WORK ORDER NO. HI76828 17CR06 (B-12040).

ALSO, BASED ON SURVEY PERFORMED BY AGUIRRE AND ASSOCIATES IN MARCH 2009, APRIL AND MAY 2010, BETWEEN APRIL AND JUNE 2013, AND JUNE 2016.

BENCHMARK:
A BRASS DISK IN CURB AT NORTHWEST CORNER OF 2ND AVE. AND QUINCE ST., ELEV. 269.15 MSL, BASED ON NGVD 29 (CITY OF SAN DIEGO BENCH MARK #108)

FIELD NOTES:

BASIS OF BEARING / COORDINATES:
THE BASIS OF BEARINGS FOR THIS PROJECT IS THE NORTH AMERICAN DATUM OF 1983 (NAD 83) CALIFORNIA STATE PLANE COORDINATE SYSTEM OF 1983 (CCS83) ZONE 6 (EPOCH 1991.35) BASED LOCALLY UPON THE FOLLOWING CONTROL POINTS PER RECORD OF SURVEY 14492.

STATION	NORTHING	EASTING
165	1844844.17	6271176.83
167	1850566.05	6285645.78

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 ROAD, SAN DIEGO, CA, 92110
619-291-0707

KEVIN R. GIBSON
LICENSE NO. 52295

DATE:_____

TRAFFIC CONTROL NOTES:

THE CONTRACTOR SHALL, PER SECTION 601-2.1.3 OF THE CONTRACT SPECIAL PROVISIONS, PREPARE TRAFFIC CONTROL WORKING DRAWINGS AND SUBMIT THEM TO THE RESIDENT ENGINEER. THE WORKING DRAWINGS WILL BE SENT TO THE ENGINEERING TRAFFIC CONTROL SECTION FOR REVIEW AND APPROVAL. THE CONTRACTOR SHALL ALLOW A MINIMUM OF 20 WORKING DAYS FOR REVIEW OF THE WORKING DRAWINGS. UPON APPROVAL OF THE TRAFFIC CONTROL PLAN, THE ENGINEERING TRAFFIC CONTROL SECTION WILL ISSUE A TRAFFIC CONTROL PLAN (TCP) PERMIT. WORK SHALL NOT BEGIN IN THE PUBLIC RIGHT OF WAY WITHOUT THE APPROVED TCP PERMIT.

WORK TO BE DONE

CONSTRUCTION OF MAPLE CANYON RESTORATION - PHASE I CONSISTS OF THE REPLACEMENT OF SIXTEEN (16) STORM DRAIN SYSTEMS THROUGHOUT BANKERS HILL THAT OUTFALL INTO MAPLE CANYON AND INCLUDES THE CONSTRUCTION OF A NEW STORM DRAIN SYSTEM WITHIN MAPLE STREET BETWEEN STATE STREET AND THE DOWNSTREAM END OF MAPLE CANYON. STORM DRAIN SIZES VARY BETWEEN 18", 24", 30", 36", 42", AND 48". CONSTRUCTION ALSO INCLUDES STORM DRAIN INLETS, CLEANOUTS, ENERGY DISSIPATORS, TRENCH RESURFACING, PAVEMENT RESURFACING, CURB RAMPS, SIDEWALK, CURB AND GUTTER, RETAINING WALL, STREET REPAIR, REVEGETATION, ACCESS ROAD IMPROVEMENTS, STREAMBED RESTORATION, AND ALL OTHER WORK AND APPURTENANCES IN ACCORDANCE WITH THESE SPECIFICATIONS AND DRAWINGS NUMBERED 38321-01-D THROUGH 38321-98-D.

LEGEND

EXISTING STRUCTURES	SYMBOL
EX MAJOR CONTOUR	
EX MINOR CONTOUR	
EX RIGHT OF WAY	
EX PROPERTY LINE	
EX JDW (JURISDICTIONAL WATERS)	
EX WATER MAIN & VALVES	
EX WATER BLOW OFF	
EX FIRE HYDRANT	
EX SEWER MAIN & MANHOLES	
EX DRAINS	
EX PAVEMENT (PROFILE)	
EX GROUND LINE (PROFILE)	
EX GAS MAIN	
EX GAS METER	
EX GAS VALVE	
ELEC. COND., TEL. COND., CATV	
EX FENCE	
EX DRIVEWAY	
EX CURB RAMP	
EX GUARDRAIL	
EX PARKING METER	
EX STEPS	
EX STREET LIGHT	
EX TREES	
EX BUSHES	
EX UTILITY POLE	
EX GUY WIRE	
EX INLET	
EX CLEANOUT	
EX TRAFFIC SIGNAL	

IMPROVEMENTS	REFERENCE	SYMBOL
STORM DRAIN	D-61, D-62, SDD-110, SDG-107	
STORM DRAIN CLEANOUT TYPE A	D-9, D-10, SDD-114, D-61, M-3	
STORM DRAIN CATCH BASIN TYPE I	D-29	
STORM DRAIN CURB INLET TYPE B	SDD-116, SDG-110	
STORM DRAIN CURB INLET TYPE C	SDD-117, SDG-110, D-03B	
6" CURB	SDG-150	
CURB AND GUTTER - COMBINED TYPE G	SDG-151	
TEMPORARY ACCESS ROAD	SEE DETAIL SHT 71	
CHAIN LINK FENCE	M-6	
WOOD FENCE	M-9	
MIDWEST GUARDRAIL	CSP A77L1	
CONCRETE BARRIER (TYPE 60)	CSP A76A	
LIMITS OF WORK	-	
GRADING LIMITS	-	
MAJOR CONTOUR	-	
MINOR CONTOUR	-	
CONCRETE ANCHOR	SDS-114	
RIP RAP	SDD-104	
WING TYPE HEADWALL	D-34	
CONCRETE ENERGY DISSIPATOR	SDD-105	
CURB RAMPS	SDG-130, SDG-131, SDG-132, SDG-133, SDG-135, SDG-136	
STRUCTURAL SECTION (SCHEDULE J)	SDG-113	
SIDEWALK	SDG-109, SDG-155, SDG-156	
CROSS GUTTER	SDG-157	
1" WATER SERVICE UNLESS OTHERWISE SPECIFIED	SDM-105, SDW-107, SDW-113, SDW-134, SDW-135, SDW-136, SDW-137, SDW-149, SDW-150, WS-03	EXISTING WATER WM P.L. W

FOR ADDITIONAL SYMBOLS SEE DEMOLITION, RESURFACING, IMPROVEMENT, CURB RAMP, AND REVEGETATION SHEETS.

G-1

PLANS FOR THE CONSTRUCTION OF
MAPLE CANYON RESTORATION – PHASE 1
COVER SHEET

MAPLE CANYON RESTORATION – PHASE 1

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

WARNING
0 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.

The City of SAN DIEGO Transportation and Storm Water

AS-BUILT INFORMATION

MATERIALS	MANUFACTURER
PIPE (STORM DRAIN)	-
STORM DRAIN CLEAN OUTS	-
CURB INLETS	-
STORM DRAIN MANHOLES	-
DISSIPATOR	-
CATCH BASINS	-
	-

SPEC. NO. 1406

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 1 OF 98 SHEETS

APPROVED:
FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DCE NAME RCE#

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

STORM DRAIN WBS B-12040

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

38321-01-D

FINAL SUBMITTAL

SHEET INDEX

SHEET NO.	DISCIPLINE CODE	TITLE	LIMITS	PIPE SIZE (IN)	PIPE MATERIAL	LENGTH (FT)
1	G-1	COVER SHEET				
2	G-2	SHEET INDEX AND ABBREVIATIONS				
3	G-3	KEY MAP				
			DEMOLITION			
4	D-1	BRANT STREET	MAPLE CANYON TO BARNSON PLACE			
5	D-2	OLIVE STREET	MAPLE CANYON TO ALBATROSS STREET			
6	D-3	SECOND AVENUE	MAPLE CANYON TO QUINCE STREET			
7	D-4	QUINCE STREET	MAPLE CANYON TO THIRD AVENUE			
8	D-5	THIRD AVENUE	MAPLE CANYON TO THIRD AVENUE			
9	D-6	REDWOOD STREET	MAPLE CANYON TO FOURTH AVENUE			
10	D-7	QUINCE STREET	MAPLE CANYON TO FOURTH AVENUE			
11	D-8	PALM STREET	MAPLE CANYON TO FOURTH AVENUE			
12	D-9	THIRD AVENUE	MAPLE CANYON TO THIRD AVENUE			
13	D-10	THIRD AVENUE	MAPLE CANYON TO OLIVE STREET			
14	D-11	SECOND AVENUE	MAPLE CANYON TO SECOND AVENUE			
15	D-12	FIRST AVENUE	MAPLE CANYON TO FIRST AVENUE			
16	D-13	FRONT STREET / NUTMEG STREET	FRONT STREET TO NUTMEG STREET			
17	D-14	MAPLE STREET / ALBATROSS STREET	MAPLE CANYON TO ALBATROSS STREET			
18	D-15	MAPLE STREET	DOVE STREET TO CURLEW STREET			
19	D-16	MAPLE STREET	STATE STREET TO DOVE STREET			
			STORM DRAIN			
20	C-1	BRANT STREET	MAPLE CANYON TO BARNSON PLACE	18/24	RCP	34.41/217.42
21	C-2	OLIVE STREET	MAPLE CANYON TO ALBATROSS STREET	18	RCP	176.03
22	C-3	SECOND AVENUE	MAPLE CANYON TO QUINCE STREET	18	RCP	234.00
23	C-4	QUINCE STREET	MAPLE CANYON TO THIRD AVENUE	18	RCP	147.23
24	C-5	THIRD AVENUE	MAPLE CANYON TO THIRD AVENUE	18	RCP	148.11
25	C-6	REDWOOD STREET	MAPLE CANYON TO FOURTH AVENUE	36/42	RCP	151.81/89.80
26	C-7	QUINCE STREET	MAPLE CANYON TO FOURTH AVENUE	18	RCP	198.33
27	C-8	PALM STREET	MAPLE CANYON TO FOURTH AVENUE			
28	C-9	THIRD AVENUE	MAPLE CANYON TO THIRD AVENUE	18	RCP	180.50
29	C-10	THIRD AVENUE	MAPLE CANYON TO OLIVE STREET	18	RCP	194.00
30	C-11	THIRD AVENUE	MAPLE CANYON TO OLIVE STREET	18	RCP	171.92
31	C-12	SECOND AVENUE	MAPLE CANYON TO SECOND AVENUE	18	RCP	158.78
32	C-13	FIRST AVENUE	MAPLE CANYON TO FIRST AVENUE	18	RCP	198.42
33	C-14	NUTMEG STREET	MAPLE CANYON TO FIRST AVENUE	36	RCP	195.00
34	C-15	NUTMEG STREET / FIRST AVENUE	MAPLE CANYON TO FIRST AVENUE / NUTMEG STREET TO MAPLE STREET	30/36	RCP	19.54/175.91
35	C-16	FIRST AVENUE	NUTMEG STREET TO MAPLE STREET	18/24/30	RCP	42.48/57.77/29.57
36	C-17	FRONT STREET	MAPLE CANYON TO W MAPLE STREET	18	RCP	144.77
37	C-18	MAPLE STREET	MAPLE CANYON TO ALBATROSS STREET	36	RCP	187.50
38	C-19	MAPLE STREET / ALBATROSS STREET	MAPLE CANYON TO ALBATROSS STREET/ MAPLE STREET TO W LAUREL STREET	36	RCP	147.85
39	C-20	CURLEW STREET	MAPLE STREET TO NUTMEG STREET	18	RCP	151.64
40	C-21	MAPLE STREET	STATE STREET TO DOVE STREET	48	RCP	346.00
41	C-22	MAPLE STREET	DOVE STREET TO CURLEW STREET	48	RCP	367.60
42	C-23	HEADWALL DETAILS 1				
43	C-24	HEADWALL DETAILS 2		TOTAL SD		4,166.39
44	C-25	HEADWALL DETAILS 3				
45	C-26	HEADWALL DETAILS 4				
46	C-27	HEADWALL DETAILS 5				
47	C-28	HEADWALL DETAILS 6				
48	C-29	STORM DRAIN DETAILS 1				
			SURFACE IMPROVEMENTS			
49	C-30	BRANT STREET	BARNSON PLACE TO W NUTMEG STREET			
50	C-31	ALBATROSS STREET / SECOND AVENUE	PALM STREET TO BARNSON PLACE/ QUINCE STREET TO MAPLE CANYON			
51	C-32	QUINCE STREET / FOURTH AVENUE	THIRD AVENUE TO MAPLE CANYON/ QUINCE STREET TO MAPLE CANYON			
52	C-33	THIRD AVENUE	PALM STREET TO OLIVE STREET			
53	C-34	FRONT STREET / FIRST AVENUE	NUTMEG STREET TO OLIVE STREET/ NUTMEG STREET TO MAPLE STREET			
54	C-35	FIRST AVENUE	NUTMEG STREET TO MAPLE STREET			
55	C-36	ALBATROSS STREET	MAPLE STREET TO LAUREL STREET			
56	C-37	CURLEW STREET	W NUTMEG STREET TO MAPLE CANYON			
57	C-38	STREET RESURFACING PLAN				

SHEET NO.	DISCIPLINE CODE	TITLE	LIMITS
58	C-39	CURB RAMP LOCATION	
59	C-40	CURB RAMP DETAIL 1	
60	C-41	CURB RAMP DETAIL 2	
61	C-42	CURB RAMP DETAIL 3	
62	C-43	CURB RAMP DETAIL 4	
63	C-44	CURB RAMP DETAIL 5	
64	C-45	CURB RAMP DETAIL 6	
65	C-46	CURB RAMP DETAIL 7	
66	C-47	CURB RAMP DETAIL 8	
67	C-48	CURB RAMP DETAIL 9	
68	C-49	RETAINING WALL SURFACE IMPROVEMENT DETAIL	THIRD AVENUE
69	C-50	STRIPING DETAILS 1	
70	C-51	STRIPING DETAILS 2	
71	C-52	TEMPORARY ACCESS ROAD 1	
72	C-53	TEMPORARY ACCESS ROAD 2	
73	C-54	TEMPORARY ACCESS ROAD 3	
74	C-55	TEMPORARY ACCESS ROAD TYPICAL SECTIONS	
75	C-56	STREAMBED RESTORATION	
76	C-57	STREAMBED RESTORATION DETAILS 1	
77	C-58	STREAMBED RESTORATION DETAILS 2	
78	C-59	SURVEY MONUMENT SHEET	
79	C-60	STORM DRAIN DETAILS 2	
		LANDSCAPE	
80	L-1	REVEGETATION PLAN KEY MAP	
81	L-2	REVEGETATION PLAN	
82	L-3	REVEGETATION PLAN	
83	L-4	REVEGETATION PLAN	
84	L-5	REVEGETATION PLAN	
85	L-6	REVEGETATION PLAN	
86	L-7	REVEGETATION PLAN	
87	L-8	REVEGETATION PLAN	
88	L-9	REVEGETATION PLAN	
89	L-10	REVEGETATION PLAN	
90	L-11	REVEGETATION PLAN	
91	L-12	REVEGETATION PLAN	
92	L-13	REVEGETATION NOTES & REFERENCE TABLES	
93	L-14	REVEGETATION LEGEND	
		STRUCTURAL	
94	S-1	STRUCTURAL GENERAL NOTES	THIRD AVENUE
95	S-2	STRUCTURAL GENERAL NOTES AND ABBREVIATIONS	THIRD AVENUE
96	S-3	RETAINING WALL DETAILS	THIRD AVENUE
97	S-4	RETAINING WALL PLAN AND PROFILE	THIRD AVENUE
98	S-5	RETAINING WALL SECTIONS	THIRD AVENUE

DISCIPLINE CODE

- G GENERAL
- D DEMOLITION
- C CIVIL
- L LANDSCAPE
- S STRUCTURAL

ABBREVIATIONS

ABAND	ABANDON
ABAND'D	ABANDONED
AC	ASBESTOS CEMENT
AHD	AHEAD
APN	ACCESSORS PARCEL NUMBER
ASSY	ASSEMBLY
AVE	AVENUE
BK	BACK
BMZ	BRUSH MANAGEMENT ZONE
BTH	BROWN TRUNK HEIGHT
BTWN	BETWEEN
CAB	CRUSHED AGGREGATE BASE
CALTRANS	CALIFORNIA DEPARTMENT OF TRANSPORTATION
CATV	CABLE TV
CFS	CUBIC FEET PER SECOND
CI	CAST IRON PIPE
CL, C	CENTER LINE
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CONC	CONCRETE
COND	CONDUIT
CONT	CONTINUED
CONTR	CONTRACTOR
CSDSD	CITY OF SAN DIEGO STANDARD DRAWING
CSP	CALTRANS STANDARD PLAN
DB	DIRECT BURIED
DI	DRAINAGE INLET
DIA	DIAMETER
DR	DRIVE
DBH	DIAMETER AT BREAST HEIGHT
EB	ENCASED BURIED
EL, ELEV	ELEVATION
ELEC	ELECTRIC
ESL	ENVIRONMENTALLY SENSITIVE LANDS
ECR	EROSION CONTROL AND REVEGETATION
EX, EXIST	EXISTING
E/O	EAST OF
F	FLANGE
FG	FINISHED GROUND
FL	FLOW LINE
FPS	FEET PER SECOND
FT	FEET
GB	GRADE BREAK
GV	GATE VALVE
H	HEIGHT
HDPE	HIGH-DENSITY POLYETHYLENE
HGL	HYDRAULIC GRADE LINE
HP	HIGH PRESSURE
IE	INVERT ELEVATION
IN	INCHES
INV	INVERT
JDW	JURISDICTIONAL WATERS
KSI	KILO POUNDS PER SQUARE INCH
L	LENGTH
LAT	LATERAL
LF	LINEAR FEET
LT	LEFT
LOL	LAYOUT LINE
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT
MTD	MULTIPLE TELEPHONE DUCT
NO.	NUMBER
N/E	NORTH EAST
N/O	NORTH OF
N/W	NORTH WEST
OVHD	OVER HEAD
PCE	PERMANENT CONSTRUCTION EASEMENT
PL	PROPERTY LINE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
PROPRCP	PROPOSED REINFORCED CONCRETE PIPE
RCP	REINFORCED CONCRETE PIPE
RED	REDUCER
REVEG	REVEGETATION
RT	RIGHT
R/W	RIGHT OF WAY
SD	STORM DRAIN
SDRSD	SAN DIEGO REGIONAL STANDARD DRAWING
SEC	SECOND
SHT	SHEET
SL	SURVEY LINE
SO	SPECIES
SP	STUB OUT
ST	STREET
STA	STATION
S/E	SOUTH EAST
S/O	SOUTH OF
S/W	SOUTH WEST
SWQH	STORM WATER QUALITY HANDBOOK
SWR	SEWER
TC	TOP OF CURB
TCE	TEMPORARY CONSTRUCTION EASEMENT
TEL	TELEPHONE
U/G	UNDER GROUND
UNK	UNKNOWN
VC	VITRIFIED CLAY PIPE
W	WIDTH
WM	WATER METER
WPC	WATER POLLUTION CONTROL
WTR	WATER
W/O	WEST OF
WV	WATER VALVE

ABBREVIATIONS AND SHEET INDEX

G-2

PLANS FOR THE CONSTRUCTION OF
MAPLE CANYON RESTORATION – PHASE 1
SHEET INDEX AND ABBREVIATIONS

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 2 OF 98 SHEETS

STORM DRAIN WBS B-12040

REGISTERED PROFESSIONAL ENGINEER · KEVIN R. GIBSON · NO. 52295 · STATE OF CALIFORNIA

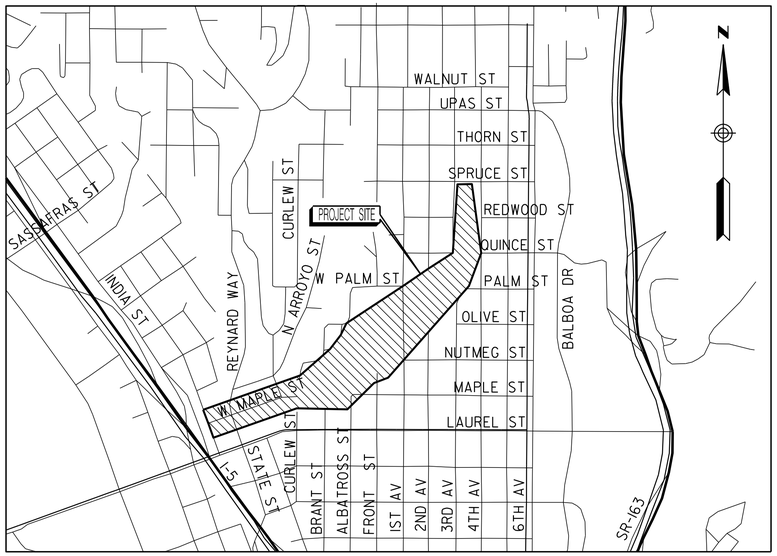
APPROVED:
FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DCE NAME _____ RCE# _____

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER
206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE
CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____
38321-02-D

RICK ENGINEERING COMPANY
San Diego
5620 FRIARS ROAD
SAN DIEGO, CA 92110
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LOCATION MAP
NO SCALE

SYSTEM 16 SHEET 39
SYSTEM 17 SHEET 41
SYSTEM 17 SHEET 40
SYSTEM 1 SHEET 20
SYSTEM 2 SHEET 21
SYSTEM 12 SHEET 32
SYSTEM 3 SHEET 22
SYSTEM 9 SHEET 28
SYSTEM 10 SHEET 29
SYSTEM 11 SHEET 31
SYSTEM 4 SHEET 23
SYSTEM 5 SHEET 24
SYSTEM 6 SHEET 25
SYSTEM 7 SHEET 26
SYSTEM 8 SHEET 27
SYSTEM 10 SHEET 30
SYSTEM 13 SHEET 33
SYSTEM 13 SHEET 35
SYSTEM 13 SHEET 34
SYSTEM 14 SHEET 36
SYSTEM 15 SHEET 37
SYSTEM 15 SHEET 38
2016 RESTORED VEGETATION AREA
2016 RESTORED VEGETATION AREA
JURISDICTIONAL WATERS
JURISDICTIONAL WATERS
MAPLE CANYON APPROX. BOUNDARY
MAPLE CANYON APPROX. BOUNDARY
FIRST AVE VEHICULAR BRIDGE
TEMPORARY ACCESS ROAD
TEMPORARY ACCESS ROAD
QUINCE STREET PEDESTRIAN BRIDGE
CANYON ENTRANCE
STAGING AREA
EXISTING DETENTION POND
ALBATROSS ST R/W (TYP)
PL (TYP)
PL (TYP)
W LAUREL ST
MAPLE ST
OLIVE ST
BARNSON PL
W NUTMEG ST
NUTMEG ST
STATE ST
CURLEW ST
DOVE ST
BRANT ST
ALBATROSS ST
PALM ST
FRONT ST
FIRST AVE
SECOND AVE
THIRD AVE
FOURTH AVE
FIFTH AVE
QUINCE ST
REDWOOD ST
REDWOOD ST

KEY MAP
NO SCALE

KEY MAP

G-3

PLANS FOR THE CONSTRUCTION OF
MAPLE CANYON RESTORATION – PHASE 1
KEY MAP

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 3 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER _____ DATE
SHEILA BOSE
PRINT DCE NAME RCE#

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

CONTRACTOR _____ DATE STARTED _____
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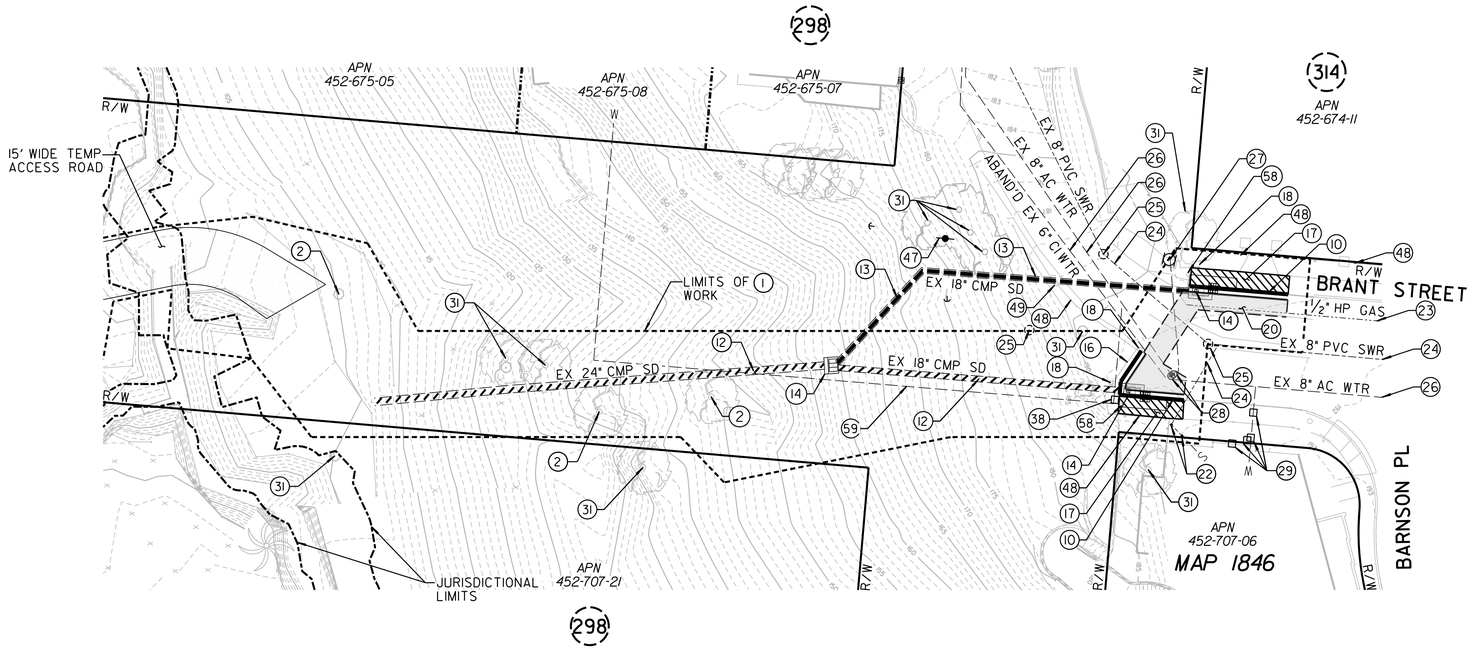
SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER
206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE
38321-03-D

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KEY MAP

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SYSTEM 1

DEMOLITION NOTES

(1) LIMITS OF WORK, CLEARING AND GRUBBING
(2) REMOVE EX TREE
(10) REMOVE AND REPLACE EX CURB AND GUTTER
(12) REMOVE EX STORM DRAIN
(13) ABANDON EX STORM DRAIN
(14) REMOVE EX STORM DRAIN STRUCTURE
(16) REMOVE AND REPLACE EX FENCE IN KIND
(17) REMOVE AND REPLACE EX SIDEWALK
(18) SALVAGE EX SIGN
(20) REMOVE AND REPLACE EX PAVEMENT
(22) PROTECT EX SEWER CLEANOUT IN PLACE
(23) PROTECT GAS IN PLACE
(24) PROTECT EX SEWER MAIN IN PLACE
(25) PROTECT EX SEWER MANHOLE IN PLACE
(26) PROTECT EX WATER MAIN IN PLACE
(27) PROTECT EX FIRE HYDRANT IN PLACE
(28) PROTECT EX WATER VALVE IN PLACE
(29) PROTECT EX WATER METER IN PLACE
(31) PROTECT EX TREE IN PLACE
(38) REMOVE AND RELOCATE EX WATER METER
(47) PROTECT UTILITY POLE IN PLACE
(48) PROTECT EX FENCE IN PLACE
(58) RESET EX SURVEY MONUMENT
(59) REMOVE AND RELOCATE EX WATER SERVICE

DEMOLITION LEGEND

- LIMITS OF WORK, CLEARING AND GRUBBING
- STORM DRAIN TO BE ABANDONED (PER GREENBOOK AND WHITEBOOK)
- STORM DRAIN TO BE REMOVED
- AC PAVEMENT REMOVAL
- CONCRETE REMOVAL
- CURB AND GUTTER TO BE REMOVED

REMOVALS

STORM DRAIN - 18" - 75 LF
STORM DRAIN - 24" - 119 LF
DRAINAGE INLET - 3
AC PAVEMENT - 327 SF
SIDEWALK - 214 SF
CURB AND GUTTER - 57 LF
TREES < 24" - 3
WOODEN POST FENCE - 15 LF
WATER METER - 1

ABANDONMENT

STORM DRAIN - 18" - 104 LF

SALVAGE

SIGN - 3

0 20 40 60
SCALE 1" = 20'

D-1

MAPLE CANYON RESTORATION – PHASE 1
DEMOLITION PLAN
BRANT STREET
MAPLE CANYON TO BARNSON PLACE

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 4 OF 98 SHEETS

STORM DRAIN WBS B-12040

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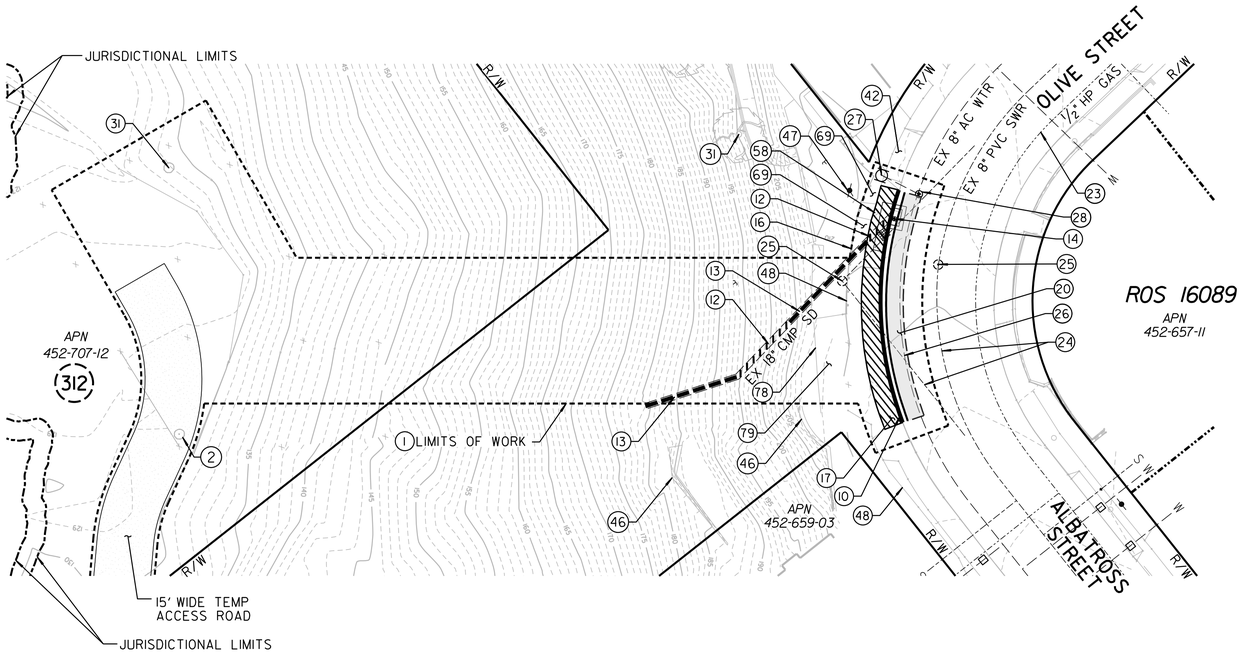
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BRANT STREET

FINAL SUBMITTAL



SYSTEM 2

DEMOLITION NOTES

(1) LIMITS OF WORK, CLEARING AND GRUBBING
(10) REMOVE AND REPLACE EX CURB AND GUTTER
(12) REMOVE EX STORM DRAIN
(13) ABANDON EX STORM DRAIN
(14) REMOVE EX STORM DRAIN STRUCTURE
(17) REMOVE AND REPLACE EX SIDEWALK
(20) REMOVE AND REPLACE EX PAVEMENT
(23) PROTECT GAS IN PLACE
(24) PROTECT EX SEWER MAIN IN PLACE
(25) PROTECT EX SEWER MANHOLE IN PLACE
(26) PROTECT EX WATER MAIN IN PLACE
(27) PROTECT EX FIRE HYDRANT IN PLACE
(28) PROTECT EX WATER VALVE IN PLACE
(30) PROTECT EX MONUMENT IN PLACE
(31) PROTECT EX TREE IN PLACE
(42) PROTECT EX DRIVEWAY IN PLACE
(46) PROTECT EX WALL IN PLACE
(47) PROTECT UTILITY POLE IN PLACE
(48) PROTECT EX FENCE IN PLACE
(58) RESET EX SURVEY MONUMENT
(69) PROTECT EX VEGETATION AND IRRIGATION SYSTEM IN PLACE
(78) REMOVE EX FENCE
(79) SALVAGE EX LANDSCAPE AND IRRIGATION SYSTEM AND RETURN TO RESIDENT

DEMOLITION LEGEND

- LIMITS OF WORK, CLEARING AND GRUBBING
- STORM DRAIN TO BE ABANDONED (PER GREENBOOK AND WHITEBOOK)
- STORM DRAIN TO BE REMOVED
- AC PAVEMENT REMOVAL
- CONCRETE REMOVAL
- CURB AND GUTTER TO BE REMOVED

REMOVALS

STORM DRAIN - 18" - 29 LF
DRAINAGE INLET - 1
AC PAVEMENT - 271SF
SIDEWALK - 322 SF
CURB AND GUTTER - 63 LF
TREES < 24" - 1
CHAIN LINK FENCE - 23 LF

ABANDONMENT

STORM DRAIN - 18" - 55 LF

0 20 40 60
SCALE 1"=20'

D-2

OLIVE STREET

MAPLE CANYON RESTORATION – PHASE 1
DEMOLITION PLAN
OLIVE STREET
MAPLE CANYON TO ALBATROSS STREET

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 5 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED: FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DCE NAME RCE#

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
DESIGNED BY: BAREAZ PIROMARI, PROJECT ENGINEER

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ORIGINAL	RICK			

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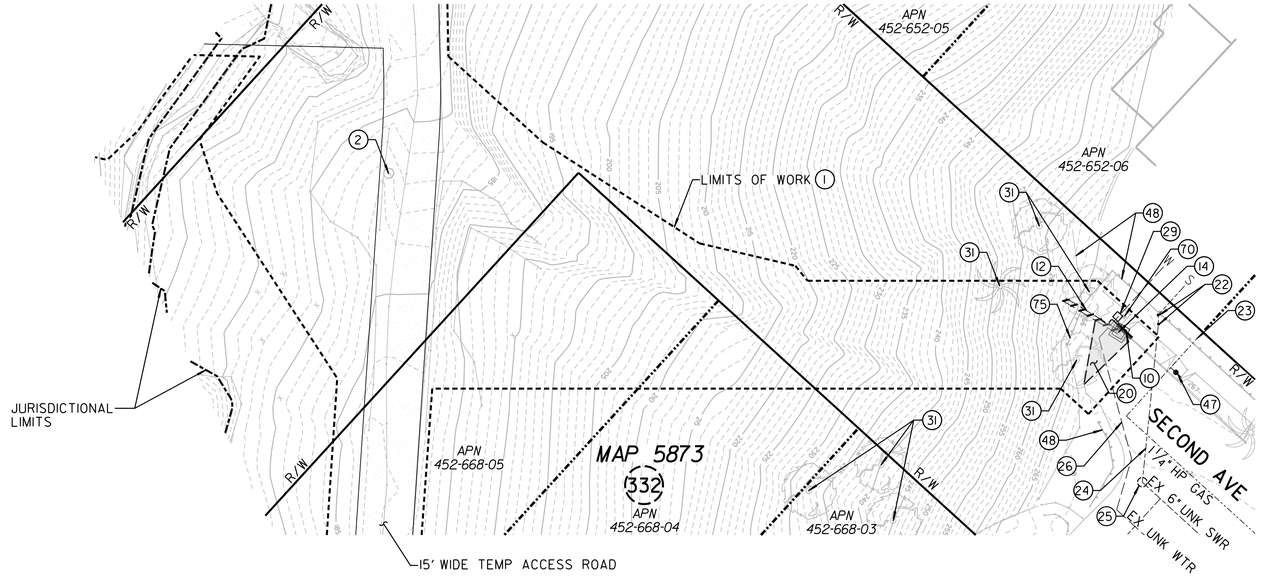
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SYSTEM 3

DEMOLITION NOTES

(1) LIMITS OF WORK, CLEARING AND GRUBBING
(2) REMOVE EX TREE
(10) REMOVE AND REPLACE EX CURB AND GUTTER
(12) REMOVE EX STORM DRAIN
(14) REMOVE EX STORM DRAIN STRUCTURE
(20) REMOVE AND REPLACE EX PAVEMENT
(22) PROTECT EX SEWER CLEANOUT IN PLACE
(23) PROTECT GAS IN PLACE
(24) PROTECT EX SEWER MAIN IN PLACE
(25) PROTECT EX SEWER MANHOLE IN PLACE
(26) PROTECT EX WATER MAIN IN PLACE
(29) PROTECT EX WATER METER IN PLACE
(31) PROTECT EX TREE IN PLACE
(47) PROTECT UTILITY POLE IN PLACE
(48) PROTECT EX FENCE IN PLACE
(70) PROTECT EX MAIL BOX IN PLACE
(75) SALVAGE EX FENCE AND PROVIDE TO RESIDENT

DEMOLITION LEGEND

------ LIMITS OF WORK, CLEARING AND GRUBBING
////// STORM DRAIN TO BE REMOVED
AC PAVEMENT REMOVAL
CURB AND GUTTER TO BE REMOVED

REMOVALS

STORM DRAIN - 12" - 20 LF
DRAINAGE INLET - 1
AC PAVEMENT - 99 SF
CURB AND GUTTER - 6 LF
TREES < 24" - 1

SALVAGE

IRON ROD FENCE - 23 LF

0 20 40 60
SCALE 1" = 20'

D-3

MAPLE CANYON RESTORATION – PHASE 1
DEMOLITION PLAN
SECOND AVENUE
MAPLE CANYON TO QUINCE STREET

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 6 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER — DATE
SHEILA BOSE
PRINT DCE NAME — RCE#

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CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

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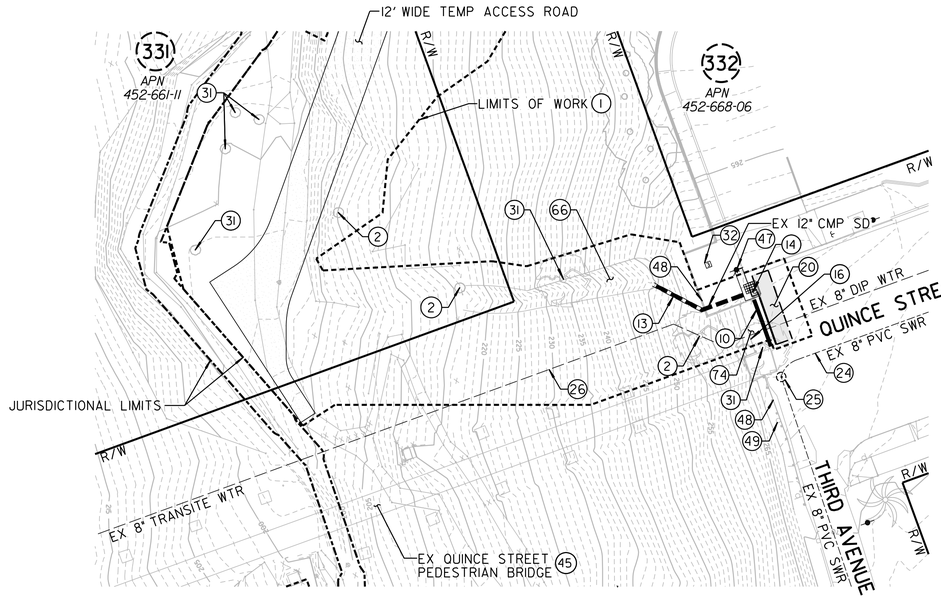
SECOND AVENUE

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SYSTEM 4

DEMOLITION NOTES

(1) LIMITS OF WORK, CLEARING AND GRUBBING
(2) REMOVE EX TREE
(10) REMOVE AND REPLACE EX CURB AND GUTTER
(13) ABANDON EX STORM DRAIN
(14) REMOVE EX STORM DRAIN STRUCTURE
(16) REMOVE AND REPLACE EX FENCE IN KIND
(20) REMOVE AND REPLACE EX PAVEMENT
(24) PROTECT EX SEWER MAIN IN PLACE
(25) PROTECT EX SEWER MANHOLE IN PLACE
(26) PROTECT EX WATER MAIN IN PLACE
(31) PROTECT EX TREE IN PLACE
(32) PROTECT UTILITY STRUCTURE IN PLACE
(45) PROTECT EX BRIDGE IN PLACE
(47) PROTECT UTILITY POLE IN PLACE
(48) PROTECT EX FENCE IN PLACE
(49) PROTECT EX SIGN IN PLACE
(66) REMOVE EXIST CONCRETE SWALE
(74) REMOVE EX VEGETATION AND IRRIGATION SYSTEM

DEMOLITION LEGEND

------ LIMITS OF WORK, CLEARING AND GRUBBING
▬ ▬ STORM DRAIN TO BE ABANDONED (PER GREENBOOK AND WHITEBOOK)
AC PAVEMENT REMOVAL
CURB AND GUTTER TO BE REMOVED

REMOVALS

DRAINAGE INLET - 1
AC PAVEMENT - 87 SF
CURB AND GUTTER - 14 LF
TREES < 24" - 3
WOODEN POST FENCE - 13 LF
CONCRETE SWALE - 355 SF

ABANDONMENT

STORM DRAIN - 12" - 27 LF

0 20 40 60
SCALE 1"=20'

QUINCE STREET

D-4

MAPLE CANYON RESTORATION – PHASE 1
DEMOLITION PLAN
QUINCE STREET
MAPLE CANYON TO THIRD AVENUE

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 7 OF 98 SHEETS

STORM DRAIN WBS B-12040

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SHEILA BOSE
PRINT DCE NAME _____ RCE# _____

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

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ORIGINAL	RICK			

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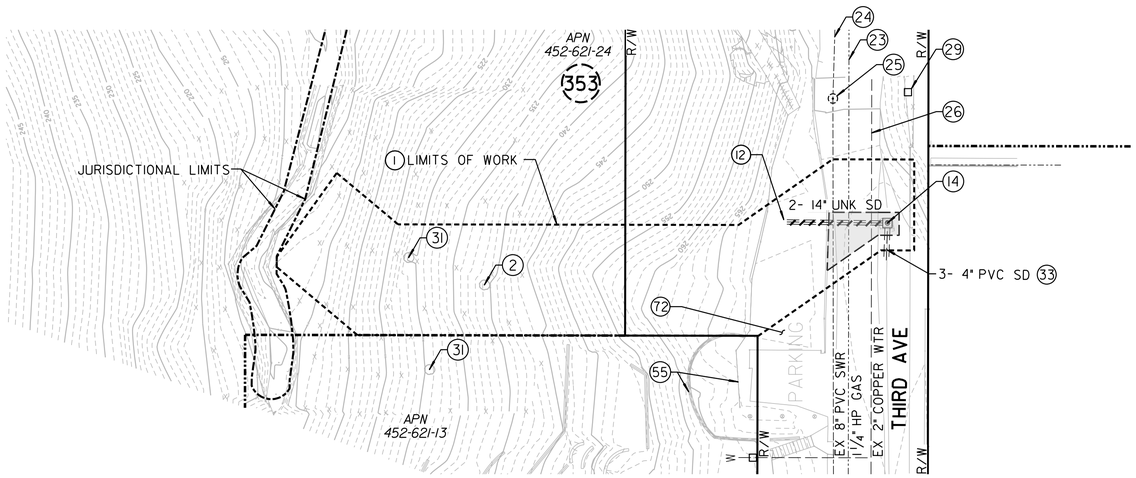
REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
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SYSTEM 5

DEMOLITION NOTES

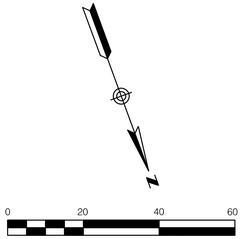
(1) LIMITS OF WORK, CLEARING AND GRUBBING
(2) REMOVE EX TREE
(12) REMOVE EX STORM DRAIN
(14) REMOVE EX STORM DRAIN STRUCTURE
(23) PROTECT GAS IN PLACE
(24) PROTECT EX SEWER MAIN IN PLACE
(25) PROTECT EX SEWER MANHOLE IN PLACE
(26) PROTECT EX WATER MAIN IN PLACE
(29) PROTECT EX WATER METER IN PLACE
(31) PROTECT EX TREE IN PLACE
(33) PROTECT EX STORM DRAIN IN PLACE
(55) PROTECT EX STRUCTURE IN PLACE
(72) PROTECT EX PARKING IN PLACE

DEMOLITION LEGEND

------ LIMITS OF WORK, CLEARING AND GRUBBING
////// STORM DRAIN TO BE REMOVED
[_ _] AC PAVEMENT REMOVAL

REMOVALS

STORM DRAIN - 14" - 54 LF
DRAINAGE INLET - 1
AC PAVEMENT - 173 SF
TREES < 24" - 1



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D-5

MAPLE CANYON RESTORATION – PHASE 1
DEMOLITION PLAN
THIRD AVENUE
MAPLE CANYON TO THIRD AVENUE

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 8 OF 98 SHEETS

STORM DRAIN WBS B-12040

REGISTERED PROFESSIONAL ENGINEER
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NO. 52295
STATE OF CALIFORNIA

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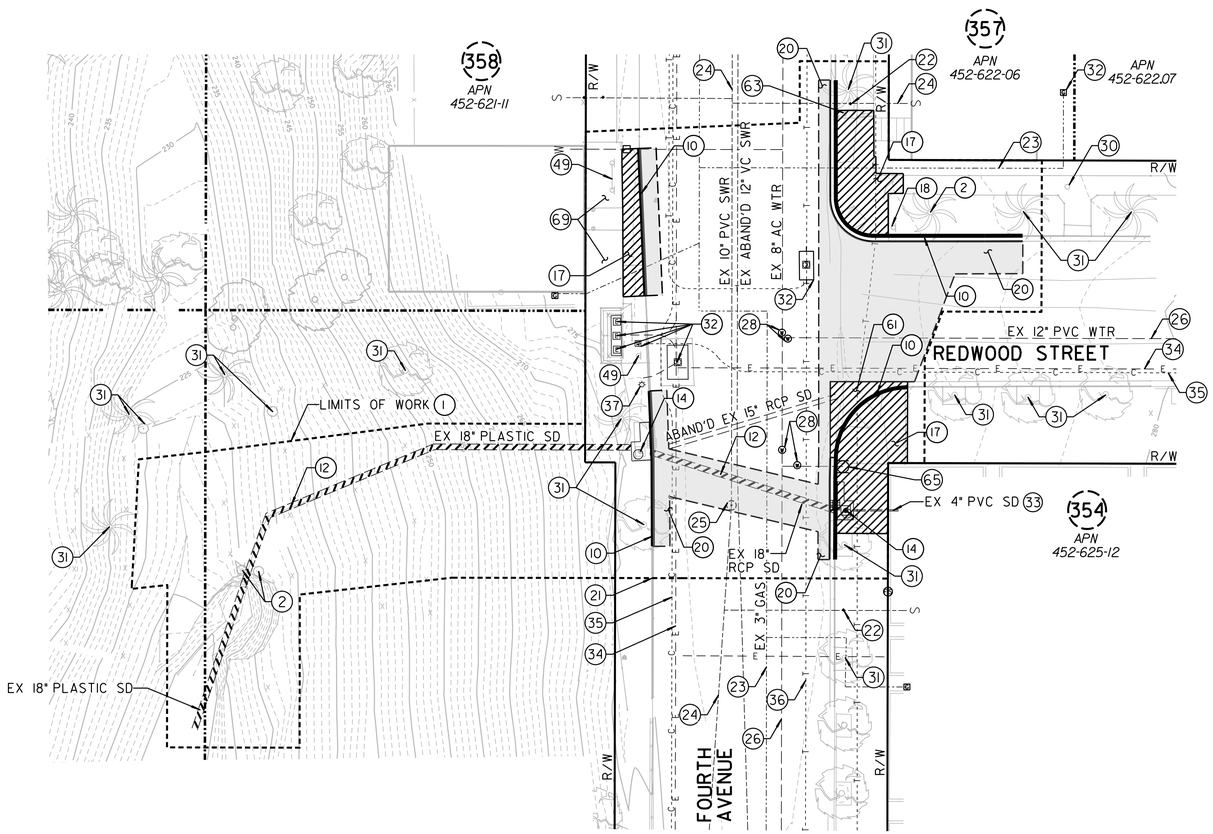
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THIRD AVENUE

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SYSTEM 6

DEMOLITION NOTES

(1) LIMITS OF WORK, CLEARING AND GRUBBING
(2) REMOVE EX TREE
(10) REMOVE AND REPLACE EX CURB AND GUTTER
(12) REMOVE EX STORM DRAIN
(13) ABANDON EX STORM DRAIN
(14) REMOVE EX STORM DRAIN STRUCTURE
(17) REMOVE AND REPLACE EX SIDEWALK
(18) SALVAGE EX SIGN
(20) REMOVE AND REPLACE EX PAVEMENT
(21) REMOVE AND REPLACE EX GUARD RAIL
(22) PROTECT EX SEWER CLEANOUT IN PLACE
(23) PROTECT GAS IN PLACE
(24) PROTECT EX SEWER MAIN IN PLACE
(25) PROTECT EX SEWER MANHOLE IN PLACE
(26) PROTECT EX WATER MAIN IN PLACE
(28) PROTECT EX WATER VALVE IN PLACE
(30) PROTECT EX MONUMENT IN PLACE
(31) PROTECT EX TREE IN PLACE
(32) PROTECT UTILITY STRUCTURE IN PLACE
(33) PROTECT EX STORM DRAIN IN PLACE
(34) PROTECT ELEC COND IN PLACE
(35) PROTECT CATV IN PLACE
(36) PROTECT TELE IN PLACE
(37) PROTECT EX STREETLIGHT IN PLACE
(49) PROTECT EX SIGN IN PLACE
(61) REMOVE AND REPLACE EX CONCRETE
(63) SALVAGE EX PARKING METER
(65) SALVAGE EX FIRE HYDRANT
(69) PROTECT EX VEGETATION AND IRRIGATION SYSTEM IN PLACE

DEMOLITION LEGEND

------ LIMITS OF WORK, CLEARING AND GRUBBING
STORM DRAIN TO BE ABANDONED (PER GREENBOOK AND WHITEBOOK)
STORM DRAIN TO BE REMOVED
AC PAVEMENT REMOVAL
CONCRETE REMOVAL
CURB AND GUTTER TO BE REMOVED

REMOVALS

STORM DRAIN - 18" - 210 LF
DRAINAGE INLET - 2
AC PAVEMENT - 2,476 SF
CONCRETE PAVEMENT - 136 SF
SIDEWALK - 1,160 SF
CURB AND GUTTER - 191LF
GUARDRAIL - 123 LF
TREES < 24" - 1

SALVAGE

SIGN - 1
FIRE HYDRANT - 1
PARKING METER - 1

N

0 20 40 60
SCALE 1" = 20'

D-6

MAPLE CANYON RESTORATION – PHASE 1
DEMOLITION PLAN
REDWOOD STREET
MAPLE CANYON TO FOURTH AVENUE

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 9 OF 98 SHEETS

STORM DRAIN WBS B-12040

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SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
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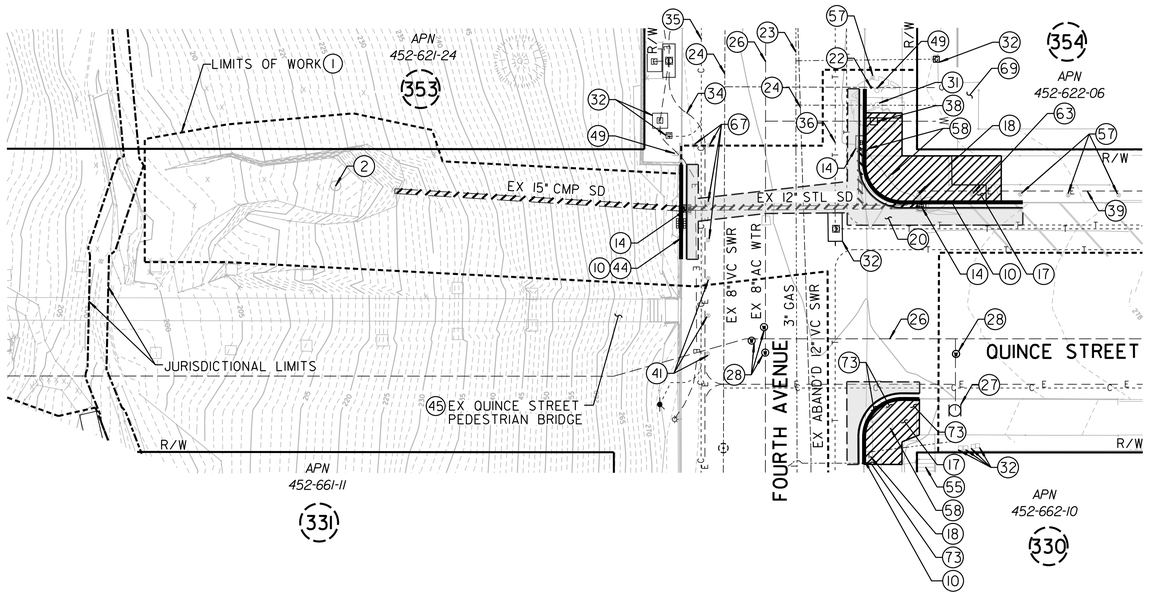
REDWOOD STREET

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SYSTEM 7-A & 7-B

REMOVALS

STORM DRAIN - 12" - 75 LF

STORM DRAIN - 15" - 77 LF

DRAINAGE INLET - 3

AC PAVEMENT - 808 SF

SIDEWALK - 733 SF

CURB AND GUTTER - 120 LF

TREES < 24" - 1

WATER METER - 1

SALVAGE

SIGN - 2

DELINEATORS - 4

HISTORICAL STAMPS - 4

DEMOLITION NOTES

(1) LIMITS OF WORK, CLEARING AND GRUBBING
(2) REMOVE EX TREE
(2) REMOVE EX TREE
(10) REMOVE AND REPLACE EX CURB AND GUTTER
(14) REMOVE EX STORM DRAIN STRUCTURE
(17) REMOVE AND REPLACE EX SIDEWALK
(18) SALVAGE EX SIGN
(20) REMOVE AND REPLACE EX PAVEMENT
(22) PROTECT EX SEWER CLEANOUT IN PLACE
(23) PROTECT GAS IN PLACE
(24) PROTECT EX SEWER MAIN IN PLACE
(26) PROTECT EX WATER MAIN IN PLACE
(27) PROTECT EX FIRE HYDRANT IN PLACE
(28) PROTECT EX WATER VALVE IN PLACE
(31) PROTECT EX TREE IN PLACE
(32) PROTECT UTILITY STRUCTURE IN PLACE
(34) PROTECT ELEC COND IN PLACE
(35) PROTECT CATV IN PLACE
(36) PROTECT TELE IN PLACE
(38) REMOVE AND RELOCATE EX WATER METER
(39) REMOVE AND RELOCATE ELEC COND (BY OTHERS)
(40) REMOVE AND RELOCATE CATV (BY OTHERS)
(41) PROTECT EX BOLLARD/DELINEATOR IN PLACE
(44) PROTECT EX GUARDRAIL IN PLACE
(45) PROTECT EX BRIDGE IN PLACE
(47) PROTECT UTILITY POLE IN PLACE
(49) PROTECT EX SIGN IN PLACE
(55) PROTECT EX STRUCTURE IN PLACE
(57) PROTECT EX PARKING METER IN PLACE
(58) RESET EX SURVEY MONUMENT
(63) SALVAGE EX PARKING METER
(67) SALVAGE EX DELINEATOR
(69) PROTECT EX VEGETATION AND IRRIGATION SYSTEM IN PLACE
(73) SALVAGE EX HISTORICAL STAMP

DEMOLITION LEGEND

- LIMITS OF WORK, CLEARING AND GRUBBING
- STORM DRAIN TO BE REMOVED
- AC PAVEMENT REMOVAL
- CONCRETE REMOVAL
- CURB AND GUTTER TO BE REMOVED

N

0 20 40 60

SCALE 1" = 20'

QUINCE STREET

D-7

MAPLE CANYON RESTORATION – PHASE 1
DEMOLITION PLAN
QUINCE STREET
MAPLE CANYON TO FOURTH AVENUE

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 10 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED: _____ FOR CITY ENGINEER _____ DATE
SHEILA BOSE PRINT DCE NAME _____ RCE#

SUBMITTED BY: ELHAM LOTFI PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCSB3 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

38321-10-D

REGISTERED PROFESSIONAL ENGINEER KEVIN R. GIBSON NO. 52295 STATE OF CALIFORNIA

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DEMOLITION NOTES

(1) LIMITS OF WORK, CLEARING AND GRUBBING

(2) REMOVE EX TREE

(16) REMOVE AND REPLACE EX FENCE IN KIND

(33) PROTECT EX STORM DRAIN IN PLACE

(56) PROTECT EX STORM DRAIN STRUCTURE IN PLACE

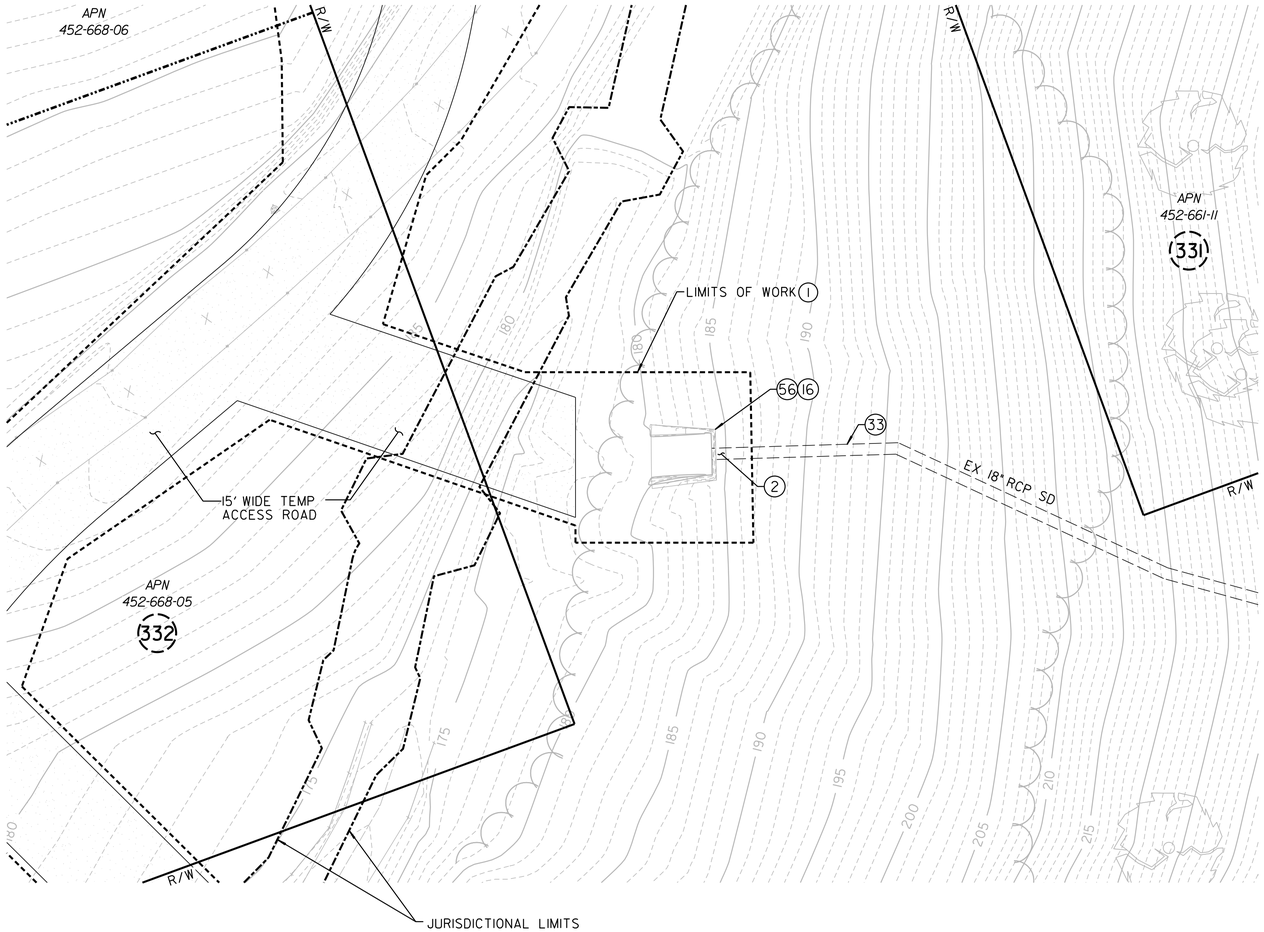
DEMOLITION LEGEND

------ LIMITS OF WORK, CLEARING AND GRUBBING

REMOVALS

CHAIN LINK FENCE - 22 LF

TREES >/= 24" - 1



SYSTEM 8

0 10 20 30

SCALE 1" = 10'

D-8

MAPLE CANYON RESTORATION – PHASE 1

DEMOLITION PLAN

PALM AVENUE

MAPLE CANYON TO FOURTH AVENUE

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 11 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DCE NAME _____ RCE# _____

SUBMITTED BY:
ELHAM LOTFI
PROJECT MANAGER

DESIGNED BY:
BAREAZ PIROMARI
PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719
CCS27 COORDINATE

1846-6276
CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

38321- 11 -D

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

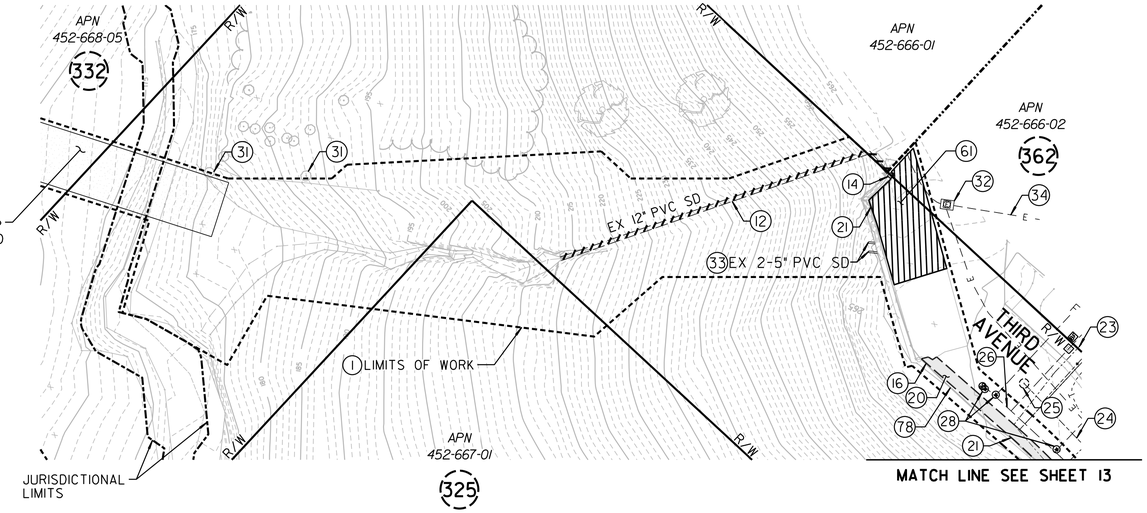
PALM STREET

FINAL SUBMITTAL

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SYSTEM 9

DEMOLITION NOTES

(1) LIMITS OF WORK, CLEARING AND GRUBBING
(12) REMOVE EX STORM DRAIN
(14) REMOVE EX STORM DRAIN STRUCTURE
(20) REMOVE AND REPLACE EX PAVEMENT
(21) REMOVE AND REPLACE EX GUARD RAIL
(23) PROTECT GAS IN PLACE
(24) PROTECT EX SEWER MAIN IN PLACE
(25) PROTECT EX SEWER MANHOLE IN PLACE
(26) PROTECT EX WATER MAIN IN PLACE
(28) PROTECT EX WATER VALVE IN PLACE
(31) PROTECT EX TREE IN PLACE
(32) PROTECT UTILITY STRUCTURE IN PLACE
(33) PROTECT EX STORM DRAIN IN PLACE
(34) PROTECT EX ELEC COND IN PLACE
(61) REMOVE AND REPLACE EX CONCRETE
(78) REMOVE EX FENCE

DEMOLITION LEGEND

------ LIMITS OF WORK, CLEARING AND GRUBBING
////// STORM DRAIN TO BE REMOVED
AC PAVEMENT REMOVAL
CONCRETE REMOVAL

REMOVALS

STORM DRAIN - 12" - 94 LF
DRAINAGE INLET - 1
AC PAVEMENT - 121 SF
CONCRETE PAVEMENT - 342 SF
GUARDRAIL - 64 LF
WOODEN POST FENCE - 30 LF

0 20 40 60
SCALE 1"=20'

D-9

MAPLE CANYON RESTORATION – PHASE 1
DEMOLITION PLAN
THIRD AVENUE
MAPLE CANYON TO THIRD AVENUE

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 12 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED: FOR CITY ENGINEER ____ DATE ____
SHEILA BOSE
PRINT DCE NAME ____ RCE# ____

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCSD COORDINATE

CONTRACTOR ____ DATE STARTED ____
INSPECTOR ____ DATE COMPLETED ____

38321-12-D

REGISTERED PROFESSIONAL ENGINEER * KEVIN R. GIBSON * NO. 52295 * STATE OF CALIFORNIA *

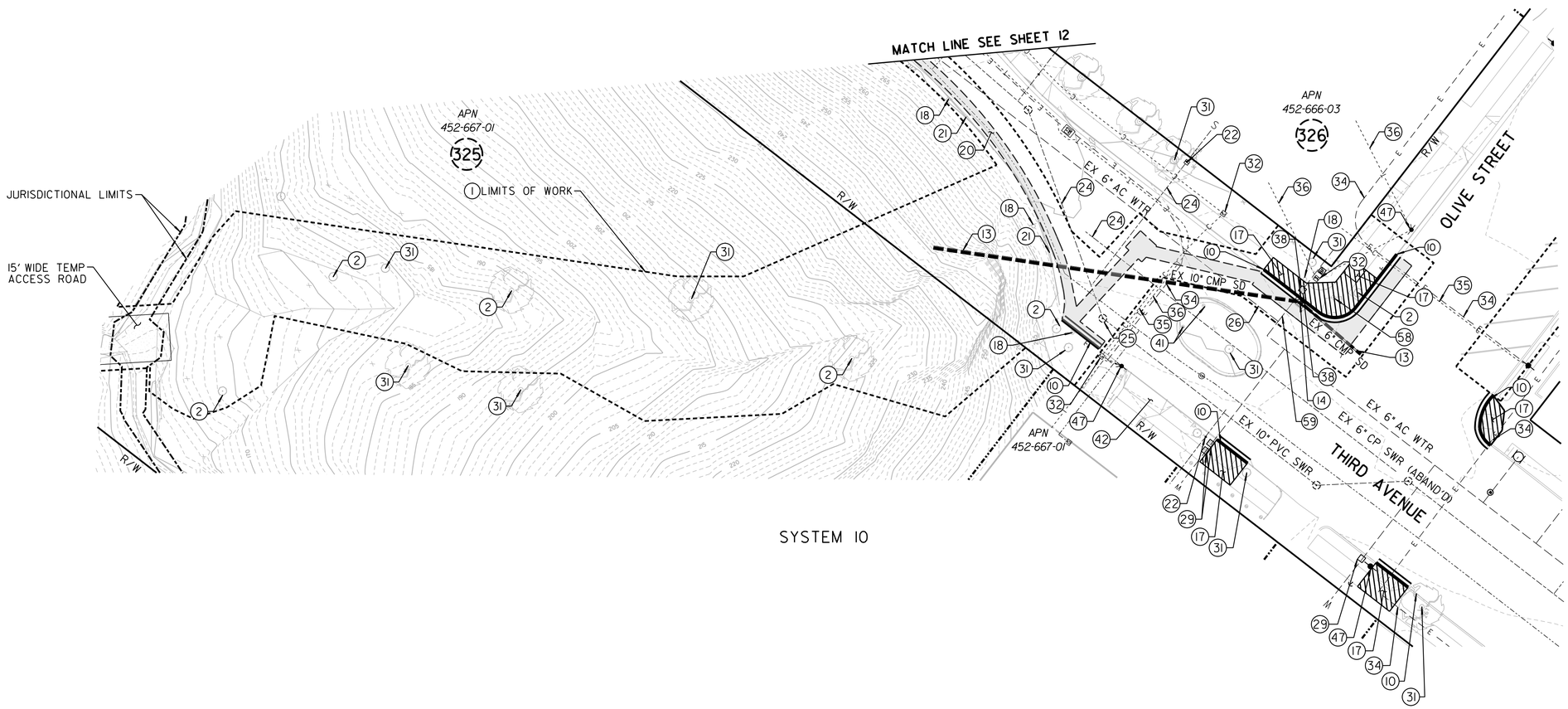
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THIRD AVENUE

FINAL SUBMITTAL



SYSTEM 10

DEMOLITION NOTES

1. LIMITS OF WORK, CLEARING AND GRUBBING
2. REMOVE EX TREE
10. REMOVE AND REPLACE EX CURB AND GUTTER
13. ABANDON EX STORM DRAIN
14. REMOVE EX STORM DRAIN STRUCTURE
17. REMOVE AND REPLACE EX SIDEWALK
18. SALVAGE EX SIGN
20. REMOVE AND REPLACE EX PAVEMENT
21. REMOVE AND REPLACE EX GUARD RAIL
22. PROTECT EX SEWER CLEANOUT IN PLACE
24. PROTECT EX SEWER MAIN IN PLACE
25. PROTECT EX SEWER MANHOLE IN PLACE
26. PROTECT EX WATER MAIN IN PLACE
29. PROTECT EX WATER METER IN PLACE
31. PROTECT EX TREE IN PLACE
32. PROTECT UTILITY STRUCTURE IN PLACE
34. PROTECT ELEC COND IN PLACE
35. PROTECT CATV IN PLACE
36. PROTECT TELE IN PLACE
38. REMOVE AND RELOCATE EX WATER METER
41. PROTECT EX BOLLARD/DELINEATOR IN PLACE
42. PROTECT EX DRIVEWAY IN PLACE
47. PROTECT UTILITY POLE IN PLACE
58. RESET EX SURVEY MONUMENT
59. REMOVE AND RELOCATE EX WATER SERVICE

DEMOLITION LEGEND

- LIMITS OF WORK, CLEARING AND GRUBBING
- STORM DRAIN TO BE ABANDONED (PER GREENBOOK AND WHITEBOOK)
- AC PAVEMENT REMOVAL
- CONCRETE REMOVAL
- CURB AND GUTTER TO BE REMOVED

REMOVALS

DRAINAGE INLET - 1
AC PAVEMENT - 963 SF
SIDEWALK - 620 SF
CURB AND GUTTER - 120 LF
GUARDRAIL - 93 LF
TREES < 24" - 5
WATER METER - 1

ABANDONMENT

STORM DRAIN - 6" - 24 LF
STORM DRAIN - 10" - 118 LF

SALVAGE

SIGN - 4

SCALE 1"=20'

D-10

MAPLE CANYON RESTORATION – PHASE 1
DEMOLITION PLAN
THIRD AVENUE
MAPLE CANYON TO OLIVE STREET

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 13 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER _____ DATE
SHEILA BOSE
PRINT DCE NAME _____ RCE#

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

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INSPECTOR _____ DATE COMPLETED _____

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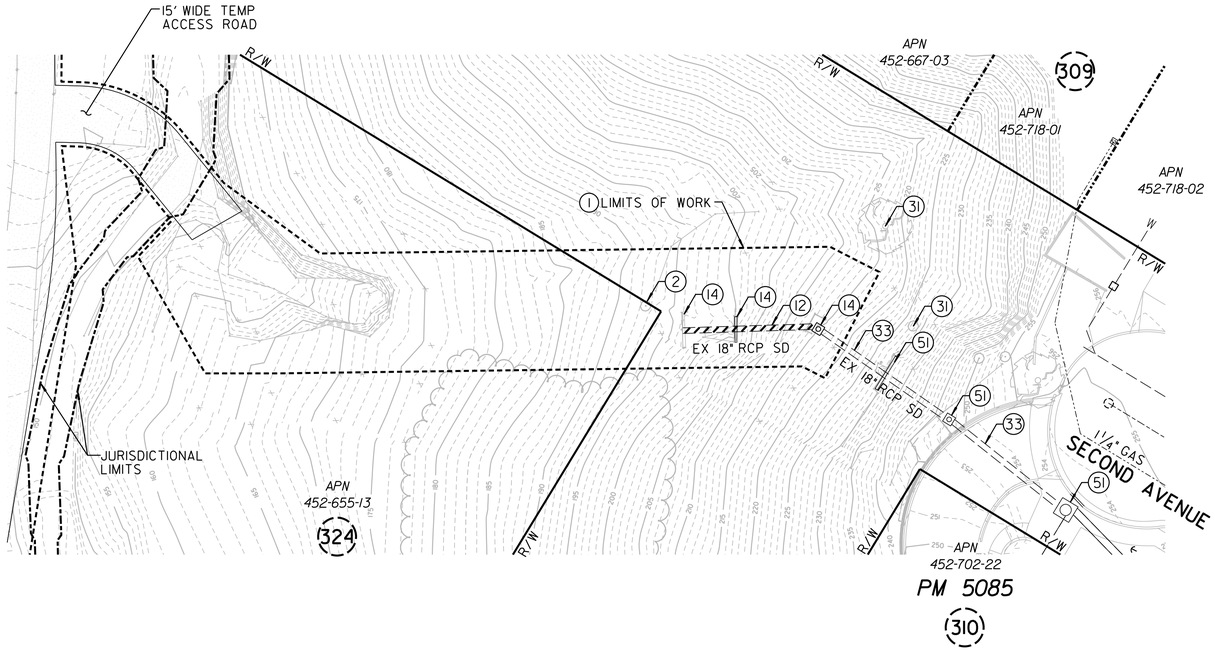
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THIRD AVENUE

FINAL SUBMITTAL



SYSTEM II

DEMOLITION NOTES

(1) LIMITS OF WORK, CLEARING AND GRUBBING
(2) REMOVE EX TREE
(12) REMOVE EX STORM DRAIN
(14) REMOVE EX STORM DRAIN STRUCTURE
(31) PROTECT EX TREE IN PLACE
(33) PROTECT EX STORM DRAIN IN PLACE
(51) PROTECT EX STORM DRAIN STRUCTURE IN PLACE

DEMOLITION LEGEND

------ LIMITS OF WORK, CLEARING AND GRUBBING
////// STORM DRAIN TO BE REMOVED

REMOVALS

STORM DRAIN - 18" - 35 LF
DRAINAGE CLEANOUT - 1
DRAINAGE STRUCTURE - 2
TREES < 24" - 1

SECOND AVENUE

D-11

MAPLE CANYON RESTORATION – PHASE 1
DEMOLITION PLAN
SECOND AVENUE
MAPLE CANYON TO SECOND AVENUE

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 14 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER ____ DATE
SHEILA BOSE
PRINT DCE NAME ____ RCE#

SUBMITTED BY:
ELHAM LOTFI
PROJECT MANAGER

CHECKED BY:
BAREAZ PIROMARI
PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719
CCS27 COORDINATE

1846-6276
CCS83 COORDINATE

CONTRACTOR ____ DATE STARTED ____
INSPECTOR ____ DATE COMPLETED ____

38321-14-D

REGISTERED PROFESSIONAL ENGINEER
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NO. 52295
STATE OF CALIFORNIA

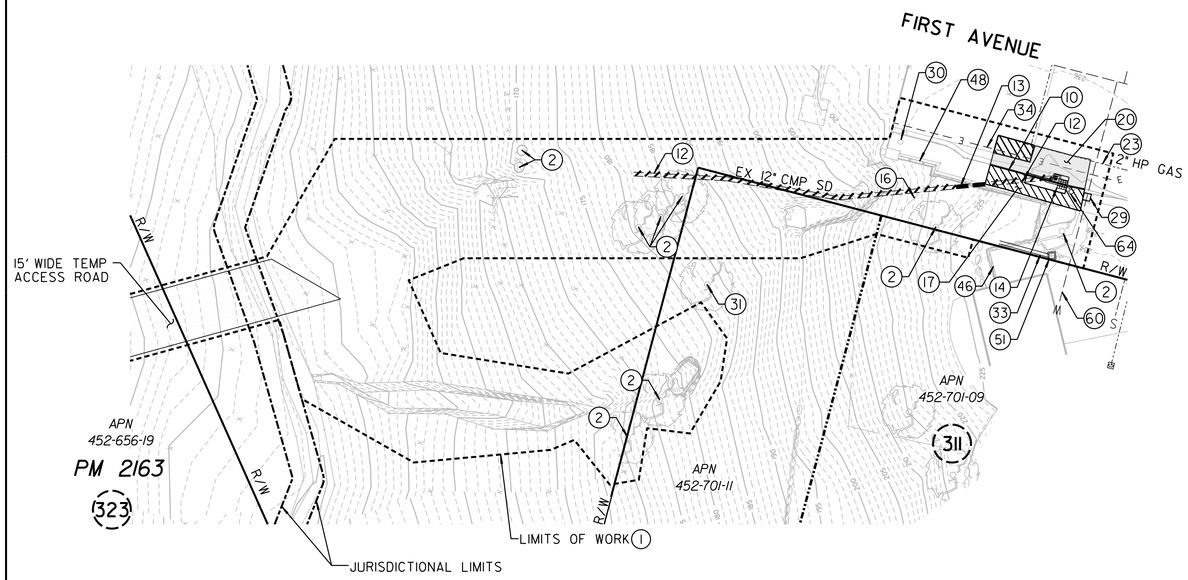
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SCALE 1"=20'

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SYSTEM 12

DEMOLITION NOTES

(1) LIMITS OF WORK, CLEARING AND GRUBBING
(2) REMOVE EX TREE
(10) REMOVE AND REPLACE EX CURB AND GUTTER
(12) REMOVE EX STORM DRAIN
(13) ABANDON EX STORM DRAIN
(14) REMOVE EX STORM DRAIN STRUCTURE
(16) REMOVE AND REPLACE EX FENCE IN KIND
(17) REMOVE AND REPLACE EX SIDEWALK
(20) REMOVE AND REPLACE EX PAVEMENT
(23) PROTECT GAS IN PLACE
(26) PROTECT EX WATER MAIN IN PLACE
(29) PROTECT EX WATER METER IN PLACE
(30) PROTECT EX MONUMENT IN PLACE
(31) PROTECT EX TREE IN PLACE
(33) PROTECT EX STORM DRAIN IN PLACE
(34) PROTECT ELEC COND IN PLACE
(37) PROTECT EX STREELIGHT IN PLACE
(46) PROTECT EX WALL IN PLACE
(48) PROTECT EX FENCE IN PLACE
(51) PROTECT EX STORM DRAIN STRUCTURE IN PLACE
(52) REMOVE AND RELOCATE EX FENCE
(64) SALVAGE EX STREETLIGHT

DEMOLITION LEGEND

- LIMITS OF WORK, CLEARING AND GRUBBING
- STORM DRAIN TO BE ABANDONED (PER GREENBOOK AND WHITEBOOK)
- STORM DRAIN TO BE REMOVED
- AC PAVEMENT REMOVAL
- CONCRETE REMOVAL
- CURB AND GUTTER TO BE REMOVED

REMOVALS

STORM DRAIN - 12" - 102 LF
DRAINAGE INLET - 1
AC PAVEMENT - 145 SF
SIDEWALK - 120 SF
CURB AND GUTTER - 26 LF
TREES < 24" - 8
TREES >/= 24" - 1
CHAIN LINK FENCE - 22 LF

ABANDONMENT

STORM DRAIN - 12" - 8 LF

SALVAGE

STREETLIGHT - 1

FIRST AVENUE

D-12

MAPLE CANYON RESTORATION – PHASE 1
DEMOLITION PLAN
FIRST AVENUE
MAPLE CANYON TO FIRST AVENUE

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 15 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED: FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE PRINT DCE NAME _____ RCE# _____

SUBMITTED BY: ELHAM LOTFI PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

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INSPECTOR _____ DATE COMPLETED _____

38321-15-D

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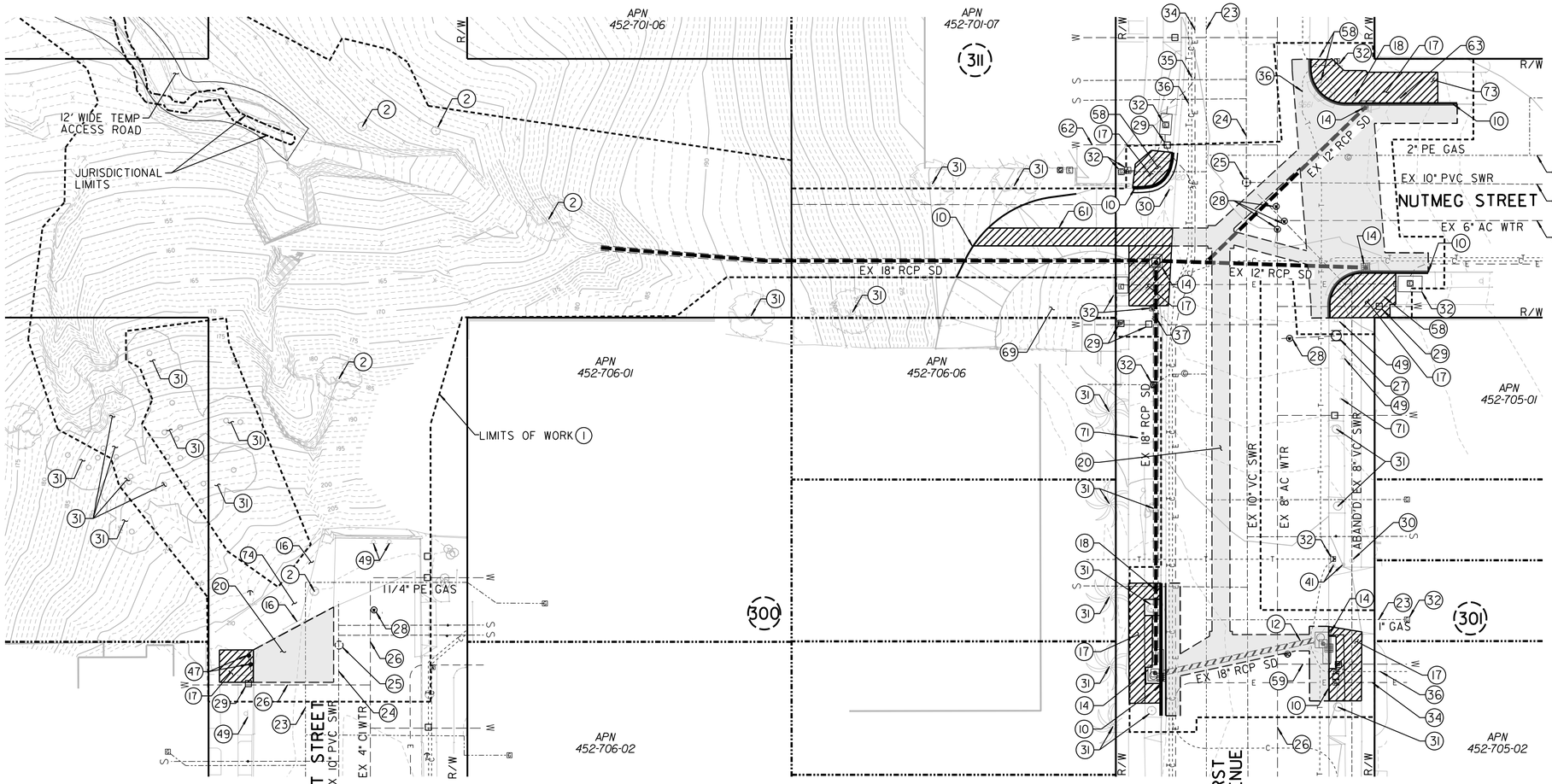
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SCALE 1"=20'

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SYSTEM 13 & 14

REMOVALS

STORM DRAIN - 18" - 48 LF

DRAINAGE INLET - 5

DRAINAGE CLEANOUT - 1

AC PAVEMENT - 3,324 SF

SIDEWALK - 1,230 SF

CONCRETE PAVEMENT - 480 SF

CURB AND GUTTER - 286 LF

WATER METER - 1

TREES < 24" - 13

WOODEN POST FENCE - 44 LF

ABANDONMENT

STORM DRAIN - 12" - 130 LF

STORM DRAIN - 18" - 293 LF

SALVAGE

SIGN - 2

PARKING METER - 1

HISTORICAL STAMPS - 1

N

0 20 40 60

SCALE 1" = 20'

DEMOLITION NOTES

(1) LIMITS OF WORK, CLEARING AND GRUBBING
(2) REMOVE EX TREE
(10) REMOVE AND REPLACE EX CURB AND GUTTER
(12) REMOVE EX STORM DRAIN
(14) REMOVE EX STORM DRAIN STRUCTURE
(16) REMOVE AND REPLACE EX FENCE IN KIND
(17) REMOVE AND REPLACE EX SIDEWALK
(18) SALVAGE EX SIGN
(20) REMOVE AND REPLACE EX PAVEMENT
(22) PROTECT EX SEWER CLEANOUT IN PLACE
(23) PROTECT GAS IN PLACE
(24) PROTECT EX SEWER MAIN IN PLACE
(25) PROTECT EX SEWER MANHOLE IN PLACE
(26) PROTECT EX WATER MAIN IN PLACE
(27) PROTECT EX FIRE HYDRANT IN PLACE
(28) PROTECT EX WATER VALVE IN PLACE
(29) PROTECT EX WATER METER IN PLACE
(30) PROTECT EX MONUMENT IN PLACE
(31) PROTECT EX TREE IN PLACE
(32) PROTECT UTILITY STRUCTURE IN PLACE
(33) PROTECT EX STORM DRAIN IN PLACE
(34) PROTECT ELEC COND IN PLACE
(35) PROTECT CATV IN PLACE
(36) PROTECT TELE IN PLACE
(37) PROTECT EX STREELIGHT IN PLACE
(41) PROTECT EX BOLLARD/DELINEATOR IN PLACE
(42) PROTECT EX DRIVEWAY IN PLACE
(47) PROTECT UTILITY POLE IN PLACE
(49) PROTECT EX SIGN IN PLACE
(58) RESET EX SURVEY MONUMENT
(59) REMOVE AND RELOCATE EX WATER SERVICE
(61) REMOVE AND REPLACE EX CONCRETE
(62) PROTECT EX WATER SERVICE IN PLACE
(63) SALVAGE EX PARKING METER
(69) PROTECT EX VEGETATION AND IRRIGATION SYSTEM IN PLACE
(71) PROTECT EX BENCH IN PLACE
(73) SALVAGE EX HISTORICAL STAMP
(74) REMOVE EX VEGETATION AND IRRIGATION SYSTEM

DEMOLITION LEGEND

------ LIMITS OF WORK, CLEARING AND GRUBBING
– – – STORM DRAIN TO BE ABANDONED (PER GREENBOOK AND WHITEBOOK)
////// STORM DRAIN TO BE REMOVED
AC PAVEMENT REMOVAL
CONCRETE REMOVAL
CURB AND GUTTER TO BE REMOVED

D–13

MAPLE CANYON RESTORATION – PHASE 1
DEMOLITION PLAN
FRONT STREET/NUTMEG STREET
FRONT STREET TO NUTMEG STREET

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 16 OF 98 SHEETS

STORM DRAIN WBS B-12040

REGISTERED PROFESSIONAL ENGINEER KEVYN R. GIBSON NO. 52295 STATE OF CALIFORNIA

APPROVED:
FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DCE NAME _____ RCE# _____

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

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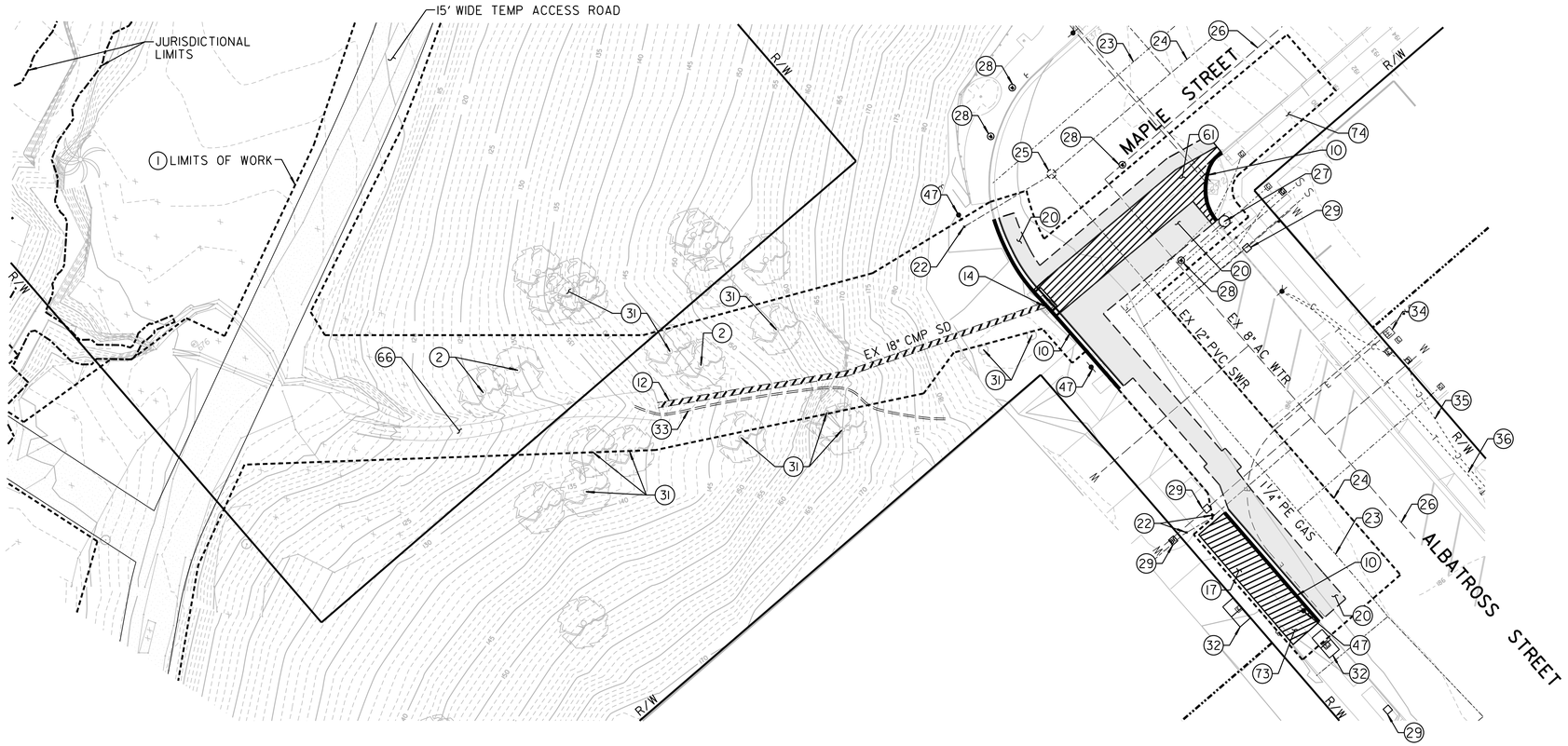
FRONT STREET/NUTMEG STREET

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DEMOLITION NOTES

(1) LIMITS OF WORK, CLEARING AND GRUBBING
(2) REMOVE EX TREE
(10) REMOVE AND REPLACE EX CURB AND GUTTER
(12) REMOVE EX STORM DRAIN
(14) REMOVE EX STORM DRAIN STRUCTURE
(17) REMOVE AND REPLACE EX SIDEWALK
(20) REMOVE AND REPLACE EX PAVEMENT
(22) PROTECT EX SEWER CLEANOUT IN PLACE
(23) PROTECT GAS IN PLACE
(24) PROTECT EX SEWER MAIN IN PLACE
(25) PROTECT EX SEWER MANHOLE IN PLACE
(26) PROTECT EX WATER MAIN IN PLACE
(27) PROTECT EX FIRE HYDRANT IN PLACE
(28) PROTECT EX WATER VALVE IN PLACE
(29) PROTECT EX WATER METER IN PLACE
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(33) PROTECT EX STORM DRAIN IN PLACE
(34) PROTECT ELEC COND IN PLACE
(35) PROTECT CATV IN PLACE
(36) PROTECT TELE IN PLACE
(47) PROTECT UTILITY POLE IN PLACE
(61) REMOVE AND REPLACE EX CONCRETE
(66) REMOVE EXIST CONCRETE SWALE
(73) SALVAGE EX HISTORICAL STAMP
(74) REMOVE EX VEGETATION AND IRRIGATION SYSTEM

DEMOLITION LEGEND

------ LIMITS OF WORK, CLEARING AND GRUBBING
////// STORM DRAIN TO BE REMOVED
AC PAVEMENT REMOVAL
CONCRETE PAVEMENT REMOVAL
CURB AND GUTTER TO BE REMOVED

REMOVALS

STORM DRAIN - 18" - 113 LF	CURB AND GUTTER - 135 LF
DRAINAGE STRUCTURES - 1	CONCRETE SWALE - 390 SF
AC PAVEMENT - 1,547 SF	CONCRETE SWALE - 390 SF
SIDEWALK - 397 SF	TREES < 24" - 2
CROSS GUTTER - 604 SF	TREES >/= 24" - 1

SYSTEM 15

0 20 40 60
SCALE 1"=20'

D-14

MAPLE CANYON RESTORATION – PHASE 1
DEMOLITION PLAN
MAPLE STREET/ALBATROSS STREET
MAPLE CANYON TO ALBATROSS STREET

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 17 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED: FOR CITY ENGINEER ____ DATE ____
SHEILA BOSE PRINT DCE NAME ____ RCE# ____

SUBMITTED BY: ELHAM LOTFI PROJECT MANAGER
DESIGNED BY: BAREAZ PIROMARI PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

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REGISTERED PROFESSIONAL ENGINEER KEVIN R. GIBSON NO. 52295 STATE OF CALIFORNIA

CONTRACTOR ____ DATE STARTED ____
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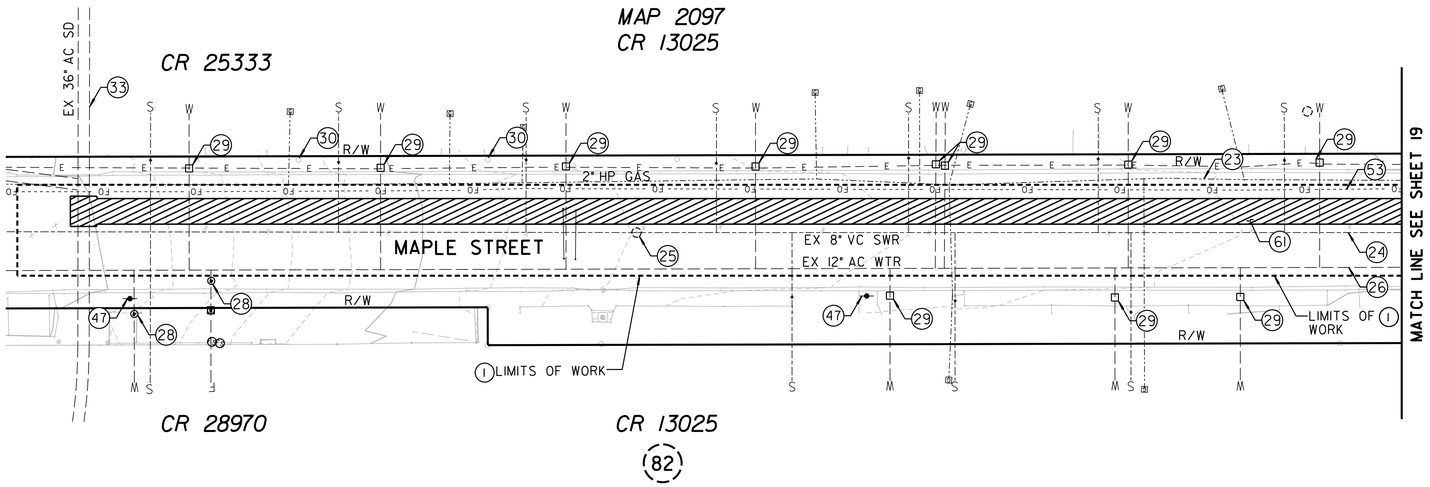
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FINAL SUBMITTAL

MAPLE STREET/ALBATROSS STREET

DEMOLITION NOTES

(1) LIMITS OF WORK, CLEARING AND GRUBBING
(23) PROTECT GAS IN PLACE
(24) PROTECT EX SEWER MAIN IN PLACE
(25) PROTECT EX SEWER MANHOLE IN PLACE
(26) PROTECT EX WATER MAIN IN PLACE
(28) PROTECT EX WATER VALVE IN PLACE
(29) PROTECT EX WATER METER IN PLACE
(30) PROTECT EX MONUMENT IN PLACE
(33) PROTECT EX STORM DRAIN IN PLACE
(47) PROTECT UTILITY POLE IN PLACE
(53) PROTECT FIBER OPTIC
(61) REMOVE AND REPLACE EX CONCRETE



DEMOLITION LEGEND

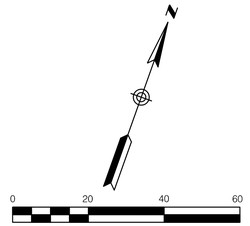
------ LIMITS OF WORK, CLEARING AND GRUBBING

CONCRETE PAVEMENT REMOVAL

REMOVALS

CONCRETE PAVEMENT - 2,381 SF

SYSTEM 17



D-15

MAPLE CANYON RESTORATION – PHASE 1
DEMOLITION PLAN
MAPLE STREET
STATE STREET TO DOVE STREET

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 18 OF 98 SHEETS

STORM DRAIN WBS B-12040

REGISTERED PROFESSIONAL ENGINEER · KEVIN R. GIBSON · NO. 52295 · STATE OF CALIFORNIA

APPROVED:
FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DCE NAME _____ RCE# _____

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER
206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE
38321-18-D

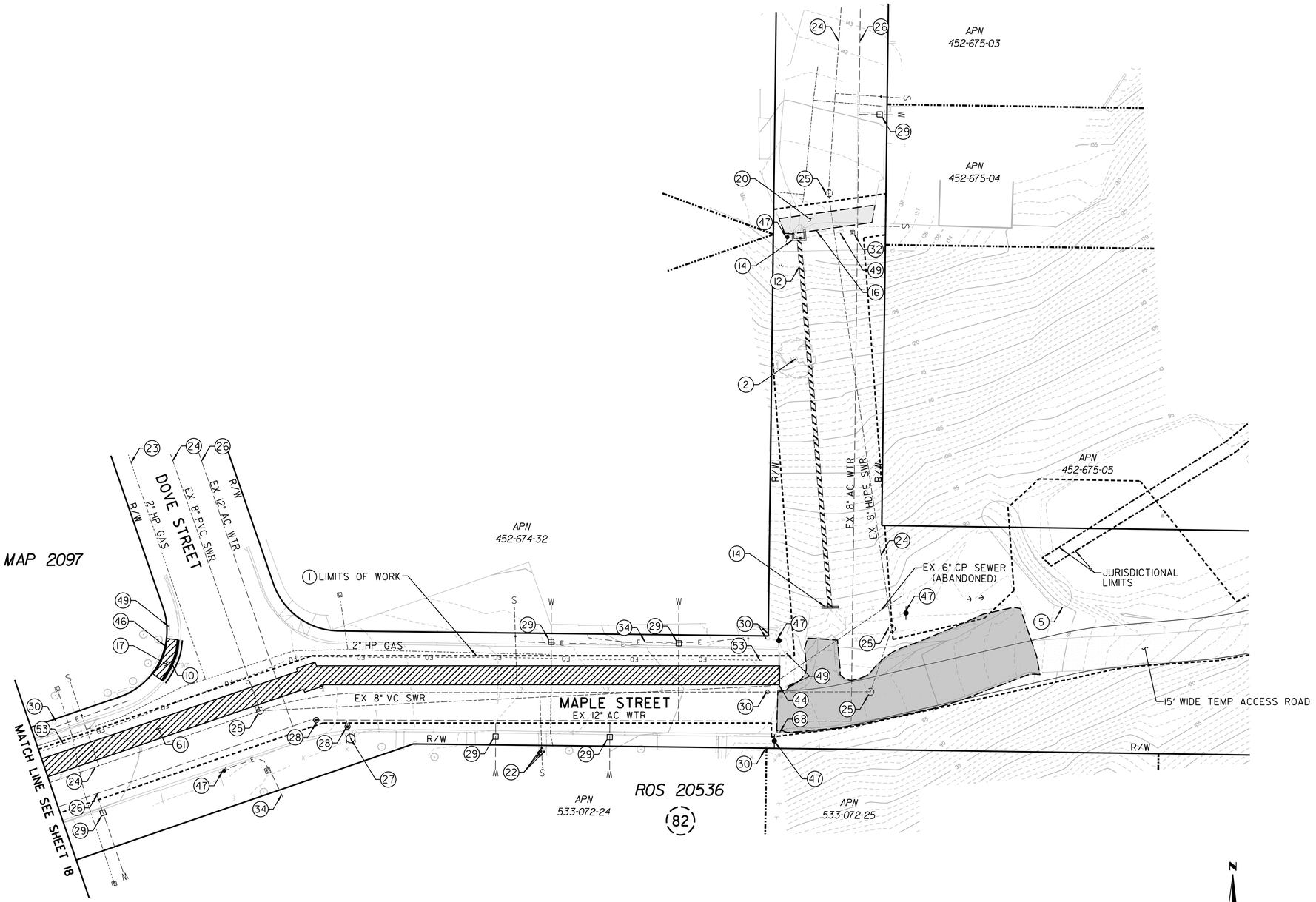
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San Diego
5620 FRIARS ROAD
SAN DIEGO, CA 92110
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(FAX) 619-291-4165
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MAPLE STREET

FINAL SUBMITTAL



SYSTEM 16 & 17

0 20 40 60
SCALE 1" = 20'

DEMOLITION NOTES

(1) LIMITS OF WORK, CLEARING AND GRUBBING
(2) REMOVE EX TREE
(5) SALVAGE EX ROCK
(10) REMOVE AND REPLACE EX CURB AND GUTTER
(12) REMOVE EX STORM DRAIN
(14) REMOVE EX STORM DRAIN STRUCTURE
(16) REMOVE AND REPLACE EX FENCE IN KIND
(17) REMOVE AND REPLACE EX SIDEWALK
(20) REMOVE AND REPLACE EX PAVEMENT
(23) PROTECT GAS IN PLACE
(24) PROTECT EX SEWER MAIN IN PLACE
(25) PROTECT EX SEWER MANHOLE IN PLACE
(26) PROTECT EX WATER MAIN IN PLACE
(27) PROTECT EX FIRE HYDRANT IN PLACE
(28) PROTECT EX WATER VALVE IN PLACE
(29) PROTECT EX WATER METER IN PLACE
(30) PROTECT EX MONUMENT IN PLACE
(32) PROTECT EX UTILITY STRUCTURE IN PLACE
(34) PROTECT ELEC COND IN PLACE
(44) PROTECT EX GUARDRAIL IN PLACE
(46) PROTECT EX WALL IN PLACE
(47) PROTECT EX UTILITY POLE IN PLACE
(49) PROTECT EX SIGN IN PLACE
(53) PROTECT EX FIBER OPTIC
(61) REMOVE AND REPLACE EX CONCRETE
(68) PROTECT EX GATE IN PLACE

DEMOLITION LEGEND

------ LIMITS OF WORK, CLEARING AND GRUBBING
////// STORM DRAIN TO BE REMOVED
AC PAVEMENT REMOVAL
CONCRETE PAVEMENT REMOVAL
CURB AND GUTTER TO BE REMOVED

REMOVALS

STORM DRAIN - 18" - 132 LF
DRAINAGE HEADWALL - 2
CONCRETE PAVEMENT - 1,822 SF
AC PAVEMENT - 2,382 SF
SIDEWALK - 59 SF
CURB AND GUTTER - 16 LF
TREES < 24" - 1
WOODEN POST FENCE - 7 LF

SALVAGE

ROCK - 370 SF

D-16

MAPLE CANYON RESTORATION – PHASE 1
DEMOLITION PLAN
MAPLE STREET
DOVE STREET TO CURLEW STREET

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 19 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER ____ DATE
SHEILA BOSE
PRINT DCE NAME ____ RCE#

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE
38321-19-D

CONTRACTOR ____ DATE STARTED ____
INSPECTOR ____ DATE COMPLETED ____

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

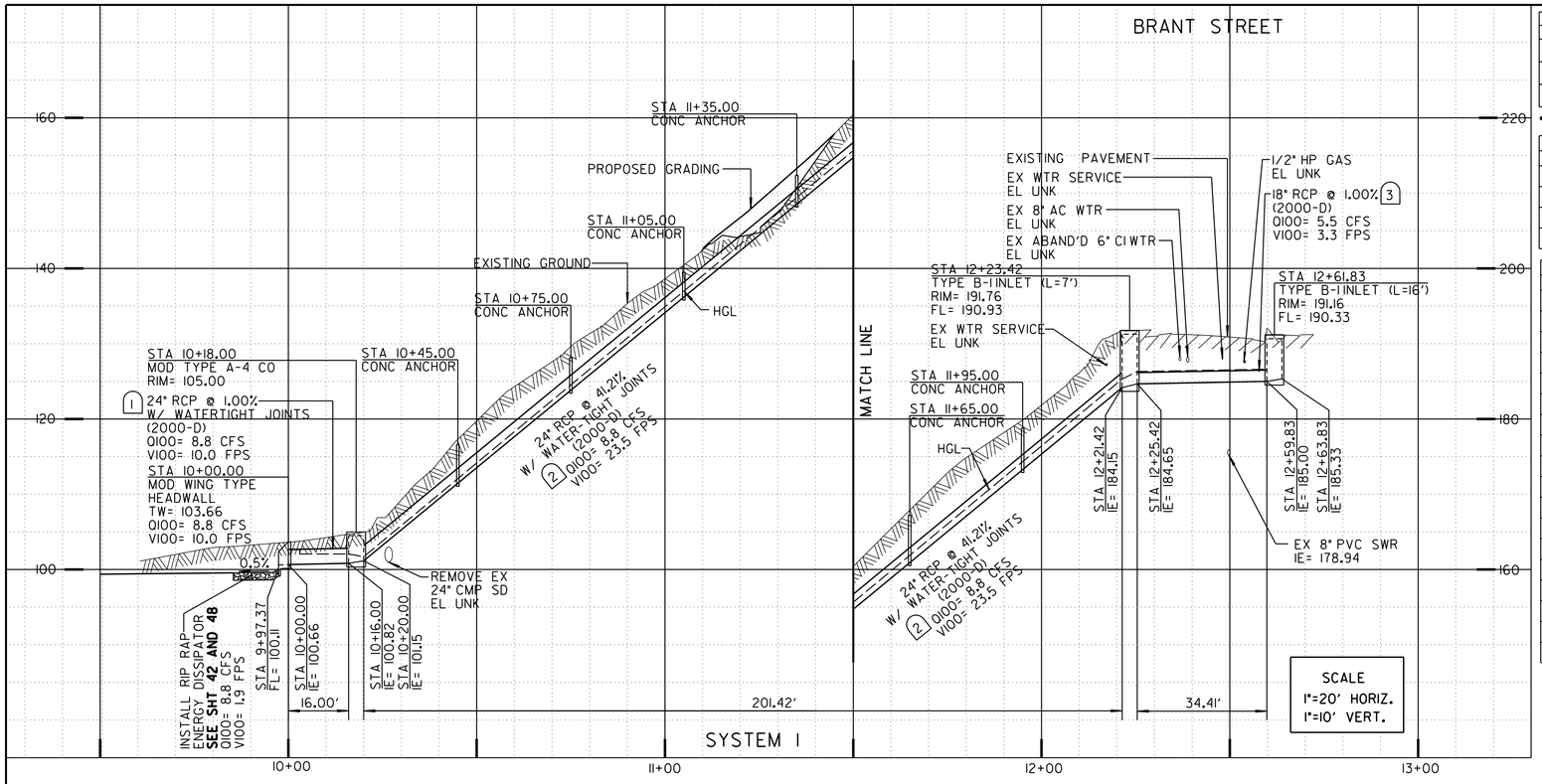
MAPLE STREET

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FINAL SUBMITTAL



STORM DRAIN DATA TABLE				
NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
1	N55° 13'13" E		16.00'	24" RCP (2000-D)•
2	N04° 46'47" W		201.42'	24" RCP (2000-D)•
3	N62° 03'17" W		34.41'	24" RCP (2000-D)•

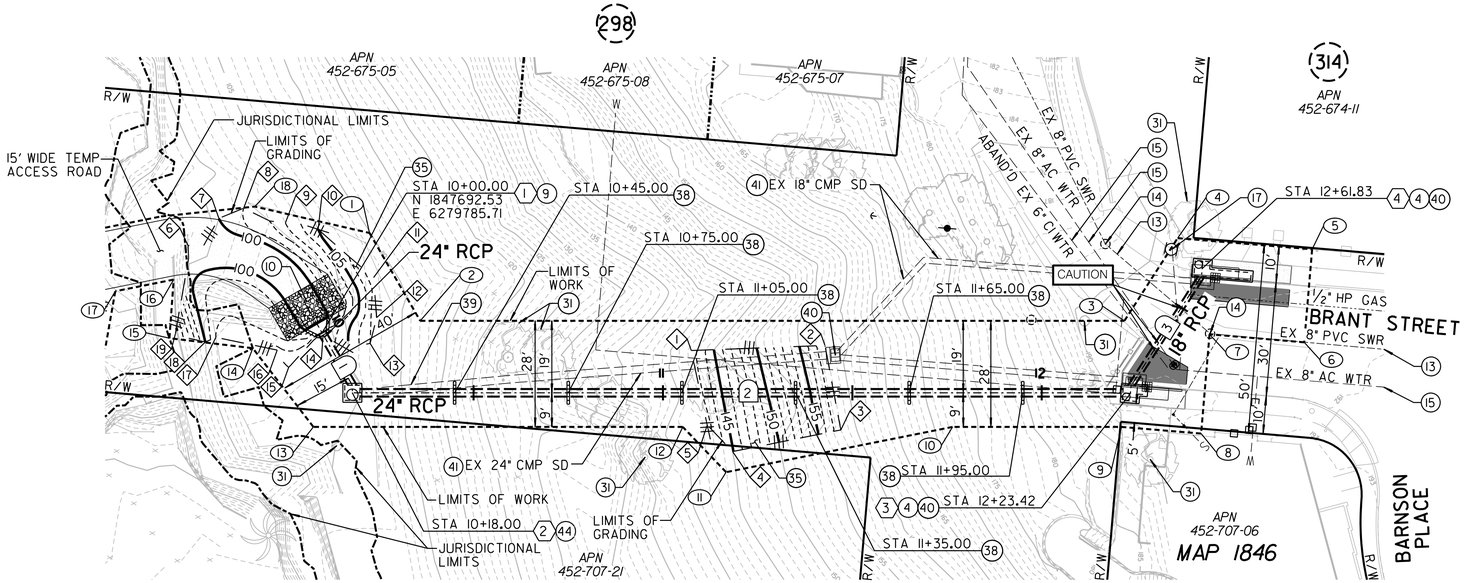
•WATER-TIGHT JOINTS

STRUCTURE DATA TABLE				
NO.	STA	NORTHING	EASTING	REMARKS
1	10+00.00	1847692.53	6279785.71	MOD WING TYPE HEADWALL
2	10+18.00	1847701.82	6279800.84	MOD TYPE A-4 CO
3	12+23.42	1847906.54	6279783.89	TYPE B-1INLET (L=7')
4	12+61.83	1847922.66	6279749.49	TYPE B-1INLET (L=16')

LIMITS OF WORK DATA TABLE		
NO.	NORTHING	EASTING
1	1847702.80	6279758.43
2	1847718.08	6279780.42
3	1847903.37	6279764.93
4	1847915.53	6279742.00
5	1847951.18	6279741.98
6	1847951.15	6279766.64
7	1847926.05	6279766.61
8	1847926.02	6279792.89
9	1847904.91	6279792.89
10	1847860.47	6279796.61
11	1847801.90	6279813.51
12	1847789.50	6279802.54
13	1847692.31	6279810.67
14	1847674.64	6279791.30
15	1847652.49	6279790.52
16	1847652.32	6279775.01
17	1847637.20	6279779.37
18	1847672.05	6279754.00

GRADING LIMITS DATA TABLE		
NO.	NORTHING	EASTING
1	1847790.05	6279782.28
2	1847825.11	6279777.99
3	1847831.15	6279799.87
4	1847803.16	6279807.95
5	1847795.89	6279801.52
6	1847655.36	6279765.78
7	1847662.86	6279757.91
8	1847669.15	6279754.68
9	1847680.45	6279757.62
10	x1847689.21	6279758.61
11	1847704.88	6279770.08
12	1847706.55	6279780.53
13	1847705.41	6279787.45
14	1847692.84	6279786.33
15	1847684.50	6279795.57
16	1847681.11	6279791.26
17	1847664.67	6279789.26
18	1847662.02	6279790.72
19	1847653.95	6279789.31

ALIGNMENT NAME:	SYSTEM I		
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
PI	9+87.37	1847685.33	6279775.34
PI	9+97.38	1847691.03	6279783.55
TANGENTIAL DIRECTION	N 55° 13'13" E		
TANGENTIAL LENGTH:	10.00		
ELEMENT: LINEAR			
PI	9+97.38	1847691.03	6279783.55
PI	10+00.00	1847692.53	6279785.71
TANGENTIAL DIRECTION	N 55° 13'13" E		
TANGENTIAL LENGTH:	2.62		
ELEMENT: LINEAR			
PI	10+00.00	1847692.53	6279785.71
PI	10+16.00	1847701.66	6279798.85
TANGENTIAL DIRECTION	N 55° 13'13" E		
TANGENTIAL LENGTH:	16.00		
ELEMENT: LINEAR			
PI	10+16.00	1847701.66	6279798.85
PI	10+18.00	1847701.82	6279800.84
TANGENTIAL DIRECTION	N 85° 13'13" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+18.00	1847701.82	6279800.84
PI	10+20.00	1847703.82	6279800.68
TANGENTIAL DIRECTION	N 4° 46'47" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+20.00	1847703.82	6279800.68
PI	12+21.42	1847904.54	6279783.89
TANGENTIAL DIRECTION	N 4° 46'47" W		
TANGENTIAL LENGTH:	201.42		
ELEMENT: LINEAR			
PI	12+21.42	1847904.54	6279783.89
PI	12+23.42	1847906.54	6279783.89
TANGENTIAL DIRECTION	N 0° 00'27" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	12+23.42	1847906.54	6279783.89
PI	12+25.42	1847906.54	6279781.89
TANGENTIAL DIRECTION	S 89° 59'33" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	12+25.42	1847906.54	6279781.89
PI	12+59.83	1847922.66	6279751.49
TANGENTIAL DIRECTION	N 62° 03'17" W		
TANGENTIAL LENGTH:	34.41		
ELEMENT: LINEAR			
PI	12+59.83	1847922.66	6279751.49
PI	12+61.83	1847922.66	6279749.49
TANGENTIAL DIRECTION	S 89° 57'59" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	12+61.83	1847922.66	6279749.49
PI	12+63.83	1847922.66	6279747.49
TANGENTIAL DIRECTION	S 89° 57'59" W		
TANGENTIAL LENGTH:	2.00		



CONSTRUCTION NOTES

4 CONSTRUCT TYPE B-1INLET
9 CONSTRUCT MOD WING TYPE HEADWALL **SEE DETAIL SHT 48**
10 INSTALL RIP RAP ENERGY DISSIPATOR **SEE TABLE SHT 48**
13 PROTECT EX SEWER MAIN IN PLACE
14 PROTECT EX SEWER MANHOLE IN PLACE
15 PROTECT EX WATER MAIN IN PLACE
17 PROTECT EX FIRE HYDRANT IN PLACE
23 PROTECT GAS IN PLACE
31 PROTECT EX TREE IN PLACE
35 REGRADE EX SLOPE
38 INSTALL CONCRETE ANCHOR
39 REMOVE EX STORM DRAIN
40 REMOVE EX STORM DRAIN STRUCTURE
41 ABANDON EX STORM DRAIN
44 CONSTRUCT MOD TYPE A-4 CLEANOUT **SEE DETAIL SHT 48**

NOTES:

1. FOR DEMOLITION WORK **SEE SHT 04**
2. FOR SURFACE IMPROVEMENTS **SEE SHT 49**
3. FOR TEMPORARY ACCESS ROAD **SEE SHT 71**
4. FOR REVEGETATION WORK **SEE SHT 83**
5. FOR HEADWALL GRADING DETAILS **SEE SHT 42**

RETIREMENTS:

18" - CMP - 180' - 1927
24" - CMP - 120' - 1927
STORM DRAIN INLET - 3

REFERENCES:

WATER: 19695-11, 19695-12
SEWER: 2487-L, 28253-10, 28253-12
STORM DRAIN: 2487-L, 28254-11
TELEPHONE: BI
GAS: 15855-118820
ELECTRIC: NONE
CABLE TV: MAP 2

NOTE:
GRADING LIMITS ARE APPROXIMATE AND SUBJECT TO CHANGE BASED ON VARYING FIELD CONDITIONS. CONTRACTOR TO VERIFY LIMITS OF WORK PRIOR TO CONSTRUCTION.

CONTRACTOR'S NOTE:
USE EXTREME CAUTION WHEN WORKING DUE TO LOW OVERHEAD UTILITY LINES.

SYSTEM I

N
0 20 40 60
SCALE 1"=20'

C-1

MAPLE CANYON RESTORATION – PHASE 1

BRANT STREET

MAPLE CANYON TO BARNSON PLACE

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 20 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER — DATE
SHEILA BOSE
PRINT DCE NAME — RCE#

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

REGISTERED PROFESSIONAL ENGINEER — KEVIN R. GIBSON — NO. 52295 — STATE OF CALIFORNIA

CONTRACTOR — DATE STARTED
INSPECTOR — DATE COMPLETED

38321-20-D

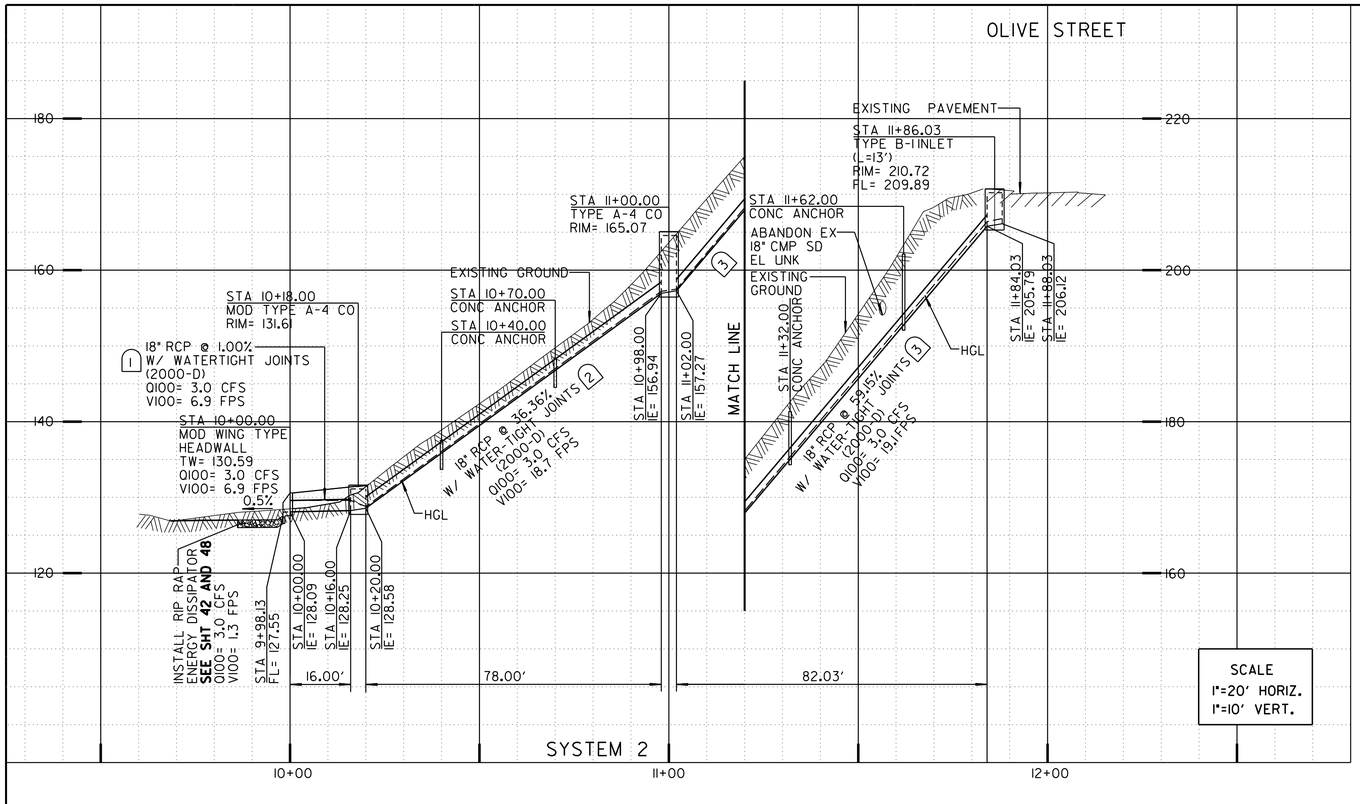
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BRANT STREET

FINAL SUBMITTAL



GRADING LIMITS DATA TABLE		
NO.	NORTHING	EASTING
1	1848127.83	6280177.34
2	1848147.04	6280172.34
3	1848149.74	6280168.37
4	1848167.99	6280168.08
5	1848169.95	6280164.54
6	1848174.30	6280166.68
7	1848184.42	6280180.08
8	1848189.73	6280180.57
9	1848187.05	6280190.52
10	1848170.13	6280190.82
11	1848166.48	6280187.59
12	1848155.66	6280185.23
13	1848147.04	6280186.05
14	1848128.38	6280181.96

LIMITS OF WORK DATA TABLE		
NO.	NORTHING	EASTING
1	1848127.46	6280149.17
2	1848174.87	6280156.30
3	1848265.85	6280042.12
4	1848250.20	6280021.16
5	1848266.49	6280010.67
6	1848316.74	6280049.34
7	1848310.42	6280068.88
8	1848297.34	6280064.37
9	1848189.76	6280199.39
10	1848183.58	6280219.67
11	1848158.21	6280201.33
12	1848120.54	6280195.74

STRUCTURE DATA TABLE				
NO.	STA	NORTHING	EASTING	REMARKS
1	10+00.00	1848167.00	6280179.64	MOD WING TYPE HEADWALL
2	10+18.00	1848184.39	6280183.27	MOD TYPE A-4 CO
3	11+00.00	1848235.49	6280119.14	TYPE A-4 CO
4	11+86.03	1848288.88	6280051.70	TYPE B-1 INLET (L=13')

STORM DRAIN DATA TABLE				
NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
1	N08° 32'55" E		16.00'	18" RCP (2000-D)•
2	N51° 27'05" W		78.00'	18" RCP (2000-D)•
3	N51° 27'05" W		82.03'	18" RCP (2000-D)•

•WATER-TIGHT JOINTS

RETIREMENTS:

18" - CMP - 90' - 1927
STORM DRAIN INLET - 1

REFERENCES:

WATER: 19695-13
SEWER: 28253-11, 2487-L
STORM DRAIN: 2487-L
TELEPHONE: BI
GAS: 15892-118825
ELECTRIC: 15892-118825
CABLE TV: MAP 2

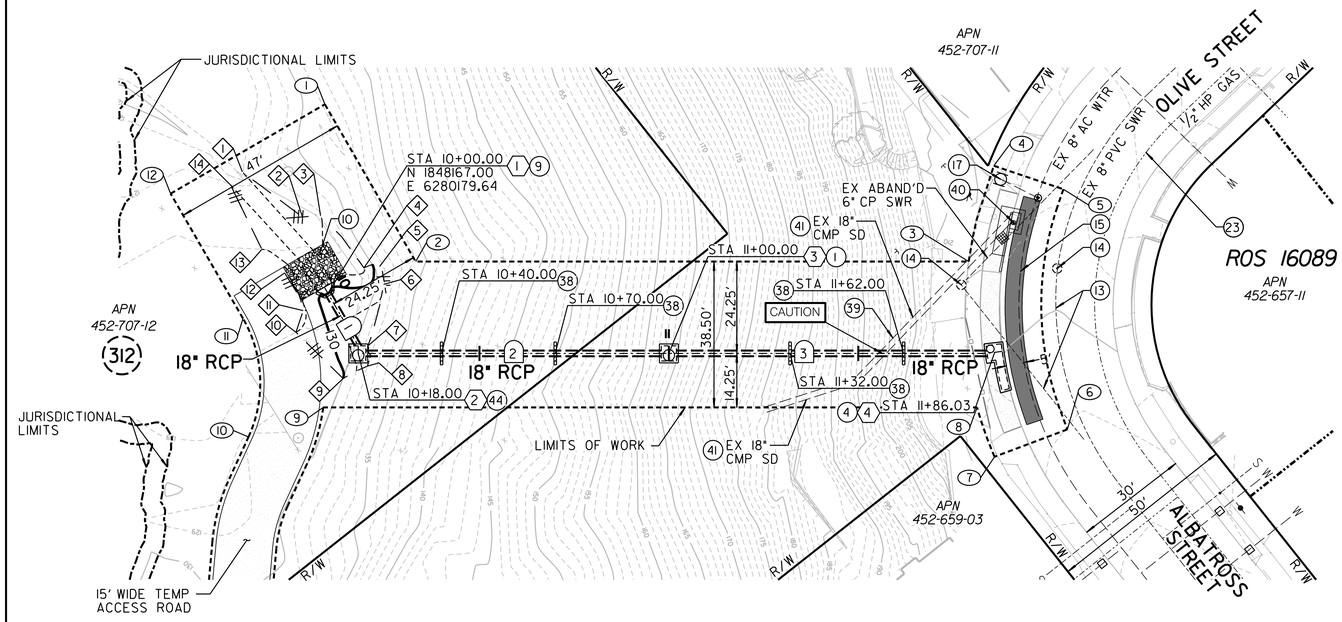
ALIGNMENT NAME:	SYSTEM 2		
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
PI	9+88.12	1848155.25	6280177.88
PI	9+98.12	1848165.14	6280179.36
TANGENTIAL DIRECTION	N 8° 32'55" E		
TANGENTIAL LENGTH:	10.00		
ELEMENT: LINEAR			
PI	9+98.12	1848165.14	6280179.36
PI	10+00.00	1848167	6280179.64
TANGENTIAL DIRECTION	N 8° 32'55" E		
TANGENTIAL LENGTH:	1.88		
ELEMENT: LINEAR			
PI	10+00.00	1848167	6280179.64
PI	10+16.00	1848182.82	6280182.02
TANGENTIAL DIRECTION	N 8° 32'55" E		
TANGENTIAL LENGTH:	16.00		
ELEMENT: LINEAR			
PI	10+16.00	1848182.82	6280182.02
PI	10+18.00	1848184.39	6280183.27
TANGENTIAL DIRECTION	N 38° 32'55" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+18.00	1848184.39	6280183.27
PI	10+20.00	1848185.63	6280181.70
TANGENTIAL DIRECTION	N 51° 27'05" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+20.00	1848185.63	6280181.70
PI	10+98.00	1848234.24	6280120.70
TANGENTIAL DIRECTION	N 51° 27'05" W		
TANGENTIAL LENGTH:	78.00		
ELEMENT: LINEAR			
PI	10+98.00	1848234.24	6280120.7
PI	11+00.00	1848235.49	6280119.14
TANGENTIAL DIRECTION	N 51° 27'05" W		
TANGENTIAL LENGTH:	2		
ELEMENT: LINEAR			
PI	11+00.00	1848235.49	6280119.14
PI	11+02.00	1848236.73	6280117.57
TANGENTIAL DIRECTION	N 51° 27'05" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+02.00	1848236.73	6280117.57
PI	11+84.03	1848287.85	6280053.42
TANGENTIAL DIRECTION	N 51° 27'05" W		
TANGENTIAL LENGTH:	82.03		
ELEMENT: LINEAR			
PI	11+84.03	1848287.85	6280053.42
PI	11+86.03	1848288.88	6280051.7
TANGENTIAL DIRECTION	N 59° 13'42" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+86.03	1848288.88	6280051.7
PI	11+88.03	1848289.9	6280049.98
TANGENTIAL DIRECTION	N 59° 13'42" W		
TANGENTIAL LENGTH:	2.00		

NOTES:

1. FOR DEMOLITION WORK **SEE SHT 05**
2. FOR SURFACE IMPROVEMENTS **SEE SHT 50**
3. FOR TEMPORARY ACCESS ROAD **SEE SHT 72**
4. FOR REVEGETATION WORK **SEE SHT 85**
5. FOR HEADWALL GRADING DETAILS **SEE SHT 42**

CONSTRUCTION NOTES

(1) CONSTRUCT TYPE A-4 CLEANOUT
(4) CONSTRUCT TYPE B-1 INLET
(9) CONSTRUCT MOD WING TYPE HEADWALL **SEE DETAIL SHT 48**
(10) INSTALL RIP RAP ENERGY DISSIPATOR **SEE TABLE SHT 48**
(13) PROTECT EX SEWER MAIN IN PLACE
(14) PROTECT EX SEWER MANHOLE IN PLACE
(15) PROTECT EX WATER MAIN IN PLACE
(17) PROTECT EX FIRE HYDRANT IN PLACE
(23) PROTECT GAS IN PLACE
(35) REGRADE EX SLOPE
(38) INSTALL CONCRETE ANCHOR
(39) REMOVE EX STORM DRAIN
(40) REMOVE EX STORM DRAIN STRUCTURE
(41) ABANDON EX STORM DRAIN
(44) CONSTRUCT MOD TYPE A-4 CLEANOUT **SEE DETAIL SHT 48**



NOTE:
GRADING LIMITS ARE APPROXIMATE AND SUBJECT TO CHANGE BASED ON VARYING FIELD CONDITIONS. CONTRACTOR TO VERIFY LIMITS OF WORK PRIOR TO CONSTRUCTION.

CONTRACTOR'S NOTE:
USE EXTREME CAUTION WHEN WORKING DUE TO LOW OVERHEAD UTILITY LINES.

0 20 40 60
SCALE 1" = 20'

SYSTEM 2

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REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

CONTRACTOR
INSPECTOR
DATE STARTED
DATE COMPLETED

C-2

MAPLE CANYON RESTORATION – PHASE 1

OLIVE STREET

MAPLE CANYON TO ALBATROSS STREET

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 21 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER — DATE
SHEILA BOSE
PRINT DCE NAME — RCE#

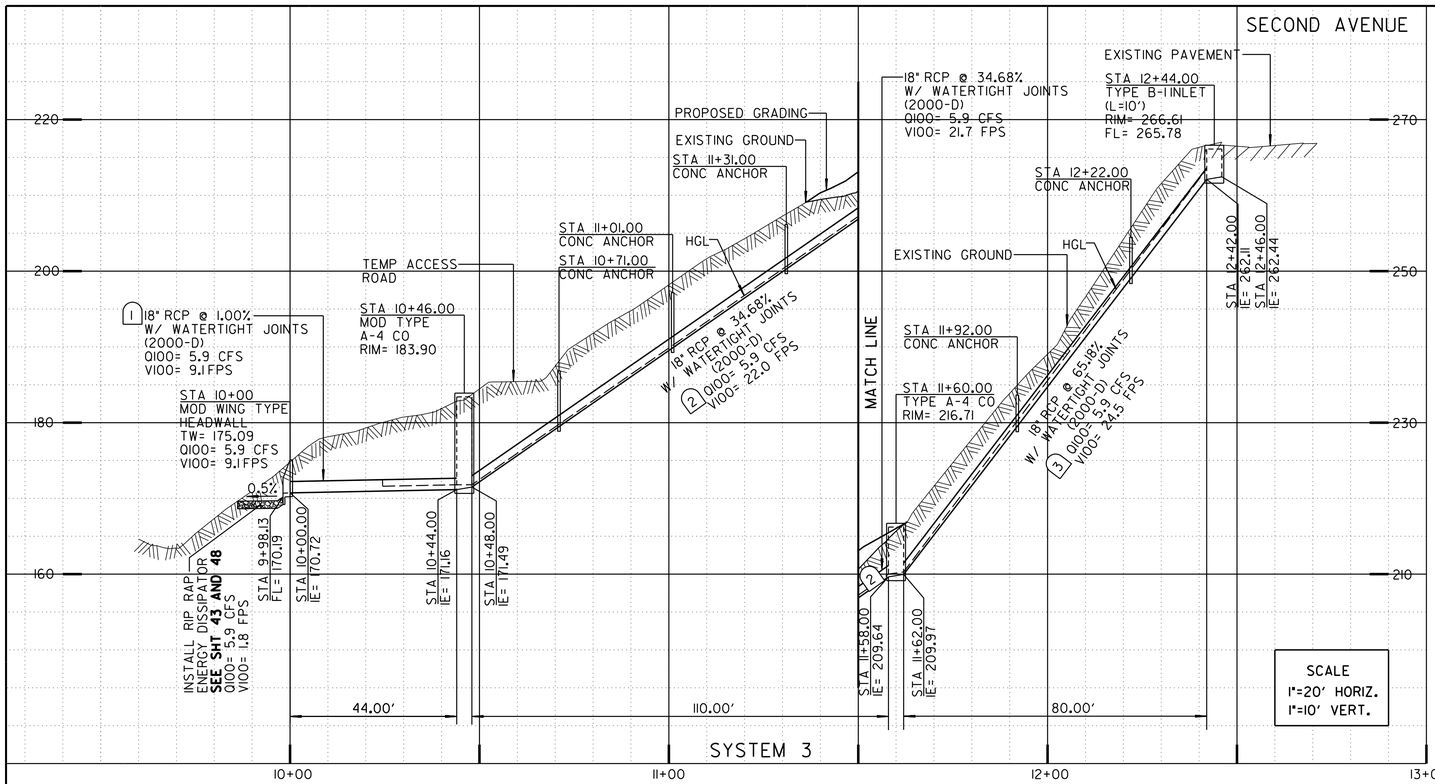
SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

38321-21-D

OLIVE STREET

FINAL SUBMITTAL

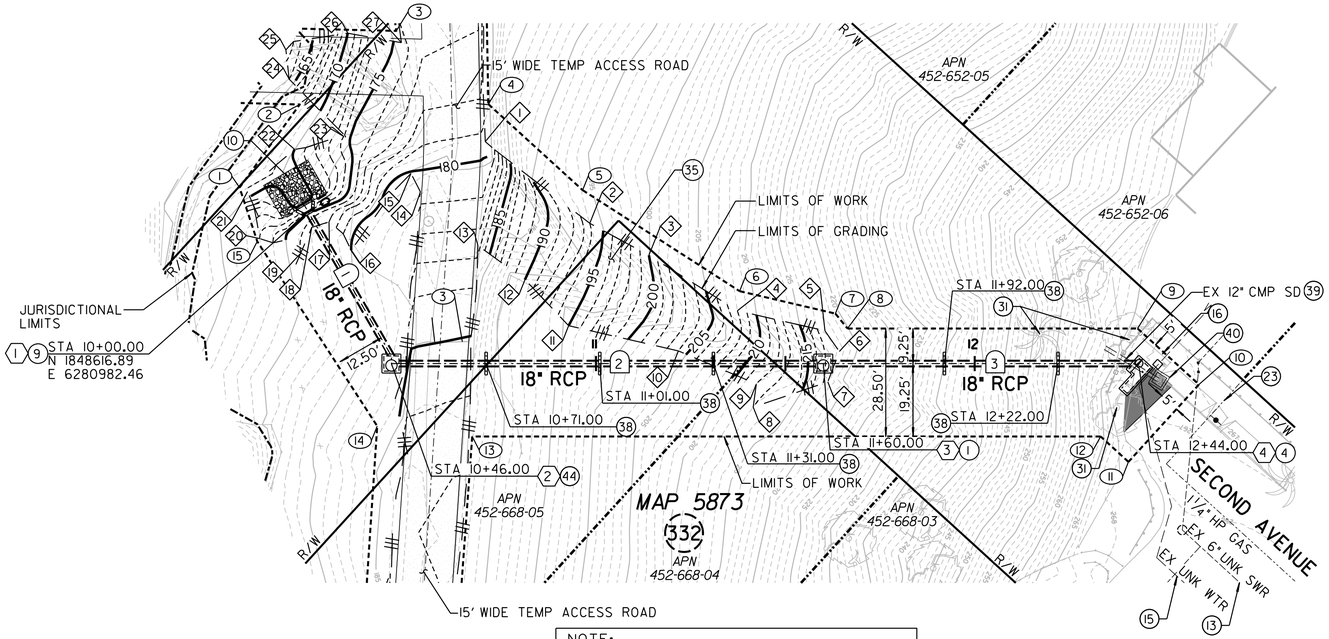


ALIGNMENT NAME:	SYSTEM 3		
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
PI	9+88.12	1848605.58	6280978.84
PI	9+98.12	1848615.1	6280981.88
TANGENTIAL DIRECTION	N 17° 44'19" E		
TANGENTIAL LENGTH:	10.00		
ELEMENT: LINEAR			
PI	9+98.12	1848615.1	6280981.88
PI	10+00.00	1848616.89	6280982.46
TANGENTIAL DIRECTION	N 17° 44'19" E		
TANGENTIAL LENGTH:	1.88		
ELEMENT: LINEAR			
PI	10+00.00	1848616.89	6280982.46
PI	10+44.00	1848658.8	6280995.86
TANGENTIAL DIRECTION	N 17° 44'19" E		
TANGENTIAL LENGTH:	44.00		
ELEMENT: LINEAR			
PI	10+44.00	1848658.8	6280995.86
PI	10+46.00	1848660.14	6280997.34
TANGENTIAL DIRECTION	N 47° 44'19" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+46.00	1848660.14	6280997.34
PI	10+48.00	1848661.62	6280996
TANGENTIAL DIRECTION	N 42° 15'41" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+48.00	1848661.62	6280996
PI	10+72.00	1848679.39	6280979.86
TANGENTIAL DIRECTION	N 42° 15'41" W		
TANGENTIAL LENGTH:	24.00		
ELEMENT: LINEAR			
PI	10+72.00	1848679.39	6280979.86
PI	10+74.00	1848680.87	6280978.51
TANGENTIAL DIRECTION	N 42° 15'41" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+74.00	1848680.87	6280978.51
PI	10+76.00	1848682.35	6280977.17
TANGENTIAL DIRECTION	N 42° 15'41" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+76.00	1848682.35	6280977.17
PI	11+58.00	1848743.03	6280922.02
TANGENTIAL DIRECTION	N 42° 15'41" W		
TANGENTIAL LENGTH:	82.00		

ALIGNMENT NAME:	SYSTEM 3		
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
PI	11+58.00	1848743.03	6280922.02
PI	11+60.00	1848744.51	6280920.68
TANGENTIAL DIRECTION	N 42° 15'41" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+60.00	1848744.51	6280920.68
PI	11+62.00	1848745.99	6280919.33
TANGENTIAL DIRECTION	N 42° 15'41" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+62.00	1848745.99	6280919.33
PI	12+42.00	1848805.2	6280865.53
TANGENTIAL DIRECTION	N 42° 15'41" W		
TANGENTIAL LENGTH:	80.00		
ELEMENT: LINEAR			
PI	12+42.00	1848805.2	6280865.53
PI	12+44.00	1848807.2	6280865.53
TANGENTIAL DIRECTION	N 0° 00'00" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	12+44.00	1848807.2	6280865.53
PI	12+46.00	1848809.2	6280865.53
TANGENTIAL DIRECTION	N 0° 00'00" E		
TANGENTIAL LENGTH:	2.00		

LIMITS OF WORK DATA TABLE		
NO.	NORTHING	EASTING
1	1848599.22	6280989.93
2	1848596.22	6280963.00
3	1848602.02	6280931.50
4	1848635.38	6280929.46
5	1848666.72	6280929.51
6	1848715.33	6280921.38
7	1848738.02	6280908.76
8	1848743.02	6280909.53
9	1848799.70	6280858.02
10	1848821.65	6280858.06
11	1848821.60	6280885.68
12	1848811.67	6280885.66
13	1848688.88	6280997.24
14	1848668.46	6281012.08
15	1848612.23	6280997.31

GRADING LIMITS DATA TABLE		
NO.	NORTHING	EASTING
1	1848639.08	6280937.31
2	1848674.01	6280934.72
3	1848691.23	6280930.49
4	1848718.36	6280925.59
5	1848739.03	6280913.97
6	1848745.51	6280915.45
7	1848748.65	6280923.44
8	1848738.57	6280941.62
9	1848735.07	6280936.54
10	1848713.96	6280943.92
11	1848688.05	6280958.48
12	1848671.34	6280957.24
13	1848656.10	6280958.94
14	1848635.45	6280958.93
15	1848630.21	6280956.72
16	1848632.20	6280982.37
17	1848622.78	6280980.72
18	1848620.41	6280984.89
19	1848622.83	6280991.92
20	1848612.23	6280996.31
21	1848601.48	6280989.28
22	1848603.23	6280972.69
23	1848610.50	6280961.44
24	1848589.66	6280959.92
25	1848583.82	6280954.80
26	1848592.96	6280940.55
27	1848605.13	6280932.89



SYSTEM 3

NOTE:
GRADING LIMITS ARE APPROXIMATE AND SUBJECT TO CHANGE BASED ON VARYING FIELD CONDITIONS. CONTRACTOR TO VERIFY LIMITS OF WORK PRIOR TO CONSTRUCTION.

CONTRACTOR'S NOTE:
USE EXTREME CAUTION WHEN WORKING DUE TO LOW OVERHEAD UTILITY LINES.

NOTES:
1. FOR DEMOLITION WORK **SEE SHT 06**
2. FOR SURFACE IMPROVEMENTS **SEE SHT 50**
3. FOR TEMPORARY ACCESS ROAD **SEE SHT 73**
4. FOR REVEGETATION WORK **SEE SHT 89**
5. FOR HEADWALL GRADING DETAILS **SEE SHT 43**

REFERENCES:
WATER: UNKNOWN
SEWER: 1329-L
STORM DRAIN: UNKNOWN
TELEPHONE: NONE
GAS: 15855-118820
ELECTRIC: 15900-118830
CABLE TV: NONE

RETIREMENTS:
12" - CMP - 20.00'
STORM DRAIN INLET - 1

CONSTRUCTION NOTES
(1) CONSTRUCT TYPE A-4 CLEANOUT
(4) CONSTRUCT TYPE B-1INLET
(9) CONSTRUCT MOD WING TYPE HEADWALL **SEE DETAIL SHT 48**
(10) INSTALL RIP RAP ENERGY DISSIPATOR **SEE TABLE SHT 48**
(13) PROTECT EX SEWER MAIN IN PLACE
(15) PROTECT EX WATER MAIN IN PLACE
(16) PROTECT EX WATER APPURTENANCE IN PLACE
(23) PROTECT GAS IN PLACE
(31) PROTECT EX TREE IN PLACE
(35) REGRADE EX SLOPE
(38) INSTALL CONCRETE ANCHOR
(39) REMOVE EX STORM DRAIN
(40) REMOVE EX STORM DRAIN STRUCTURE
(44) CONSTRUCT MOD TYPE A-4 CLEANOUT **SEE DETAIL SHT 48**

SCALE 1"=20'

STORM DRAIN DATA TABLE				
NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
1	N17° 44'19" E		44.00'	18" RCP (2000-D)*
2	N42° 15'41" W		110.00'	18" RCP (2000-D)*
3	N42° 15'41" W		80.00'	18" RCP (2000-D)*

*WATER-TIGHT JOINTS

STRUCTURE DATA TABLE				
NO.	STA	NORTHING	EASTING	REMARKS
1	10+00.00	1848616.89	6280982.46	WING TYPE HEADWALL
2	10+46.00	1848660.14	6280997.34	MOD TYPE A-4 CO
3	11+60.00	1848744.51	6280920.68	TYPE A-4 CO
4	12+44.00	1848807.20	6280865.53	TYPE B-1 INLET (L=10')

C-3

MAPLE CANYON RESTORATION – PHASE 1

SECOND AVENUE
MAPLE CANYON TO QUINCE STREET

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 22 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER _____ DATE
SHEILA BOSE
PRINT DCE NAME _____ RCE#

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

38321-22-D

REGISTERED PROFESSIONAL ENGINEER KEVIN R. GIBSON NO. 52295 STATE OF CALIFORNIA

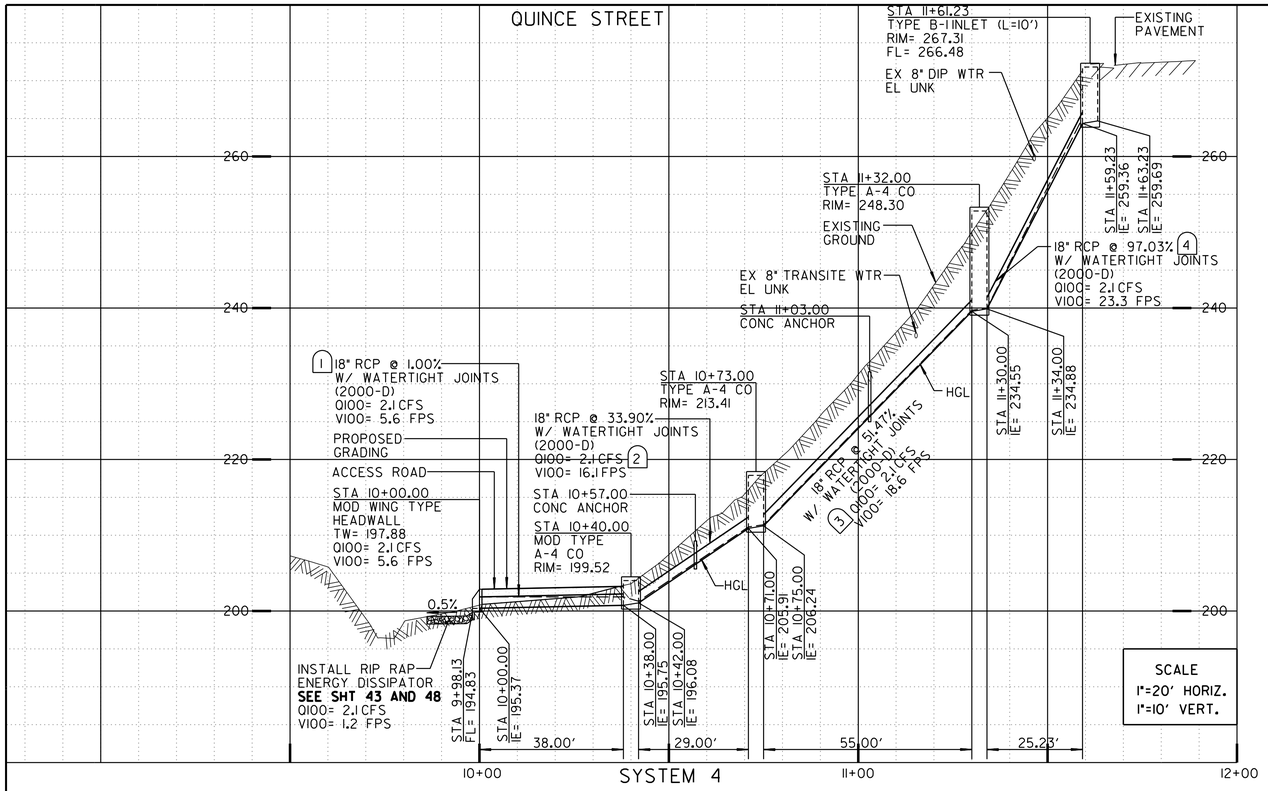
RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619-291-0707
(FAX) 619-291-4165
rickengineering.com
San Diego
Riverside - Orange - Sacramento - San Luis Obispo - Phoenix - Tucson - Denver

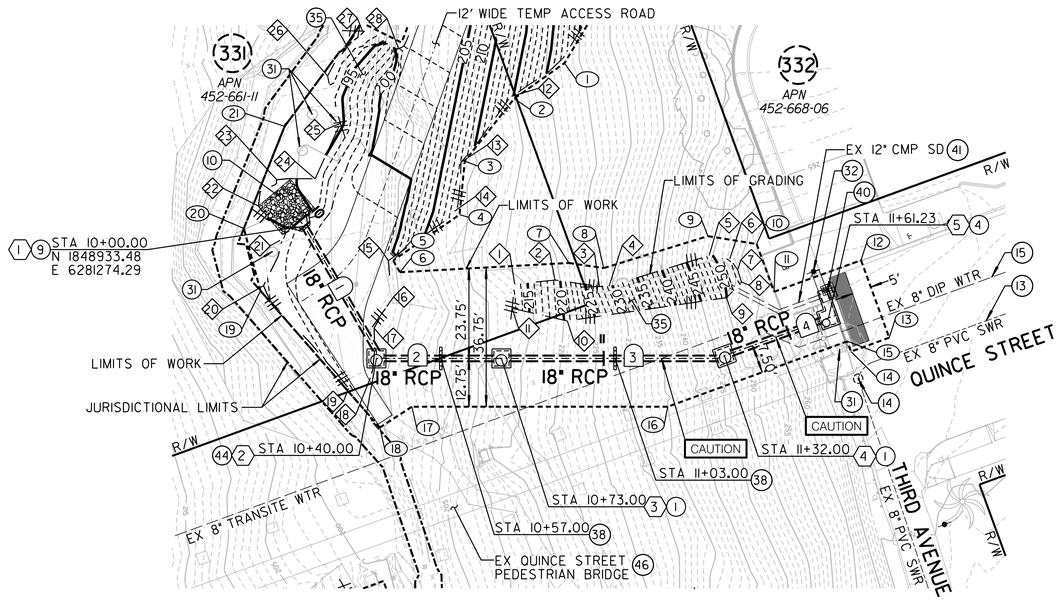
\\cp.rickeng.com\projects\C_SD_J\18022-F_MapleCanyonSDOutfalls\Civil\Sheets\Final Sheets\18022F_C3_System 3.dgn

21-JAN-2020 08:55 knguyen

SECOND AVENUE

FINAL SUBMITTAL





SYSTEM 4

ALIGNMENT NAME:	SYSTEM 4 STATION	NORTHING	EASTING
ELEMENT: LINEAR			
PI	9+88.12	1848922.31	6281278.33
PI	9+98.12	1848931.71	6281274.93
TANGENTIAL DIRECTION	N 19° 52'14" W		
TANGENTIAL LENGTH:	10.00		
ELEMENT: LINEAR			
PI	9+98.12	1848931.71	6281274.93
PI	10+00.00	1848933.48	6281274.29
TANGENTIAL DIRECTION	N 19° 52'14" W		
TANGENTIAL LENGTH:	1.88		
ELEMENT: LINEAR			
PI	10+00.00	1848933.48	6281274.29
PI	10+38.00	1848970.92	6281267.77
TANGENTIAL DIRECTION	N 9° 52'17" W		
TANGENTIAL LENGTH:	38.00		
ELEMENT: LINEAR			
PI	10+38.00	1848970.92	6281267.77
PI	10+40.00	1848972.79	6281268.46
TANGENTIAL DIRECTION	N 20° 07'43" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+40.00	1848972.79	6281268.46
PI	10+42.00	1848973.48	6281266.58
TANGENTIAL DIRECTION	N 69° 52'17" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+42.00	1848973.48	6281266.58
PI	10+71.00	1848983.46	6281239.36
TANGENTIAL DIRECTION	N 69° 52'17" W		
TANGENTIAL LENGTH:	29.00		
ELEMENT: LINEAR			
PI	10+71.00	1848983.46	6281239.36
PI	10+73.00	1848984.15	6281237.48
TANGENTIAL DIRECTION	N 69° 52'17" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+73.00	1848984.15	6281237.48
PI	10+75.00	1848984.84	6281235.6
TANGENTIAL DIRECTION	N 69° 52'17" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+75.00	1848984.84	6281235.6
PI	11+30.00	1849003.76	6281183.96
TANGENTIAL DIRECTION	N 69° 52'17" W		
TANGENTIAL LENGTH:	55.00		

ALIGNMENT NAME:	SYSTEM 4 STATION	NORTHING	EASTING
ELEMENT: LINEAR			
PI	11+30.00	1849003.76	6281183.96
PI	11+32.00	1849003.77	6281181.96
TANGENTIAL DIRECTION	N 89° 52'17" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+32.00	1849003.77	6281181.96
PI	11+34.00	1849003.77	6281179.96
TANGENTIAL DIRECTION	N 89° 52'17" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+34.00	1849003.77	6281179.96
PI	11+59.23	1849003.83	6281154.73
TANGENTIAL DIRECTION	N 89° 52'17" W		
TANGENTIAL LENGTH:	25.23		
ELEMENT: LINEAR			
PI	11+59.23	1849003.83	6281154.73
PI	11+61.23	1849003.86	6281152.73
TANGENTIAL DIRECTION	N 89° 15'23" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+61.23	1849003.86	6281152.73
PI	11+63.23	1849003.88	6281150.73
TANGENTIAL DIRECTION	N 89° 15'23" W		
TANGENTIAL LENGTH:	2.00		

STORM DRAIN DATA TABLE				
NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
1	N09° 52'17"W		38.00'	18" RCP (2000-D)•
2	N69° 52'17"W		29.00'	18" RCP (2000-D)•
3	N69° 52'17"W		55.00'	18" RCP (2000-D)•
4	N89° 52'17"W		25.23'	18" RCP (2000-D)•

•WATER-TIGHT JOINTS

STRUCTURE DATA TABLE				
NO.	STA	NORTHING	EASTING	REMARKS
1	10+00.00	1848933.48	6281274.29	MOD WING TYPE HEADWALL
2	10+40.00	1848972.79	6281268.46	MOD TYPE A-4 CO
3	10+73.00	1848984.15	6281237.48	TYPE A-4 CO
4	11+32.00	1849003.77	6281181.96	TYPE A-4 CO
5	11+61.23	1849003.86	6281152.73	TYPE B-I INLET (L=10')

GRADING LIMITS DATA TABLE		
NO.	NORTHING	EASTING
1	1848966.96	6281227.44
2	1848969.60	6281217.09
3	1848975.26	6281206.67
4	1848976.05	6281204.27
5	1848977.53	6281176.63
6	1848980.24	6281171.82
7	1848983.66	6281170.87
8	1848987.03	6281171.02
9	1848989.56	6281176.17
10	1848980.84	6281217.73
11	1848972.71	6281230.29
12	1848920.09	6281211.14
13	1848931.84	6281229.66
14	1848943.43	6281235.73
15	1848949.65	6281256.60
16	1848960.91	6281261.21
17	1848965.08	6281266.29
18	1848977.05	6281271.73
19	1848977.68	6281278.09
20	1848944.50	6281289.85
21	1848934.75	6281281.58
22	1848924.31	6281283.86
23	1848919.45	6281276.97
24	1848922.72	6281267.35
25	1848911.22	6281256.01
26	1848898.34	6281254.91
27	1848890.43	6281242.18
28	1848898.00	6281234.83

LIMITS OF WORK DATA TABLE		
NO.	NORTHING	EASTING
1	1848916.70	6281195.03
2	1848920.92	6281210.71
3	1848931.94	6281228.67
4	1848944.70	6281234.80
5	1848950.03	6281255.42
6	1848953.57	6281254.81
7	1848966.62	6281212.09
8	1848971.06	6281203.92
9	1848972.60	6281175.20
10	1848978.99	6281163.84
11	1848992.42	6281163.85
12	1848992.48	6281139.43
13	1849014.24	6281139.48
14	1849014.21	6281150.19
15	1849011.34	6281150.16
16	1849011.23	6281200.65
17	1848987.98	6281264.07
18	1848990.23	6281273.89
19	1848945.52	6281291.06
20	1848928.54	6281289.53
21	1848906.94	6281270.14

CONSTRUCTION NOTES

1. CONSTRUCT TYPE A-4 CLEANOUT
4. CONSTRUCT TYPE B-I INLET
9. CONSTRUCT MOD WING TYPE HEADWALL **SEE DETAILS SHT 48**
10. INSTALL RIP RAP ENERGY DISSIPATOR **SEE TABLE SHT 48**
13. PROTECT EX SEWER MAIN IN PLACE
14. PROTECT EX SEWER MANHOLE IN PLACE
15. PROTECT EX WATER MAIN IN PLACE
31. PROTECT EX TREE IN PLACE
32. PROTECT EX UTILITY POLE
35. REGRADE EX SLOPE
38. INSTALL CONCRETE ANCHOR
39. REMOVE EX STORM DRAIN
40. REMOVE EX STORM DRAIN STRUCTURE
41. ABANDON EX STORM DRAIN
44. CONSTRUCT MOD TYPE A-4 CLEANOUT **SEE DETAIL SHT 48**
46. PROTECT EX BRIDGE IN PLACE

NOTES:

1. FOR DEMOLITION WORK **SEE SHT 07**
2. FOR SURFACE IMPROVEMENTS **SEE SHT 51**
3. FOR TEMPORARY ACCESS ROAD **SEE SHT 73**
4. FOR REVEGETATION WORK **SEE SHT 89**
5. FOR HEADWALL GRADING DETAILS **SEE SHT 43**

RETIREMENTS:

12" - CMP - 30' - 1982
STORM DRAIN INLET - 1

REFERENCES:

WATER: 20524-D
SEWER: 29465-3-D
STORM DRAIN: 20524-D
TELEPHONE: A2, B2
GAS: NONE
ELECTRIC: 15900-11B835
CABLE: MAP 2

NOTE:
GRADING LIMITS ARE APPROXIMATE AND SUBJECT TO CHANGE BASED ON VARYING FIELD CONDITIONS. CONTRACTOR TO VERIFY LIMITS OF WORK PRIOR TO CONSTRUCTION.

CONTRACTOR'S NOTE:
USE EXTREME CAUTION WHEN WORKING DUE TO LOW OVERHEAD UTILITY LINES.

C-4

QUINCE STREET

MAPLE CANYON RESTORATION – PHASE 1

QUINCE STREET
MAPLE CANYON TO THIRD AVENUE

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 23 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED: FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DOE NAME _____ RCE# _____

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

REGISTERED PROFESSIONAL ENGINEER · KEVIN R. GIBSON · NO. 52295 · STATE OF CALIFORNIA

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

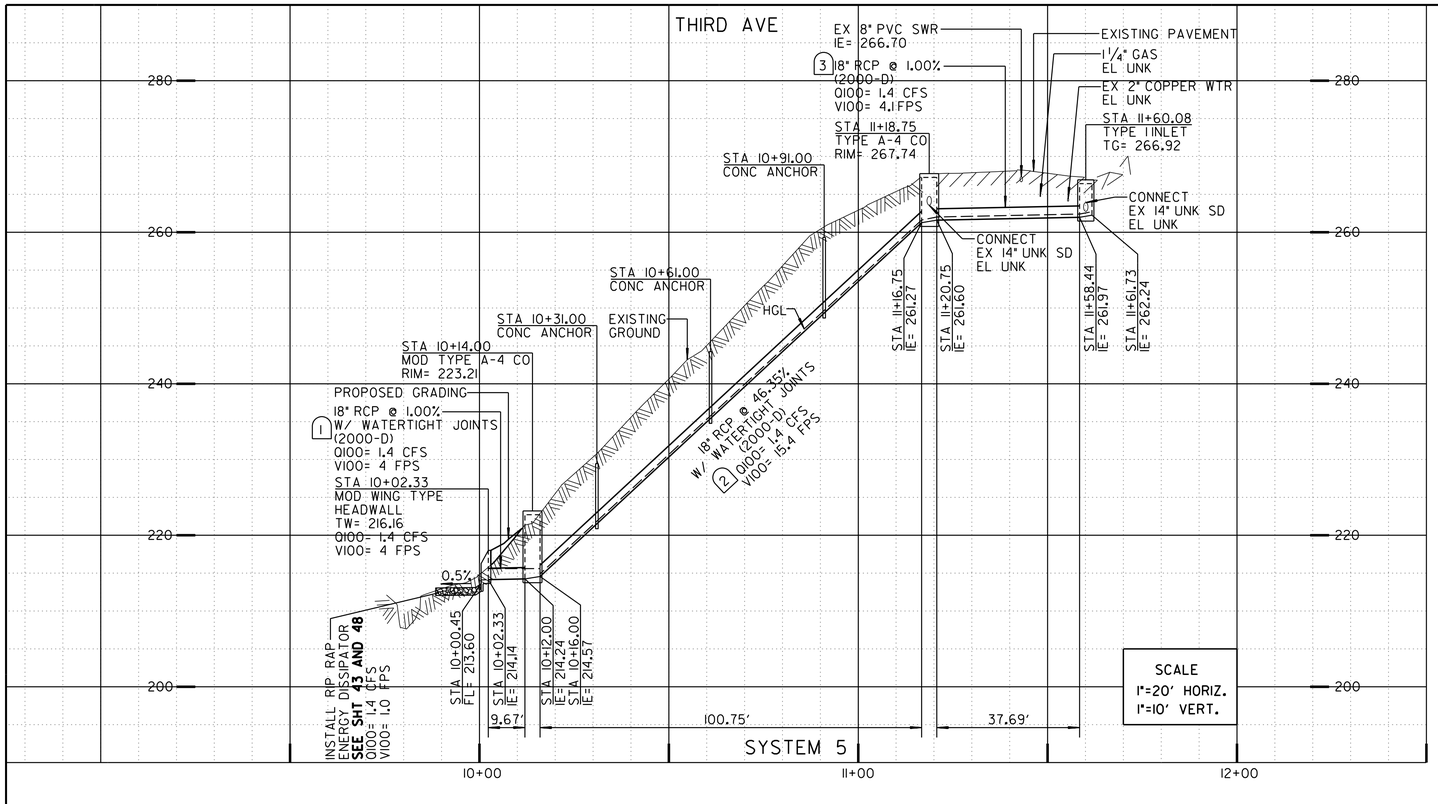
38321-23-D

RICK ENGINEERING COMPANY
San Diego
5620 FRIARS ROAD
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rickengineering.com
Riverside - Orange - Sacramento - San Luis Obispo - Phoenix - Tucson - Denver

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FINAL SUBMITTAL



STRUCTURE DATA TABLE				
NO.	STA	NORTHING	EASTING	REMARKS
1	10+02.33	1849239.00	6281286.86	MOD WING TYPE HEADWALL
2	10+14.00	1849251.40	6281280.89	MOD TYPE A-4 CO
3	11+18.75	1849251.61	6281176.14	TYPE A-4 CO
4	11+60.08	1849230.05	6281141.58	TYPE 1INLET

STORM DRAIN DATA TABLE				
NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
1	N49° 53'17" W		9.67'	18" RCP (2000-D)•
2	N89° 53'17" W		100.75'	18" RCP (2000-D)•
3	S55° 06'10" W		37.69'	18" RCP (2000-D)

•WATER-TIGHT JOINTS

GRADING LIMITS DATA TABLE		
NO.	NORTHING	EASTING
1	1849227.69	6281289.30
2	1849239.07	6281278.72
3	1849249.40	6281280.51
4	1849252.90	6281284.91
5	1849249.48	6281291.90
6	1849245.77	6281292.93
7	1849239.33	6281300.57
8	1849228.42	6281295.31

LIMITS OF WORK DATA TABLE		
NO.	NORTHING	EASTING
1	1849218.01	6281285.23
2	1849230.17	6281270.73
3	1849230.35	6281180.80
4	1849213.03	6281155.97
5	1849213.06	6281134.41
6	1849237.06	6281134.45
7	1849237.05	6281143.21
8	1849259.61	6281175.56
9	1849259.40	6281281.43
10	1849241.44	6281302.75
11	1849238.76	6281302.71

REFERENCES:

WATER: 18326-D
SEWER: 29465-D-D
STORM DRAIN: 1648-L
TELEPHONE: A2
GAS: 15900-118835
ELECTRIC: NONE

RETIREMENTS:

4" - PVC - 80' - 1989

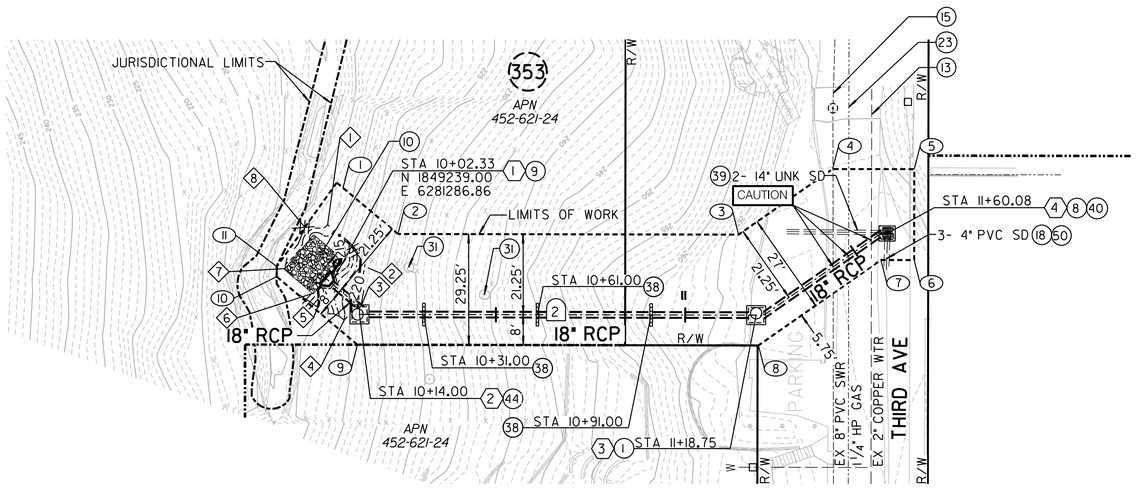
NOTES:

1. FOR DEMOLITION WORK **SEE SHT 08**
2. FOR REVEGETATION WORK **SEE SHT 86**
3. FOR HEADWALL GRADING DETAILS **SEE SHT 43**

CONSTRUCTION NOTES

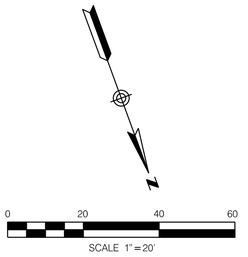
(1) CONSTRUCT TYPE A-4 CLEANOUT
(8) CONSTRUCT TYPE 1INLET
(9) CONSTRUCT MOD WING TYPE HEADWALL **SEE DETAIL SHT 48**
(10) INSTALL RIP RAP ENERGY DISSIPATOR **SEE TABLE SHT 48**
(13) PROTECT EX SEWER MAIN IN PLACE
(15) PROTECT EX WATER MAIN IN PLACE
(18) PROTECT EX STORM DRAIN IN PLACE
(23) PROTECT GAS IN PLACE
(35) REGRADE EX SLOPE
(38) INSTALL CONCRETE ANCHOR
(39) REMOVE EX STORM DRAIN
(40) REMOVE EX STORM DRAIN STRUCTURE
(44) CONSTRUCT MOD TYPE A-4 CLEANOUT **SEE DETAIL SHT 48**
(50) CONNECT TO EX STORM DRAIN

ALIGNMENT NAME:	SYSTEM 5		
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
PI	9+90.45	1849235.54	6281297.38
PI	10+00.45	1849241.97	6281289.72
TANGENTIAL DIRECTION	N 50° 02'31" W		
TANGENTIAL LENGTH:	10.00		
ELEMENT: LINEAR			
PI	10+00.45	1849241.97	6281289.72
PI	10+02.33	1849243.17	6281288.28
TANGENTIAL DIRECTION	N 50° 02'31" W		
TANGENTIAL LENGTH:	1.88		
ELEMENT: LINEAR			
PI	10+02.33	1849243.17	6281288.28
PI	10+12.00	1849249.40	6281280.88
TANGENTIAL DIRECTION	N 49° 53'17" W		
TANGENTIAL LENGTH:	9.67		
ELEMENT: LINEAR			
PI	10+12.00	1849249.40	6281280.88
PI	10+14.00	1849251.40	6281280.89
TANGENTIAL DIRECTION	N 0° 06'43" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+14.00	1849251.40	6281280.89
PI	10+16.00	1849251.41	6281278.89
TANGENTIAL DIRECTION	N 89° 53'17" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+16.00	1849251.41	6281278.89
PI	11+16.75	1849251.60	6281178.14
TANGENTIAL DIRECTION	N 89° 53'17" W		
TANGENTIAL LENGTH:	100.75		
ELEMENT: LINEAR			
PI	11+16.75	1849251.60	6281178.14
PI	11+18.75	1849251.61	6281176.14
TANGENTIAL DIRECTION	N 89° 53'17" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+18.75	1849251.61	6281176.14
PI	11+20.75	1849251.61	6281174.14
TANGENTIAL DIRECTION	N 89° 53'17" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+20.75	1849251.61	6281174.14
PI	11+58.44	1849230.05	6281143.23
TANGENTIAL DIRECTION	S 55° 06'10" W		
TANGENTIAL LENGTH:	37.69		
ELEMENT: LINEAR			
PI	11+58.44	1849230.05	6281143.23
PI	11+60.08	1849230.05	6281141.58
TANGENTIAL DIRECTION	N 89° 53'50" W		
TANGENTIAL LENGTH:	1.64		
ELEMENT: LINEAR			
PI	11+60.08	1849230.05	6281141.58
PI	11+61.73	1849230.05	6281139.94
TANGENTIAL DIRECTION	N 89° 53'50" W		
TANGENTIAL LENGTH:	1.65		



SYSTEM 5

NOTE:
GRADING LIMITS ARE APPROXIMATE AND SUBJECT TO CHANGE BASED ON VARYING FIELD CONDITIONS. CONTRACTOR TO VERIFY LIMITS OF WORK PRIOR TO CONSTRUCTION.



C-5

MAPLE CANYON RESTORATION – PHASE 1

THIRD AVENUE

MAPLE CANYON TO THIRD AVENUE

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 24 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED: FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE PRINT DCE NAME _____ RCE# _____

SUBMITTED BY: ELHAM LOTFI PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

38321-24-D

REGISTERED PROFESSIONAL ENGINEER KEVIN R. GIBSON NO. 52295 STATE OF CALIFORNIA

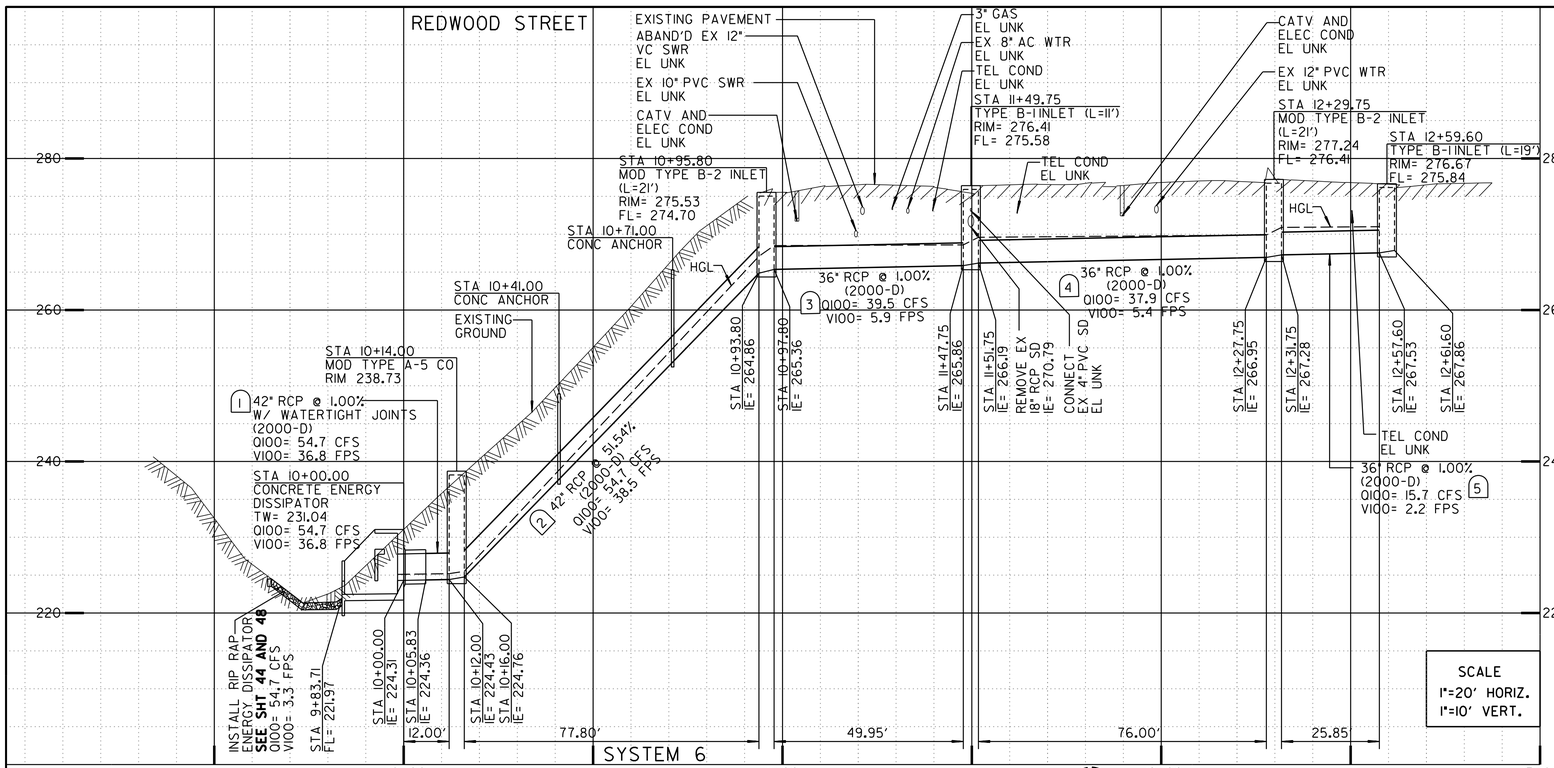
RICK ENGINEERING COMPANY
San Diego
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619-291-0707
(FAX) 619-291-4165
rickengineering.com
Riverside - Orange - Sacramento - San Luis Obispo - Phoenix - Tucson - Denver

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THIRD AVENUE

FINAL SUBMITTAL



ALIGNMENT NAME:	SYSTEM 6		
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
PI	9+65.67	1849343.86	6281297.79
PI	9+84.67	1849345.95	6281316.67
TANGENTIAL DIRECTION	N 83° 41'11" E		
TANGENTIAL LENGTH:	19.00		
ELEMENT: LINEAR			
PI	9+84.67	1849345.95	6281316.67
PI	10+00.00	1849347.64	6281331.91
TANGENTIAL DIRECTION	N 83° 41'11" E		
TANGENTIAL LENGTH:	15.33		
ELEMENT: LINEAR			
PI	10+00.00	1849347.64	6281331.91
PI	10+12.00	1849348.96	6281343.84
TANGENTIAL DIRECTION	N 83° 41'11" E		
TANGENTIAL LENGTH:	12.00		
ELEMENT: LINEAR			
PI	10+12.00	1849348.96	6281343.84
PI	10+14.00	1849349.18	6281345.83
TANGENTIAL DIRECTION	N 83° 41'11" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+14.00	1849349.18	6281345.83
PI	10+16.00	1849349.4	6281347.81
TANGENTIAL DIRECTION	N 83° 41'11" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+16.00	1849349.4	6281347.81
PI	10+93.80	1849357.95	6281425.14
TANGENTIAL DIRECTION	N 83° 41'11" E		
TANGENTIAL LENGTH:	77.8		
ELEMENT: LINEAR			
PI	10+93.80	1849357.95	6281425.14
PI	10+95.80	1849357.96	6281427.14
TANGENTIAL DIRECTION	N 89° 44'23" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+95.80	1849357.96	6281427.14
PI	10+97.80	1849357.97	6281429.14
TANGENTIAL DIRECTION	N 89° 44'23" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+97.80	1849357.97	6281429.14
PI	11+47.75	1849346.45	6281477.75
TANGENTIAL DIRECTION	S 76° 40'01" E		
TANGENTIAL LENGTH:	49.95		

ALIGNMENT NAME:	SYSTEM 6		
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
PI	11+47.75	1849346.45	6281477.75
PI	11+49.75	1849346.46	6281479.75
TANGENTIAL DIRECTION	N 89° 42'25" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+49.75	1849346.46	6281479.75
PI	11+51.75	1849348.46	6281479.74
TANGENTIAL DIRECTION	N 0° 17'35" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+51.75	1849348.46	6281479.74
PI	12+27.75	1849419.58	6281506.53
TANGENTIAL DIRECTION	N 20° 38'38" E		
TANGENTIAL LENGTH:	76.00		
ELEMENT: LINEAR			
PI	12+27.75	1849419.58	6281506.53
PI	12+29.75	1849421.58	6281506.53
TANGENTIAL DIRECTION	N 0° 01'37" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	12+29.75	1849421.58	6281506.53
PI	12+31.75	1849421.58	6281504.53
TANGENTIAL DIRECTION	N 89° 58'23" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	12+31.75	1849421.58	6281504.53
PI	12+57.60	1849434.02	6281481.86
TANGENTIAL DIRECTION	N 61° 14'29" W		
TANGENTIAL LENGTH:	25.85		
ELEMENT: LINEAR			
PI	12+57.60	1849434.02	6281481.86
PI	12+59.60	1849434.02	6281479.86
TANGENTIAL DIRECTION	S 89° 54'37" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	12+59.60	1849434.02	6281479.86
PI	12+61.60	1849434.01	6281477.86
TANGENTIAL DIRECTION	S 89° 54'37" W		
TANGENTIAL LENGTH:	2.00		

LIMITS OF WORK DATA TABLE		
NO.	NORTHING	EASTING
1	1849360.41	6281293.71
2	1849369.86	6281369.99
3	1849369.78	6281411.52
4	1849446.88	6281411.66
5	1849449.25	6281468.19
6	1849465.53	6281468.17
7	1849465.49	6281491.71
8	1849439.44	6281491.66
9	1849439.34	6281532.09
10	1849399.34	6281531.98
11	1849399.40	6281505.87
12	1849386.94	6281501.18
13	1849359.42	6281501.11
14	1849359.44	6281491.50
15	1849328.93	6281491.44
16	1849329.16	6281376.33
17	1849324.72	6281336.19
18	1849284.33	6281336.01
19	1849284.36	6281301.12
20	1849327.24	6281301.20
21	1849326.19	6281291.78

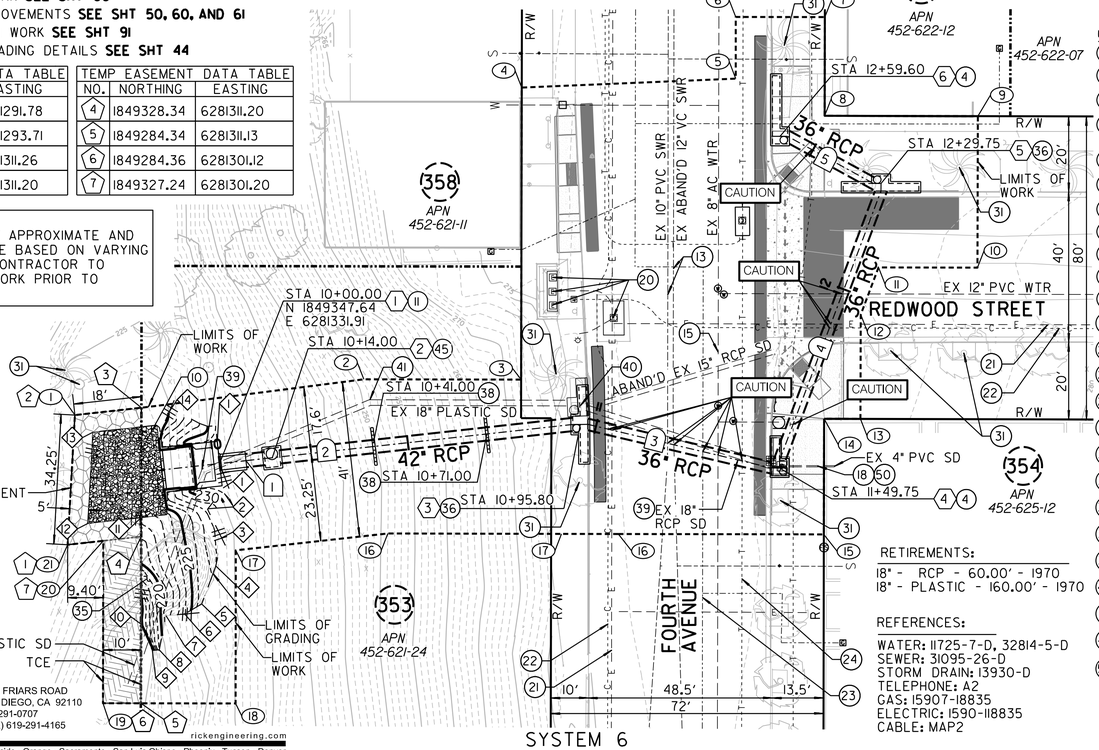
GRADING LIMITS DATA TABLE		
NO.	NORTHING	EASTING
1	1849341.18	6281332.83
2	1849335.69	6281328.82
3	1849328.00	6281332.44
4	1849391.62	6281411.56
5	1849391.67	6281461.25
6	1849307.91	6281322.68
7	1849307.48	6281317.78
8	1849298.45	6281315.98
9	1849298.29	6281314.16
10	1849305.26	6281311.16
11	1849333.37	6281311.21
12	1849331.81	6281297.11
13	1849355.91	6281298.46
14	1849361.078	6281318.50

NOTES:
1. FOR DEMOLITION WORK **SEE SHT 09**
2. FOR SURFACE IMPROVEMENTS **SEE SHT 50, 60, AND 61**
3. FOR REVEGETATION WORK **SEE SHT 91**
4. FOR HEADWALL GRADING DETAILS **SEE SHT 44**

PERM EASEMENT DATA TABLE		
NO.	NORTHING	EASTING
1	1849326.19	6281291.78
2	1849360.41	6281293.71
3	1849362.36	6281311.26
4	1849328.34	6281311.20

TEMP EASEMENT DATA TABLE		
NO.	NORTHING	EASTING
4	1849328.34	6281311.20
5	1849284.34	6281311.13
6	1849284.36	6281301.12
7	1849327.24	6281301.20

NOTE:
GRADING LIMITS ARE APPROXIMATE AND SUBJECT TO CHANGE BASED ON VARYING FIELD CONDITIONS. CONTRACTOR TO VERIFY LIMITS OF WORK PRIOR TO CONSTRUCTION.



CONSTRUCTION NOTES
1. CONSTRUCT TYPE A-4 CLEANOUT
2. CONSTRUCT TYPE A-5 CLEANOUT
4. CONSTRUCT TYPE B-1INLET
10. INSTALL RIP RAP ENERGY DISSIPATOR **SEE TABLE SHT 48**
11. INSTALL CONCRETE ENERGY DISSIPATOR
13. PROTECT EX SEWER MAIN IN PLACE
15. PROTECT EX WATER MAIN IN PLACE
16. PROTECT EX WATER APPURTENANCE IN PLACE
18. PROTECT EX STORM DRAIN IN PLACE
19. PROTECT EX STORM DRAIN STRUCTURE IN PLACE
20. PROTECT DRY UTILITY STRUCTURE IN PLACE
21. PROTECT ELEC COND IN PLACE
22. PROTECT CATV IN PLACE
23. PROTECT GAS IN PLACE
24. PROTECT TELE IN PLACE
31. PROTECT EX TREE IN PLACE
33. PROTECT EX PARKING METER IN PLACE
35. REGRADE EX SLOPE
36. CONSTRUCT MOD TYPE B-2 INLET **SEE DETAIL SHT 48**
38. INSTALL CONCRETE ANCHOR
39. REMOVE EX STORM DRAIN
40. REMOVE EX STORM DRAIN STRUCTURE
41. ABANDON EX STORM DRAIN
45. CONSTRUCT MOD TYPE A-5 CLEANOUT **SEE DETAIL SHT 48**
50. CONNECT TO EX STORM DRAIN

STRUCTURE DATA TABLE				
NO.	STA	NORTHING	EASTING	REMARKS
1	10+00.00	1849347.64	6281331.91	CONC ENERGY DISSIPATOR
2	10+14.00	1849349.18	6281345.83	MOD TYPE A-5 CO
3	10+95.80	1849357.96	6281427.14	MOD TYPE B-2 INLET (L=21')
4	11+49.75	1849346.46	6281479.75	TYPE B-1INLET (L=11')
5	12+29.75	1849421.58	6281506.53	MOD TYPE B-2 INLET (L=21')
6	12+59.60	1849434.02	6281479.86	TYPE B-1INLET (L=19')

STORM DRAIN DATA TABLE				
NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
1	N83° 41'11" E		12.00'	42" RCP (2000-D)•
2	N83° 41'11" E		77.80'	42" RCP (2000-D)•
3	S76° 40'01" E		49.95'	36" RCP (2000-D)•
4	N20° 38'38" E		76.00'	36" RCP (2000-D)•
5	N61° 14'29" W		25.85'	36" RCP (2000-D)•

•WATER-TIGHT JOINTS

RETIREMENTS:
18" - RCP - 60.00' - 1970
18" - PLASTIC - 160.00' - 1970

REFERENCES:
WATER: 11725-7-D, 32814-5-D
SEWER: 31095-26-D
STORM DRAIN: 13930-D
TELEPHONE: A2
GAS: 15907-11835
ELECTRIC: 1590-118835
CABLE: MAP2

N

0 20 40 60
SCALE 1"=20'

C-6

MAPLE CANYON RESTORATION – PHASE 1

REDWOOD STREET
MAPLE CANYON TO FOURTH AVENUE

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 25 OF 98 SHEETS

STORM DRAIN WBS B-12040

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

APPROVED:
FOR CITY ENGINEER — DATE
SHEILA BOSE
PRINT DCE NAME — RCE#

SUBMITTED BY:
ELHAM LOTFI
PROJECT MANAGER

DRAWN BY:
BAREAZ PIROMARI
PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719
CCS27 COORDINATE

1846-6276
CCS83 COORDINATE

CONTRACTOR — DATE STARTED
INSPECTOR — DATE COMPLETED

38321-25-D

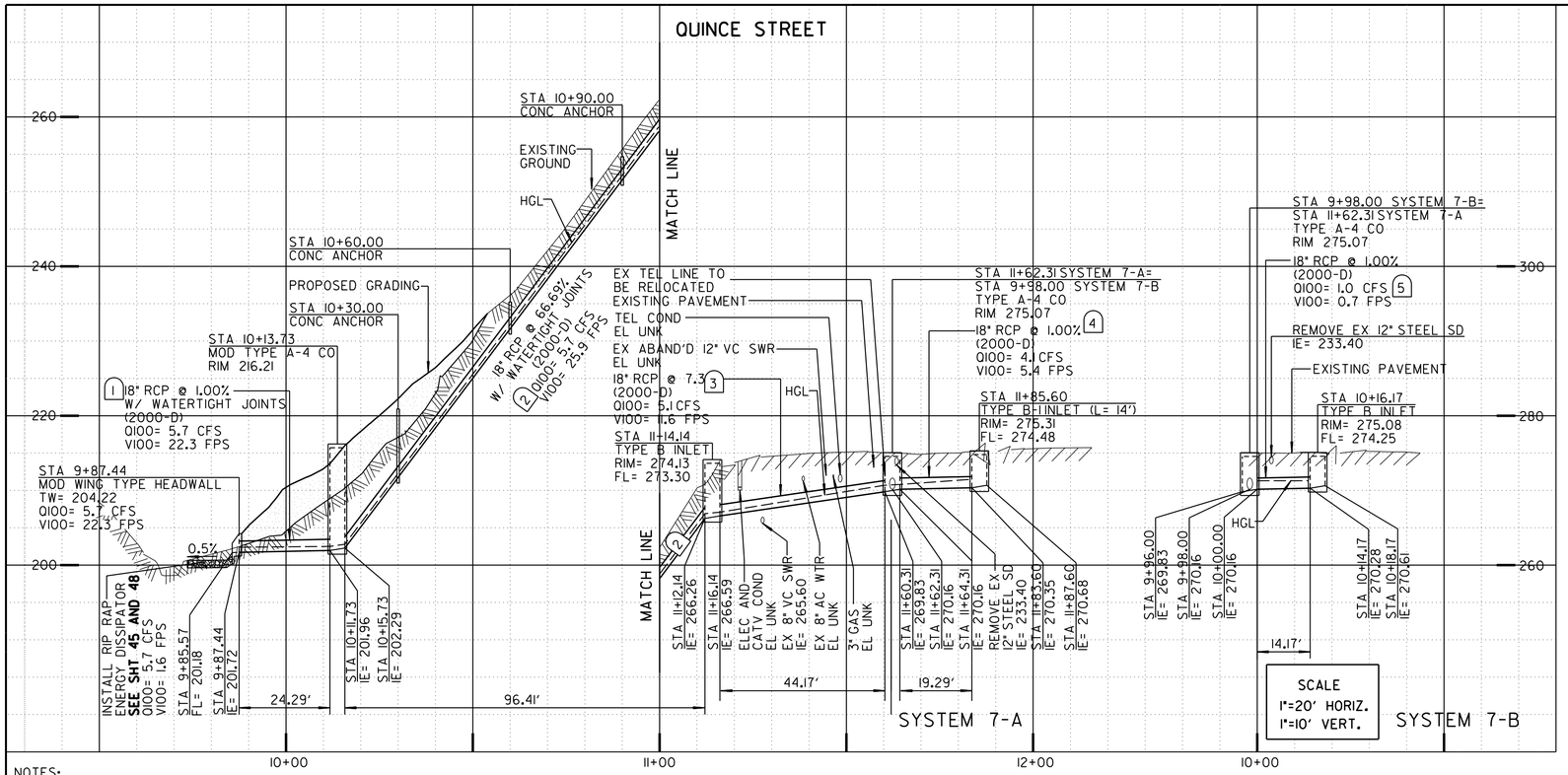
RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619-291-0707
(FAX) 619-291-4165
rickengineering.com
San Diego | Riverside - Orange - Sacramento - San Luis Obispo - Phoenix - Tucson - Denver

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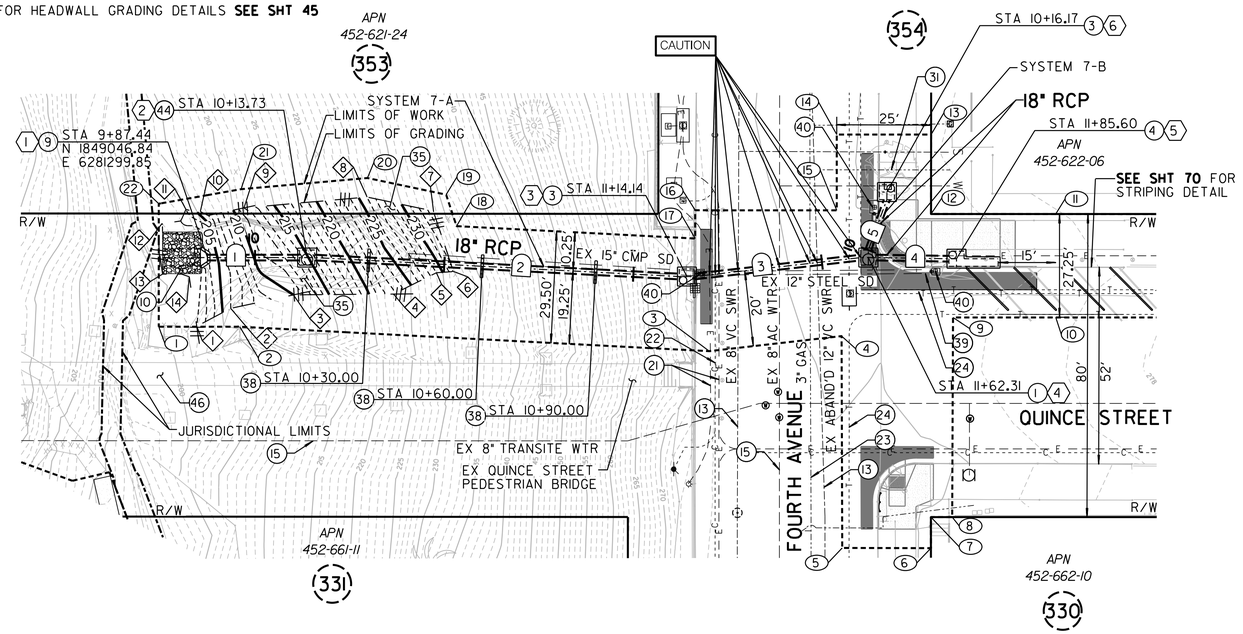
REDWOOD STREET

FINAL SUBMITTAL



NOTES:

1. FOR DEMOLITION WORK **SEE SHT 10**
2. FOR SURFACE IMPROVEMENTS **SEE SHT 51, 62, AND 63**
3. FOR REVEGETATION WORK **SEE SHT 90**
4. FOR HEADWALL GRADING DETAILS **SEE SHT 45**



SYSTEM 7-A & 7-B

CONSTRUCTION NOTES

1. CONSTRUCT TYPE A-4 CLEANOUT
3. CONSTRUCT TYPE B INLET
4. CONSTRUCT TYPE B-I INLET
9. CONSTRUCT MOD WING TYPE HEADWALL **SEE DETAIL SHT 48**
10. INSTALL RIP RAP ENERGY DISSIPATOR **SEE TABLE SHT 48**
13. PROTECT EX SEWER MAIN IN PLACE
15. PROTECT EX WATER MAIN IN PLACE
21. PROTECT ELEC COND IN PLACE
22. PROTECT CATV IN PLACE
23. PROTECT GAS IN PLACE
24. PROTECT TELE IN PLACE
31. PROTECT EX TREE IN PLACE
35. REGRADE EX SLOPE
38. INSTALL CONCRETE ANCHOR
39. REMOVE EX STORM DRAIN
40. REMOVE EX STORM DRAIN STRUCTURE
44. CONSTRUCT MOD TYPE A-4 CLEANOUT **SEE DETAIL SHT 48**
46. PROTECT EX BRIDGE IN PLACE

REFERENCES:

WATER: 10412-5-D, 20524-D
SEWER: 310956-26-D
STORM DRAIN: NONE
TELEPHONE: BK02007
GAS: 15907-118835
ELECTRIC: 15907-118835

RETIREMENTS:

12" - STEEL - 55.00'
12" - RCP - 80.00'
STORM DRAIN INLET - 3

NOTE:
GRADING LIMITS ARE APPROXIMATE AND SUBJECT TO CHANGE BASED ON VARYING FIELD CONDITIONS. CONTRACTOR TO VERIFY LIMITS OF WORK PRIOR TO CONSTRUCTION.

N

0 20 40 60
SCALE 1" = 20'

ALIGNMENT NAME:	SYSTEM 7A		
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
PI	9+75.56	1849046.86	6281287.97
PI	9+85.56	1849046.84	6281297.97
TANGENTIAL DIRECTION	S 89° 55'01" E		
TANGENTIAL LENGTH:	10.00		
ELEMENT: LINEAR			
PI	9+85.56	1849046.84	6281297.97
PI	9+87.44	1849046.84	6281299.85
TANGENTIAL DIRECTION	S 89° 55'01" E		
TANGENTIAL LENGTH:	1.88		
ELEMENT: LINEAR			
PI	9+87.44	1849046.84	6281299.85
PI	10+11.73	1849046.81	6281324.14
TANGENTIAL DIRECTION	S 89° 55'01" E		
TANGENTIAL LENGTH:	24.29		
ELEMENT: LINEAR			
PI	10+11.73	1849046.81	6281324.14
PI	10+13.73	1849046.8	6281326.14
TANGENTIAL DIRECTION	S 89° 55'01" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+13.73	1849046.8	6281326.14
PI	10+15.73	1849046.8	6281328.14
TANGENTIAL DIRECTION	S 89° 55'01" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+15.73	1849046.8	6281328.14
PI	11+12.14	1849041.66	6281424.41
TANGENTIAL DIRECTION	S 86° 56'39" E		
TANGENTIAL LENGTH:	96.41		
ELEMENT: LINEAR			
PI	11+12.14	1849041.66	6281424.41
PI	11+14.14	1849041.66	6281426.41
TANGENTIAL DIRECTION	S 89° 55'01" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+14.14	1849041.66	6281426.41
PI	11+16.14	1849041.65	6281428.41
TANGENTIAL DIRECTION	S 89° 55'01" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+16.14	1849041.65	6281428.41
PI	11+60.31	1849046.59	6281472.30
TANGENTIAL DIRECTION	N 83° 35'01" E		
TANGENTIAL LENGTH:	44.17		
ELEMENT: LINEAR			
PI	11+60.31	1849046.59	6281472.30
PI	11+62.31	1849046.59	6281474.30
TANGENTIAL DIRECTION	S 89° 55'02" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+62.31	1849046.59	6281474.30
PI	11+64.31	1849046.58	6281476.30
TANGENTIAL DIRECTION	S 89° 55'02" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+64.31	1849046.58	6281476.30
PI	11+83.60	1849046.26	6281495.59
TANGENTIAL DIRECTION	S 89° 02'54" E		
TANGENTIAL LENGTH:	19.29		
ELEMENT: LINEAR			
PI	11+83.60	1849046.26	6281495.59
PI	11+85.60	1849046.26	6281497.59
TANGENTIAL DIRECTION	S 89° 53'58" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+85.60	1849046.26	6281497.59
PI	11+87.60	1849044.26	6281497.59
TANGENTIAL DIRECTION	S 0° 06'02" W		
TANGENTIAL LENGTH:	2.00		

ALIGNMENT NAME:	SYSTEM 7B		
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
POB	9+95.00	1849043.59	6281474.30
PI	10+00.00	1849048.59	6281474.31
TANGENTIAL DIRECTION	N 0° 04'58" E		
TANGENTIAL LENGTH:	5.00		
ELEMENT: LINEAR			
PI	10+00.00	1849048.59	6281474.31
PI	10+14.17	1849061.88	6281479.23
TANGENTIAL DIRECTION	N 20° 19'52" E		
TANGENTIAL LENGTH:	14.17		
ELEMENT: LINEAR			
PI	10+14.17	1849061.88	6281479.23
PI	10+16.17	1849063.88	6281479.25
TANGENTIAL DIRECTION	N 0° 30'12" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+16.17	1849063.88	6281479.25
PI	10+18.17	1849063.89	6281477.25
TANGENTIAL DIRECTION	N 89° 29'48" W		
TANGENTIAL LENGTH:	2.00		

STORM DRAIN DATA TABLE

NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
1	S89° 55'01"E		24.29'	18" RCP (2000-D)•
2	S86° 56'39"E		96.41'	18" RCP (2000-D)•
3	N83° 35'01"E		44.17'	18" RCP (2000-D)
4	N89° 02'54"W		19.29'	18" RCP (2000-D)
5	N20° 19'52"E		14.17'	18" RCP (2000-D)

•WATER-TIGHT JOINTS

STRUCTURE DATA TABLE

NO.	STA	NORTHING	EASTING	REMARKS
1	9+87.44	1849046.84	6281299.85	WING TYPE HEADWALL
2	10+13.73	1849046.80	6281326.14	MOD TYPE A-4 CO
3	11+14.14	1849046.66	6281426.41	TYPE B INLET
4	11+62.31	1849046.59	6281474.30	TYPE A-4 CO
5	11+85.60	1849046.26	6281497.59	TYPE B-I INLET (L=14')
6	10+16.17	1849063.88	6281479.25	TYPE B INLET

LIMITS OF WORK DATA TABLE

NO.	NORTHING	EASTING
1	1849028.61	6281286.94
2	1849028.58	6281308.36
3	1849021.96	6281432.27
4	1849025.89	6281467.22
5	1848969.95	6281467.31
6	1848969.88	6281490.73
7	1848978.06	6281490.74
8	1848978.05	6281496.36
9	1849030.77	6281496.67
10	1849030.77	6281523.76
11	1849058.02	6281523.81
12	1849058.06	6281490.90
13	1849079.05	6281490.94
14	1849079.10	6281466.02
15	1849059.07	6281465.98
16	1849059.15	6281428.63
17	1849051.70	6281428.62
18	1849055.06	6281365.63
19	1849063.37	6281362.88
20	1849067.78	6281342.10
21	1849064.90	6281308.72
22	1849061.09	6281286.99

GRADING LIMITS DATA TABLE

NO.	NORTHING	EASTING
1	1849028.73	6281296.97
2	1849033.43	6281305.95
3	1849036.97	6281322.53
4	1849037.16	6281348.93
5	1849042.77	6281360.29
6	1849043.20	6281364.52
7	1849058.78	6281359.56
8	1849062.76	6281342.02
9	1849059.96	6281309.51
10	1849059.00	6281297.98
11	1849059.58	6281294.18
12	1849055.85	6281287.86
13	1849042.50	6281287.96
14	1849041.80	6281295.02

C-7

QUINCE STREET

MAPLE CANYON RESTORATION – PHASE 1

QUINCE STREET

MAPLE CANYON TO FOURTH AVENUE

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 26 OF 98 SHEETS

STORM DRAIN WBS B-12040

REGISTERED PROFESSIONAL ENGINEER KEVIN R. GIBSON NO. 52295 STATE OF CALIFORNIA

APPROVED:
FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DCE NAME _____ RCE#

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

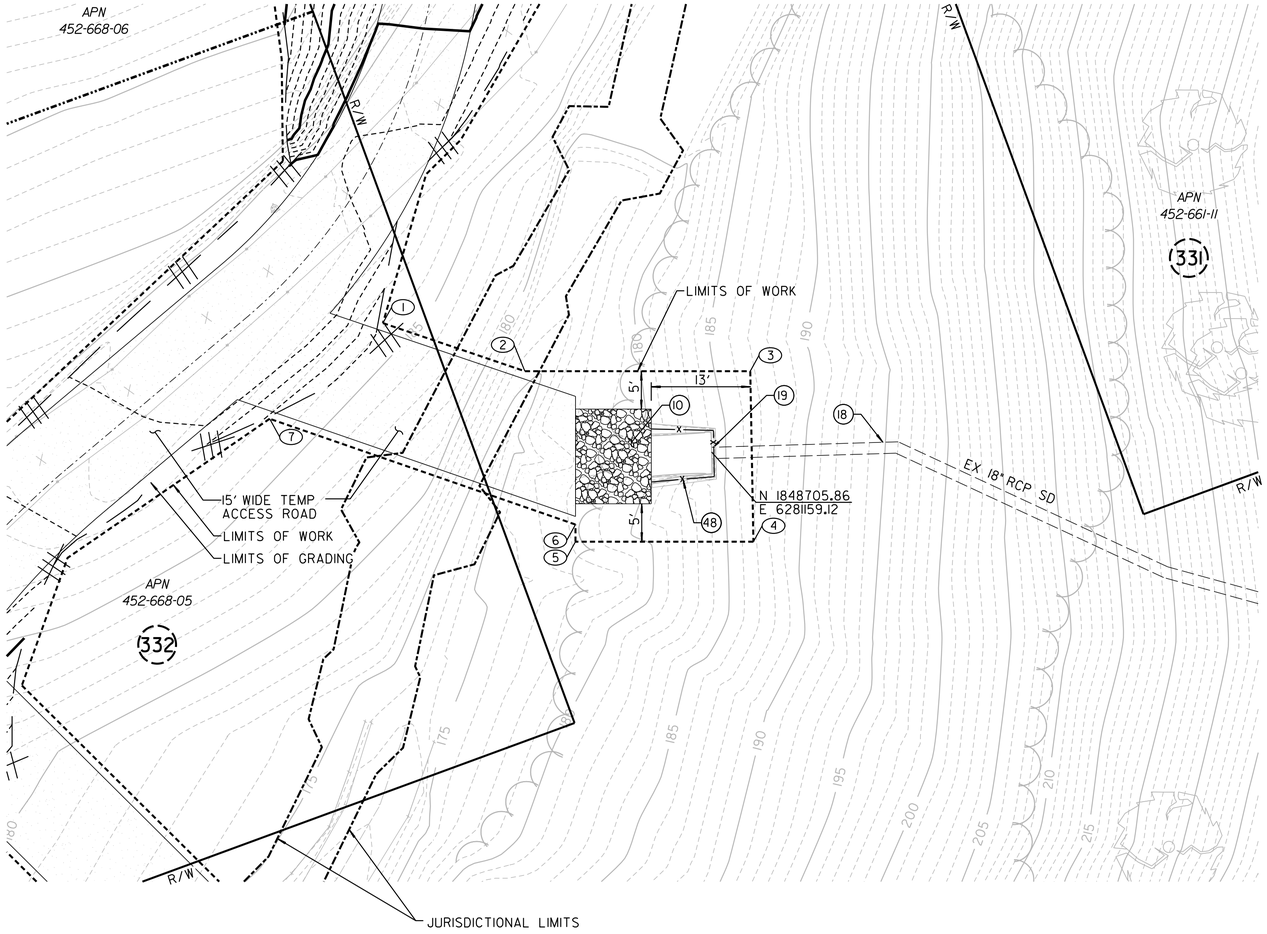
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FINAL SUBMITTAL



LIMITS OF WORK DATA TABLE		
NO.	NORTHING	EASTING
1	1848736.89	6281124.32
2	1848724.43	6281139.69
3	1848714.11	6281167.59
4	1848692.86	6281160.18
5	1848701.01	6281138.16
6	1848703.13	6281138.94
7	1848730.22	6281105.92

CONSTRUCTION NOTES

(10) INSTALL RIP RAP ENERGY DISSIPATOR **SEE TABLE SHT 48**

(18) PROTECT EX STORM DRAIN IN PLACE

(19) PROTECT EX STORM DRAIN STRUCTURE IN PLACE

(48) REPLACE DAMAGED CHAIN LINK FENCE WITH CHAIN LINK FENCE (H=5', VINYL COATED, BLACK)

NOTES:

1. FOR DEMOLITION WORK **SEE SHT 11**
2. FOR TEMPORARY ACCESS ROAD **SEE SHT 70**
3. FOR REVEGETATION WORK **SEE SHT 85**

REFERENCES:

WATER: NONE
SEWER: NONE
STORM DRAIN: 33892-03-D
TELEPHONE: NONE
GAS: NONE
ELECTRIC: NONE

RETIREMENTS:

NONE

SYSTEM 8

SCALE 1"=10'

PALM STREET

C-8

MAPLE CANYON RESTORATION – PHASE 1

PALM STREET

MAPLE CANYON TO FOURTH AVENUE

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 27 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER _____ DATE
SHEILA BOSE
PRINT DCE NAME _____ RCE#

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE

1846-6276 CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

38321-27-D

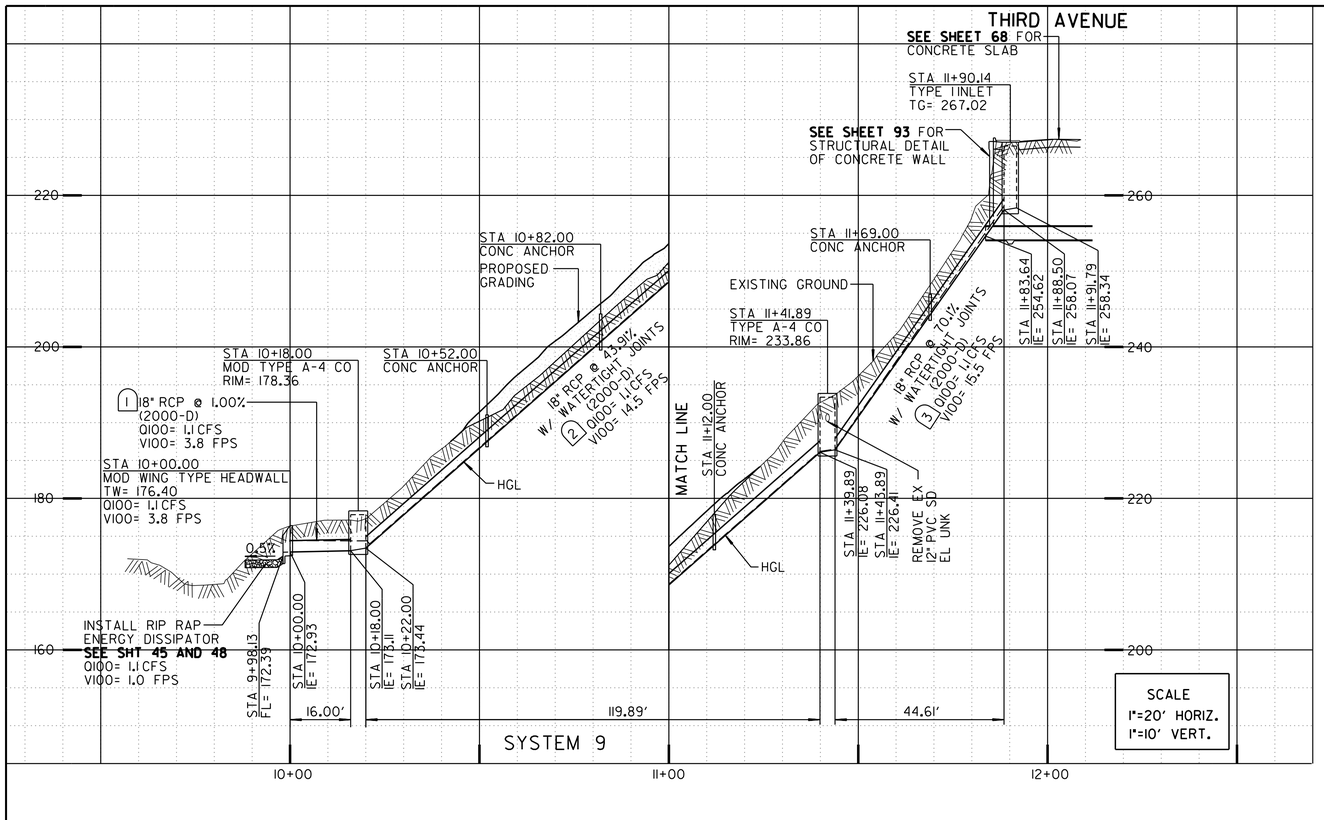
REGISTERED PROFESSIONAL ENGINEER * KEVIN R. GIBSON * NO. 52295 * STATE OF CALIFORNIA *

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SAN DIEGO, CA 92110
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FINAL SUBMITTAL



GRADING LIMITS DATA TABLE		
NO.	NORTHING	EASTING
1	1848627.69	6281078.26
2	1848607.57	6281096.30
3	1848589.31	6281103.50
4	1848580.54	6281109.77
5	1848572.85	6281121.40
6	1848554.96	6281131.00
7	1847825.11	6279777.99
8	1848553.74	6281142.30
9	1848554.04	6281153.19
10	1848557.17	6281156.43
11	1848562.26	6281157.30
12	1848580.24	6281157.27
13	1848596.72	6281140.39
14	1848602.91	6281131.53
15	1848611.32	6281123.31
16	1848624.94	6281106.85
17	1848625.83	6281096.96
18	1848629.41	6281084.41
19	1848638.03	6281076.87
20	1848632.98	6281074.90
21	1848626.25	6281068.14
22	1848629.06	6281058.29
23	1848634.59	6281057.00
24	1848634.70	6281050.68
25	1848639.53	6281048.56
26	1848645.02	6281048.87
27	1848649.71	6281054.40
28	1848645.00	6281063.92
29	1848644.51	6281069.76
30	1848641.22	6281074.87

LIMITS OF WORK DATA TABLE		
NO.	NORTHING	EASTING
1	1848616.71	6281053.86
2	1848621.35	6281074.46
3	1848550.58	6281125.03
4	1848548.01	6281148.81
5	1848505.73	6281187.78
6	1848484.60	6281174.75
7	1848483.65	6281176.30
8	1848470.14	6281187.65
9	1848482.09	6281195.04
10	1848496.58	6281203.99
11	1848523.10	6281220.37
12	1848523.13	6281209.45
13	1848536.79	6281209.48
14	1848552.67	6281179.87
15	1848568.43	6281162.29
16	1848582.35	6281162.27
17	1848629.30	6281114.18
18	1848629.79	6281108.77
19	1848649.90	6281090.23
20	1848657.60	6281067.92
21	1848646.39	6281045.22
22	1848640.64	6281048.30

PERM EASEMENT DATA TABLE		
NO.	NORTHING	EASTING
1	1848505.38	6281209.42
2	1848523.10	6281220.37
3	1848523.13	6281209.45

STORM DRAIN DATA TABLE				
NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
1	N77° 19'25"E		16.00'	18" RCP (2000-D)•
2	S42° 40'35"E		119.89'	18" RCP (2000-D)•
3	S42° 40'35"E		44.61'	18" RCP (2000-D)•

•WATER-TIGHT JOINTS

STRUCTURE DATA TABLE				
NO.	STA	NORTHING	EASTING	REMARKS
1	10+00.00	1848638.42	6281068.36	MOD WING TYPE HEADWALL
2	10+18.00	1848643.29	6281085.44	MOD TYPE A-4 CO
3	11+41.89	1848552.21	6281169.42	TYPE A-4 CO
4	11+90.14	1848517.08	6281202.42	TYPE 1INLET

CONSTRUCTION NOTES

1. CONSTRUCT TYPE A-4 CLEANOUT
8. CONSTRUCT TYPE 1INLET
9. CONSTRUCT MOD WING TYPE HEADWALL **SEE DETAIL SHT 48**
10. INSTALL RIP RAP ENERGY DISSIPATOR **SEE TABLE SHT 48**
21. PROTECT ELEC COND IN PLACE
35. REGRADE EX SLOPE
38. INSTALL CONCRETE ANCHOR
39. REMOVE EX STORM DRAIN
40. REMOVE EX STORM DRAIN STRUCTURE
44. CONSTRUCT MOD TYPE A-4 CLEANOUT **SEE DETAIL SHT 48**

REFERENCES:

WATER: 10842-B
SEWER: NONE
STORM DRAIN: 19736-9-D
TELEPHONE: BK02007
GAS: 16207-119475
ELECTRIC: 16207-119475

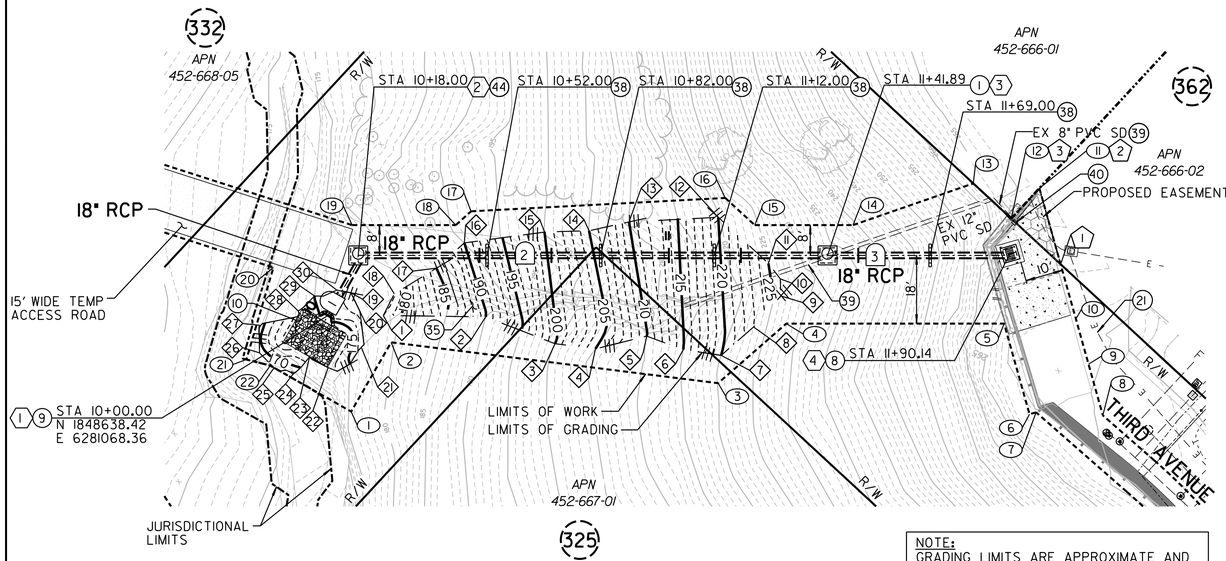
RETIREMENTS:

12" - PVC - 86' - 1989
8" - PVC - 8' - 1989
STORM DRAIN INLET - 1

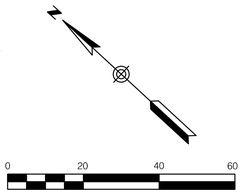
ALIGNMENT NAME:	SYSTEM 9		
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
PI	9+88.12	1848635.82	6281056.77
PI	9+98.12	1848638.01	6281066.53
TANGENTIAL DIRECTION	N 77° 19'28" E		
TANGENTIAL LENGTH:	10.00		
ELEMENT: LINEAR			
PI	9+98.12	1848638.01	6281066.53
PI	10+00.00	1848638.42	6281068.36
TANGENTIAL DIRECTION	N 77° 19'28" E		
TANGENTIAL LENGTH:	1.88		
ELEMENT: LINEAR			
PI	10+00.00	1848638.42	6281068.36
PI	10+16.00	1848641.94	6281083.97
TANGENTIAL DIRECTION	N 77° 19'25" E		
TANGENTIAL LENGTH:	16.00		
ELEMENT: LINEAR			
PI	10+16.00	1848641.94	6281083.97
PI	10+18.00	1848643.29	6281085.44
TANGENTIAL DIRECTION	N 47° 19'25" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+18.00	1848643.29	6281085.44
PI	10+20.00	1848641.82	6281086.80
TANGENTIAL DIRECTION	S 42° 40'35" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+20.00	1848641.82	6281086.80
PI	11+39.89	1848553.68	6281168.06
TANGENTIAL DIRECTION	S 42° 40'35" E		
TANGENTIAL LENGTH:	119.89		
ELEMENT: LINEAR			
PI	11+39.89	1848553.68	6281168.06
PI	11+41.89	1848552.21	6281169.42
TANGENTIAL DIRECTION	S 42° 40'35" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+41.89	1848552.21	6281169.42
PI	11+43.89	1848550.74	6281170.78
TANGENTIAL DIRECTION	S 42° 40'35" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+43.89	1848550.74	6281170.78
PI	11+88.50	1848517.94	6281201.01
TANGENTIAL DIRECTION	S 42° 40'35" E		
TANGENTIAL LENGTH:	44.61		
ELEMENT: LINEAR			
PI	11+88.50	1848517.94	6281201.01
PI	11+90.14	1848517.08	6281202.42
TANGENTIAL DIRECTION	S 58° 26'30" E		
TANGENTIAL LENGTH:	1.64		
ELEMENT: LINEAR			
PI	11+90.14	1848517.08	6281202.42
PI	11+91.79	1848516.22	6281203.82
TANGENTIAL DIRECTION	S 58° 26'30" E		
TANGENTIAL LENGTH:	1.65		

NOTES:

1. FOR DEMOLITION WORK **SEE SHT 12**
2. FOR SURFACE IMPROVEMENTS **SEE SHT 52 AND 68**
3. FOR TEMPORARY ACCESS ROAD **SEE SHT 73**
4. FOR REVEGETATION WORK **SEE SHT 88 AND 89**
5. FOR HEADWALL GRADING DETAILS **SEE SHT 45**



NOTE:
GRADING LIMITS ARE APPROXIMATE AND SUBJECT TO CHANGE BASED ON VARYING FIELD CONDITIONS. CONTRACTOR TO VERIFY LIMITS OF WORK PRIOR TO CONSTRUCTION.



C-9

MAPLE CANYON RESTORATION – PHASE 1

THIRD AVENUE
MAPLE CANYON TO THIRD AVENUE

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 28 OF 98 SHEETS

STORM DRAIN WBS B-12040

REGISTERED PROFESSIONAL ENGINEER KEVIN R. GIBSON NO. 52295 STATE OF CALIFORNIA

APPROVED:
FOR CITY ENGINEER _____ DATE
SHEILA BOSE
PRINT DCE NAME RCE#

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

38321-28-D

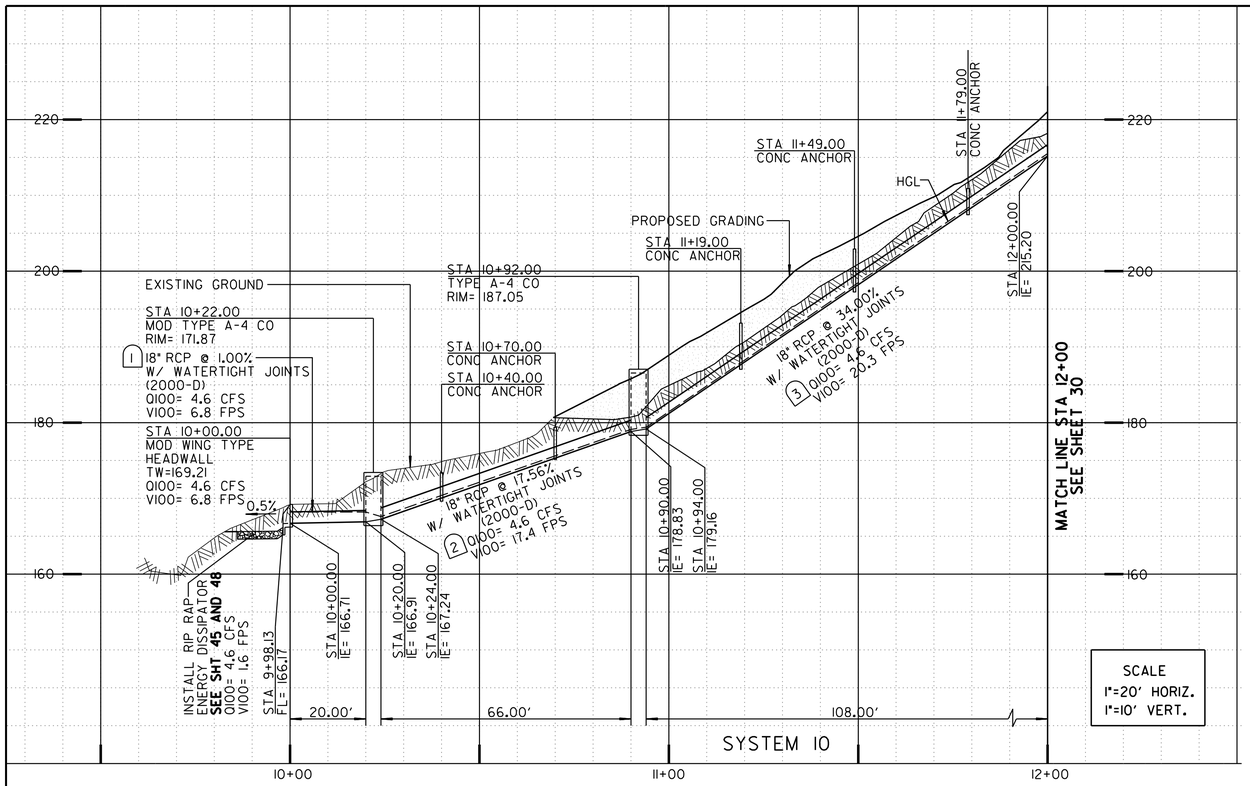
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5620 FRIARS ROAD
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THIRD AVENUE

FINAL SUBMITTAL



STORM DRAIN DATA TABLE				
NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
1	S85° 32'58"E		20.00'	18" RCP (2000-D)•
2	S25° 32'58"E		66.00'	18" RCP (2000-D)•
3	S37° 32'58"E		108.00'	18" RCP (2000-D)•

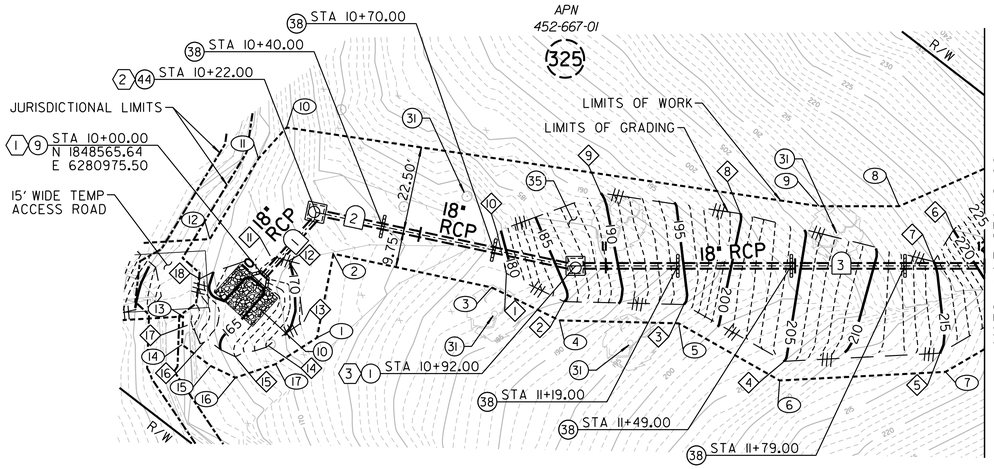
•WATER-TIGHT JOINTS

STRUCTURE DATA TABLE				
NO.	STA	NORTHING	EASTING	REMARKS
1	10+00.00	1848565.64	6280975.50	MOD TYPE WING HEADWALL
2	10+22.00	1848564.95	6280997.25	MOD TYPE A-4 CO
3	10+92.00	1848502.01	6281027.79	TYPE A-4 CO

LIMITS OF WORK DATA TABLE		
NO.	NORTHING	EASTING
1	1848544.57	6280971.14
2	1848554.62	6280991.38
3	1848516.06	6281009.81
4	1848496.57	6281013.80
5	1848471.17	6281032.36
6	1848440.84	6281036.65
7	1848407.50	6281065.14
8	1848443.86	6281092.36
9	1848460.59	6281079.50
10	1848584.75	6281010.28
11	1848585.91	6280995.38
12	1848582.86	6280974.57
13	1848576.00	6280954.05
14	1848571.68	6280948.01
15	1848562.27	6280948.16
16	1848555.19	6280949.65
17	1848548.96	6280959.00

GRADING LIMITS DATA TABLE		
NO.	NORTHING	EASTING
1	1848515.24	6281015.08
2	1848498.64	6281018.48
3	1848473.11	6281037.14
4	1848442.98	6281041.39
5	1848411.67	6281068.15
6	1848428.68	6281096.11
7	1848427.72	6281086.33
8	1848475.86	6281065.26
9	1848508.48	6281047.08
10	1848524.01	6281022.34
11	1848567.49	6280980.75
12	1848562.82	6280982.71
13	1848549.89	6280972.38
14	1848553.49	6280961.66
15	1848558.59	6280954.04
16	1848567.46	6280952.09
17	1848573.66	6280952.98
18	1848578.57	6280964.59

Alignment Name:	System 10		
	Station	Northing	Easting
Element: Linear			
PI	9+88.12	1848566.56	6280963.66
PI	9+98.12	1848565.78	6280973.63
Tangential Direction	S 85° 32'58" E		
Tangential Length:	10.00		
Element: Linear			
PI	9+98.12	1848565.78	6280973.63
PI	10+00.00	1848565.64	6280975.5
Tangential Direction	S 85° 32'58" E		
Tangential Length:	1.88		
Element: Linear			
PI	10+00.00	1848565.64	6280975.5
PI	10+20.00	1848564.09	6280995.44
Tangential Direction	S 85° 32'58" E		
Tangential Length:	20.00		
Element: Linear			
PI	10+20.00	1848564.09	6280995.44
PI	10+22.00	1848564.95	6280997.25
Tangential Direction	N 64° 27'02" E		
Tangential Length:	2.00		
Element: Linear			
PI	10+22.00	1848564.95	6280997.25
PI	10+24.00	1848563.14	6280998.11
Tangential Direction	S 25° 32'58" E		
Tangential Length:	2.00		
Element: Linear			
PI	10+24.00	1848563.14	6280998.11
PI	10+90.00	1848503.6	6281026.57
Tangential Direction	S 25° 32'58" E		
Tangential Length:	66.00		
Element: Linear			
PI	10+90.00	1848503.6	6281026.57
PI	10+92.00	1848502.01	6281027.79
Tangential Direction	S 37° 32'58" E		
Tangential Length:	2.00		
Element: Linear			
PI	10+92.00	1848502.01	6281027.79
PI	10+94.00	1848500.43	6281029.01
Tangential Direction	S 37° 32'58" E		
Tangential Length:	2.00		
SEE SHEET 30			



CONSTRUCTION NOTES

(1) CONSTRUCT TYPE A-4 CLEANOUT
(9) CONSTRUCT MOD WING TYPE HEADWALL **SEE DETAIL SHT 48**
(10) INSTALL RIP RAP ENERGY DISSIPATOR **SEE TABLE SHT 48**
(31) PROTECT EX TREE IN PLACE
(35) REGRADE EX SLOPE
(38) INSTALL CONCRETE ANCHOR
(44) CONSTRUCT MOD TYPE A-4 CLEANOUT **SEE DETAIL SHT 48**

NOTES:

1. FOR DEMOLITION WORK **SEE SHT 13**
2. FOR TEMPORARY ACCESS ROAD **SEE SHT 73**
3. FOR REVEGETATION WORK **SEE SHT 88**
4. FOR HEADWALL GRADING DETAILS **SEE SHT 45**

REFERENCES:

WATER: NONE
SEWER: NONE
STORM DRAIN: NONE
TELEPHONE: NONE
GAS: NONE
ELECTRIC: NONE

RETIREMENTS:

NONE

NOTE:
GRADING LIMITS ARE APPROXIMATE AND SUBJECT TO CHANGE BASED ON VARYING FIELD CONDITIONS. CONTRACTOR TO VERIFY LIMITS OF WORK PRIOR TO CONSTRUCTION.

0 20 40 60
SCALE 1" = 20'

C-10

MAPLE CANYON RESTORATION – PHASE 1

THIRD AVENUE
MAPLE CANYON TO OLIVE STREET

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 29 OF 98 SHEETS

STORM DRAIN WBS B-12040

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

APPROVED:
FOR CITY ENGINEER DATE
SHEILA BOSE
PRINT DCE NAME RCE#

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

CONTRACTOR DATE STARTED
INSPECTOR DATE COMPLETED

38321-29-D

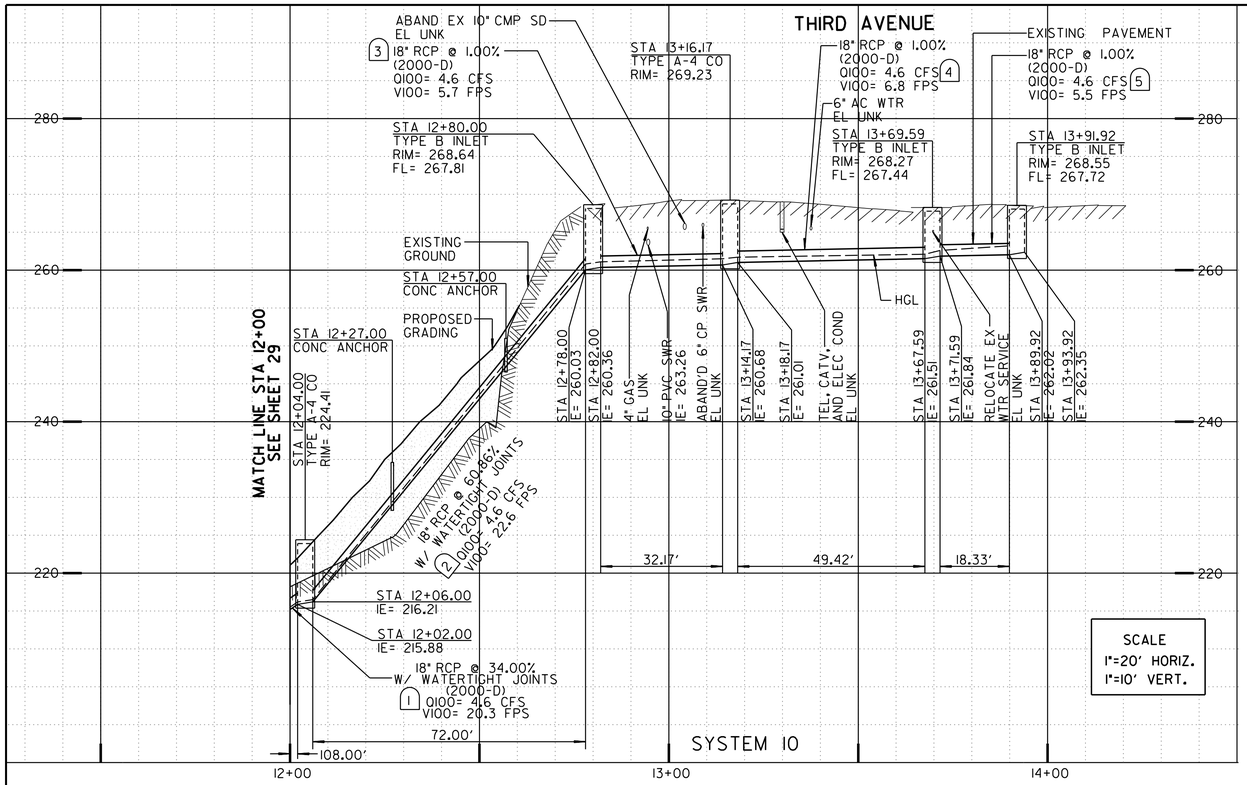
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THIRD AVENUE

FINAL SUBMITTAL



ALIGNMENT NAME:	SYSTEM 10		
SEE SHEET 29			
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
PI	10+94.00	1848500.43	6281029.01
PI	12+02.00	1848414.80	6281094.83
TANGENTIAL DIRECTION:	S 37° 32'58" E		
TANGENTIAL LENGTH:	108.00		
ELEMENT: LINEAR			
PI	12+02.00	1848414.80	6281094.83
PI	12+04.00	1848413.22	6281096.05
TANGENTIAL DIRECTION:	S 37° 32'58" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	12+04.00	1848413.22	6281096.05
PI	12+06.00	1848411.63	6281097.27
TANGENTIAL DIRECTION:	S 37° 32'58" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	12+06.00	1848411.63	6281097.27
PI	12+78.00	1848354.55	6281141.15
TANGENTIAL DIRECTION:	S 37° 32'58" E		
TANGENTIAL LENGTH:	72.00		
ELEMENT: LINEAR			
PI	12+78.00	1848354.55	6281141.15
PI	12+80.00	1848352.55	6281141.13
TANGENTIAL DIRECTION:	S 0° 27'02" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	12+80.00	1848352.55	6281141.13
PI	12+82.00	1848352.53	6281143.13
TANGENTIAL DIRECTION:	S 89° 32'58" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	12+82.00	1848352.53	6281143.13
PI	13+14.17	1848349.47	6281175.16
TANGENTIAL DIRECTION:	S 84° 32'24" E		
TANGENTIAL LENGTH:	32.17		

ALIGNMENT NAME:	SYSTEM 10		
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
PI	13+14.17	1848349.47	6281175.16
PI	13+16.17	1848349.29	6281177.15
TANGENTIAL DIRECTION:	S 84° 53'50" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	13+16.17	1848349.29	6281177.15
PI	13+18.17	1848347.30	6281176.98
TANGENTIAL DIRECTION:	S 5° 06'10" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	13+18.17	1848347.30	6281176.98
PI	13+67.59	1848302.23	6281197.22
TANGENTIAL DIRECTION:	S 24° 11'15" E		
TANGENTIAL LENGTH:	49.41		
ELEMENT: LINEAR			
PI	13+67.59	1848302.23	6281197.22
PI	13+69.59	1848300.23	6281197.22
TANGENTIAL DIRECTION:	S 0° 07'36" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	13+69.59	1848300.23	6281197.22
PI	13+71.59	1848298.23	6281197.21
TANGENTIAL DIRECTION:	S 0° 07'36" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	13+71.59	1848298.23	6281197.21
PI	13+89.92	1848285.38	6281210.29
TANGENTIAL DIRECTION:	S 45° 31'13" E		
TANGENTIAL LENGTH:	18.34		
ELEMENT: LINEAR			
PI	13+89.92	1848285.38	6281210.29
PI	13+91.92	1848285.38	6281212.29
TANGENTIAL DIRECTION:	S 89° 54'17" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	13+91.92	1848285.38	6281212.29
PI	13+93.92	1848283.38	6281212.29
TANGENTIAL DIRECTION:	S 0° 05'43" W		
TANGENTIAL LENGTH:	2.00		

GRADING LIMITS DATA TABLE		
NO.	NORTHING	EASTING
1	1848404.17	6281086.50
2	1848370.09	6281099.86
3	1848367.74	6281110.96
4	1848370.93	6281124.71
5	1848367.48	6281136.93
6	1848374.35	6281155.87
7	1848398.03	6281163.91
8	1848399.10	6281139.64
9	1848407.04	6281136.21
10	1848410.58	6281126.57
11	1848426.34	6281113.19

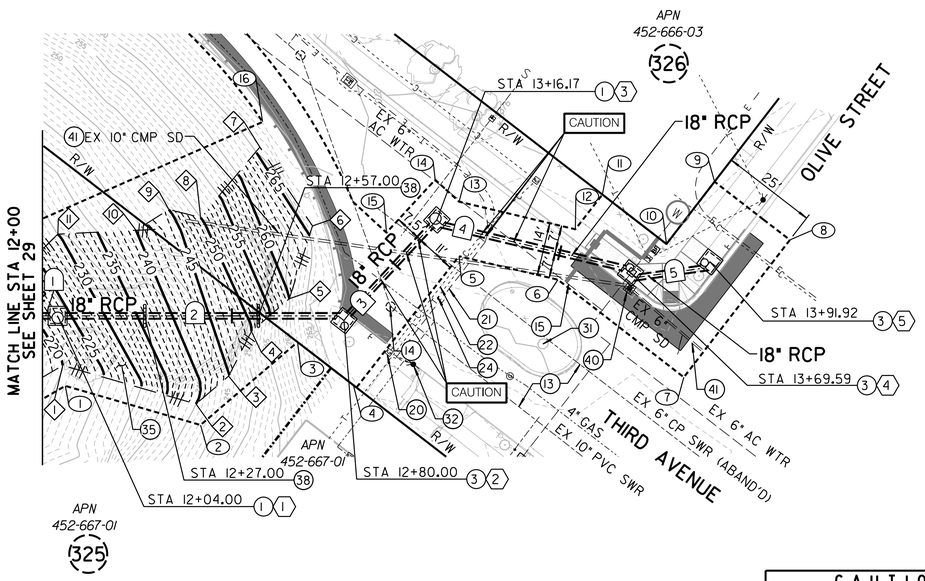
LIMITS OF WORK DATA TABLE		
NO.	NORTHING	EASTING
1	1848400.32	6281082.59
2	1848365.76	6281096.19
3	1848358.78	6281129.16
4	1848339.14	6281129.12
5	1848338.80	6281173.12
6	1848314.34	6281184.11
7	1848272.26	6281183.95
8	1848272.18	6281229.77
9	1848297.30	6281229.81
10	1848297.35	6281209.05
11	1848318.72	6281209.09
12	1848318.80	6281196.08
13	1848345.02	6281184.30
14	1848356.10	6281185.29
15	1848357.78	6281166.39
16	1848401.18	6281170.26

STORM DRAIN DATA TABLE				
NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
1	S37° 32'58"E		2.00'	18" RCP (2000-D)•
2	S37° 32'58"E		72.00'	18" RCP (2000-D)•
3	S84° 32'24"E		32.17'	18" RCP (2000-D)
4	S24° 11'15"E		49.42'	18" RCP (2000-D)
5	S45° 31'13"E		18.33'	18" RCP (2000-D)

•WATER-TIGHT JOINTS

STRUCTURE DATA TABLE				
NO.	STA	NORTHING	EASTING	REMARKS
1	12+04.00	1848413.22	6281096.05	TYPE A-4 CO
2	12+80.00	1848352.55	6281141.13	TYPE B INLET
3	13+16.17	1848349.29	6281177.15	TYPE A-4 CO
4	13+69.59	1848300.23	6281197.22	TYPE B INLET
5	13+91.92	1848285.38	6281212.29	TYPE B INLET

NOTES:
1. FOR DEMOLITION WORK **SEE SHT 13**
2. FOR SURFACE IMPROVEMENTS **SEE SHT 52 AND 64**
3. FOR REVEGETATION WORK **SEE SHT 84**



SYSTEM 10

NOTE:
GRADING LIMITS ARE APPROXIMATE AND SUBJECT TO CHANGE BASED ON VARYING FIELD CONDITIONS. CONTRACTOR TO VERIFY LIMITS OF WORK PRIOR TO CONSTRUCTION.

CAUTION

4" GAS! CONTRACTOR TO VERIFY EXACT LOCATION AND MUST NOTIFY SDG&E THREE (3) WEEKS IN ADVANCE PRIOR TO EXCAVATION
SDG&E STANDBY REQUIRED

CONSTRUCTION NOTES
1. CONSTRUCT TYPE A-4 CLEANOUT
3. CONSTRUCT TYPE B INLET
13. PROTECT EX SEWER MAIN IN PLACE
14. PROTECT EX SEWER MANHOLE IN PLACE
15. PROTECT EX WATER MAIN IN PLACE
20. PROTECT DRY UTILITY STRUCTURE IN PLACE
21. PROTECT ELEC COND IN PLACE
22. PROTECT CATV IN PLACE
23. PROTECT GAS IN PLACE
24. PROTECT TELE IN PLACE
31. PROTECT EX TREE IN PLACE
32. PROTECT EX UTILITY POLE
35. REGRADE EX SLOPE
38. INSTALL CONCRETE ANCHOR
39. REMOVE EX STORM DRAIN
40. REMOVE EX STORM DRAIN STRUCTURE
41. ABANDON EX STORM DRAIN

REFERENCES:
WATER: 10842-B,
SEWER: 31095-23-D
STORM DRAIN: 19736-9-D
TELEPHONE: BK02007, B2
CABLE TV: MAP 2
GAS: 16207-119475, 15900-118825
ELECTRIC: 16207-119475, 15900-118825

RETIREMENTS:
10" - CMP - 118.00'
6" - CMP - 24.00'
STORM DRAIN INLET - 1

0 20 40 60
SCALE 1" = 20'

C-11

MAPLE CANYON RESTORATION – PHASE 1

THIRD AVENUE
MAPLE CANYON TO OLIVE STREET

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 30 OF 98 SHEETS

STORM DRAIN WBS B-12040

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

APPROVED:
FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DCE NAME _____ RCE# _____

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

38321-30-D

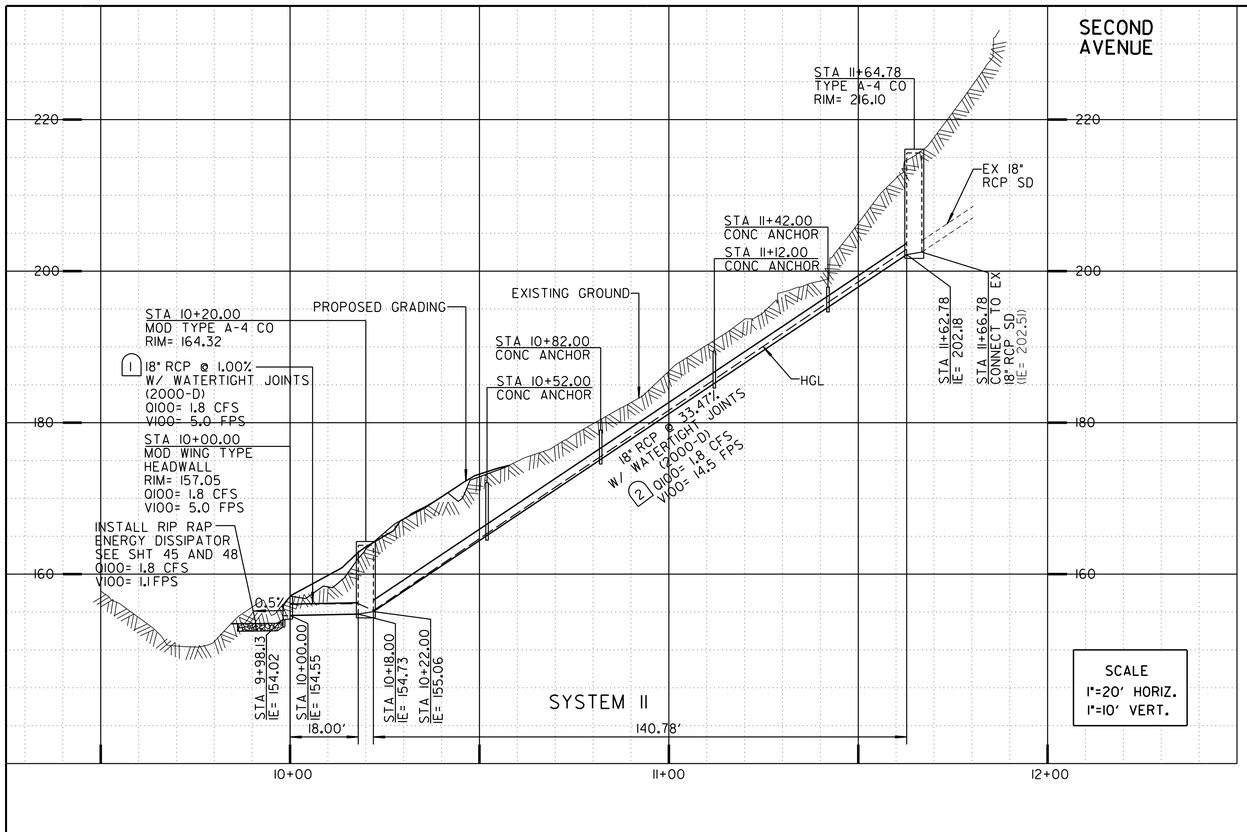
THIRD AVENUE

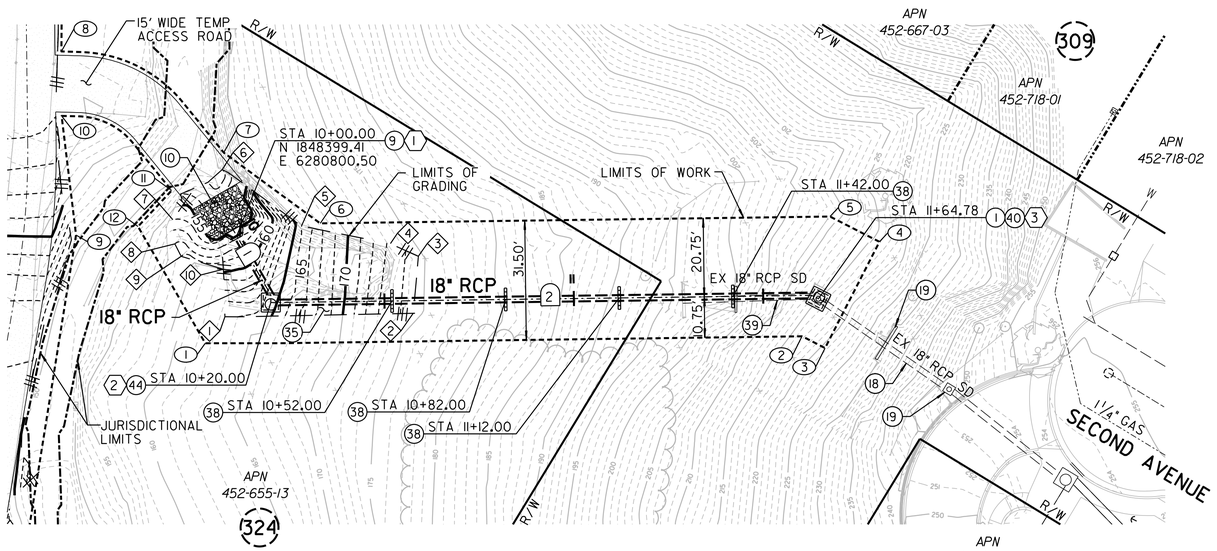
FINAL SUBMITTAL

RICK ENGINEERING COMPANY
San Diego
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619-291-0707
(FAX) 619-291-4165
rickengineering.com
Riverside - Orange - Sacramento - San Luis Obispo - Phoenix - Tucson - Denver

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GRADING LIMITS DATA TABLE		
NO.	NORTHING	EASTING
1	1848391.01	6280780.63
2	1848348.97	6280807.25
3	1848355.61	6280820.77
4	1848363.66	6280819.81
5	1848386.16	6280811.63
6	1848411.78	6280813.50
7	1848416.03	6280795.39
8	1848412.28	6280790.20
9	1848409.15	6280788.27
10	1848397.87	6280791.13

LIMITS OF WORK DATA TABLE		
NO.	NORTHING	EASTING
1	1848391.80	6280771.96
2	1848258.08	6280855.28
3	1848251.26	6280855.77
4	1848253.54	6280887.19
5	1848268.15	6280886.13
6	1848382.28	6280814.77
7	1848413.72	6280817.51
8	1848464.23	6280818.10
9	1848435.79	6280778.68
10	1848453.03	6280802.67
11	1848420.30	6280801.80
12	1848422.97	6280789.06

ALIGNMENT NAME:		SYSTEM II	
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
PI	9+88.12	1848409.82	6280806.21
PI	9+98.12	1848401.06	6280801.4
TANGENTIAL DIRECTION	S 28° 44'45" W		
TANGENTIAL LENGTH:	10.00		
ELEMENT: LINEAR			
PI	9+98.12	1848401.06	6280801.4
PI	10+00.00	1848399.41	6280800.5
TANGENTIAL DIRECTION	S 28° 44'45" W		
TANGENTIAL LENGTH:	1.88		
ELEMENT: LINEAR			
PI	10+00.00	1848399.41	6280800.5
PI	10+18.00	1848383.63	6280791.84
TANGENTIAL DIRECTION	S 28° 44'43" W		
TANGENTIAL LENGTH:	18.00		
ELEMENT: LINEAR			
PI	10+18.00	1848383.63	6280791.84
PI	10+20.00	1848382.59	6280790.13
TANGENTIAL DIRECTION	S 58° 44'43" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+20.00	1848382.59	6280790.13
PI	10+22.00	1848380.88	6280791.17
TANGENTIAL DIRECTION	S 31° 15'17" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+22.00	1848380.88	6280791.17
PI	11+62.78	1848261.52	6280865.81
TANGENTIAL DIRECTION	S 32° 01'02" E		
TANGENTIAL LENGTH:	140.78		
ELEMENT: LINEAR			
PI	11+62.78	1848261.52	6280865.81
PI	11+64.78	1848259.52	6280865.95
TANGENTIAL DIRECTION	S 4° 08'51" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+64.78	1848259.52	6280865.95
PI	11+66.78	1848257.53	6280866.09
TANGENTIAL DIRECTION	S 4° 08'51" E		
TANGENTIAL LENGTH:	2.00		

REFERENCES:

WATER: NONE
SEWER: NONE
STORM DRAIN: UNKNOWN
TELEPHONE: NONE
GAS: NONE
CABLE: MAP 2
ELECTRIC: NONE

RETIREMENTS:

18" - RCP - 35.00' - 1989
CLEANOUT - 1

NOTES:

1. FOR DEMOLITION WORK **SEE SHT 14**
2. FOR TEMPORARY ACCESS ROAD **SEE SHT 70**
3. FOR REVEGETATION WORK **SEE SHT 83**
4. FOR HEADWALL GRADING DETAILS **SEE SHT 45**

CONSTRUCTION NOTES

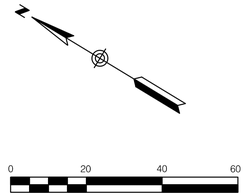
(1) CONSTRUCT TYPE A-4 CLEANOUT
(9) CONSTRUCT MOD WING TYPE HEADWALL **SEE DETAIL SHT 48**
(10) INSTALL RIP RAP ENERGY DISSIPATOR **SEE TABLE SHT 48**
(12) CONNECT TO EX STORM DRAIN STRUCTURE
(13) PROTECT EX SEWER MAIN IN PLACE
(18) PROTECT EX STORM DRAIN IN PLACE
(19) PROTECT EX STORM DRAIN STRUCTURE IN PLACE
(31) PROTECT EX TREE IN PLACE
(35) REGRADE EX SLOPE
(38) INSTALL CONCRETE ANCHOR
(39) REMOVE EX STORM DRAIN
(40) REMOVE EX STORM DRAIN STRUCTURE
(44) CONSTRUCT MOD TYPE A-4 CLEANOUT **SEE DETAIL 48**

STORM DRAIN DATA TABLE				
NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
1	S28° 44'43"W		18.00'	18" RCP (2000-D)•
2	S32° 01'02"E		140.78'	18" RCP (2000-D)•

•WATER-TIGHT JOINTS

STRUCTURE DATA TABLE				
NO.	STA	NORTHING	EASTING	REMARKS
1	10+00.00	1848399.41	6280800.50	MOD WING TYPE HEADWALL
2	10+20.00	1848382.59	6280790.13	MOD TYPE A-4 CO
3	11+64.78	1848259.52	6280865.95	TYPE A-4 CO

NOTE:
GRADING LIMITS ARE APPROXIMATE AND SUBJECT TO CHANGE BASED ON VARYING FIELD CONDITIONS. CONTRACTOR TO VERIFY LIMITS OF WORK PRIOR TO CONSTRUCTION.



SYSTEM II

C–12

MAPLE CANYON RESTORATION – PHASE 1

SECOND AVENUE
MAPLE CANYON TO SECOND AVENUE

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 31 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER ____ DATE ____
SHEILA BOSE
PRINT DCE NAME ____ RCE# ____

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

CONTRACTOR ____ DATE STARTED ____
INSPECTOR ____ DATE COMPLETED ____

38321–31–D

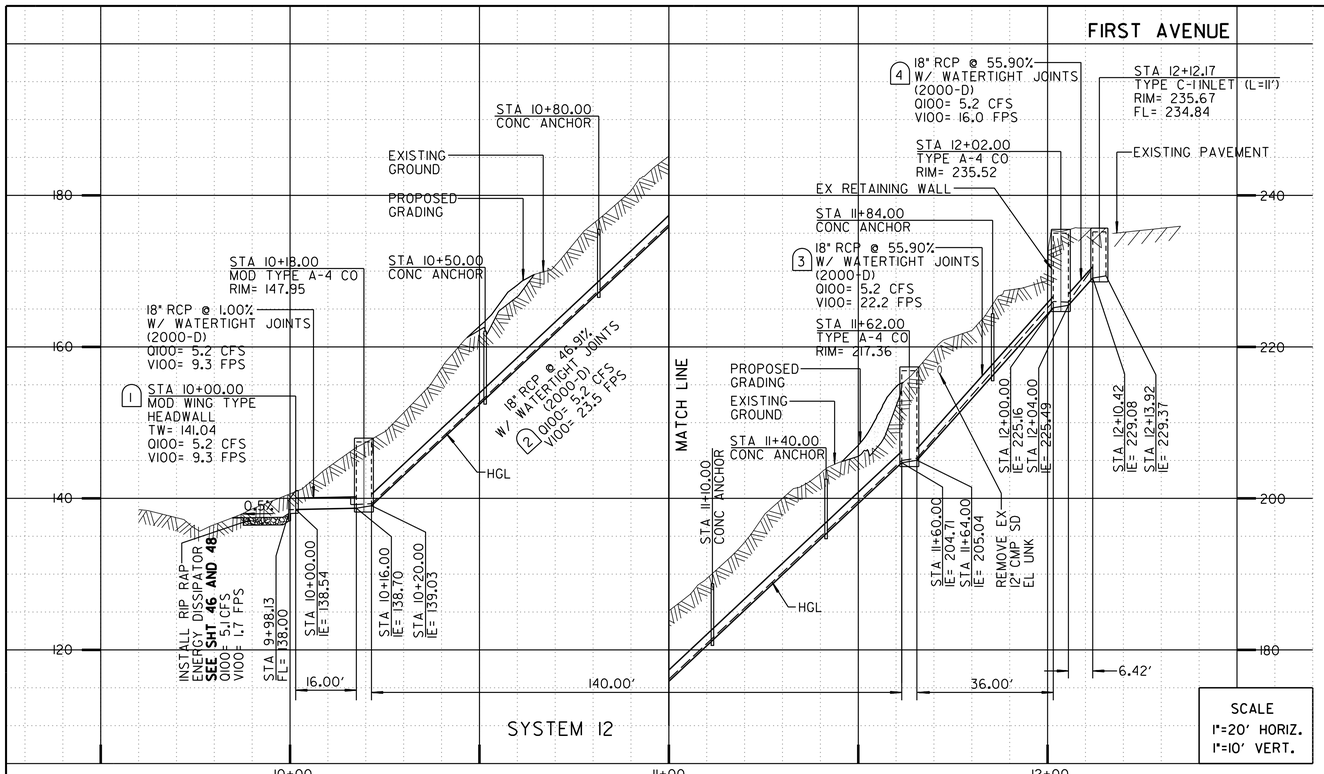
RICK ENGINEERING COMPANY
San Diego
5620 FRIARS ROAD
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619-291-0707
(FAX) 619-291-4165
rickengineering.com
Riverside - Orange - Sacramento - San Luis Obispo - Phoenix - Tucson - Denver

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SECOND AVENUE

FINAL SUBMITTAL



NOTES:

1. FOR DEMOLITION WORK **SEE SHT 15**
2. FOR SURFACE IMPROVEMENTS **SEE SHT 53**
3. FOR TEMPORARY ACCESS ROAD **SEE SHT 72**
4. FOR REVEGETATION WORK **SEE SHT 86 AND 87**
5. FOR HEADWALL GRADING DETAILS **SEE SHT 46**

LIMITS OF WORK DATA TABLE		
NO.	NORTHING	EASTING
1	1848314.96	6280501.45
2	1848304.02	6280482.73
3	1848271.15	6280473.87
4	1848236.97	6280486.18
5	1848231.63	6280490.29
6	1848219.58	6280481.19
7	1848212.51	6280484.36
8	1848202.50	6280499.59
9	1848198.12	6280514.95
10	1848199.31	6280526.33
11	1848208.34	6280533.82
12	1848237.53	6280506.83
13	1848271.55	6280503.64
14	1848284.50	6280520.14
15	1848261.09	6280537.37
16	1848198.39	6280553.62
17	1847695.34	6279747.69
18	1848185.01	6280552.23
19	1848168.02	6280562.49
20	1848167.99	6280567.95
20	1848112.91	6280567.84
21	1848112.85	6280599.15
22	1848171.00	6280599.26
23	1848171.02	6280588.08
24	1848312.78	6280551.35
25	1848322.34	6280516.82

ALIGNMENT NAME:		SYSTEM 12	
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
PI	9+88.11	1848311.01	6280513.69
PI	9+98.11	1848308.35	6280523.32
TANGENTIAL DIRECTION	S 74° 31'41" E		
TANGENTIAL LENGTH:	10.00		
ELEMENT: LINEAR			
PI	9+98.11	1848308.35	6280523.32
PI	10+00.00	1848307.84	6280525.14
TANGENTIAL DIRECTION	S 74° 31'41" E		
TANGENTIAL LENGTH:	1.89		
ELEMENT: LINEAR			
PI	10+00.00	1848307.84	6280525.14
PI	10+16.00	1848303.58	6280540.56
TANGENTIAL DIRECTION	S 74° 31'41" E		
TANGENTIAL LENGTH:	16.00		
ELEMENT: LINEAR			
PI	10+16.00	1848303.58	6280540.56
PI	10+18.00	1848304.08	6280542.5
TANGENTIAL DIRECTION	N 75° 28'19" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+18.00	1848304.08	6280542.5
PI	10+20.00	1848302.14	6280543
TANGENTIAL DIRECTION	S 14° 31'41" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+20.00	1848302.14	6280543
PI	11+60.00	1848166.62	6280578.12
TANGENTIAL DIRECTION	S 14° 31'41" E		
TANGENTIAL LENGTH:	140		
ELEMENT: LINEAR			
PI	11+60.00	1848166.62	6280578.12
PI	11+62.00	1848164.62	6280578.1
TANGENTIAL DIRECTION	S 0° 28'19" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+62.00	1848164.62	6280578.1
PI	11+64.00	1848162.62	6280578.09
TANGENTIAL DIRECTION	S 0° 28'19" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+64.00	1848162.62	6280578.09
PI	12+00.00	1848126.62	6280577.79
TANGENTIAL DIRECTION	S 0° 28'19" W		
TANGENTIAL LENGTH:	36.00		
ELEMENT: LINEAR			
PI	12+00.00	1848126.62	6280577.79
PI	12+02.00	1848124.62	6280577.77
TANGENTIAL DIRECTION	S 0° 28'19" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	12+02.00	1848124.62	6280577.77
PI	12+04.00	1848124.6	6280579.77
TANGENTIAL DIRECTION	S 89° 31'41" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	12+04.00	1848124.6	6280579.77
PI	12+10.42	1848124.55	6280586.19
TANGENTIAL DIRECTION	S 89° 31'28" E		
TANGENTIAL LENGTH:	6.42		
ELEMENT: LINEAR			
PI	12+10.42	1848124.55	6280586.19
PI	12+12.17	1848124.54	6280587.94
TANGENTIAL DIRECTION	S 89° 32'22" E		
TANGENTIAL LENGTH:	1.75		
ELEMENT: LINEAR			
PI	12+12.17	1848124.54	6280587.94
PI	12+13.92	1848124.52	6280589.69
TANGENTIAL DIRECTION	S 89° 32'22" E		
TANGENTIAL LENGTH:	1.75		

GRADING LIMITS DATA TABLE		
NO.	NORTHING	EASTING
1	1848193.75	6280555.65
2	1848186.82	6280556.97
3	1848174.59	6280564.36
4	1848165.42	6280577.12
5	1848169.38	6280582.10
6	1848175.19	6280581.73
7	1848196.01	6280564.62
8	1848286.46	6280527.62
9	1848280.94	6280528.97
10	1848264.58	6280541.01
11	1848258.31	6280550.35
12	1848261.97	6280555.96
13	1848270.38	6280554.50
14	1848289.43	6280538.52
15	1848293.67	6280531.78
16	1848304.65	6280489.57
17	1848302.55	6280487.88
18	1848296.80	6280488.70
19	1848281.16	6280484.99
20	1848272.59	6280480.35
21	1848269.88	6280479.79
22	1848252.47	6280487.87
23	1848239.18	6280490.80
24	1848232.07	6280496.26
25	1848218.93	6280486.96
26	1848217.83	6280487.45
27	1848219.20	6280502.08
28	1848213.60	6280503.17
29	1848212.22	6280505.12
30	1848210.35	6280506.11
31	1848208.25	6280506.74
32	1848205.74	6280506.46
33	1848205.34	6280509.00
34	1848203.42	6280517.60

GRADING LIMITS DATA TABLE		
NO.	NORTHING	EASTING
35	1848204.46	6280524.10
36	1848207.04	6280526.25
37	1848210.01	6280522.45
38	1848212.49	6280521.47
39	1848214.03	6280519.62
40	1848215.38	6280515.03
41	1848220.20	6280512.96
42	1848223.40	6280510.27
43	1848227.30	6280508.86
44	1848229.86	6280502.82
45	1848234.62	6280502.04
46	1848238.42	6280499.34
47	1848250.90	6280498.40
48	1848268.77	6280496.06
49	1848272.43	6280497.99
50	1848274.86	6280497.17
51	1848279.18	6280501.52
52	1848280.24	6280505.10
53	1848284.44	6280511.96
54	1848297.42	6280499.48
55	1848301.60	6280497.85
56	1848302.96	6280493.98
57	1848305.05	6280492.18
58	1848307.28	6280503.60
59	1848298.05	6280513.90
60	1848297.46	6280521.87
61	1848300.99	6280525.57
62	1848313.28	6280529.78
63	1848317.60	6280528.86
64	1848319.61	6280525.68
65	1848314.80	6280514.74
66	1848314.39	6280509.93
67	1848311.10	6280504.93

STORM DRAIN DATA TABLE				
NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
1	S74° 31'41"E		16.00'	18" RCP (2000-D)•
2	S14° 31'41"E		140.00'	18" RCP (2000-D)•
3	S00° 28'19"W		36.00'	18" RCP (2000-D)•
4	S89° 31'28"E		6.42'	18" RCP (2000-D)•

•WATER-TIGHT JOINTS

STRUCTURE DATA TABLE				
NO.	STA	NORTHING	EASTING	REMARKS
1	10+10.00	1848307.84	6280525.14	MOD WING TYPE HEADWALL
2	10+18.00	1848304.08	6280542.50	MOD TYPE A-4 CO
3	11+62.00	1848164.62	6280578.10	TYPE A-4 CO
4	12+02.00	1848124.62	6280577.77	TYPE A-4 CO
5	12+12.17	1848124.54	6280587.94	TYPE C-I INLET (L=11')

TEMP EASEMENT DATA TABLE		
NO.	NORTHING	EASTING
1	1848168.00	6280562.95
2	1848143.01	6280562.90
3	1848142.99	6280567.90
4	1848167.99	6280567.95

REFERENCES:

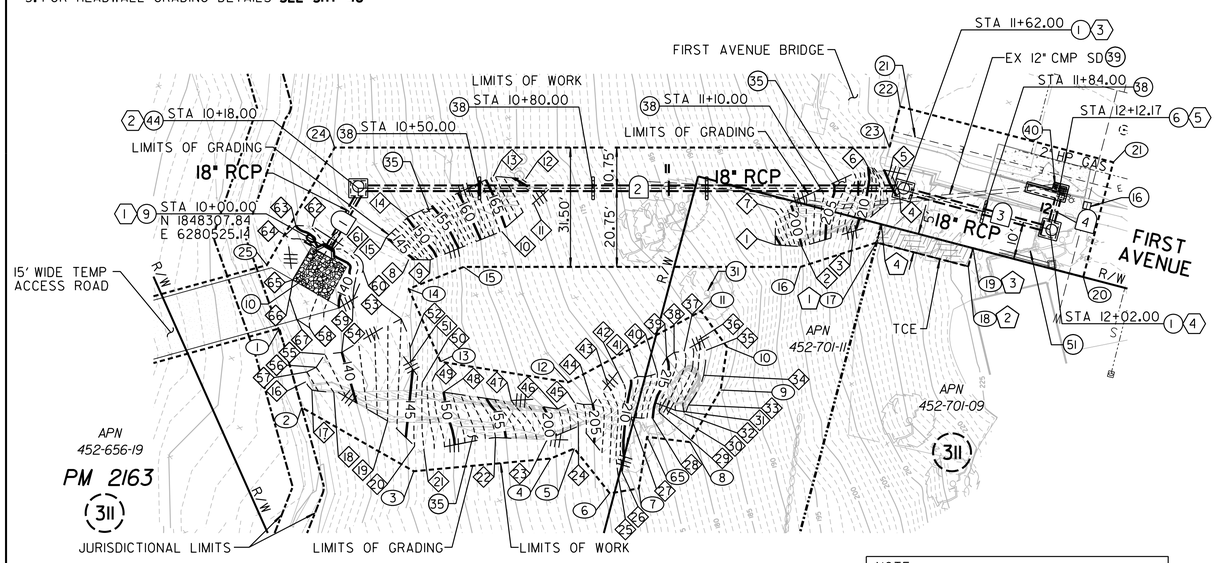
WATER: NONE
SEWER: NONE
STORM DRAIN: UNKNOWN
GAS: 15900-118825
TELEPHONE: B2
ELECTRIC: 15892-118825

RETIREMENTS:

12" - CMP - 112.00'
STORM DRAIN INLET - 1

CONSTRUCTION NOTES

1. CONSTRUCT TYPE A-4 CLEANOUT
6. CONSTRUCT TYPE C-I INLET
9. CONSTRUCT MOD WING TYPE HEADWALL **SEE DETAIL SHT 48**
10. INSTALL RIP RAP ENERGY DISSIPATOR **SEE TABLE SHT 48**
16. PROTECT EX WATER APPURTENANCE IN PLACE
18. PROTECT EX STORM DRAIN IN PLACE
19. PROTECT EX STORM DRAIN STRUCTURE IN PLACE
21. PROTECT ELEC COND IN PLACE
31. PROTECT EX TREE IN PLACE
35. REGRADE EX SLOPE
38. INSTALL CONCRETE ANCHOR
39. REMOVE EX STORM DRAIN
40. REMOVE EX STORM DRAIN STRUCTURE
44. CONSTRUCT MOD TYPE A-4 CLEANOUT **SEE DETAIL SHT 48**
51. PROTECT EX RETAINING WALL IN PLACE



NOTE:
GRADING LIMITS ARE APPROXIMATE AND SUBJECT TO CHANGE BASED ON VARYING FIELD CONDITIONS. CONTRACTOR TO VERIFY LIMITS OF WORK PRIOR TO CONSTRUCTION.

0 20 40 60
SCALE 1"=20'

RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619-291-0707
(FAX) 619-291-4165
rickengineering.com
San Diego Riverside - Orange - Sacramento - San Luis Obispo - Phoenix - Tucson - Denver

\\cp.rickeng.com\projects\C_SD_J\18022-F_MapleCanyonSDOutfalls\Civil\Sheets\Final Sheets\18022F_C13_System 12.dgn

21-JAN-2020 09:00 knguyen

REGISTERED PROFESSIONAL ENGINEER KEVIN R. GIBSON NO. 52295 STATE OF CALIFORNIA

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

APPROVED:
FOR CITY ENGINEER _____ DATE
SHEILA BOSE
PRINT DCE NAME RCE#

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

C-13

MAPLE CANYON RESTORATION – PHASE 1

FIRST AVENUE

MAPLE CANYON TO FIRST AVENUE

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 32 OF 98 SHEETS

STORM DRAIN WBS B-12040

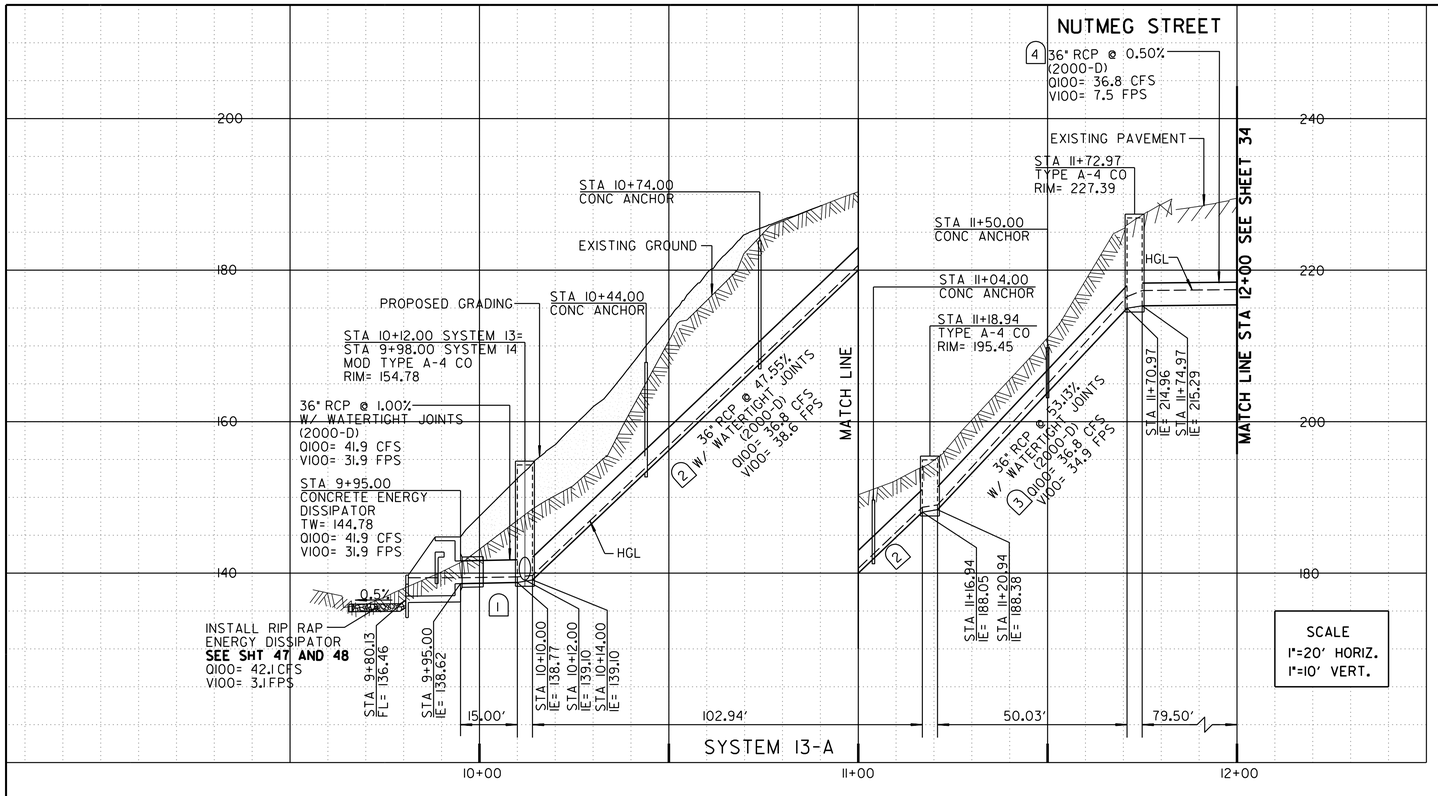
SUBMITTED BY: ELHAM LOTFI PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI PROJECT ENGINEER

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

38321-32-D

FIRST AVENUE

FINAL SUBMITTAL



STORM DRAIN DATA TABLE				
NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
1	S73° 31'17"E		15.00'	36" RCP (2000-D)•
2	S81° 20'33"E		102.94'	36" RCP (2000-D)•
3	S89° 52'37"E		50.03'	36" RCP (2000-D)•
4	S89° 52'38"E		25.03'	36" RCP (2000-D)

•WATER-TIGHT JOINTS

STRUCTURE DATA TABLE				
NO.	STA	NORTHING	EASTING	REMARKS
1	9+95.00	1847884.03	6280339.74	CONC ENERGY DISSIPATOR
2	10+12.00	1847879.18	6280356.13	MOD TYPE A-4 CO
3	11+18.94	1847863.11	6280461.82	TYPE A-4 CO
4	11+72.97	1847863.00	6280515.84	TYPE A-4 CO

GRADING LIMITS DATA TABLE		
	NORTHING	EASTING
1	1847868.82	6280432.84
2	1847848.78	6280441.04
3	1847840.21	6280431.00
4	1847839.41	6280414.99
5	1847839.27	6280400.38
6	1847838.13	6280383.88
7	1847838.29	6280361.58
8	1847833.12	6280355.93
9	1847829.63	6280333.02
10	1847823.12	6280331.35
11	1847824.93	6280296.85
12	1847834.09	6280293.70
13	1847839.00	6280294.24
14	1847916.46	6280325.24
15	1847923.68	6280328.74
16	1847922.48	6280336.99
17	1847916.86	6280346.68
18	1847904.87	6280352.67
19	1847894.66	6280374.37
20	1847900.10	6280376.70
21	1847894.76	6280380.36
22	1847886.59	6280379.89

LIMITS OF WORK DATA TABLE		
NO.	NORTHING	EASTING
1	1847886.78	6280467.17
2	1847878.10	6280467.16
3	1847850.70	6280447.05
4	1847838.71	6280431.56
5	1847838.48	6280365.20
6	1847830.89	6280293.14
7	1847838.41	6280292.30
8	1847918.02	6280324.51
9	1847924.84	6280328.38
10	1847921.38	6280342.63
11	1847917.50	6280348.49
12	1847903.87	6280354.94

TEMP EASEMENT DATA TABLE		
NO.	NORTHING	EASTING
1	1847878.10	6280467.16
2	1847873.14	6280467.15

CONSTRUCTION NOTES

(1) CONSTRUCT TYPE A-4 CLEANOUT
(10) INSTALL RIP RAP ENERGY DISSIPATOR **SEE TABLE SHT 48**
(11) INSTALL CONCRETE ENERGY DISSIPATOR
(31) PROTECT EX TREE IN PLACE
(35) REGRADE EX SLOPE
(38) INSTALL CONCRETE ANCHOR
(40) REMOVE EX STORM DRAIN STRUCTURE
(41) ABANDON EX STORM DRAIN
(44) CONSTRUCT MOD TYPE A-4 CLEANOUT **SEE DETAIL SHT 48**

NOTES:

1. FOR DEMOLITION WORK **SEE SHT 16**
2. FOR TEMPORARY ACCESS ROAD **SEE SHT 72**
3. FOR REVEGETATION WORK **SEE SHT 84**
4. FOR HEADWALL GRADING DETAILS **SEE SHT 47**
5. FOR STREAMBED RESTORATION WORK **SEE SHT 75**

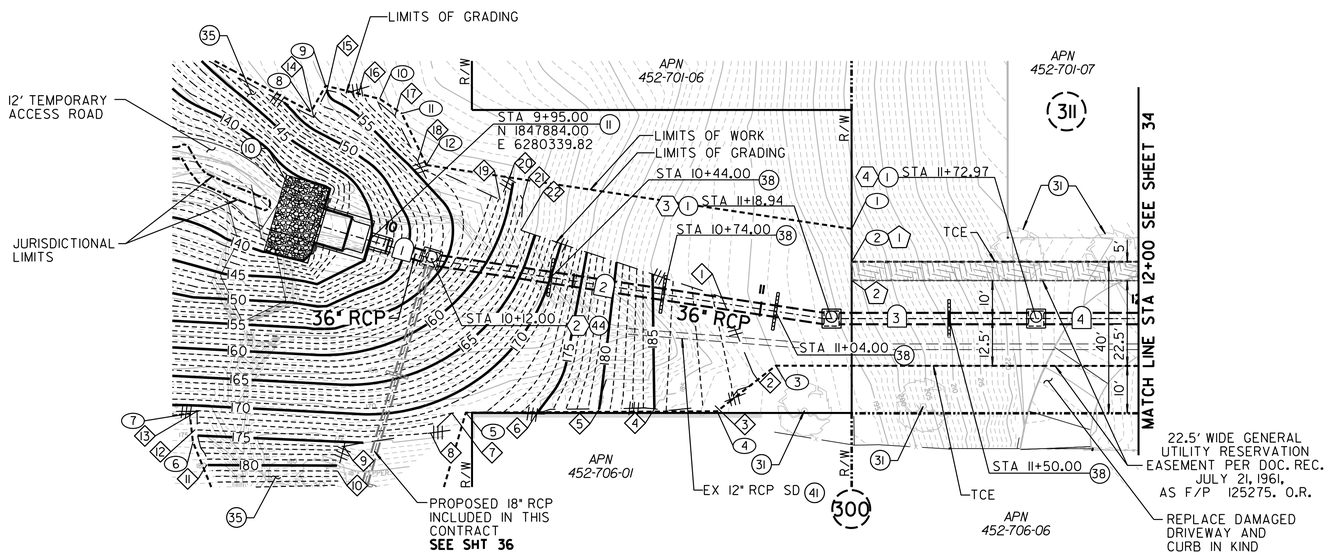
RETIREMENTS:

12" - RCP - 170' - 1958
STORM DRAIN CO - 1

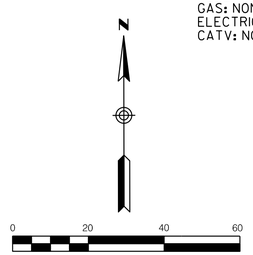
REFERENCES:

WATER: NONE
SEWER: NONE
STORM DRAIN: 14110-L
TELEPHONE: B2
GAS: NONE
ELECTRIC: NONE
CATV: NONE

ALIGNMENT NAME:		SYSTEM 13-A	
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
PI	9+69.13	1847891.34	6280315.02
PI	9+81.13	1847887.94	6280326.52
TANGENTIAL DIRECTION	S 73° 31'17" E		
TANGENTIAL LENGTH:	12.00		
ELEMENT: LINEAR			
PI	9+81.13	1847887.94	6280326.52
PI	9+95.00	1847884.00	6280339.82
TANGENTIAL DIRECTION	S 73° 31'17" E		
TANGENTIAL LENGTH:	13.87		
ELEMENT: LINEAR			
PI	9+95.00	1847884.00	6280339.82
PI	10+10.00	1847879.75	6280354.21
TANGENTIAL DIRECTION	S 73° 31'17" E		
TANGENTIAL LENGTH:	15.00		
ELEMENT: LINEAR			
PI	10+10.00	1847879.75	6280354.21
PI	10+12.00	1847879.18	6280356.13
TANGENTIAL DIRECTION	S 73° 31'17" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+12.00	1847879.18	6280356.13
PI	10+14.00	1847878.61	6280358.04
TANGENTIAL DIRECTION	S 73° 31'17" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+14.00	1847878.61	6280358.04
PI	11+16.94	1847863.12	6280459.82
TANGENTIAL DIRECTION	S 81° 20'33" E		
TANGENTIAL LENGTH:	102.94		
ELEMENT: LINEAR			
PI	11+16.94	1847863.12	6280459.82
PI	11+18.94	1847863.11	6280461.82
TANGENTIAL DIRECTION	S 89° 52'37" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+18.94	1847863.11	6280461.82
PI	11+20.94	1847863.11	6280463.82
TANGENTIAL DIRECTION	S 89° 52'37" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+20.94	1847863.11	6280463.82
PI	11+70.97	1847863	6280513.84
TANGENTIAL DIRECTION	S 89° 52'37" E		
TANGENTIAL LENGTH:	50.03		
ELEMENT: LINEAR			
PI	11+70.97	1847863	6280513.84
PI	11+72.97	1847863	6280515.84
TANGENTIAL DIRECTION	S 89° 52'37" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+72.97	1847863	6280515.84
PI	11+74.97	1847862.99	6280517.84
TANGENTIAL DIRECTION	S 89° 52'37" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+74.97	1847862.99	6280517.84
PI	12+54.47	1847862.82	6280597.34
TANGENTIAL DIRECTION	S 89° 52'38" E		
TANGENTIAL LENGTH:	79.50		
SEE SHEET 34			



NOTE:
GRADING LIMITS ARE APPROXIMATE AND SUBJECT TO CHANGE BASED ON VARYING FIELD CONDITIONS. CONTRACTOR TO VERIFY LIMITS OF WORK PRIOR TO CONSTRUCTION.



C-14

MAPLE CANYON RESTORATION – PHASE 1

NUTMEG STREET
MAPLE CANYON TO
FIRST AVENUE

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 33 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER _____ DATE
SHEILA BOSE
PRINT DCE NAME _____ RCE#

SUBMITTED BY: ELHAM LOTFI
PROJECT MANAGER

CHECKED BY: BAREAZ PIROMARI
PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719
CCS27 COORDINATE

1846-6276
CCS83 COORDINATE

38321-33-D

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

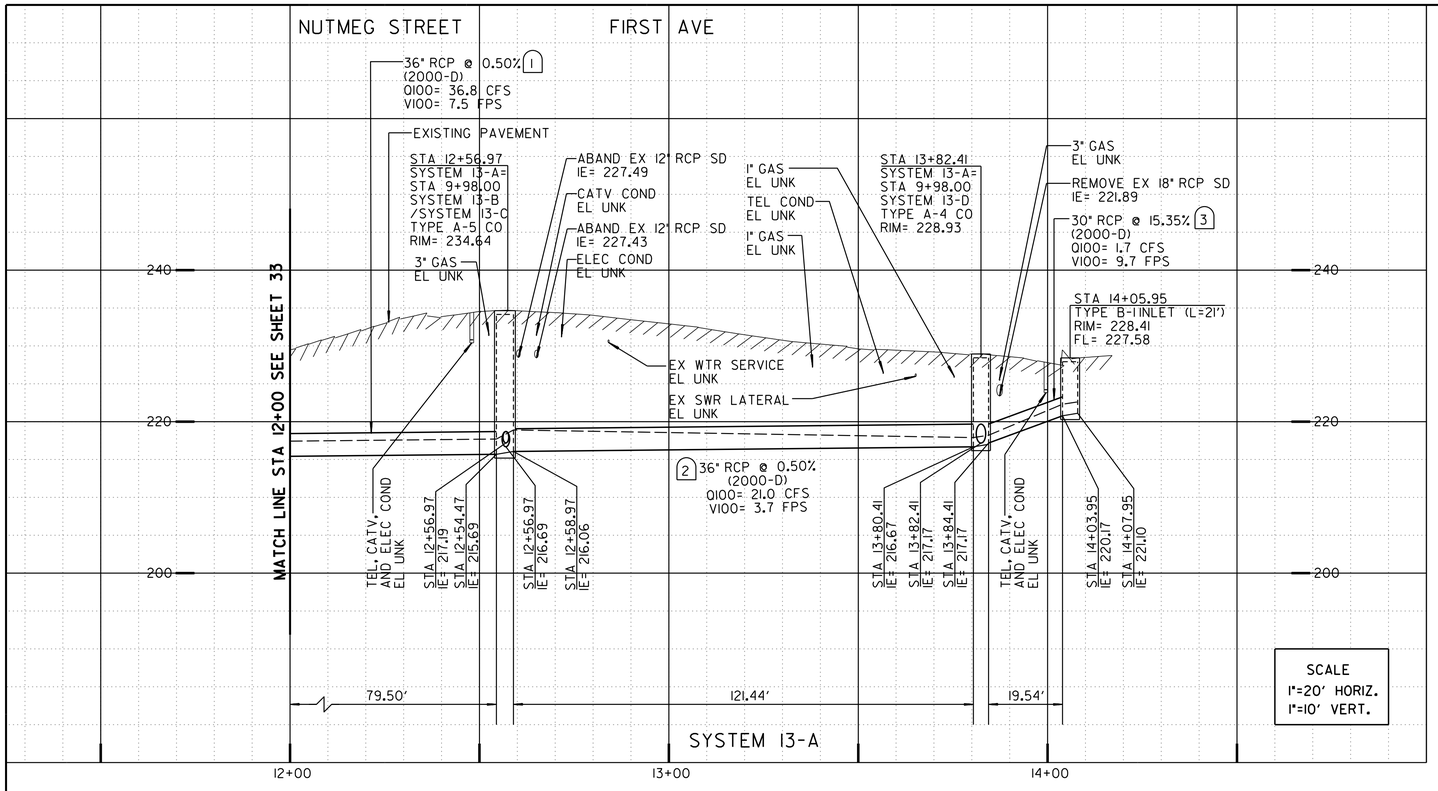
RICK ENGINEERING COMPANY
San Diego
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619-291-0707
(FAX) 619-291-4165
rickengineering.com
Riverside - Orange - Sacramento - San Luis Obispo - Phoenix - Tucson - Denver

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21-JAN-2020 09:00 knguyen

NUTMEG STREET

FINAL SUBMITTAL



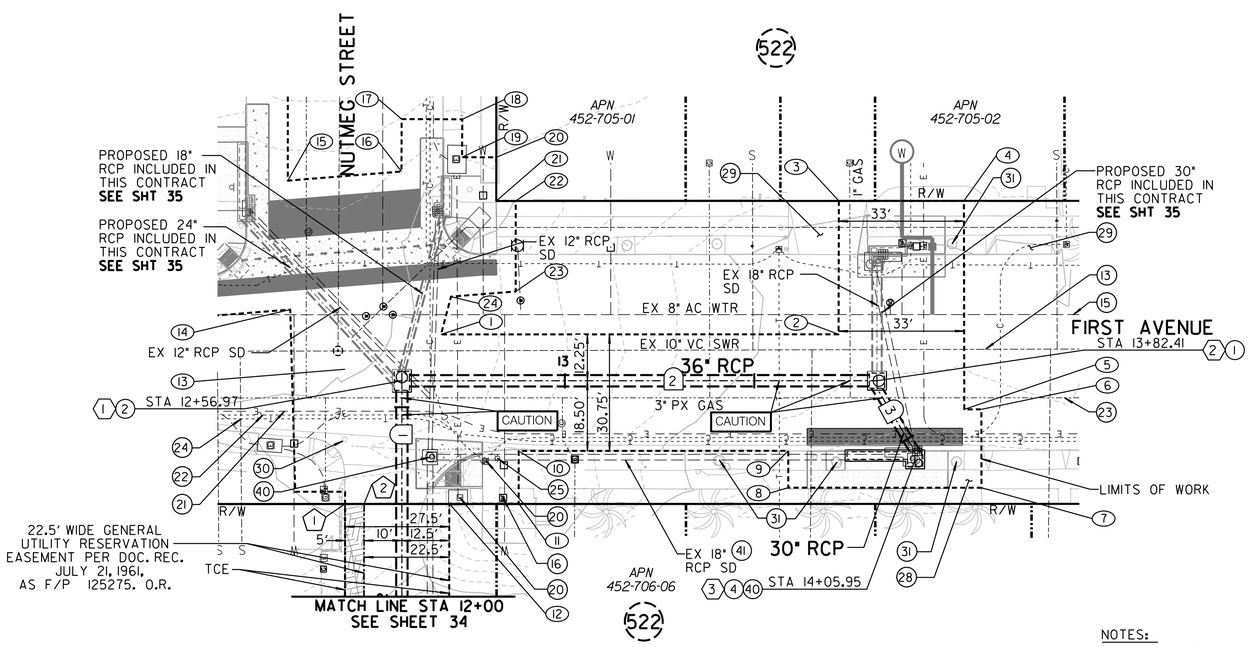
STORM DRAIN DATA TABLE				
NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
(1)	S89° 52'37"E		54.47'	36" RCP (2000-D)
(2)	S00° 06'28"W		121.44'	36" RCP (2000-D)
(3)	S59° 06'33"W		19.54'	30" RCP (2000-D)

STRUCTURE DATA TABLE				
NO.	STA	NORTHING	EASTING	REMARKS
(1)	12+56.97	1847862.82	6280599.84	TYPE A-5 CO
(2)	13+82.41	1847737.38	6280599.61	TYPE A-4 CO
(3)	14+05.95	1847727.36	6280578.84	TYPE B-1INLET (L=21')

TEMP EASEMENT DATA TABLE		
NO.	NORTHING	EASTING
(1)	1847877.89	6280567.37
(2)	1847872.86	6280567.36

LIMITS OF WORK DATA TABLE		
NO.	NORTHING	EASTING
(1)	1847852.46	6280612.07
(2)	1847747.49	6280611.88
(3)	1847747.33	6280647.11
(4)	1847714.33	6280647.04
(5)	1847714.33	6280592.00
(6)	1847709.84	6280591.99
(7)	1847709.86	6280571.29
(8)	1847760.86	6280571.42
(9)	1847760.86	6280581.15
(10)	1847832.02	6280581.29
(11)	1847832.05	6280567.38
(12)	1847850.36	6280567.42
(13)	1847877.81	6280602.94
(14)	1847892.26	6280618.74
(15)	1847892.82	6280652.75
(16)	1847862.81	6280655.11
(17)	1847862.73	6280668.96
(18)	1847846.73	6280668.86
(19)	1847846.79	6280658.86
(20)	1847837.76	6280658.81
(21)	1847837.78	6280647.29
(22)	1847832.65	6280647.28
(23)	1847832.70	6280623.38
(24)	1847849.80	6280622.04

ALIGNMENT NAME: SYSTEM 13-A SEE SHEET 33			
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
PI	12+54.47	1847862.82	6280597.34
PI	12+56.97	1847862.82	6280599.84
TANGENTIAL DIRECTION:	S 89° 52'37" E		
TANGENTIAL LENGTH:	2.50		
ELEMENT: LINEAR			
PI	12+56.97	1847862.82	6280599.84
PI	12+58.97	1847860.82	6280599.84
TANGENTIAL DIRECTION:	S 0° 07'23" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	12+58.97	1847860.82	6280599.84
PI	13+80.41	1847739.38	6280599.61
TANGENTIAL DIRECTION:	S 0° 06'28" W		
TANGENTIAL LENGTH:	121.44		
ELEMENT: LINEAR			
PI	13+80.41	1847739.38	6280599.61
PI	13+82.41	1847737.38	6280599.61
TANGENTIAL DIRECTION:	S 0° 06'28" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	13+82.41	1847737.38	6280599.61
PI	13+84.41	1847737.38	6280597.61
TANGENTIAL DIRECTION:	N 89° 53'32" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	13+84.41	1847737.38	6280597.61
PI	14+03.95	1847727.35	6280580.84
TANGENTIAL DIRECTION:	S 59° 06'33" W		
TANGENTIAL LENGTH:	19.54		
ELEMENT: LINEAR			
PI	14+03.95	1847727.35	6280580.84
PI	14+05.95	1847727.36	6280578.84
TANGENTIAL DIRECTION:	N 89° 51'17" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	14+05.95	1847727.36	6280578.84
PI	14+07.95	1847727.36	6280576.84
TANGENTIAL DIRECTION:	N 89° 51'17" W		
TANGENTIAL LENGTH:	2.00		



CONSTRUCTION NOTES

(1) CONSTRUCT TYPE A-4 CLEANOUT
(2) CONSTRUCT TYPE A-5 CLEANOUT
(4) CONSTRUCT TYPE B-1INLET
(13) PROTECT EX SEWER MAIN IN PLACE
(14) PROTECT EX SEWER MANHOLE IN PLACE
(15) PROTECT EX WATER MAIN IN PLACE
(16) PROTECT EX WATER APPURTENANCE IN PLACE
(20) PROTECT DRY UTILITY STRUCTURE IN PLACE
(21) PROTECT ELEC COND IN PLACE
(22) PROTECT CATV IN PLACE
(23) PROTECT GAS IN PLACE
(24) PROTECT TELE IN PLACE
(25) PROTECT EX STREETLIGHT IN PLACE
(28) PROTECT EX SIDEWALK IN PLACE
(29) PROTECT EX DRIVEWAY IN PLACE
(30) PROTECT EX SURVEY MONUMENT IN PLACE
(31) PROTECT EX TREE IN PLACE
(40) REMOVE EX STORM DRAIN STRUCTURE
(41) ABANDON EX STORM DRAIN

REFERENCES:

WATER: 10296-2, 11725-12-D
SEWER: 31095-20-D
STORM DRAIN: 14110-L, 732-L
TELEPHONE: B2
GAS: 15900-118820
ELECTRIC: 15892-118820
CABLE TV: MAP 2

RETIREMENTS:

12" - RCP - 130' - 1958
18" - RCP - 175' - 1958
STORM DRAIN INLET - 3

NOTES:

1. FOR DEMOLITION WORK **SEE SHT 16**
2. FOR SURFACE IMPROVEMENTS **SEE SHT 54, 65, 66, AND 67**
3. FOR REVEGETATION WORK **SEE SHT 84**

N
0 20 40 60
SCALE 1" = 20'

RICK ENGINEERING COMPANY
San Diego
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619-291-0707
(FAX) 619-291-4165
rickengineering.com
Riverside - Orange - Sacramento - San Luis Obispo - Phoenix - Tucson - Denver

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21-JAN-2020 09:01 knguyen

REGISTERED PROFESSIONAL ENGINEER KEVIN R. GIBSON NO. 52295 STATE OF CALIFORNIA

APPROVED:
FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DOE NAME _____ RCE# _____

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

C-15

MAPLE CANYON RESTORATION – PHASE 1

NUTMEG STREET / FIRST AVENUE
MAPLE CANYON TO FIRST AVENUE / NUTMEG STREET TO MAPLE STREET

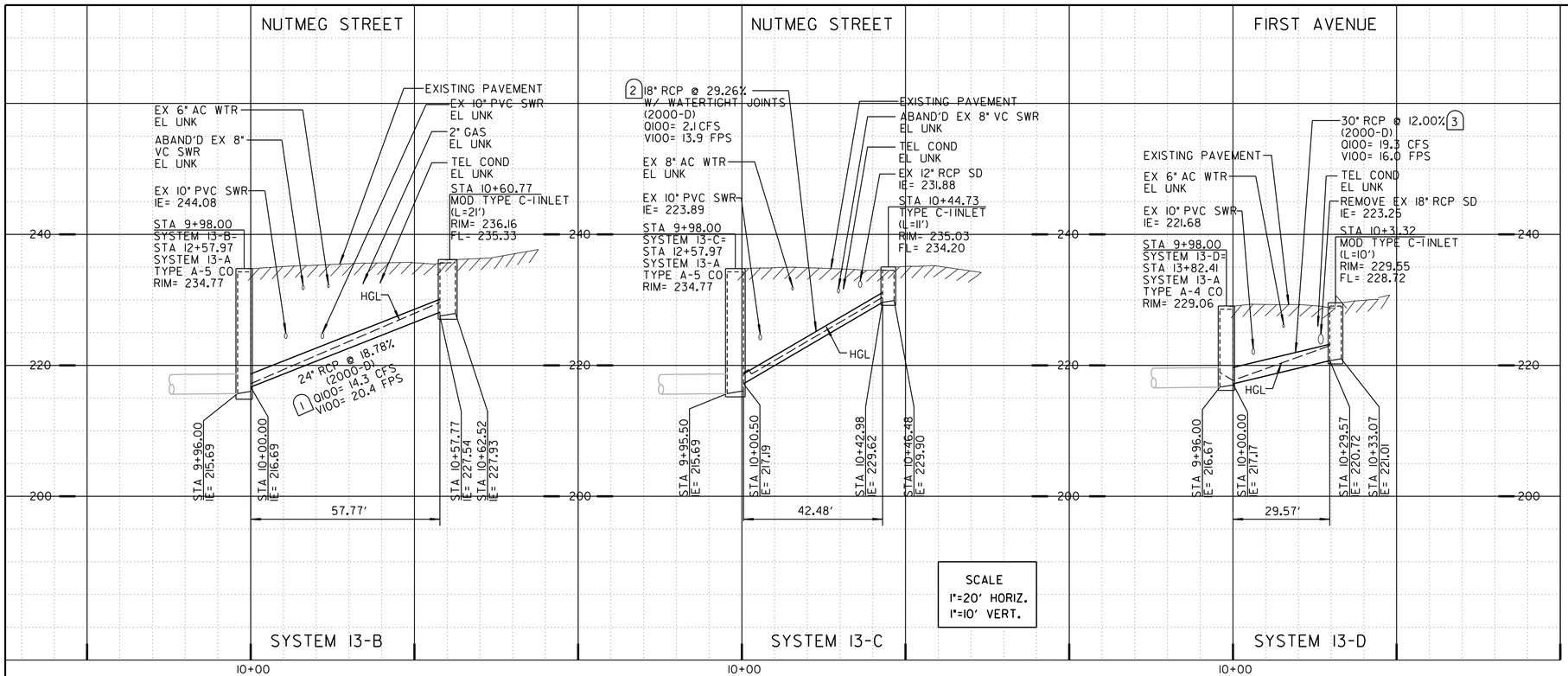
CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 34 OF 98 SHEETS

STORM DRAIN WBS B-12040

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER
206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE
38321-34-D

NUTMEG STREET / FIRST AVENUE

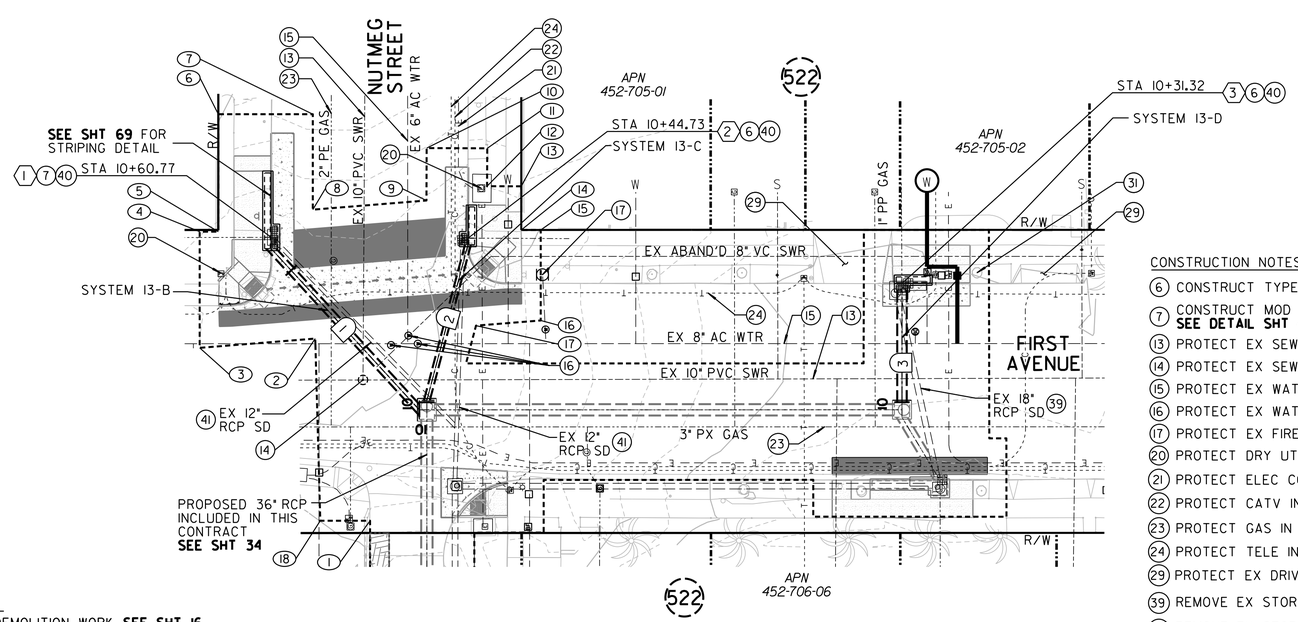
FINAL SUBMITTAL



ALIGNMENT NAME:	SYSTEM 13-B		
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
POB	9+98.00	1847862.82	6280599.84
PI	10+00.00	1847864.82	6280599.85
TANGENTIAL DIRECTION:	N 0° 07'23" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+00.00	1847864.82	6280599.85
PI	10+57.77	1847903.81	6280642.48
TANGENTIAL DIRECTION:	N 47° 33'02" E		
TANGENTIAL LENGTH:	57.77		
ELEMENT: LINEAR			
PI	10+57.77	1847903.81	6280642.48
PI	10+60.77	1847903.81	6280645.48
TANGENTIAL DIRECTION:	S 89° 58'59" E		
TANGENTIAL LENGTH:	3.00		
ELEMENT: LINEAR			
PI	10+60.77	1847903.81	6280645.48
PI	10+62.52	1847905.56	6280645.48
TANGENTIAL DIRECTION:	N 0° 01'01" E		
TANGENTIAL LENGTH:	1.75		

ALIGNMENT NAME:	SYSTEM 13-C		
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
POB	9+98.00	1847862.82	6280599.84
PI	10+00.50	1847862.81	6280602.34
TANGENTIAL DIRECTION:	S 89° 52'37" E		
TANGENTIAL LENGTH:	2.5		
ELEMENT: LINEAR			
PI	10+00.50	1847862.81	6280602.34
PI	10+42.98	1847851.88	6280643.39
TANGENTIAL DIRECTION:	S 75° 05'20" E		
TANGENTIAL LENGTH:	42.48		
ELEMENT: LINEAR			
PI	10+42.98	1847851.88	6280643.39
PI	10+44.73	1847851.87	6280645.14
TANGENTIAL DIRECTION:	S 89° 40'05" E		
TANGENTIAL LENGTH:	1.75		
ELEMENT: LINEAR			
PI	10+44.73	1847851.87	6280645.14
PI	10+46.48	1847850.12	6280645.13
TANGENTIAL DIRECTION:	S 0° 19'55" W		
TANGENTIAL LENGTH:	1.75		

ALIGNMENT NAME:	SYSTEM 13-D		
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
POB	9+98.00	1847737.38	6280599.61
PI	10+00.00	1847737.37	6280601.61
TANGENTIAL DIRECTION:	S 89° 53'32" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+00.00	1847737.37	6280601.61
PI	10+29.57	1847737.32	6280631.18
TANGENTIAL DIRECTION:	S 89° 53'48" E		
TANGENTIAL LENGTH:	29.57		
ELEMENT: LINEAR			
PI	10+29.57	1847737.32	6280631.18
PI	10+31.32	1847737.33	6280632.93
TANGENTIAL DIRECTION:	N 89° 48'44" E		
TANGENTIAL LENGTH:	1.75		
ELEMENT: LINEAR			
PI	10+31.32	1847737.33	6280632.93
PI	10+33.07	1847737.33	6280634.68
TANGENTIAL DIRECTION:	N 89° 48'44" E		
TANGENTIAL LENGTH:	1.75		



STRUCTURE DATA TABLE				
NO.	STA	NORTHING	EASTING	REMARKS
1	10+60.77	1847903.81	6280645.48	MOD TYPE C-I INLET (L=21')
2	10+44.73	1847851.87	6280645.14	TYPE C-I INLET (L=11')
3	10+31.32	1847737.33	6280632.93	MOD TYPE C-I INLET (L=10')

STORM DRAIN DATA TABLE				
NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
1	N47° 33'02"E		57.77'	24" RCP (2000-D)
2	S75° 05'20"E		42.48'	18" RCP (2000-D)•
3	S89° 53'48"E		29.57'	30" RCP (2000-D)

•WATER-TIGHT JOINTS

CONSTRUCTION NOTES

(6) CONSTRUCT TYPE C-I INLET
(7) CONSTRUCT MOD TYPE C-I INLET W/ MOD GRATE **SEE DETAIL SHT 48**
(13) PROTECT EX SEWER MAIN IN PLACE
(14) PROTECT EX SEWER MANHOLE IN PLACE
(15) PROTECT EX WATER MAIN IN PLACE
(16) PROTECT EX WATER APPURTENANCE IN PLACE
(17) PROTECT EX FIRE HYDRANT IN PLACE
(20) PROTECT DRY UTILITY STRUCTURE IN PLACE
(21) PROTECT ELEC COND IN PLACE
(22) PROTECT CATV IN PLACE
(23) PROTECT GAS IN PLACE
(24) PROTECT TELE IN PLACE
(29) PROTECT EX DRIVEWAY IN PLACE
(39) REMOVE EX STORM DRAIN
(40) REMOVE EX STORM DRAIN STRUCTURE
(41) ABANDON EX STORM DRAIN

LIMITS OF WORK DATA TABLE		
NO.	NORTHING	EASTING
1	1847877.88	6280570.61
2	1847892.26	6280618.74
3	1847922.75	6280616.36
4	1847922.69	6280647.01
5	1847917.80	6280646.89
6	1847917.72	6280678.00
7	1847892.77	6280677.96
8	1847892.82	6280652.75
9	1847862.81	6280655.11
10	1847862.73	6280668.96
11	1847846.73	6280668.86
12	1847846.79	6280658.86
13	1847837.76	6280658.81
14	1847837.78	6280647.29
15	1847832.65	6280647.28
16	1847832.70	6280623.38
17	1847849.80	6280622.04
18	1847891.02	6280570.64

N

0 20 40 60
SCALE 1"=20'

REFERENCES:
WATER: 10296-2, 11725-12-D
SEWER: 31095-20-D
STORM DRAIN: 14110-L, 732-L
TELEPHONE: B2
GAS: 15900-118820
ELECTRIC: 15892-118820
CABLE TV: MAP 2

RETIREMENTS:
12" - RCP - 130' - 1958
18" - RCP - 180' - 1958
STORM DRAIN INLET - 3

NOTES:
1. FOR DEMOLITION WORK **SEE SHT 16**
2. FOR SURFACE IMPROVEMENTS **SEE SHT 54, 65, 66, AND 67**
3. FOR REVEGETATION WORK **SEE SHT 84**

SYSTEM 13-B 13-C & 13-D

C-16

MAPLE CANYON RESTORATION – PHASE 1

FIRST AVENUE

NUTMEG STREET TO MAPLE STREET

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 35 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER — DATE
SHEILA BOSE
PRINT DCE NAME — RCE#

SUBMITTED BY:
ELHAM LOTFI
PROJECT MANAGER

DESIGNED BY:
BAREAZ PIROMARI
PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719
CCS27 COORDINATE

1846-6276
CCS83 COORDINATE

38321-35-D

CONTRACTOR
INSPECTOR
DATE STARTED
DATE COMPLETED

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

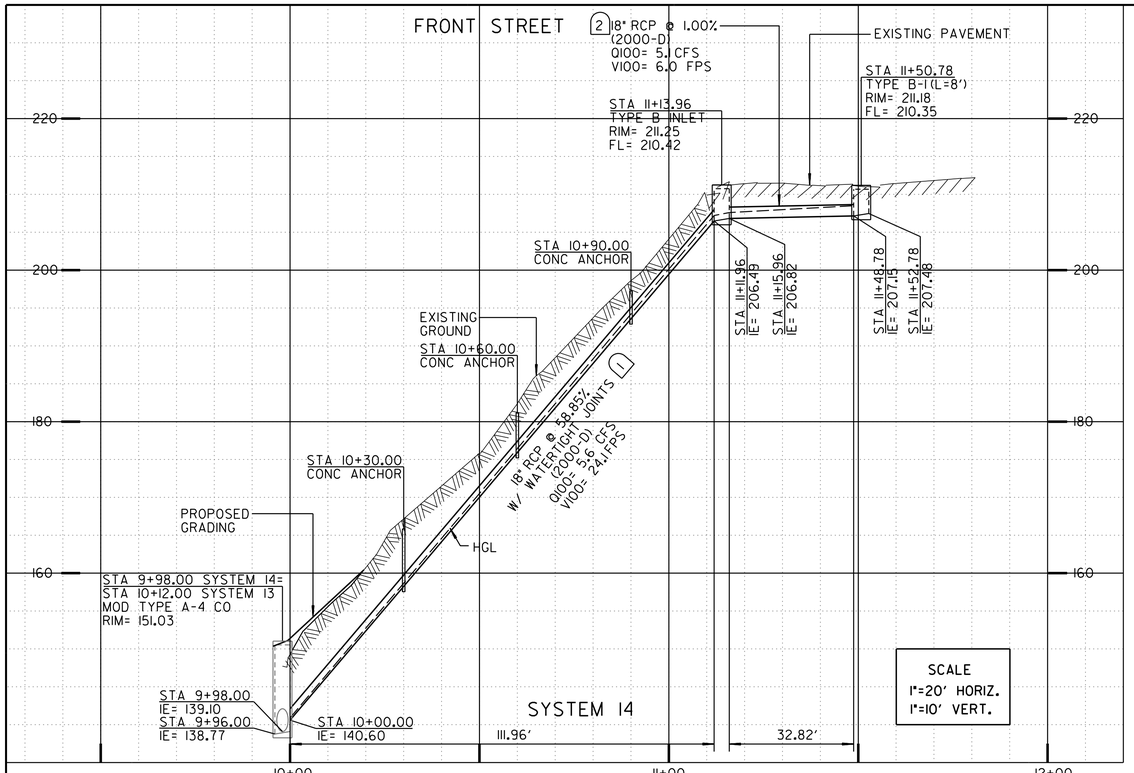
FIRST AVENUE

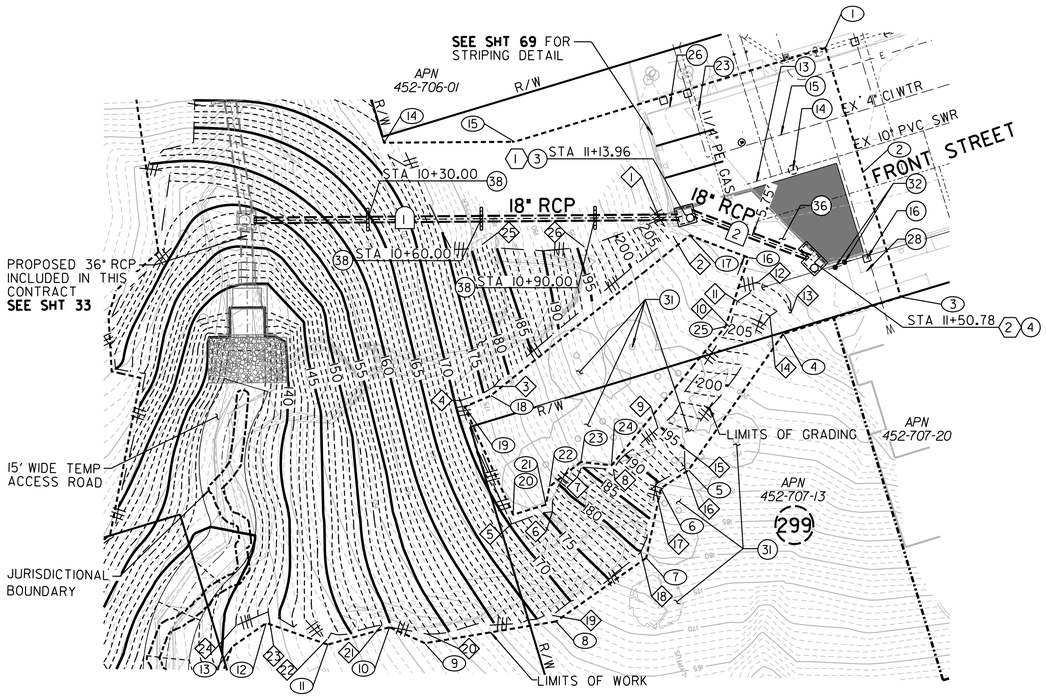
FINAL SUBMITTAL

RICK ENGINEERING COMPANY
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SYSTEM 14

STORM DRAIN DATA TABLE				
NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
1	S16° 28'43"E		111.96'	18" RCP (2000-D)*
2	S37° 38'43"E		32.82'	18" RCP (2000-D)

*WATER-TIGHT JOINTS

STRUCTURE DATA TABLE				
NO.	STA	NORTHING	EASTING	REMARKS
1	11+13.96	1847767.90	6280323.74	TYPE B INLET
2	11+50.78	1847738.98	6280301.87	TYPE B-1INLET (L=8')

GRADING LIMITS DATA TABLE		
NO.	NORTHING	EASTING
1	1847774.64	6280324.58
2	1847772.67	6280319.48
3	1847829.36	6280295.18
4	1847839.00	6280294.24
5	1847835.55	6280259.16
6	1847824.31	6280259.07
7	1847813.62	6280267.95
8	1847805.60	6280265.12
9	1847791.18	6280272.17
10	1847765.30	6280292.08
11	1847761.40	6280298.03
12	1847754.50	6280301.34
13	1847748.75	6280291.00
14	1847754.32	6280291.80
15	1847786.06	6280264.98
16	1847787.51	6280259.95
17	1847796.51	6280257.69
18	1847805.09	6280242.08
19	1847832.29	6280232.92
20	1847865.19	6280237.72
21	1847876.03	6280243.63
22	1847890.97	6280244.19
23	1847903.77	6280255.64
24	1847912.97	6280254.63
25	1847821.61	6280331.93
26	1847795.86	6280323.46

LIMITS OF WORK DATA TABLE		
NO.	NORTHING	EASTING
1	1847719.71	6280355.28
2	1847719.77	6280320.92
3	1847719.84	6280286.57
4	1847752.35	6280286.26
5	1847786.70	6280259.13
6	1847795.11	6280256.66
7	1847804.12	6280240.22
8	1847831.82	6280231.11
9	1847866.56	6280235.45
10	1847874.31	6280242.43
11	1847891.25	6280242.79
12	1847905.13	6280252.95
13	1847915.62	6280249.54
14	1847838.48	6280365.20
15	1847805.45	6280355.43
16	1847750.39	6280304.45
17	1847768.40	6280318.35
18	1847830.89	6280293.14
19	1847838.41	6280292.30
20	1847834.45	6280261.36
21	1847825.40	6280261.36
22	1847823.12	6280265.62
23	1847813.28	6280269.48
24	1847805.81	6280266.26
25	1847766.33	6280292.59

ALIGNMENT NAME:	SYSTEM 14		
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
POB	9+98.00	1847879.18	6280356.13
PI	10+00.00	1847877.26	6280355.56
TANGENTIAL DIRECTION:	S 16° 28'43" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+00.00	1847877.26	6280355.56
PI	11+11.96	1847769.90	6280323.80
TANGENTIAL DIRECTION:	S 16° 28'43" E		
TANGENTIAL LENGTH:	111.96		
ELEMENT: LINEAR			
PI	11+11.96	1847769.90	6280323.80
PI	11+13.96	1847767.90	6280323.74
TANGENTIAL DIRECTION:	S 1° 44'44" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+13.96	1847767.90	6280323.74
PI	11+15.96	1847765.90	6280323.68
TANGENTIAL DIRECTION:	S 1° 44'44" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+15.96	1847765.90	6280323.68
PI	11+48.78	1847739.92	6280303.64
TANGENTIAL DIRECTION:	S 37° 38'43" E		
TANGENTIAL LENGTH:	32.82		
ELEMENT: LINEAR			
PI	11+48.78	1847739.92	6280303.64
PI	11+50.78	1847738.98	6280301.87
TANGENTIAL DIRECTION:	S 61° 59'38" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+50.78	1847738.98	6280301.87
PI	11+52.78	1847737.21	6280302.81
TANGENTIAL DIRECTION:	S 28° 00'22" E		
TANGENTIAL LENGTH:	2.00		

CONSTRUCTION NOTES

(3) CONSTRUCT TYPE B INLET
(4) CONSTRUCT TYPE B-1INLET
(13) PROTECT EX SEWER MAIN IN PLACE
(14) PROTECT EX SEWER MANHOLE IN PLACE
(15) PROTECT EX WATER MAIN IN PLACE
(16) PROTECT EX WATER APPURTENANCE IN PLACE
(23) PROTECT GAS IN PLACE
(26) PROTECT EX CURB AND GUTTER IN PLACE
(28) PROTECT EX SIDEWALK IN PLACE
(31) PROTECT EX TREE IN PLACE
(32) PROTECT EX UTILITY POLE IN PLACE
(35) REGRADE EX SLOPE
(36) REPLACE IN KIND EX VEGETATION
(38) INSTALL CONCRETE ANCHOR

REFERENCES:

WATER: 13529-13
SEWER: 31095-18-D
STORM DRAIN: NONE
TELEPHONE: B2
GAS: 15892-118820
ELECTRIC: 15892-118820

RETIREMENTS:

NONE

NOTES:

1. FOR DEMOLITION WORK **SEE SHT 16**
2. FOR SURFACE IMPROVEMENTS **SEE SHT 53**
3. FOR REVEGETATION WORK **SEE SHT 84**

NOTE:
GRADING LIMITS ARE APPROXIMATE AND SUBJECT TO CHANGE BASED ON VARYING FIELD CONDITIONS. CONTRACTOR TO VERIFY LIMITS OF WORK PRIOR TO CONSTRUCTION.

0 20 40 60
SCALE 1" = 20'

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

C-17

MAPLE CANYON RESTORATION – PHASE 1

FRONT STREET

MAPLE CANYON TO W MAPLE STREET

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 36 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER _____ DATE
SHEILA BOSE
PRINT DCE NAME _____ RCE#

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

38321-36-D

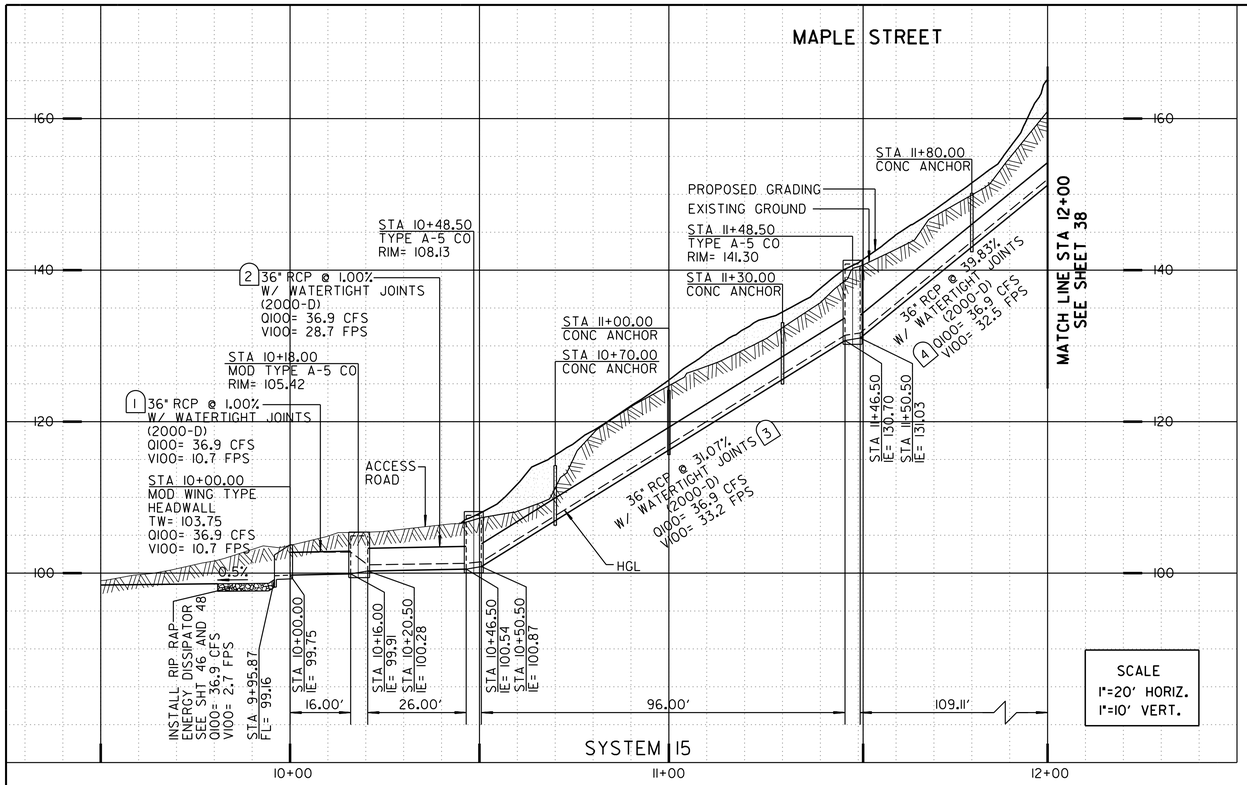
FRONT STREET

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FINAL SUBMITTAL



STORM DRAIN DATA TABLE				
NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
1	S84° 04'39"E		16.00'	36" RCP (2000-D)•
2	S24° 04'39"E		26.00'	36" RCP (2000-D)•
3	S49° 04'39"E		96.00'	36" RCP (2000-D)•
4	S64° 12'28"E		49.50'	36" RCP (2000-D)•

•WATER-TIGHT JOINTS

STRUCTURE DATA TABLE				
NO.	STA	NORTHING	EASTING	REMARKS
1	10+00.00	1847615.28	627981I.39	MOD WING TYPE HEADWALL
2	10+18.00	1847614.44	6279829.13	MOD TYPE A-5 CO
3	10+48.50	1847587.11	6279842.27	TYPE A-5 CO
4	11+48.50	1847522.05	627991I.12	TYPE A-5 CO

GRADING LIMITS DATA TABLE		
NO.	NORTHING	EASTING
1	1847588.29	6279833.52
2	1847580.91	6279834.33
3	1847518.08	627991I.25
4	1847526.22	6279922.51
5	1847573.34	6279873.52
6	1847594.98	6279858.13
7	1847597.32	6279850.42
8	1847607.70	6279819.09
9	1847629.06	6279818.72
10	1847630.62	6279814.04
11	1847634.48	6279808.99
12	1847633.64	6279789.06
13	1847591.13	6279822.06

LIMITS OF WORK DATA TABLE		
NO.	NORTHING	EASTING
1	1847695.34	6279747.69
2	1847720.05	6279783.26
3	1847901.70	6279768.08
4	1847915.53	6279742.00
5	1847941.16	6279741.98
6	1847941.17	6279756.98
7	1847931.92	6279756.99
8	1847630.62	6279814.04
9	1847634.48	6279808.99
10	1847637.20	6279779.37
11	1847597.99	6279772.98

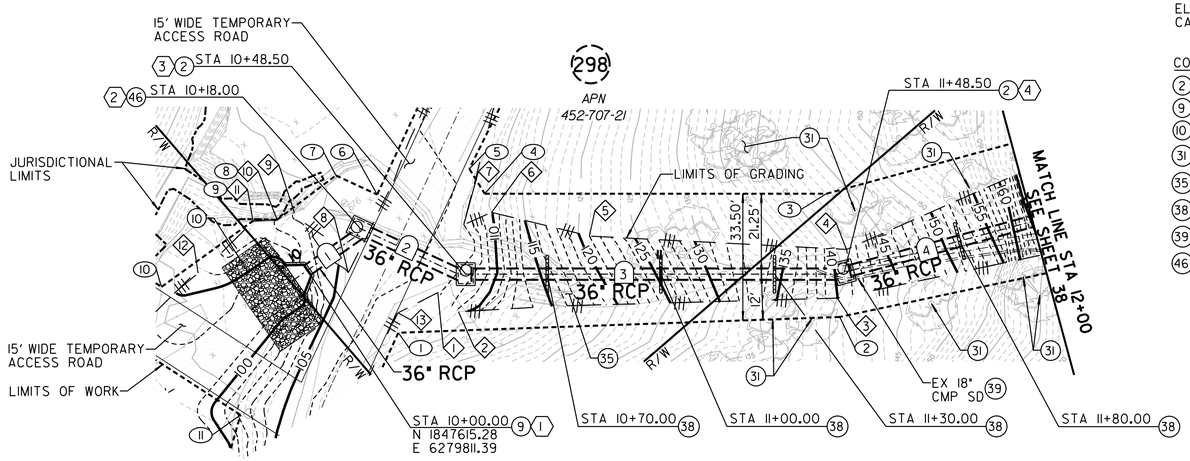
ALIGNMENT NAME:	SYSTEM 15		
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
PI	9+81.87	1847617.15	6279793.36
PI	9+95.87	1847615.7	6279807.28
TANGENTIAL DIRECTION	S 84° 04'39" E		
TANGENTIAL LENGTH:	14.00		
ELEMENT: LINEAR			
PI	9+95.87	1847615.7	6279807.28
PI	10+00.00	1847615.28	627981I.39
TANGENTIAL DIRECTION	S 84° 04'39" E		
TANGENTIAL LENGTH:	4.13		
ELEMENT: LINEAR			
PI	10+00.00	1847615.28	627981I.39
PI	10+16.00	1847613.63	6279827.3
TANGENTIAL DIRECTION	S 84° 04'39" E		
TANGENTIAL LENGTH:	16.00		
ELEMENT: LINEAR			
PI	10+16.00	1847613.63	6279827.3
PI	10+18.00	1847614.44	6279829.13
TANGENTIAL DIRECTION	N 65° 55'21" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+18.00	1847614.44	6279829.13
PI	10+20.50	1847612.16	6279830.15
TANGENTIAL DIRECTION	S 24° 04'39" E		
TANGENTIAL LENGTH:	2.50		
ELEMENT: LINEAR			
PI	10+20.50	1847612.16	6279830.15
PI	10+46.50	1847588.42	6279840.76
TANGENTIAL DIRECTION	S 24° 04'39" E		
TANGENTIAL LENGTH:	26.00		
ELEMENT: LINEAR			
PI	10+46.50	1847588.42	6279840.76
PI	10+48.50	1847587.11	6279842.27
TANGENTIAL DIRECTION	S 49° 04'39" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+48.50	1847587.11	6279842.27
PI	10+50.50	1847585.80	6279843.78
TANGENTIAL DIRECTION	S 49° 04'39" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+50.50	1847585.80	6279843.78
PI	11+46.50	1847522.92	6279916.32
TANGENTIAL DIRECTION	S 49° 04'39" E		
TANGENTIAL LENGTH:	96.00		
ELEMENT: LINEAR			
PI	11+46.50	1847522.92	6279916.32
PI	11+48.50	1847522.05	627991I.12
TANGENTIAL DIRECTION	S 64° 12'28" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+48.50	1847522.05	627991I.12
PI	11+50.50	1847521.18	627991I.92
TANGENTIAL DIRECTION	S 64° 12'28" E		
TANGENTIAL LENGTH:	2		
ELEMENT: LINEAR			
PI	11+50.50	1847521.18	627991I.92
PI	12+59.61	1847473.70	6280018.16
TANGENTIAL DIRECTION	S 64° 12'28" E		
TANGENTIAL LENGTH:	109.11		
SEE SHEET 38			

REFERENCES:

WATER: NONE
SEWER: NONE
STORM DRAIN: 4532-B
TELEPHONE: NONE
GAS: NONE
ELECTRIC: NONE
CABLE TV: NONE

RETIREMENTS:

18" - CMP - 54' - 1952



CONSTRUCTION NOTES

(2) CONSTRUCT TYPE A-5 CLEANOUT
(9) CONSTRUCT MOD WING TYPE HEADWALL **SEE DETAIL SHT 48**
(10) INSTALL RIP RAP ENERGY DISSIPATOR **SEE TABLE SHT 48**
(31) PROTECT EX TREE IN PLACE
(35) REGRADE EX SLOPE
(38) INSTALL CONCRETE ANCHOR
(39) REMOVE EX STORM DRAIN
(46) CONSTRUCT MOD TYPE A-5 CLEANOUT **SEE DETAIL SHT 48**

NOTES:

1. FOR DEMOLITION WORK **SEE SHT 17**
2. FOR TEMPORARY ACCESS ROAD **SEE SHT 68**
3. FOR REVEGETATION WORK **SEE SHT 78**
4. FOR HEADWALL GRADING DETAILS **SEE SHT 46**

NOTE:
GRADING LIMITS ARE APPROXIMATE AND SUBJECT TO CHANGE BASED ON VARYING FIELD CONDITIONS. CONTRACTOR TO VERIFY LIMITS OF WORK PRIOR TO CONSTRUCTION.

0 20 40 60
SCALE 1" = 20'

SYSTEM 15

RICK ENGINEERING COMPANY
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C-18

MAPLE CANYON RESTORATION – PHASE 1

MAPLE STREET
MAPLE CANYON TO ALBATROSS STREET

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 37 OF 98 SHEETS

STORM DRAIN WBS B-12040

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

APPROVED:
FOR CITY ENGINEER DATE
SHEILA BOSE
PRINT DCE NAME RCE#

SUBMITTED BY: ELHAM LOTFI PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

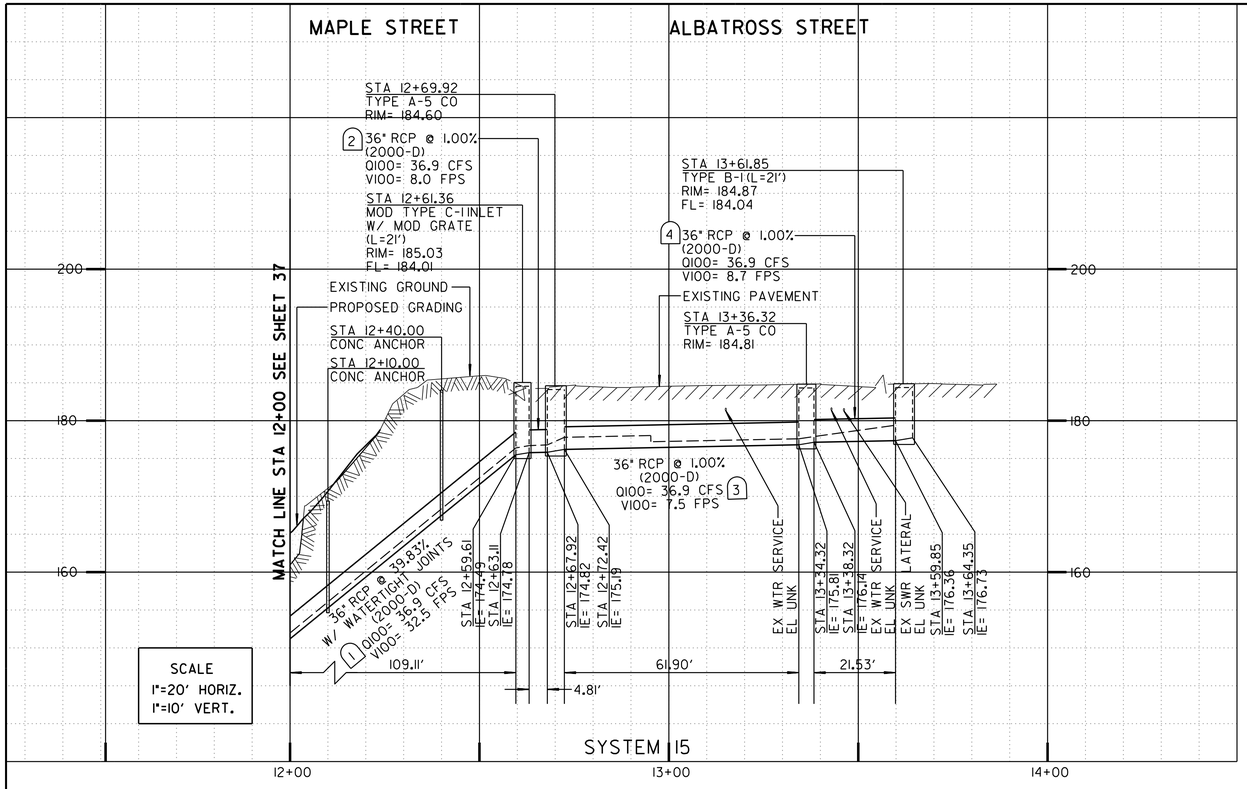
206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

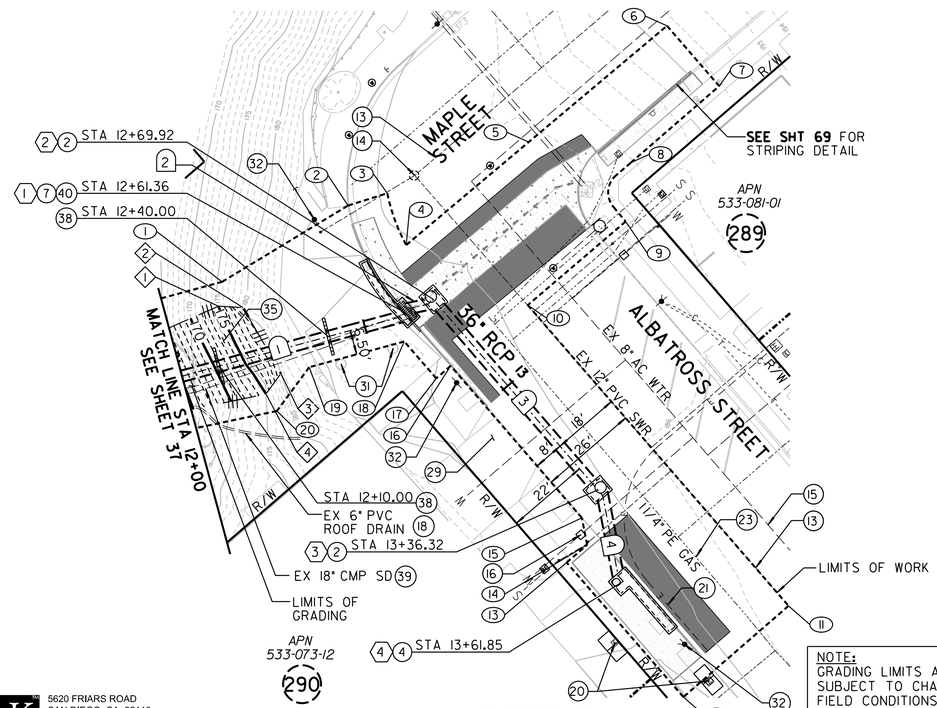
CONTRACTOR
INSPECTOR
DATE STARTED
DATE COMPLETED

38321-37-D

MAPLE STREET

FINAL SUBMITTAL





STORM DRAIN DATA TABLE				
NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
1	S64° 12'28"E		59.61'	36" RCP (2000-D)•
2	S61° 20'17"E		4.81'	36" RCP (2000-D)
3	S00° 06'48"W		61.90'	36" RCP (2000-D)
4	S29° 58'54"W		21.53'	36" RCP (2000-D)

•WATER-TIGHT JOINTS

STRUCTURE DATA TABLE				
NO.	STA	NORTHING	EASTING	REMARKS
1	12+61.36	1847473.74	6280019.91	MOD TYPE C-1INLET (L=21')
2	12+69.92	1847471.48	6280027.87	TYPE A-5 CO
3	13+36.32	1847405.07	6280027.74	TYPE A-5 CO
4	13+61.85	1847382.42	6280016.97	TYPE B-1INLET (L=21')

GRADING LIMITS DATA TABLE		
NO.	NORTHING	EASTING
1	1847507.32	6279983.81
2	1847502.78	6279988.52
3	1847483.04	6279984.66
4	1847481.58	6279978.14

LIMITS OF WORK DATA TABLE		
NO.	NORTHING	EASTING
1	1847511.51	6279988.77
2	1847504.97	6280027.09
3	1847500.62	6280037.06
4	1847487.03	6280031.87
5	1847486.39	6280074.12
6	1847485.67	6280121.81
7	1847464.61	6280121.80
8	1847464.60	6280090.89
9	1847453.76	6280079.71
10	1847454.02	6280045.74
11	1847348.94	6280045.74
12	1847348.92	6280009.01
13	1847395.93	6280016.11
14	1847395.93	6280016.11
15	1847402.21	6280019.74
16	1847455.24	6280019.84
17	1847455.22	6280014.84
18	1847468.12	6280014.78
19	1847479.43	6279991.38
20	1847476.29	6279977.38

CONSTRUCTION NOTES

(2) CONSTRUCT TYPE A-5 CLEANOUT
(4) CONSTRUCT TYPE B-1INLET
(7) CONSTRUCT MOD TYPE C-1INLET W/ MOD GRATE **SEE DETAIL SHT 48**
(13) PROTECT EX SEWER MAIN IN PLACE
(14) PROTECT EX SEWER MANHOLE IN PLACE
(15) PROTECT EX WATER MAIN IN PLACE
(16) PROTECT EX WATER APPURTENANCE IN PLACE
(18) PROTECT EX STORM DRAIN IN PLACE
(20) PROTECT DRY UTILITY STRUCTURE IN PLACE
(21) PROTECT ELEC COND IN PLACE
(23) PROTECT GAS IN PLACE
(29) PROTECT EX DRIVEWAY IN PLACE
(31) PROTECT EX TREE IN PLACE
(32) PROTECT EX UTILITY POLE
(35) REGRADE EX SLOPE
(38) INSTALL CONCRETE ANCHOR
(39) REMOVE EX STORM DRAIN
(40) REMOVE EX STORM DRAIN STRUCTURE

REFERENCES:

WATER: 13529-12-D, 14551-L
SEWER: UNKNOWN
STORM DRAIN: 4532-B
TELEPHONE: BI
GAS: 15892-118815, 11832-118815
ELECTRIC: 15492-118820
CABLE TV: MAP 2

RETIREMENTS:

18" - CMP - 60'
STORM DRAIN INLET - 1

NOTES:

1. FOR DEMOLITION WORK **SEE SHT 17**
2. FOR SURFACE IMPROVEMENTS **SEE SHT 55**
3. FOR TEMPORARY ACCESS ROAD **SEE SHT 71**
4. FOR REVEGETATION WORK **SEE SHT 82**

NOTE:
GRADING LIMITS ARE APPROXIMATE AND SUBJECT TO CHANGE BASED ON VARYING FIELD CONDITIONS. CONTRACTOR TO VERIFY LIMITS OF WORK PRIOR TO CONSTRUCTION.

CONTRACTOR'S NOTE:
USE EXTREME CAUTION WHEN WORKING DUE TO LOW OVERHEAD UTILITY LINES.

SCALE 1"=20'

ALIGNMENT NAME:	SYSTEM 15		
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
PI	12+41.61	1847481.54	6280001.95
PI	12+43.61	1847480.67	6280003.75
TANGENTIAL DIRECTION:	S 64° 12'28" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	12+43.61	1847480.67	6280003.75
PI	12+45.61	1847479.80	6280005.55
TANGENTIAL DIRECTION:	S 64° 12'28" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	12+45.61	1847479.80	6280005.55
PI	12+59.61	1847473.70	6280018.16
TANGENTIAL DIRECTION:	S 64° 12'28" E		
TANGENTIAL LENGTH:	14.00		
ELEMENT: LINEAR			
PI	12+59.61	1847473.70	6280018.16
PI	12+61.36	1847473.74	6280019.91
TANGENTIAL DIRECTION:	N 88° 39'44" E		
TANGENTIAL LENGTH:	1.75		
ELEMENT: LINEAR			
PI	12+61.36	1847473.74	6280019.91
PI	12+63.11	1847473.79	6280021.66
TANGENTIAL DIRECTION:	N 88° 39'44" E		
TANGENTIAL LENGTH:	1.75		
ELEMENT: LINEAR			
PI	12+63.11	1847473.79	6280021.66
PI	12+67.92	1847471.48	6280025.87
TANGENTIAL DIRECTION:	S 61° 20'17" E		
TANGENTIAL LENGTH:	4.81		
ELEMENT: LINEAR			
PI	12+67.92	1847471.48	6280025.87
PI	12+69.92	1847471.48	6280027.87
TANGENTIAL DIRECTION:	S 89° 53'12" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	12+69.92	1847471.48	6280027.87
PI	12+72.42	1847468.98	6280027.87
TANGENTIAL DIRECTION:	S 0° 06'48" W		
TANGENTIAL LENGTH:	2.50		
ELEMENT: LINEAR			
PI	12+72.42	1847468.98	6280027.87
PI	13+34.32	1847407.07	6280027.75
TANGENTIAL DIRECTION:	S 0° 06'48" W		
TANGENTIAL LENGTH:	61.90		
ELEMENT: LINEAR			
PI	13+34.32	1847407.07	6280027.75
PI	13+36.32	1847405.07	6280027.74
TANGENTIAL DIRECTION:	S 0° 13'36" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	13+36.32	1847405.07	6280027.74
PI	13+38.32	1847403.07	6280027.73
TANGENTIAL DIRECTION:	S 0° 13'36" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	13+38.32	1847403.07	6280027.73
PI	13+59.85	1847384.42	6280016.97
TANGENTIAL DIRECTION:	S 29° 58'54" W		
TANGENTIAL LENGTH:	21.53		
ELEMENT: LINEAR			
PI	13+59.85	1847384.42	6280016.97
PI	13+61.85	1847382.42	6280016.97
TANGENTIAL DIRECTION:	S 0° 02'56" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	13+61.85	1847382.42	6280016.97
PI	13+64.34	1847382.42	6280014.48
TANGENTIAL DIRECTION:	S 89° 57'04" W		
TANGENTIAL LENGTH:	2.49		

MAPLE STREET/ALBATROSS STREET

C-19

MAPLE CANYON RESTORATION – PHASE 1

MAPLE STREET / ALBATROSS ST
MAPLE CANYON TO ALBATROSS STREET — MAPLE STREET TO W LAUREL STREET

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 38 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER — DATE
SHEILA BOSE
PRINT DCE NAME — RCE#

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

CONTRACTOR — DATE STARTED
INSPECTOR — DATE COMPLETED

38321-38-D

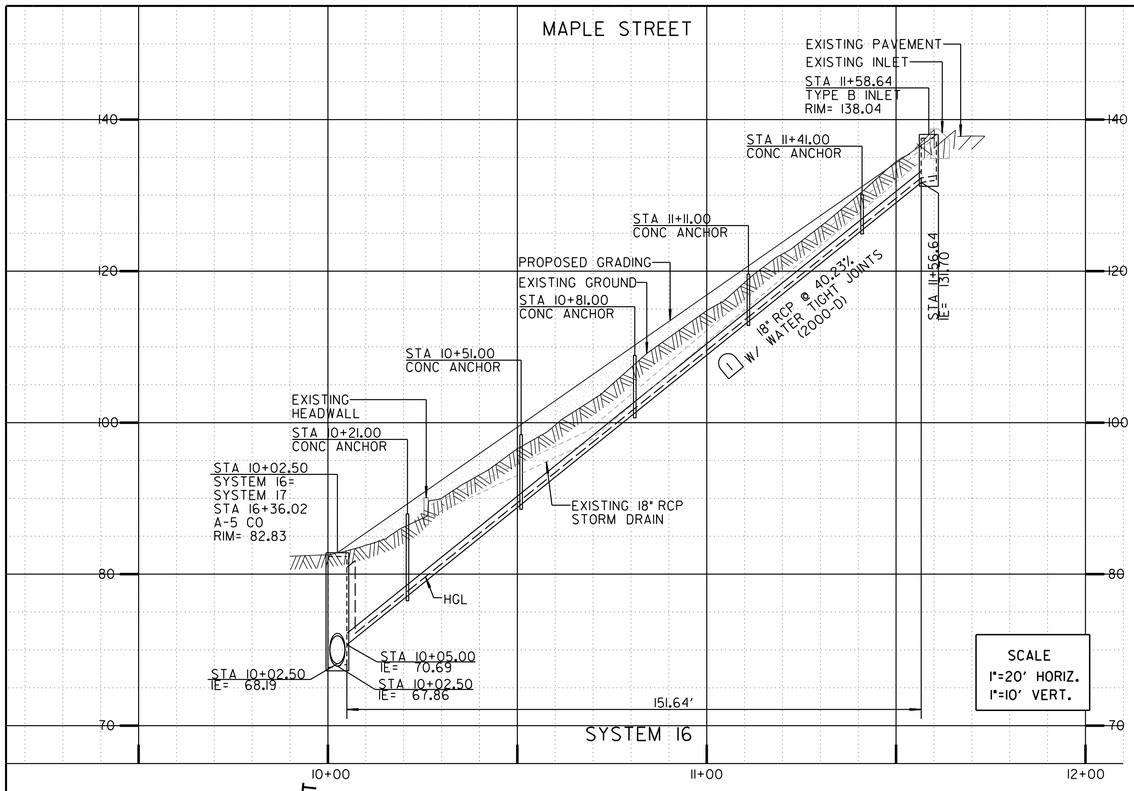
REGISTERED PROFESSIONAL ENGINEER KEVIN R. GIBSON NO. 52295 STATE OF CALIFORNIA

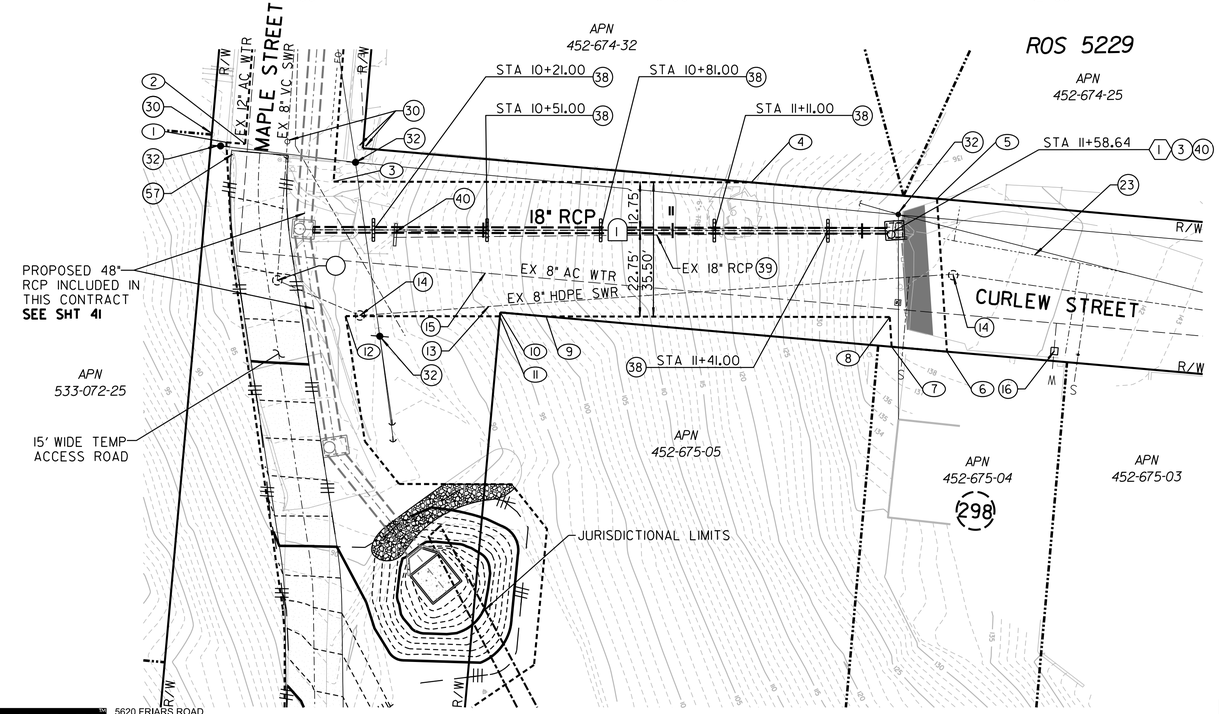
RICK ENGINEERING COMPANY
San Diego
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SAN DIEGO, CA 92110
619-291-0707
(FAX) 619-291-4165
rickengineering.com
Riverside - Orange - Sacramento - San Luis Obispo - Phoenix - Tucson - Denver

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FINAL SUBMITTAL





ALIGNMENT NAME:		SYSTEM 16	
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
POB	9+90.00	1847473.45	6279508.99
PI	10+00.00	1847483.45	6279508.82
TANGENTIAL DIRECTION	N 0° 58'09" W		
TANGENTIAL LENGTH:	10.00		
ELEMENT: LINEAR			
PI	10+00.00	1847483.45	6279508.82
PI	10+02.50	1847485.95	6279508.79
TANGENTIAL DIRECTION	N 0° 41'39" W		
TANGENTIAL LENGTH:	2.50		
ELEMENT: LINEAR			
PI	10+02.50	1847485.95	6279508.79
PI	10+05.00	1847488.45	6279508.76
TANGENTIAL DIRECTION	N 0° 41'39" W		
TANGENTIAL LENGTH:	2.50		
ELEMENT: LINEAR			
PI	10+05.00	1847488.45	6279508.76
PI	11+56.64	1847639.55	6279495.88
TANGENTIAL DIRECTION	N 4° 52'21" W		
TANGENTIAL LENGTH:	151.64		
ELEMENT: LINEAR			
PI	11+56.64	1847639.55	6279495.88
PI	11+58.64	1847641.52	6279495.58
TANGENTIAL DIRECTION	N 8° 43'04" W		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	11+58.64	1847641.52	6279495.58
PI	11+60.64	1847643.50	6279495.28
TANGENTIAL DIRECTION	N 8° 43'04" W		
TANGENTIAL LENGTH:	2.00		

STORM DRAIN DATA TABLE				
NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
1	N04° 52'21"W		151.64'	18" RCP (2000-D)•

•WATER-TIGHT JOINTS

STRUCTURE DATA TABLE				
NO.	STA	NORTHING	EASTING	REMARKS
1	11+58.64	1847641.53	6279495.58	TYPE B INLET

LIMITS OF WORK DATA TABLE		
NO.	NORTHING	EASTING
1	1847463.70	6279487.73
2	1847468.70	6279487.73
3	1847492.79	6279495.60
4	1847602.90	6279486.21
5	1847651.90	6279486.26
6	1847658.03	6279526.27
7	1847643.36	6279526.26
8	1847642.17	6279518.49
9	1847551.80	6279526.20
10	1847539.64	6279526.19
11	1847539.63	6279527.23
12	1847499.06	6279530.69

CONSTRUCTION NOTES

3 CONSTRUCT TYPE B INLET
13 PROTECT EX SEWER MAIN IN PLACE
14 PROTECT EX SEWER MANHOLE IN PLACE
15 PROTECT EX WATER MAIN IN PLACE
16 PROTECT EX WATER APPURTENANCE IN PLACE
23 PROTECT GAS IN PLACE
30 PROTECT EX SURVEY MONUMENT IN PLACE
32 PROTECT EX UTILITY POLE
38 INSTALL CONCRETE ANCHOR
39 REMOVE EX STORM DRAIN
40 REMOVE EX STORM DRAIN STRUCTURE
56 ADJUST EX SEWER MANHOLE TO GRADE
57 PROTECT EXIST GATE IN PLACE

NOTES:

1. FOR DEMOLITION WORK **SEE SHT 18**
2. FOR SURFACE IMPROVEMENTS **SEE SHT 56**
3. FOR TEMPORARY ACCESS ROAD **SEE SHT 71**
4. FOR REVEGETATION WORK **SEE SHT 81**

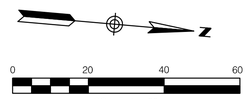
REFERENCES:

WATER: 10994-4-D, 19695-11-D
SEWER: 28253-8-D
STORM DRAIN: 3646-D, 10994-4-D
TELEPHONE: BI
GAS: 15885-118815
ELECTRIC: 15885-118815
CABLE TV: MAP 2

RETIREMENTS:

18" - RCP - 133.00' -
HEADWALLS - 2

CONTRACTOR'S NOTE:
USE EXTREME CAUTION WHEN WORKING DUE TO LOW OVERHEAD UTILITY LINES.



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C-20

CURLEW STREET

MAPLE CANYON RESTORATION – PHASE 1

CURLEW STREET
MAPLE STREET TO NUTMEG STREET

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 39 OF 98 SHEETS

STORM DRAIN WBS B-12040

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

APPROVED:
FOR CITY ENGINEER _____ DATE
SHEILA BOSE
PRINT DCE NAME _____ RCE#

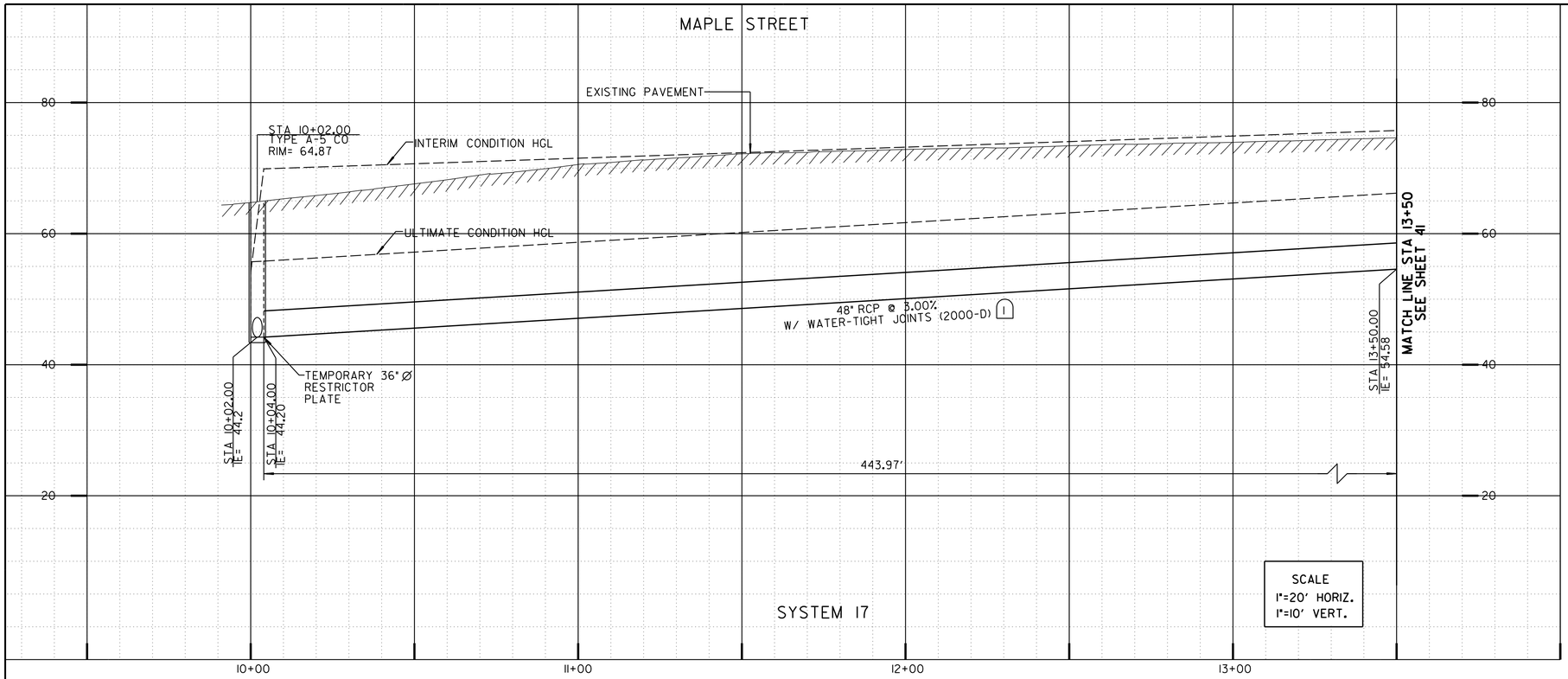
SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE
38321-39-D

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

FINAL SUBMITTAL



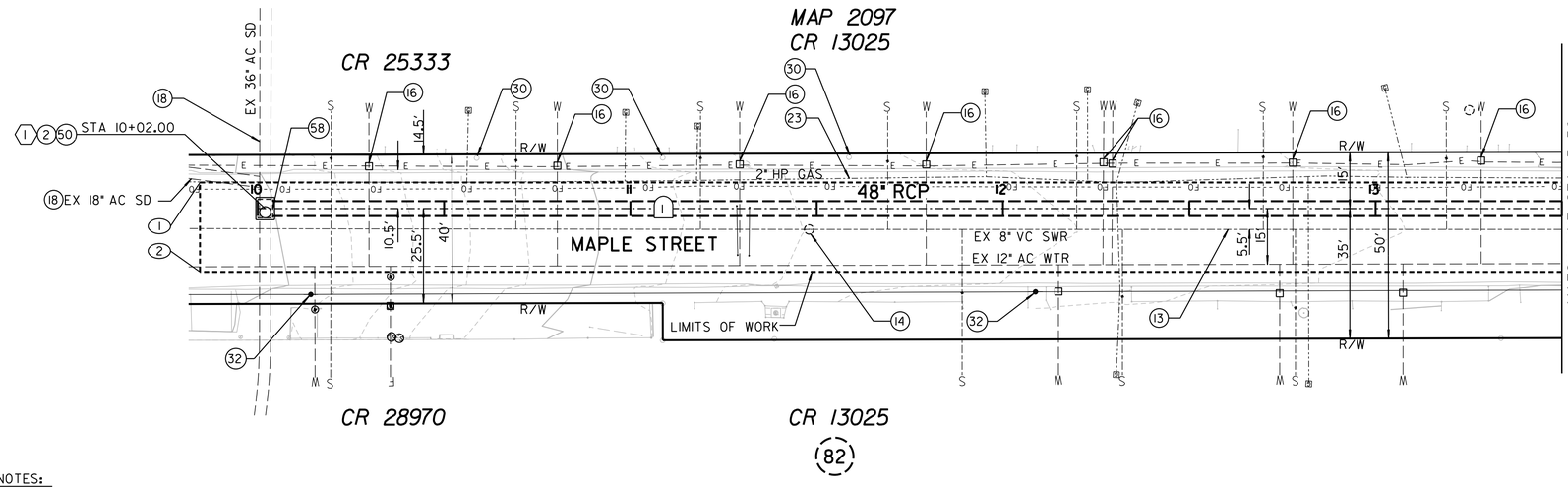
ALIGNMENT NAME:	SYSTEM 17		
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
POB	9+90.00	1847329.05	6278889.45
PI	10+00.00	1847332.39	6278898.88
TANGENTIAL DIRECTION:	N 70° 26'18" E		
TANGENTIAL LENGTH:	10.00		
ELEMENT: LINEAR			
PI	10+00.00	1847332.39	6278898.88
PI	10+02.00	1847333.06	6278900.76
TANGENTIAL DIRECTION:	N 70° 26'18" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+02.00	1847333.06	6278900.76
PI	10+04.00	1847333.73	6278902.64
TANGENTIAL DIRECTION:	N 70° 26'18" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	10+04.00	1847333.73	6278902.64
PI	14+47.97	1847482.38	6279320.99
TANGENTIAL DIRECTION:	N 70° 26'18" E		
TANGENTIAL LENGTH:	443.97		
SEE SHEET 41			

STRUCTURE DATA TABLE				
NO.	STA	NORTHING	EASTING	REMARKS
(1)	10+02.00	1847333.06	6278900.76	TYPE A-5 CO

STORM DRAIN DATA TABLE				
NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
(1)	N70° 26'18"E		346.00'	48" RCP (2000-D)•

•WATER-TIGHT JOINTS

LIMITS OF WORK DATA TABLE		
NO.	NORTHING	EASTING
(1)	1847333.80	6278881.93
(2)	1847311.19	6278889.96



CONSTRUCTION NOTES

(2) CONSTRUCT TYPE A-5 CLEANOUT
(13) PROTECT EX SEWER MAIN IN PLACE
(14) PROTECT EX SEWER MANHOLE IN PLACE
(15) PROTECT EX WATER MAIN IN PLACE
(16) PROTECT EX WATER APPURTENANCE IN PLACE
(18) PROTECT EX STORM DRAIN IN PLACE
(23) PROTECT GAS IN PLACE
(30) PROTECT EX SURVEY MONUMENT IN PLACE
(32) PROTECT EX UTILITY POLE
(50) CONNECT TO EX STORM DRAIN
(58) INSTALL 36" ø RESTRICTOR PLATE

REFERENCES:

WATER: 10994-4-D
SEWER: 28253-8-D
STORM DRAIN: 3646-D, 10994-4-D
TELEPHONE: BI
GAS: 15885-11881S
ELECTRIC: 15885-11881S
CABLE TV: MAP 2

RETIREMENTS:

NONE

NOTES:

1. FOR DEMOLITION WORK **SEE SHT 19**

CONTRACTOR'S NOTE:
USE EXTREME CAUTION WHEN WORKING DUE TO LOW OVERHEAD UTILITY LINES.

SCALE 1"=20'

SYSTEM 17

C-21

MAPLE CANYON RESTORATION – PHASE 1

MAPLE STREET
STATE STREET TO DOVE STREET

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 40 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER _____ DATE
SHEILA BOSE
PRINT DCE NAME RCE#

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE
38321-40-D

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

REGISTERED PROFESSIONAL ENGINEER · KEVYN R. GIBSON · NO. 52295 · STATE OF CALIFORNIA

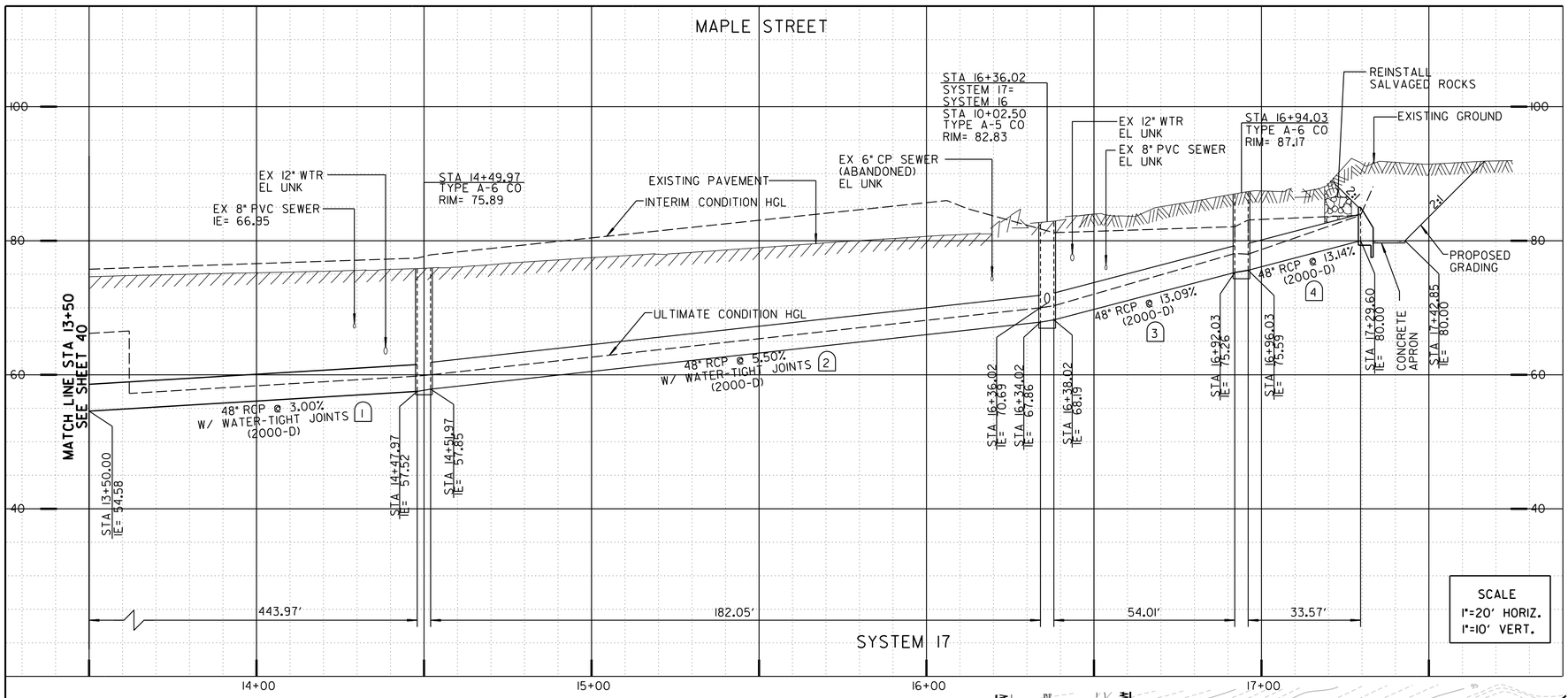
RICK ENGINEERING COMPANY
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619-291-0707
(FAX) 619-291-4165
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MAPLE STREET

FINAL SUBMITTAL



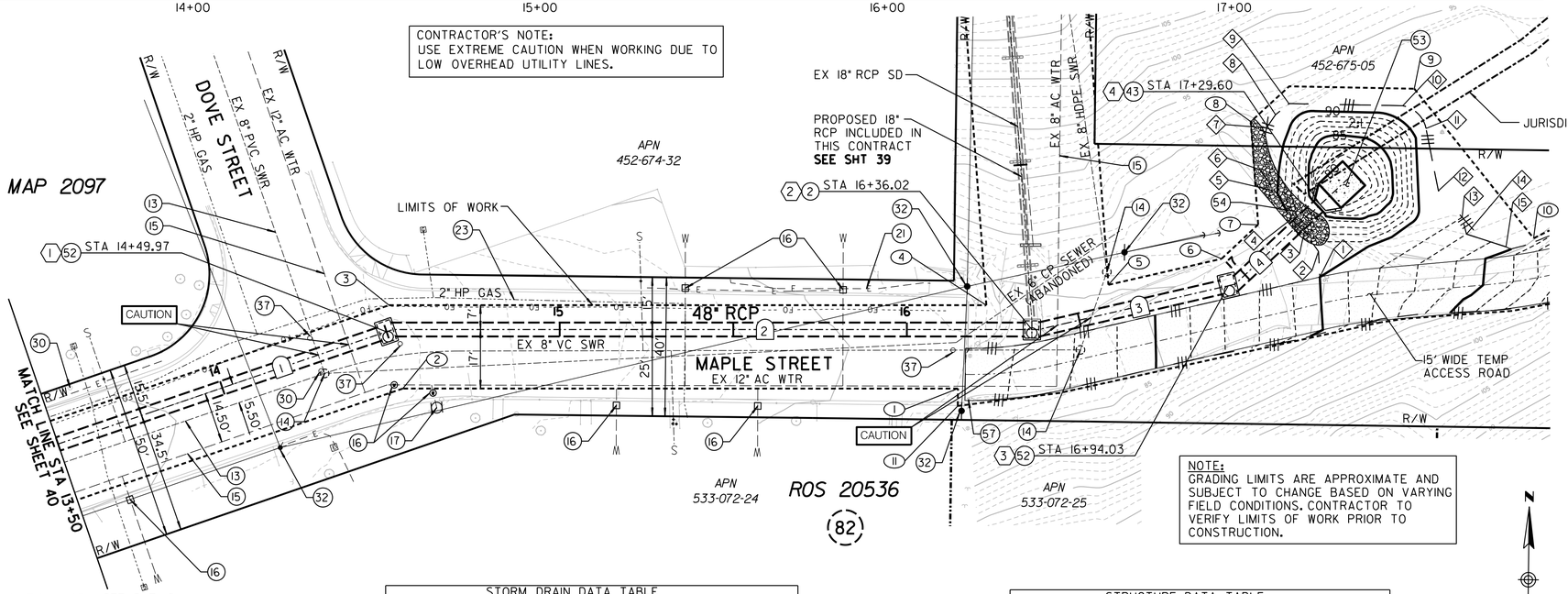
GRADING LIMITS DATA TABLE		
NO.	NORTHING	EASTING
1	1847502.04	6279591.56
2	1847509.45	6279591.08
3	1847515.13	6279586.92
4	1847518.62	6279583.08
5	1847526.66	6279578.46
6	1847532.71	6279573.93
7	1847544.83	6279575.67
8	1847548.65	6279578.24
9	1847551.89	6279582.06
10	1847551.67	6279614.84
11	1847545.20	6279621.65
12	1847527.30	6279625.42
13	1847519.76	6279632.35
14	1847514.93	6279633.65
15	1847511.41	6279645.10

LIMITS OF WORK DATA TABLE		
NO.	NORTHING	EASTING
1	1847468.70	6279487.73
2	1847466.76	6279327.79
3	1847490.71	6279323.51
4	1847492.79	6279495.60
5	1847499.06	6279530.69
6	1847506.98	6279563.18
7	1847516.86	6279573.43
8	1847546.58	6279571.12
9	1847556.61	6279618.12
10	1847513.98	6279653.00
11	1847463.70	6279487.73

ALIGNMENT NAME:	SYSTEM 17		
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
PI	14+47.97	1847482.38	6279320.90
PI	14+49.97	1847483.05	6279322.80
TANGENTIAL	N 70° 26'18" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	14+49.97	1847483.05	6279322.80
PI	14+51.97	1847483.72	6279324.70
TANGENTIAL	N 70° 26'18" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	14+51.97	1847483.72	6279324.70
PI	16+34.02	1847485.93	6279506.70
TANGENTIAL	N 89° 18'21" E		
TANGENTIAL LENGTH:	182.05		
ELEMENT: LINEAR			
PI	16+34.02	1847485.93	6279506.70
PI	16+36.02	1847485.95	6279508.70
TANGENTIAL	N 89° 18'21" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	16+36.02	1847485.95	6279508.70
PI	16+38.02	1847485.98	6279510.79
TANGENTIAL	N 89° 18'21" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	16+38.02	1847485.98	6279510.79
PI	16+92.03	1847498.76	6279563.20
TANGENTIAL	N 76° 18'21" E		
TANGENTIAL LENGTH:	54.01		
ELEMENT: LINEAR			
PI	16+92.03	1847498.76	6279563.20
PI	16+94.03	1847499.24	6279565.20
TANGENTIAL	N 76° 18'21" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	16+94.03	1847499.24	6279565.20
PI	16+96.03	1847499.71	6279567.16
TANGENTIAL	N 76° 18'21" E		
TANGENTIAL LENGTH:	2.00		
ELEMENT: LINEAR			
PI	16+96.03	1847499.71	6279567.16
PI	17+29.60	1847522.90	6279591.43
TANGENTIAL	N 46° 18'21" E		
TANGENTIAL LENGTH:	33.57		
ELEMENT: LINEAR			
PI	17+29.60	1847522.90	6279591.43
POE	17+79.60	1847557.44	6279627.50
TANGENTIAL	N 46° 18'21" E		
TANGENTIAL LENGTH:	50.00		

CONSTRUCTION NOTES

2 CONSTRUCT TYPE A-5 CLEANOUT
13 PROTECT EX SEWER MAIN IN PLACE
14 PROTECT EX SEWER MANHOLE IN PLACE
15 PROTECT EX WATER MAIN IN PLACE
16 PROTECT EX WATER APPURTENANCE IN PLACE
17 PROTECT EX FIRE HYDRANT IN PLACE
21 PROTECT ELEC COND IN PLACE
23 PROTECT GAS IN PLACE
30 PROTECT EX SURVEY MONUMENT IN PLACE
32 PROTECT UTILITY POLE
37 RESET EX SURVEY MONUMENT
43 CONSTRUCT WING TYPE HEADWALL
52 CONSTRUCT TYPE A-6 CLEANOUT
53 CONSTRUCT CONCRETE APRON **SEE DETAIL SHT 46**
54 REINSTALL SALVAGED ROCKS
57 PROTECT EXIST GATE IN PLACE



NOTE:
GRADING LIMITS ARE APPROXIMATE AND SUBJECT TO CHANGE BASED ON VARYING FIELD CONDITIONS. CONTRACTOR TO VERIFY LIMITS OF WORK PRIOR TO CONSTRUCTION.

RETIREMENTS:
NONE

REFERENCES:
WATER: 10994-4-D, 19695-11-D
SEWER: 28253-8-D
STORM DRAIN: 3646-D, 10994-4-D
TELEPHONE: BI
GAS: 15885-118815
ELECTRIC: 15885-118815
CABLE TV: MAP 2

NOTES:
1. FOR DEMOLITION WORK **SEE SHT 18**
2. FOR TEMPORARY ACCESS ROAD **SEE SHT 71**
3. FOR HEADWALL GRADING DETAILS **SEE SHT 46**
4. FOR REVEGETATION WORK **SEE SHT 81**

STORM DRAIN DATA TABLE				
NO.	DELTA OR BRG.	RADIUS	LENGTH	REMARKS
1	N70° 26'18"E		97.97'	48" RCP (2000-D)*
2	N89° 18'21"E		182.05'	48" RCP (2000-D)*
3	N76° 18'21"E		54.01'	48" RCP (2000-D)*
4	N46° 18'21"E		33.57'	48" RCP (2000-D)*

*WATER-TIGHT JOINTS

SYSTEM 17

STRUCTURE DATA TABLE				
NO.	STA	NORTHING	EASTING	REMARKS
1	14+49.97	1847483.05	6279322.88	TYPE A-6 CO
2	16+36.02	1847485.95	6279508.79	TYPE A-5 CO
3	16+94.03	1847499.24	6279565.22	TYPE A-6 CO
4	17+29.60	1847522.90	6279591.43	WING TYPE HEADWALL

SCALE 1" = 20'

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21-JAN-2020 09:04 knguyen

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

CONTRACTOR
INSPECTOR
DATE STARTED
DATE COMPLETED

C-22

MAPLE CANYON RESTORATION – PHASE 1

MAPLE STREET

DOVE STREET TO CURLEW STREET

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 41 OF 98 SHEETS

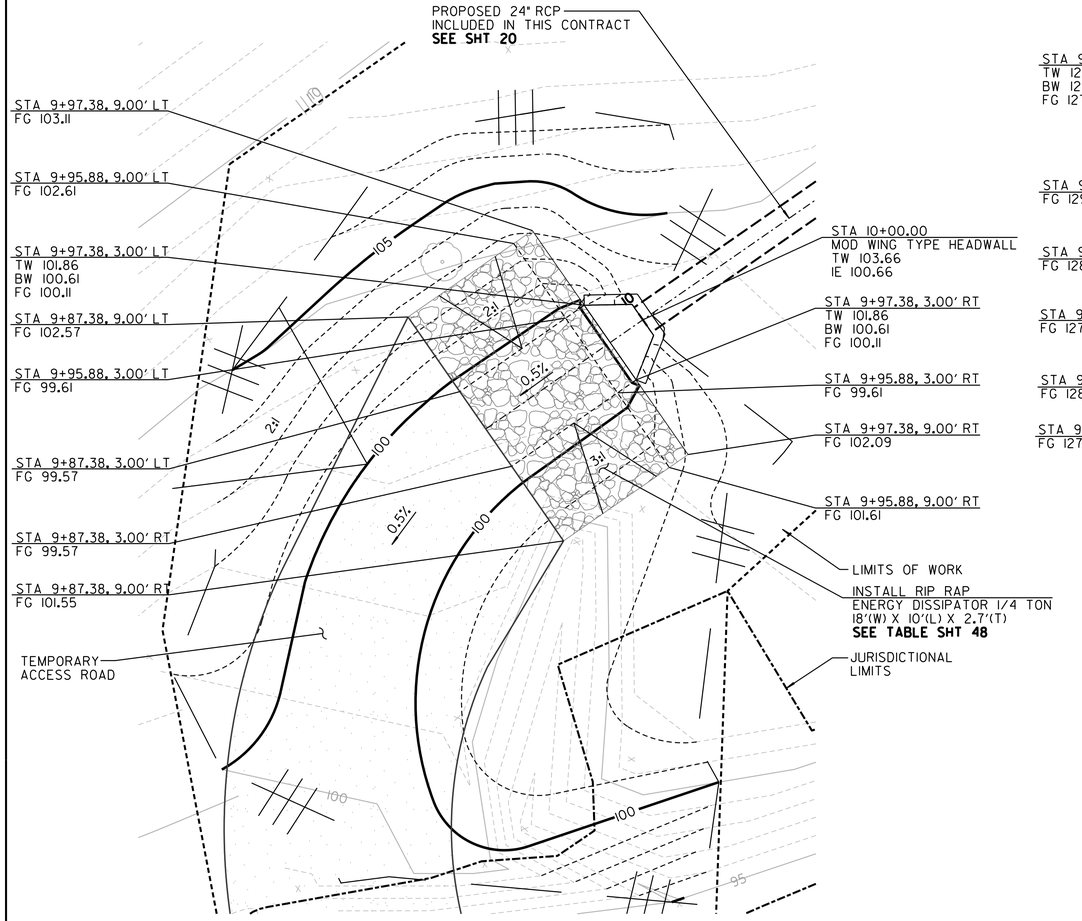
STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER DATE
SHEILA BOSE
PRINT DCE NAME RCE#

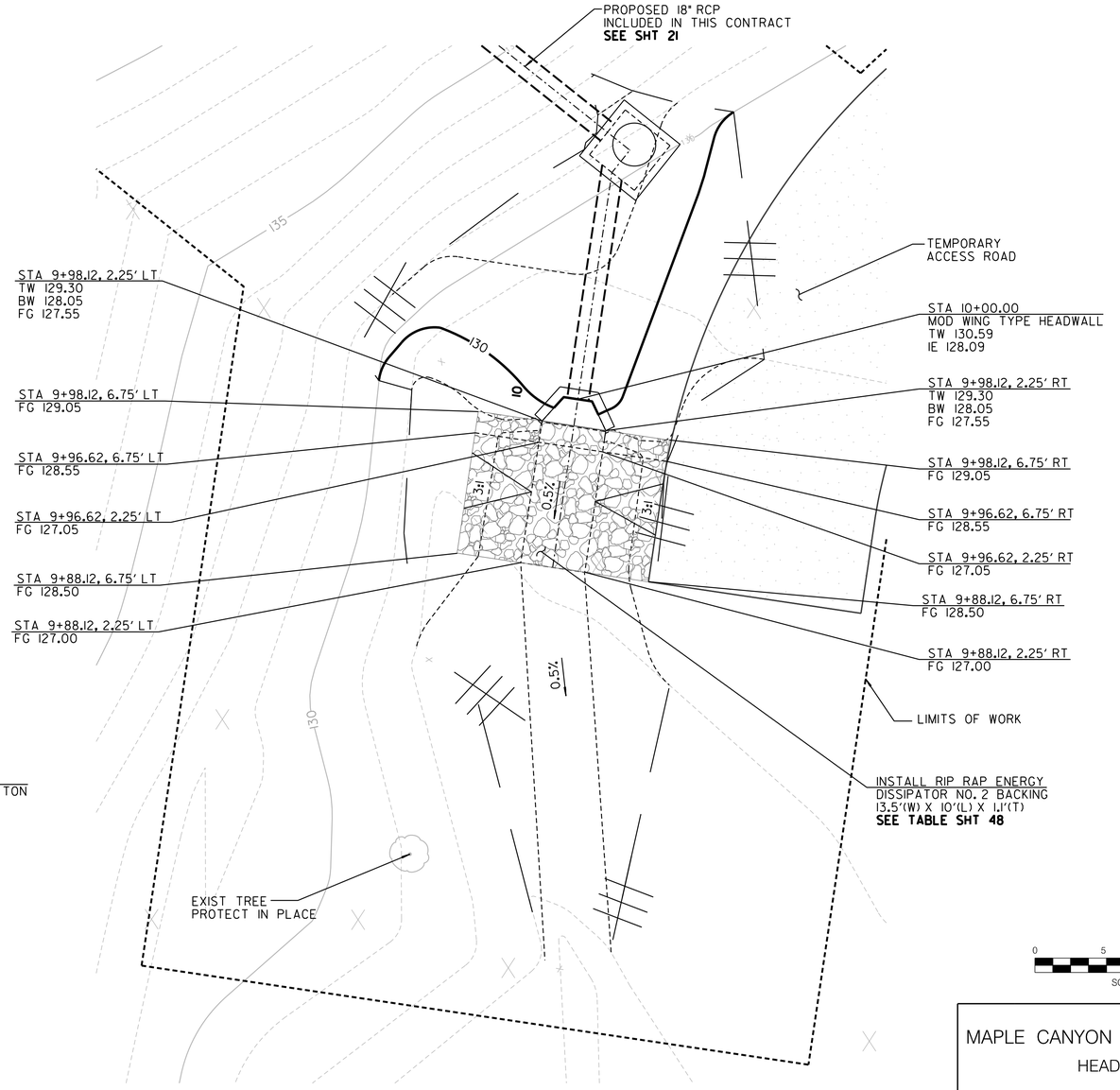
SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER
206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE
38321-41-D

MAPLE STREET

FINAL SUBMITTAL



RIP RAP ENERGY DISSIPATOR (SDD-104)
DRAINAGE SYSTEM 1DETAIL



RIP RAP ENERGY DISSIPATOR (SDD-104)
DRAINAGE SYSTEM 2 DETAIL

N

0 5 10 15
SCALE 1"=5'

C-23

HEADWALL DETAILS 1

MAPLE CANYON RESTORATION – PHASE 1
HEADWALL DETAILS 1

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 42 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER DATE
SHEILA BOSE
PRINT DCE NAME RCE#

SUBMITTED BY: ELHAM LOTFI
PROJECT MANAGER

CHECKED BY: BAREAZ PIROMARI
PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719
CCS27 COORDINATE

1846-6276
CCS83 COORDINATE

CONTRACTOR DATE STARTED
INSPECTOR DATE COMPLETED

38321-42-D

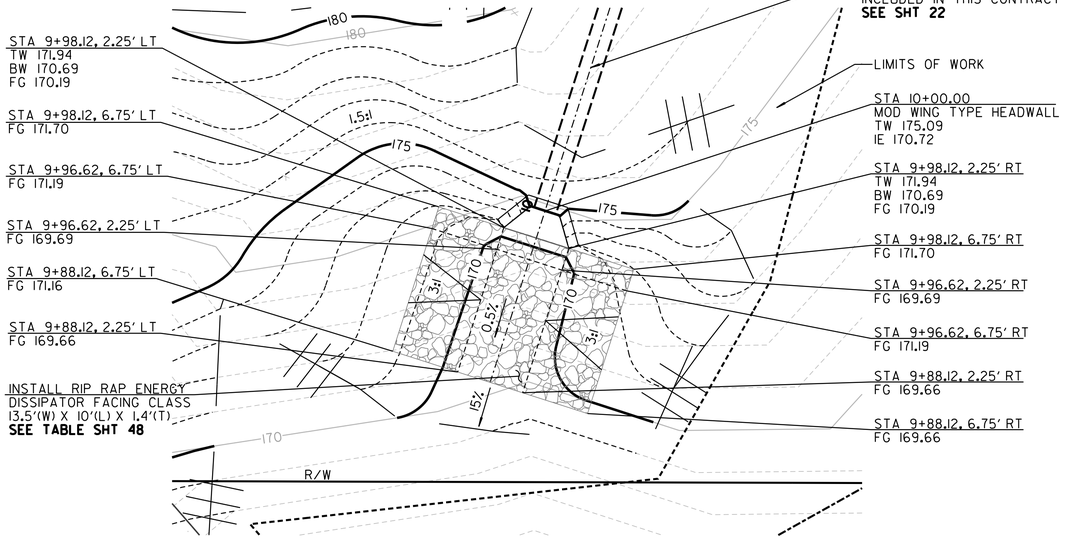
REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

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San Diego
5620 FRIARS ROAD
SAN DIEGO, CA 92110
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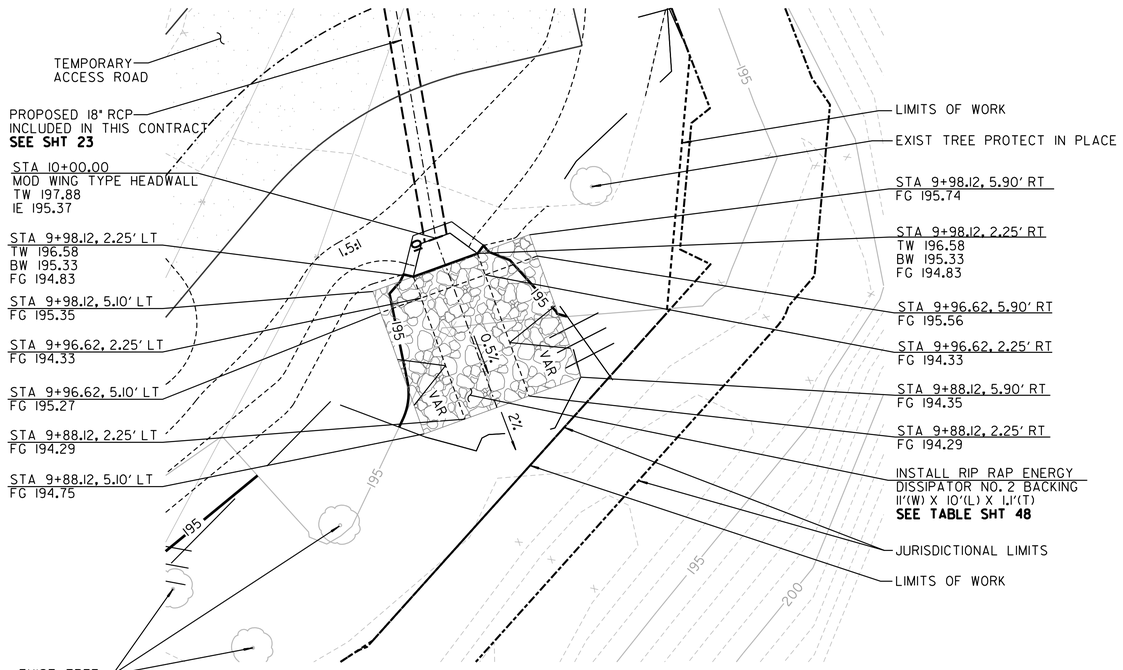
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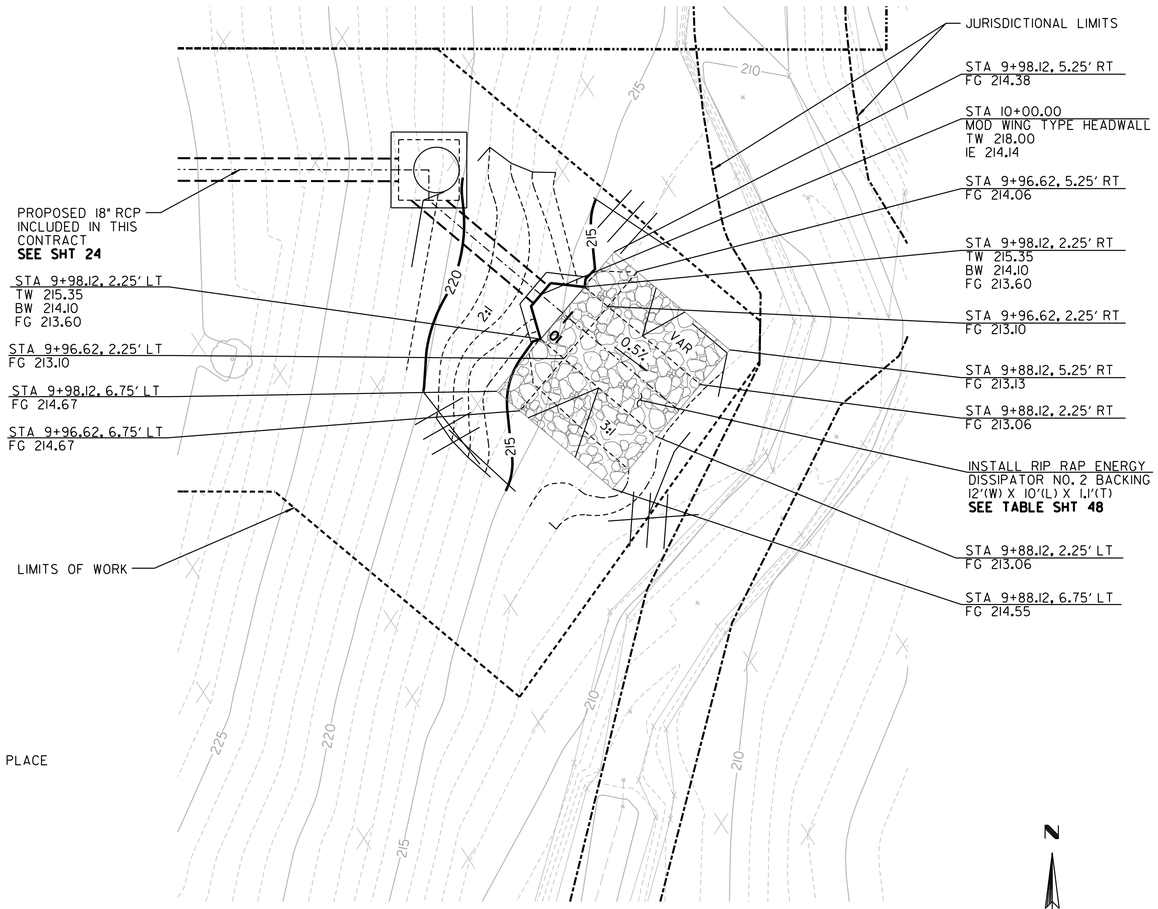
FINAL SUBMITTAL



RIP RAP ENERGY DISSIPATOR (SDD-104)
DRAINAGE SYSTEM 3 DETAIL



RIP RAP ENERGY DISSIPATOR (SDD-104)
DRAINAGE SYSTEM 4 DETAIL



RIP RAP ENERGY DISSIPATOR (SDD-104)
DRAINAGE SYSTEM 5 DETAIL

N

0 5 10 15
SCALE 1"=5'

C-24

HEADWALL DETAILS 2

MAPLE CANYON RESTORATION – PHASE 1
HEADWALL DETAILS 2

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 43 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER _____ DATE
SHEILA BOSE
PRINT DCE NAME RCE#

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

38321-43-D

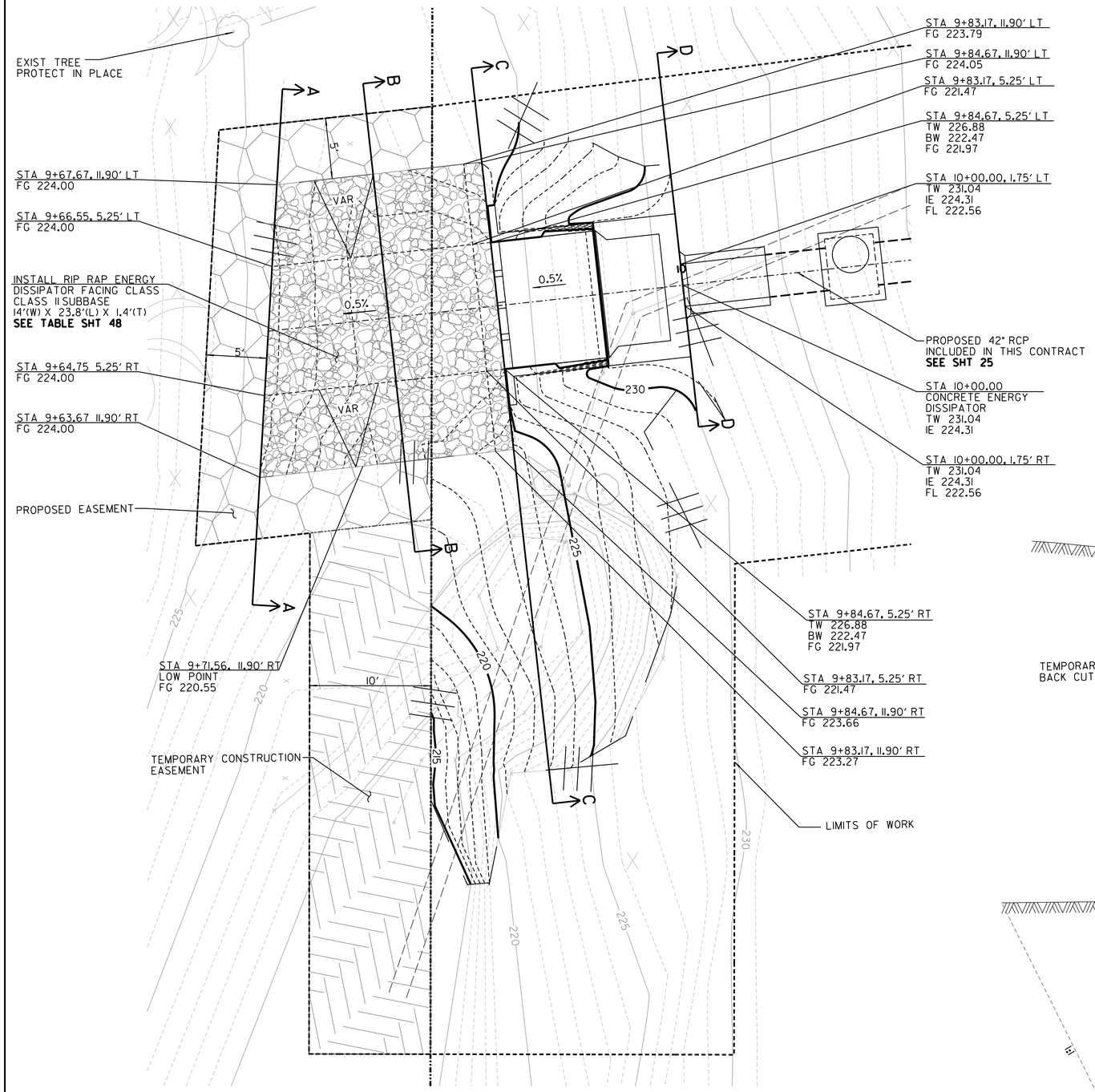
REGISTERED PROFESSIONAL ENGINEER KEVIN R. GIBSON NO. 52295 STATE OF CALIFORNIA

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SAN DIEGO, CA 92110
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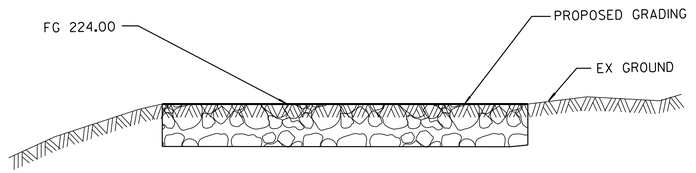
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21-JAN-2020 09:06 knguyen

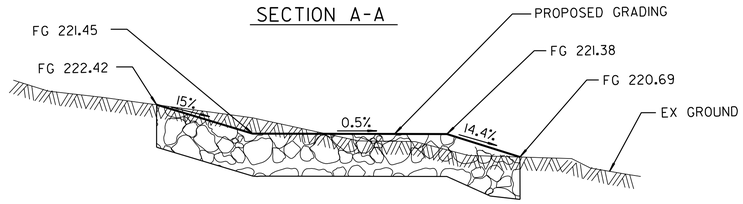
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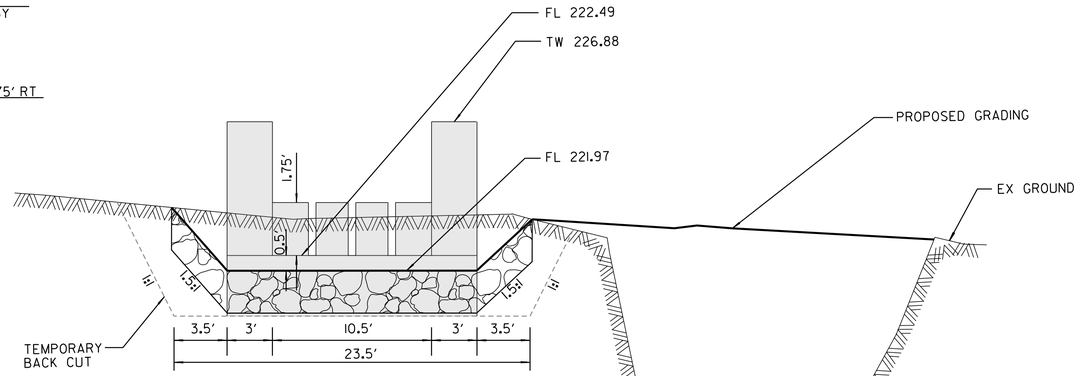
CONCRETE ENERGY DISSIPATOR (SDD-105)
DRAINAGE SYSTEM 6 DETAIL



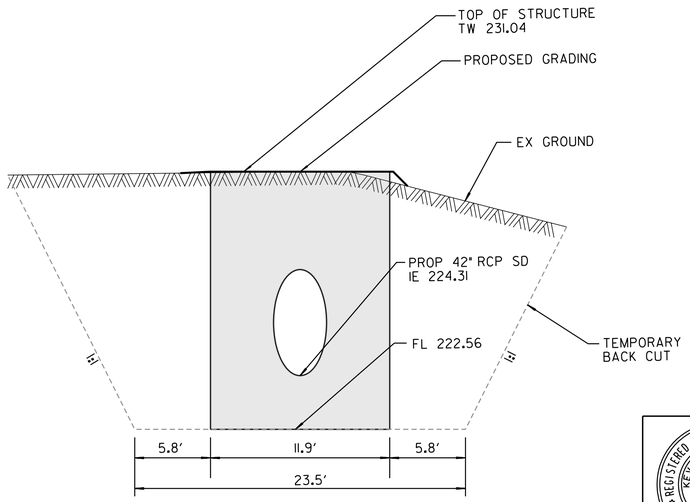
SECTION A-A



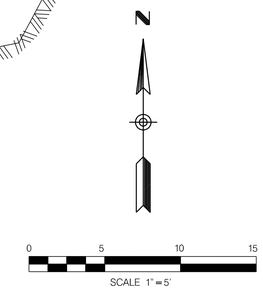
SECTION B-B



SECTION C-C



SECTION D-D



C-25

MAPLE CANYON RESTORATION – PHASE 1
HEADWALL DETAILS 3

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 44 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER _____ DATE
SHEILA BOSE
PRINT DCE NAME _____ RCE#

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER
206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE
38321-44-D

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

REGISTERED PROFESSIONAL ENGINEER · KEVIN R. GIBSON · NO. 52295 · STATE OF CALIFORNIA

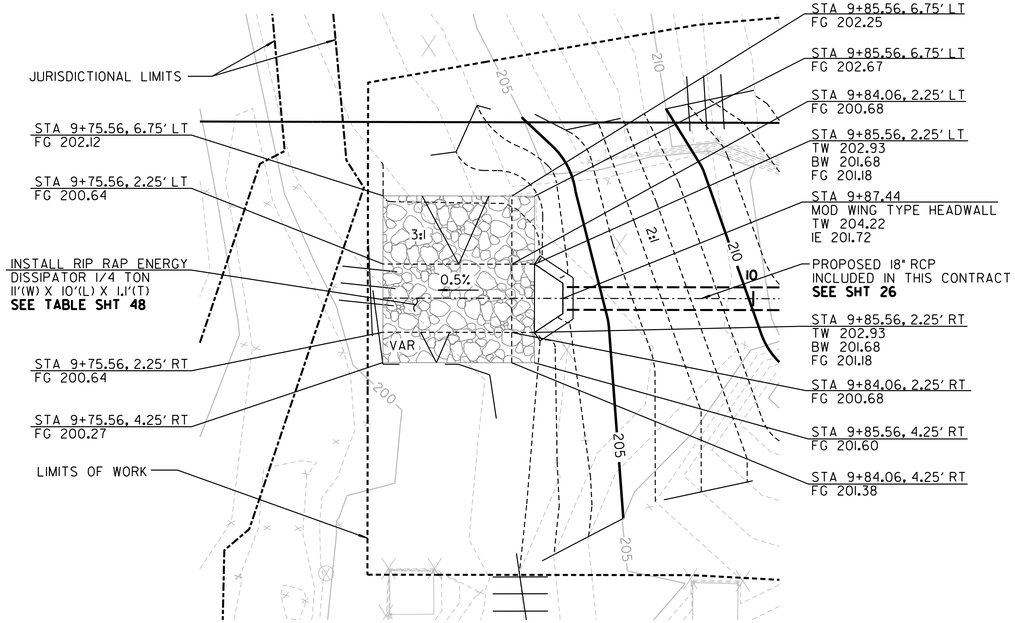
HEADWALL DETAILS 3

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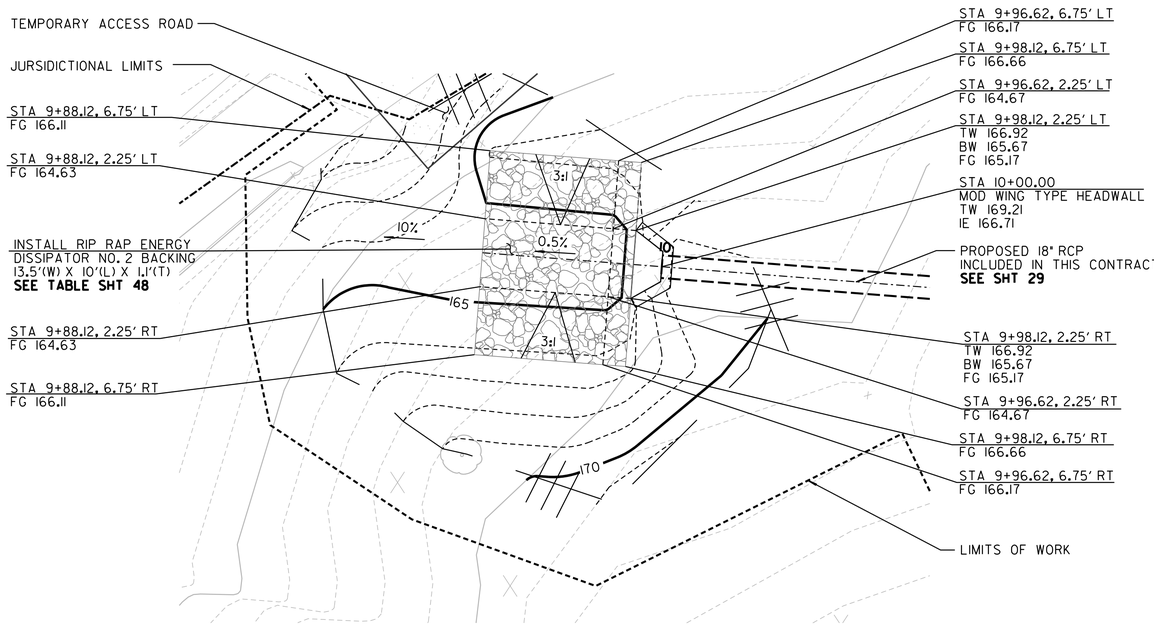
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21-JAN-2020 09:07 knguyen

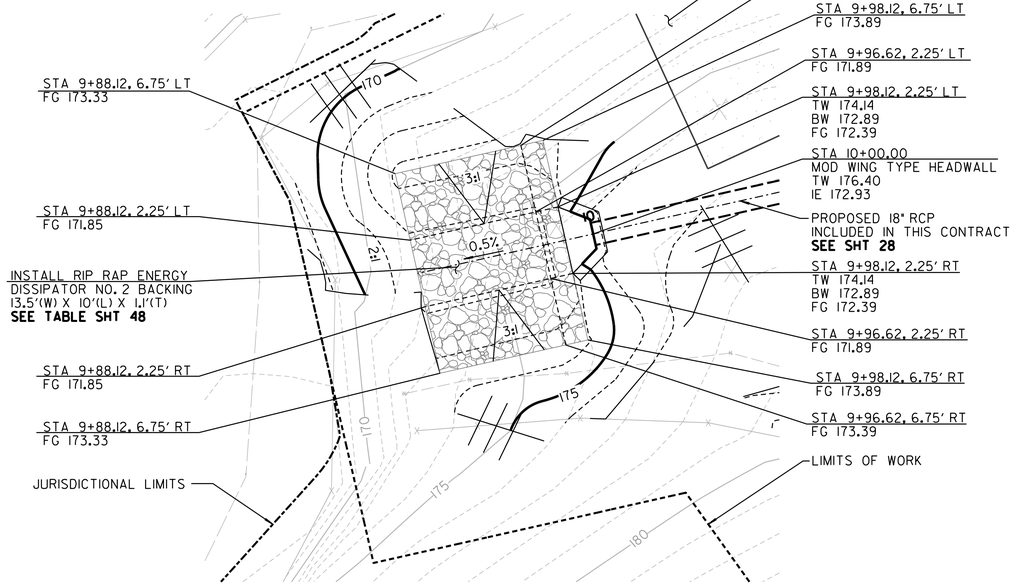
FINAL SUBMITTAL



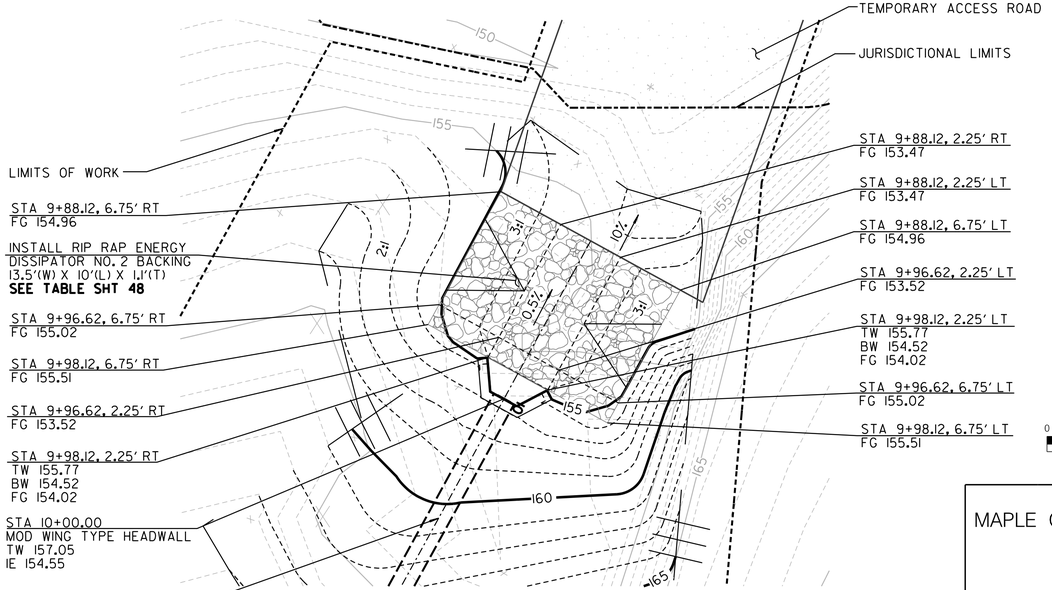
RIP RAP ENERGY DISSIPATOR (SDD-104)
DRAINAGE SYSTEM 7 DETAIL



RIP RAP ENERGY DISSIPATOR (SDD-104)
DRAINAGE SYSTEM 10 DETAIL



RIP RAP ENERGY DISSIPATOR (SDD-104)
DRAINAGE SYSTEM 9 DETAIL



RIP RAP ENERGY DISSIPATOR (SDD-104)
DRAINAGE SYSTEM 11 DETAIL

N

0 5 10 15
SCALE 1" = 5'

C-26

HEADWALL DETAILS 4

MAPLE CANYON RESTORATION – PHASE 1
HEADWALL DETAILS 4

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 45 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER DATE
SHEILA BOSE
PRINT DCE NAME RCE#

SUBMITTED BY:
ELHAM LOTFI
PROJECT MANAGER

CHECKED BY:
BAREAZ PIROMARI
PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719
CCS27 COORDINATE

1846-6276
CCS83 COORDINATE

CONTRACTOR
INSPECTOR
DATE STARTED
DATE COMPLETED

38321-45-D

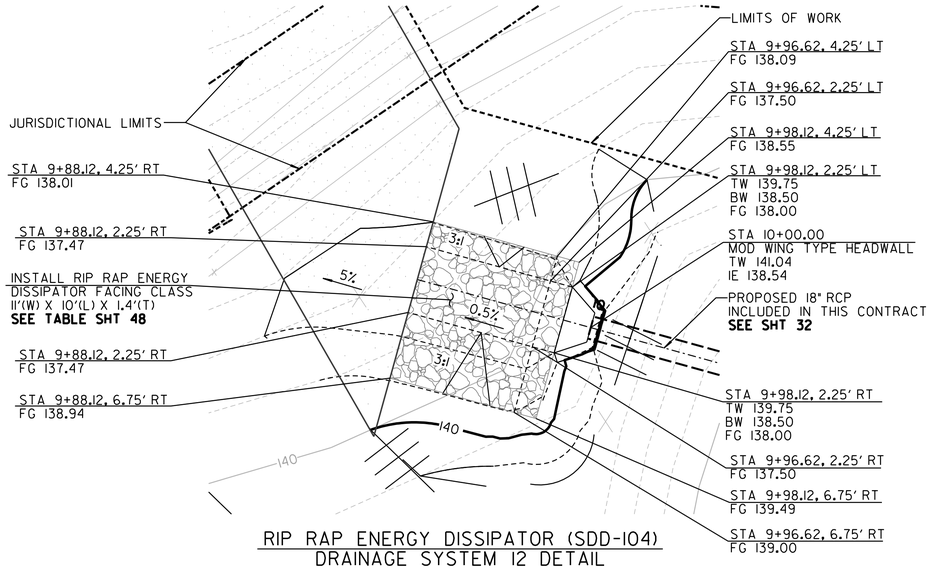
REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

RICK ENGINEERING COMPANY
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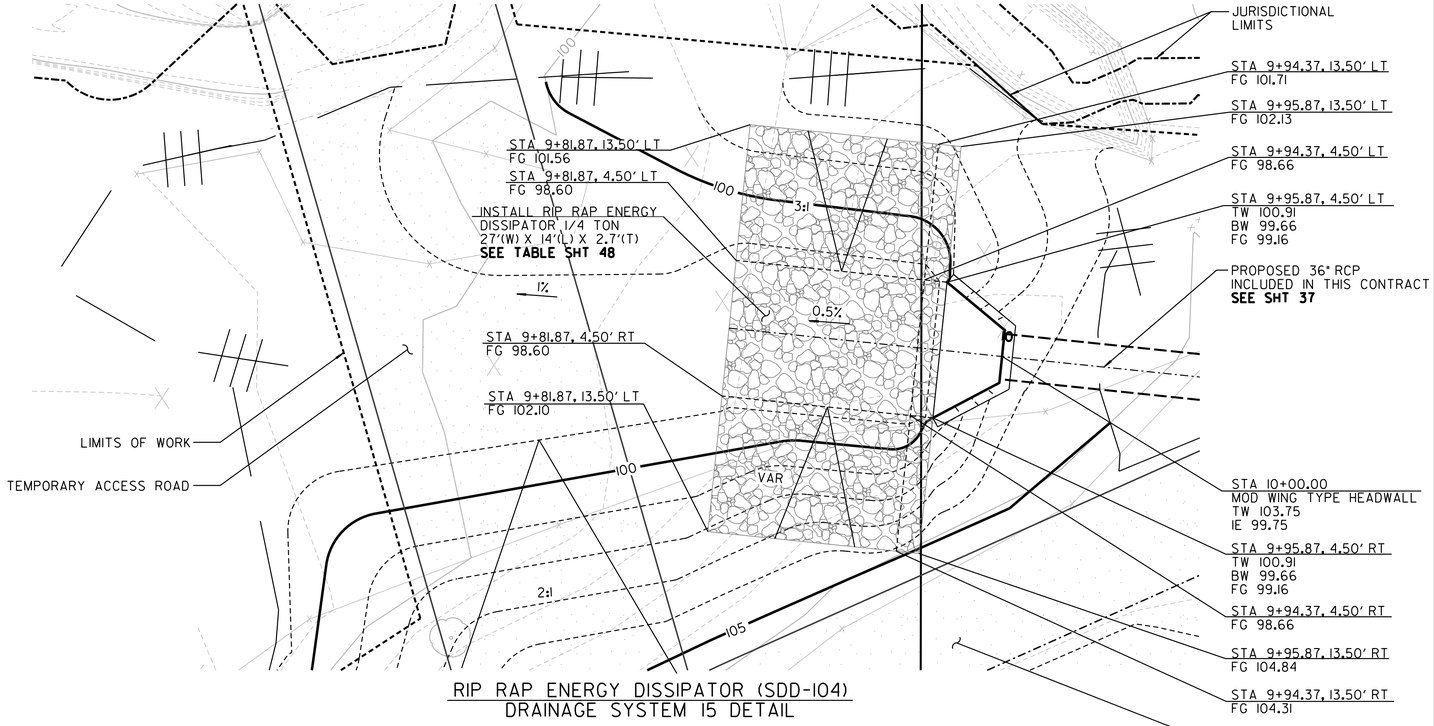
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21-JAN-2020 09:07 knguyen

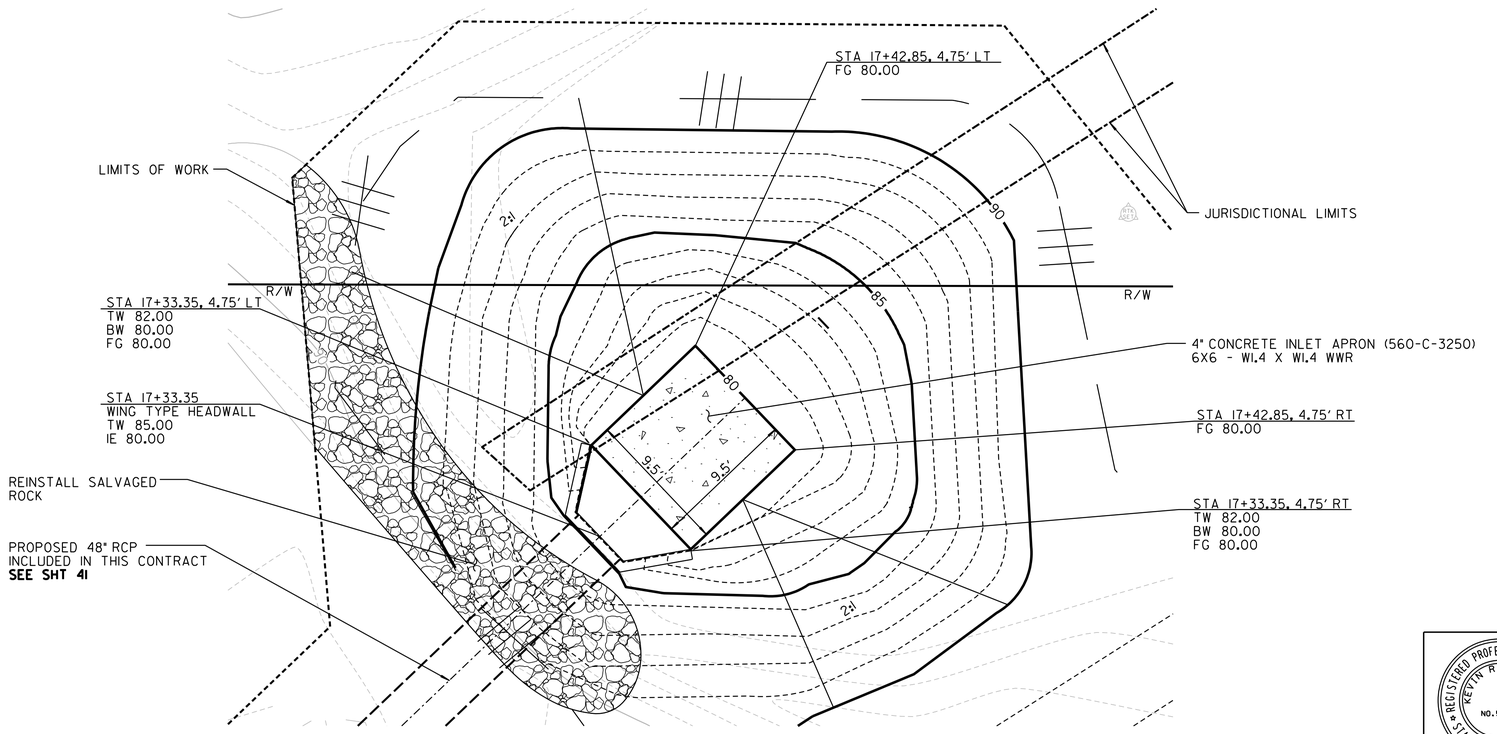
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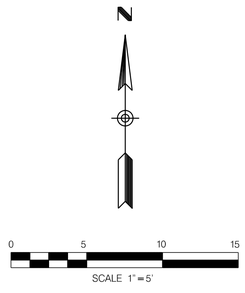
RIP RAP ENERGY DISSIPATOR (SDD-104)
DRAINAGE SYSTEM 12 DETAIL



RIP RAP ENERGY DISSIPATOR (SDD-104)
DRAINAGE SYSTEM 15 DETAIL



WING TYPE HEADWALL ENTRANCE STRUCTURE
DRAINAGE SYSTEM 17 DETAIL



C-27

MAPLE CANYON RESTORATION – PHASE 1

HEADWALL DETAILS 5

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 46 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER _____ DATE
SHEILA BOSE
PRINT DCE NAME _____ RCE#

SUBMITTED BY:
ELHAM LOTFI
PROJECT MANAGER

DESIGNED BY:
BAREAZ PIROMARI
PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719
CCS27 COORDINATE

1846-6276
CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

38321-46-D

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

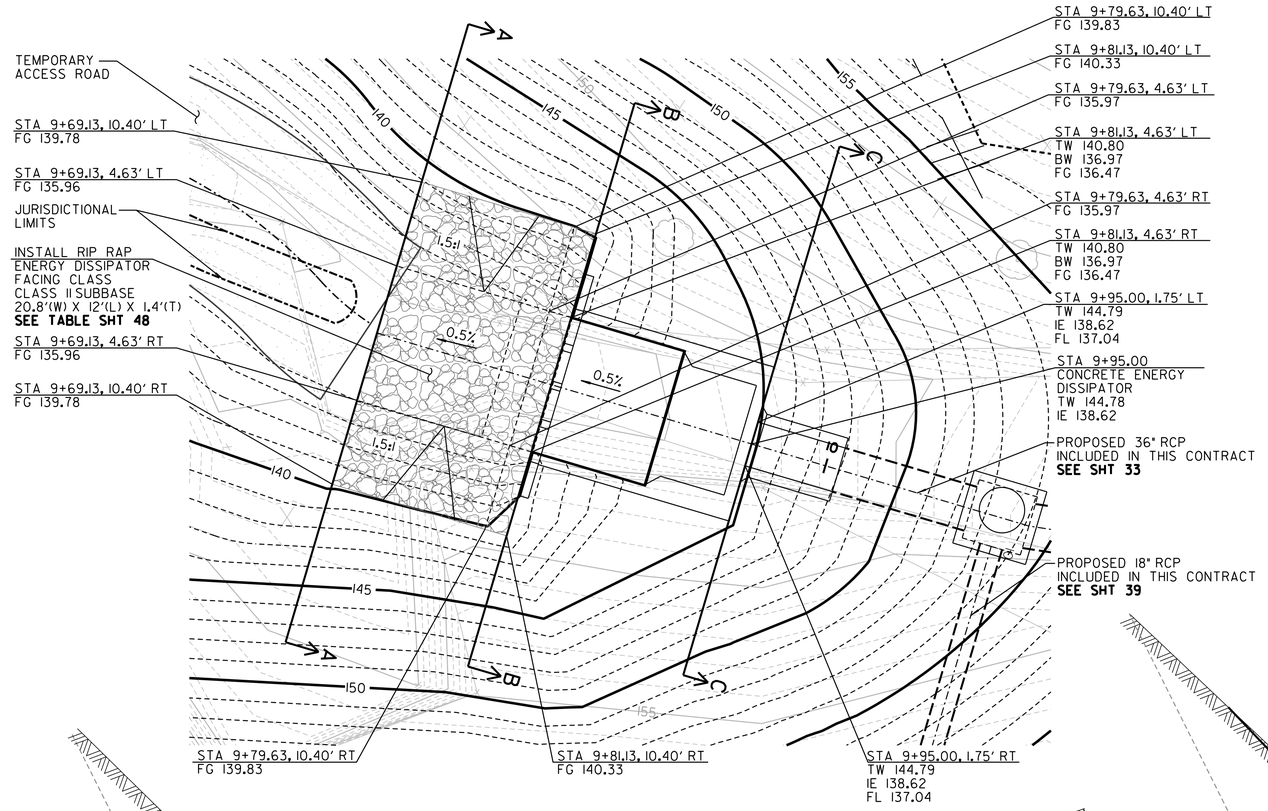
RICK ENGINEERING COMPANY
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5620 FRIARS ROAD
SAN DIEGO, CA 92110
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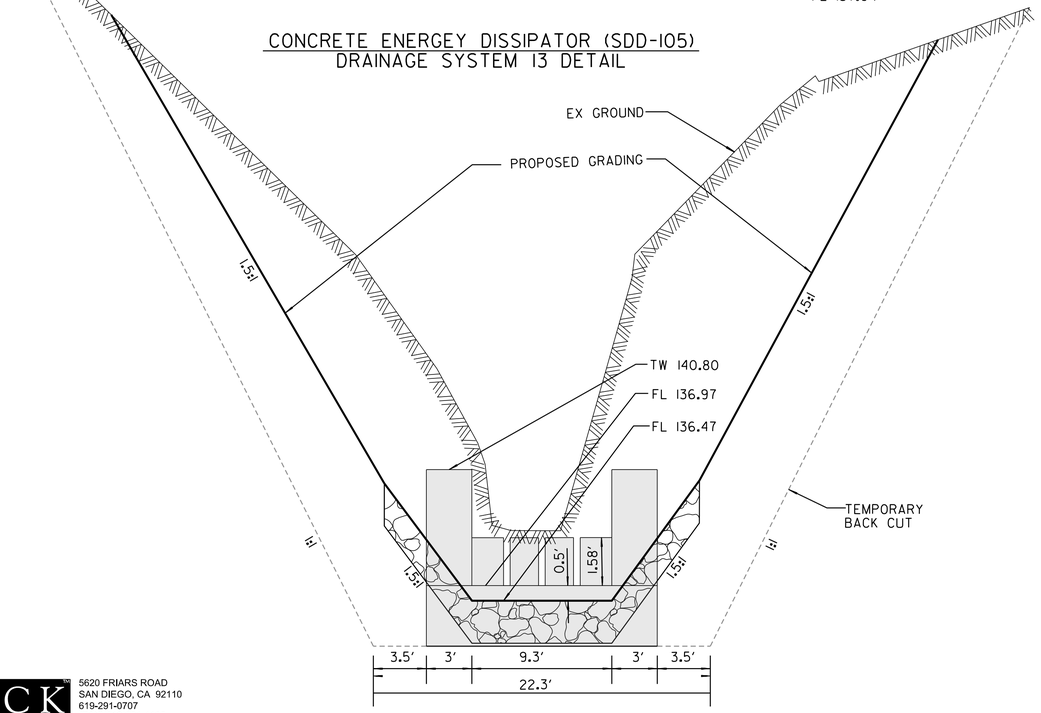
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HEADWALL DETAILS

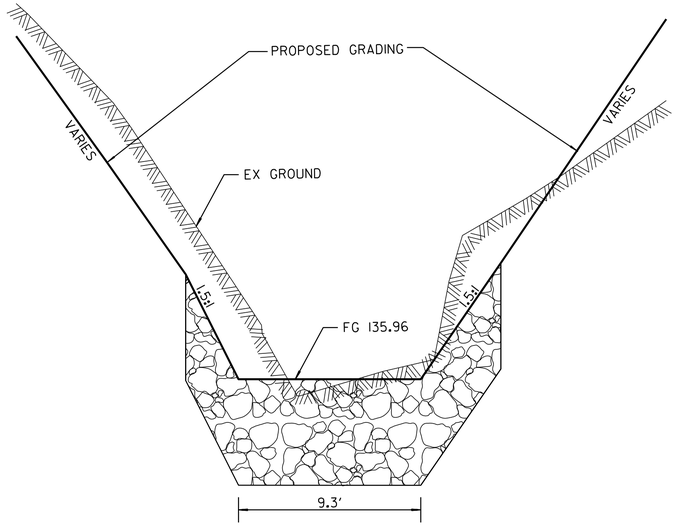
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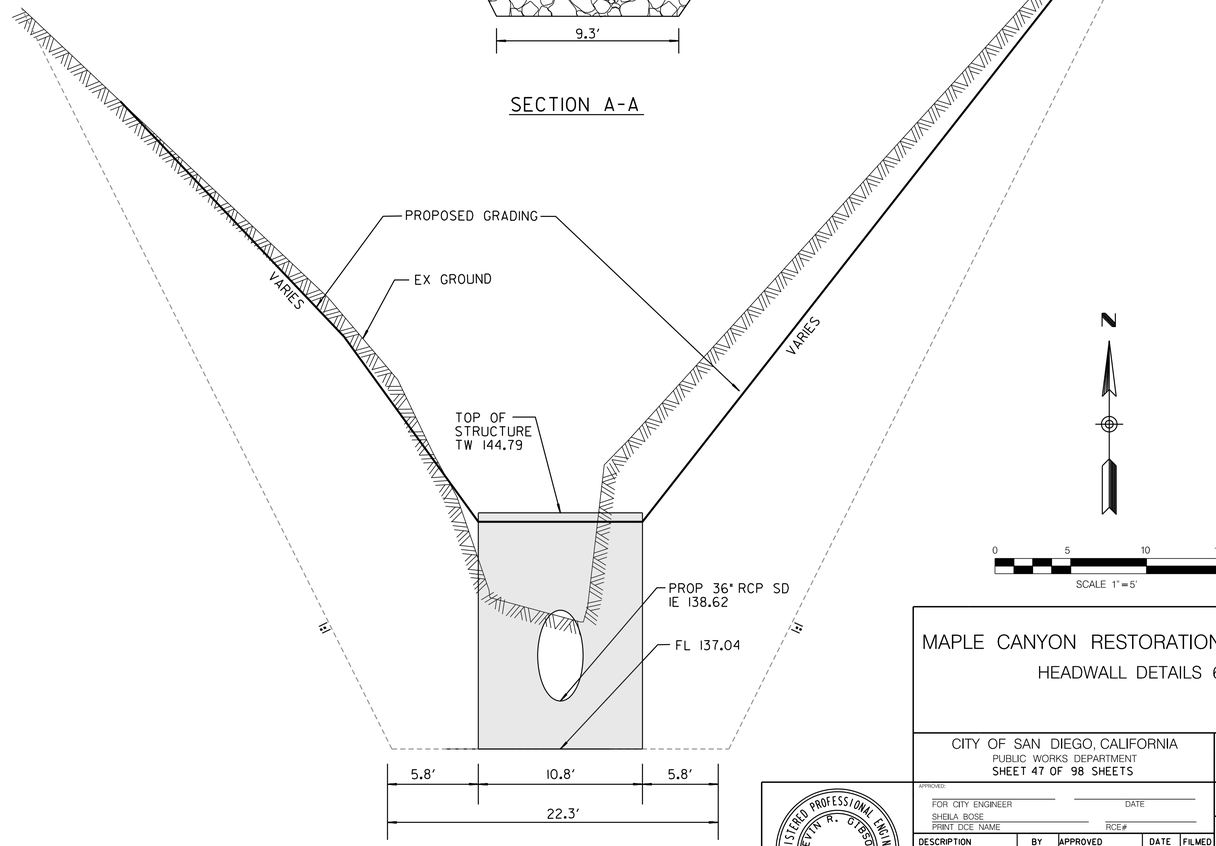
CONCRETE ENERGY DISSIPATOR (SDD-105)
DRAINAGE SYSTEM 13 DETAIL



SECTION B-B



SECTION A-A



SECTION C-C

C-28

MAPLE CANYON RESTORATION – PHASE 1

HEADWALL DETAILS 6

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 47 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER _____ DATE
SHEILA BOSE
PRINT DCE NAME _____ RCE#

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

38321-47-D

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

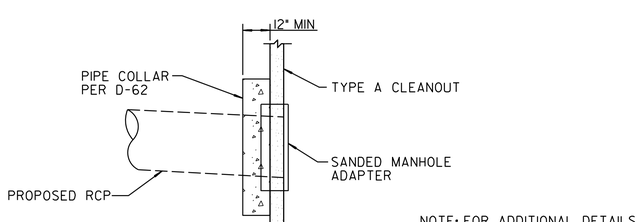
HEADWALL DETAILS 6

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RIP-RAP SIZING SUMMARY											
SYSTEM ID	Q100 (CFS)	PROPOSED PIPE SIZE (INCHES)	PIPE EXIT VELOCITY (FPS)	RIP-RAP EXIT VELOCITY (FPS)	ENERGY DISSIPATOR TYPE 2	ROCK CLASSIFICATION	FILTER BLANKET		ENERGY DISSIPATOR DIMENSIONS		
							UPPER (T) (FT)	LOWER (T) (FT)	LENGTH (L) (FT)	WIDTH (W) (FT)	THICKNESS (T) (FT)
1	8.8	24" RCP	10.0	1.9	SDD-104	1/4 TON	1	0.35	10	18.0	2.7
2	3.0	18" RCP	6.9	1.3	SDD-104	NO. 2 BACKING	1	N/A	10	13.5	1.1
3	5.9	18" RCP	9.5	1.8	SDD-104	FACING CLASS	1	N/A	10	13.5	1.4
4	2.1	18" RCP	5.6	1.2	SDD-104	NO. 2 BACKING	1	N/A	10	11.0	1.1
5	1.4	18" RCP	4	1.0	SDD-104	NO. 2 BACKING	1	N/A	10	12.0	1.1
6	54.7	42" RCP	36.8	EXIT FROM CONC. PAD ONTO RIP-RAP 3.3 FPS	SDD-105	FACING CLASS	1	N/A	14	23.8	1.4
7	5.7	18" RCP	22.3	1.6	SDD-104	1/4 TON	1	N/A	10	11.0	1.1
8	13	EX 18" RCP	-	EXIT FROM CONC. PAD ONTO RIP-RAP 2.5 FPS	EX SDD-105	FACING CLASS	1	N/A	10	12.5	1.4
9	1.1	18" RCP	3.8	1.0	SDD-104	NO. 2 BACKING	1	N/A	10	13.5	1.1
10	4.6	18" RCP	6.8	1.6	SDD-104	NO. 2 BACKING	1	N/A	10	13.5	1.1
11	1.8	18" RCP	5.0	1.1	SDD-104	NO. 2 BACKING	1	N/A	10	13.5	1.1
12	5.1	18" RCP	9.3	1.7	SDD-104	FACING CLASS	1	N/A	10	11.0	1.4
13,14	42.1	36" RCP	31.9	EXIT FROM CONC. PAD ONTO RIP-RAP 3.1 FPS	SDD-105	FACING CLASS	1	N/A	12	20.8	1.4
15	36.9	36" RCP	10.7	2.7	SDD-104	1/4 TON	1	0.35	14	27.0	2.7

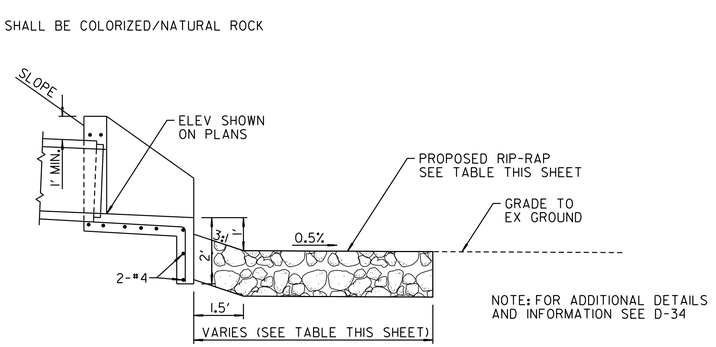
NOTES:

1. RIP-RAP SHALL BE COLORIZED/NATURAL ROCK



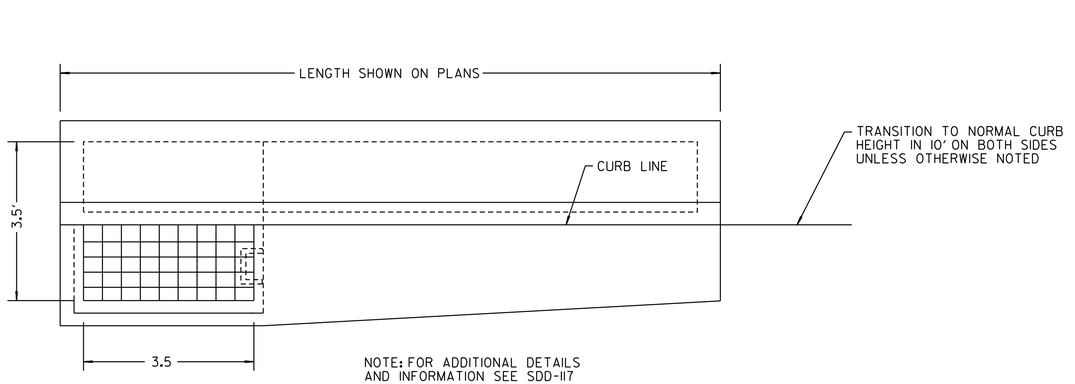
MODIFIED TYPE A CLEANOUT W/ PIPE COLLAR

NO SCALE



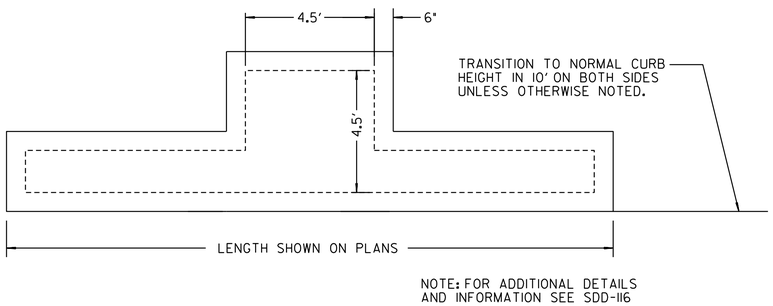
MODIFIED WING TYPE HEADWALL

NO SCALE



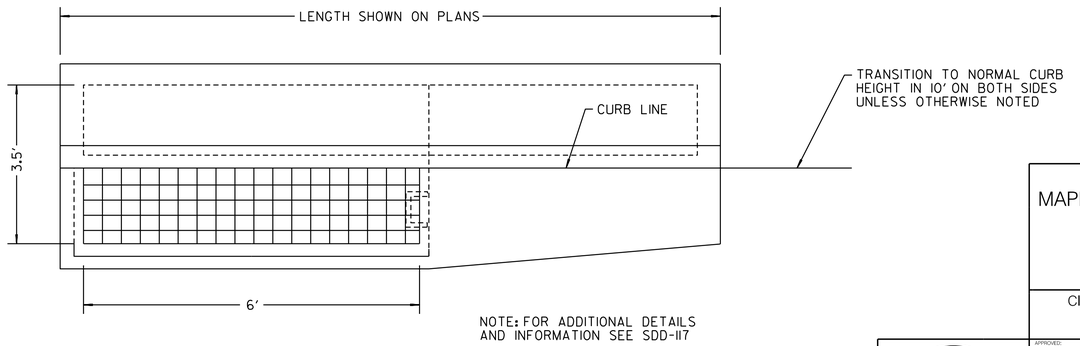
MODIFIED TYPE C-1 INLET

NO SCALE



MODIFIED TYPE B-2 INLET

NO SCALE



MODIFIED TYPE C-1 INLET W/ MODIFIED GRATE

NO SCALE

STORM DRAIN DETAILS 1

C-29

MAPLE CANYON RESTORATION – PHASE 1

STORM DRAIN DETAILS 1

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 48 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED: FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DCE NAME _____ RCE# _____

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
DESIGNED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE

1846-6276 CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

38321-48-D

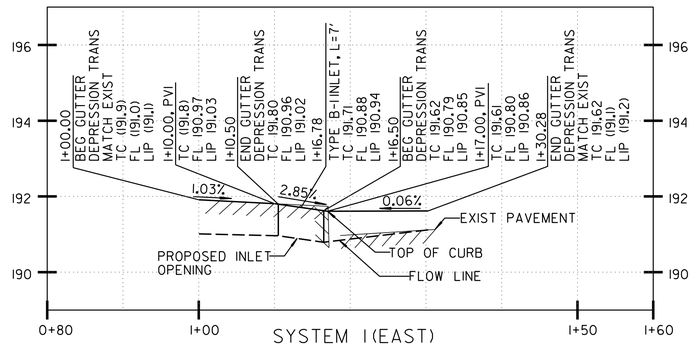
REGISTERED PROFESSIONAL ENGINEER * KEVIN R. GIBSON * NO. 52295 * STATE OF CALIFORNIA *

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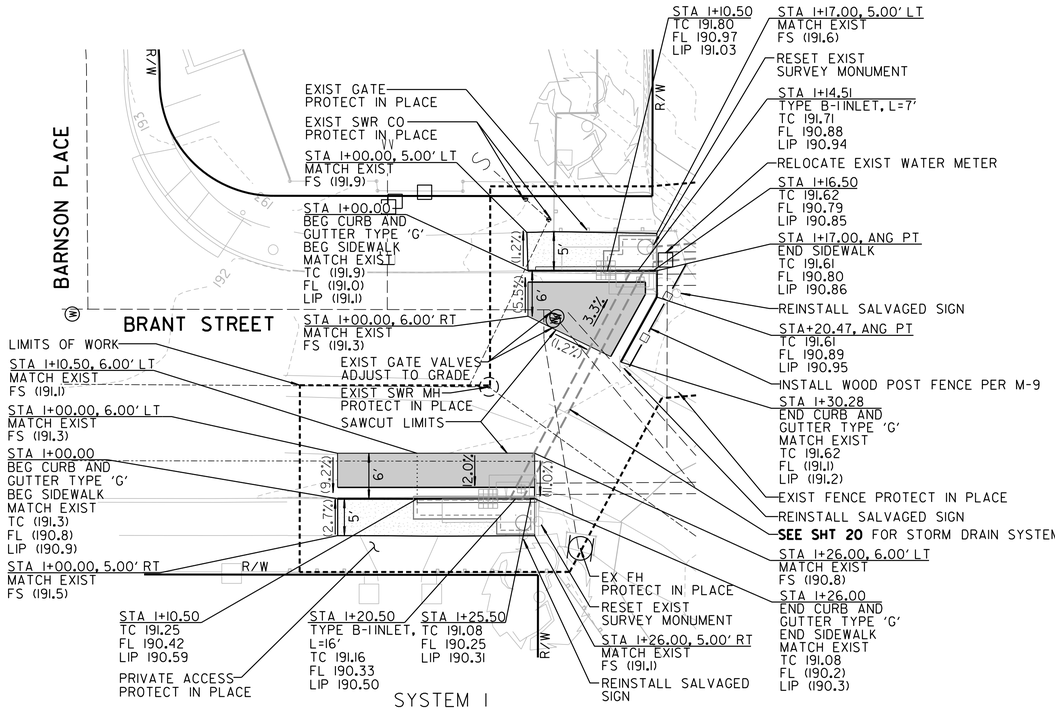
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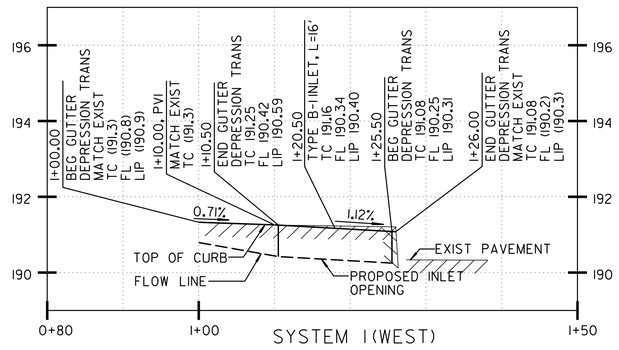
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FINAL SUBMITTAL



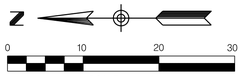
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HORIZONTAL				VERTICAL		
	STATION	NORTHING	EASTING		STATION	ELEVATION
ELEMENT: LINEAR				ELEMENT: LINEAR		
POB	1+00.00	1847921.04	6279781.73	POB	1+00.00	191.91
POE	1+17.00	1847904.04	6279781.75	PVI	1+10.00	191.81
TANGENTIAL DIRECTION	S 0° 00'20" E			TANGENT GRADE:	-1.03%	
TANGENTIAL LENGTH:	17.00			TANGENT LENGTH:	10.00	
ELEMENT: LINEAR				ELEMENT: LINEAR		
POB	1+17.00	1847904.04	6279781.75	PVI	1+10.00	191.81
PI	1+20.47	1847904.03	6279778.27	POE	1+17.00	191.61
TANGENTIAL DIRECTION	S 89° 59'33" W			TANGENT GRADE:	-2.85%	
TANGENTIAL LENGTH:	3.47			TANGENT LENGTH:	7.00	
ELEMENT: LINEAR				ELEMENT: LINEAR		
PI	1+20.47	1847904.03	6279778.27	POB	1+17.00	191.61
POE	1+30.28	1847908.78	6279769.70	POE	1+30.28	191.62
TANGENTIAL DIRECTION	N 61° 02'14" W			TANGENT GRADE:	0.06%	
TANGENTIAL LENGTH:	9.80			TANGENT LENGTH:	13.28	





ALIGNMENT NAME:	SYSTEM 1SURFACE IMPROVEMENT WEST					
HORIZONAL				VERTICAL		
	STATION	NORTHING	EASTING		STATION	ELEVATION
ELEMENT: LINEAR				ELEMENT: LINEAR		
POB	1+00.00	1847946.16	6279751.65	POB	1+00.00	191.33
POE	1+26.00	1847920.16	6279751.66	PVI	1+10.00	191.26
TANGENTIAL DIRECTION	S 0° 02'05" E			TANGENT GRADE:	-0.71%	
TANGENTIAL LENGTH:	26.00			TANGENT LENGTH:	10.00	
				ELEMENT: LINEAR		
				PVI	1+10.00	191.26
				POE	1+26.00	191.08
				TANGENT GRADE:	-1.12%	
				TANGENT LENGTH:	16.00	

CONTRACTOR'S NOTE:
USE EXTREME CAUTION WHEN WORKING DUE TO LOW OVERHEAD UTILITY LINES.



BRANT STREET

C-30

MAPLE CANYON RESTORATION – PHASE 1

BRANT STREET

MAPLE CANYON TO BARSON PLACE

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 49 OF 98 SHEETS

STORM DRAIN WBS B-12040

REGISTERED PROFESSIONAL ENGINEER
KEVYN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

APPROVED:
FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DCE NAME _____ RCE# _____

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

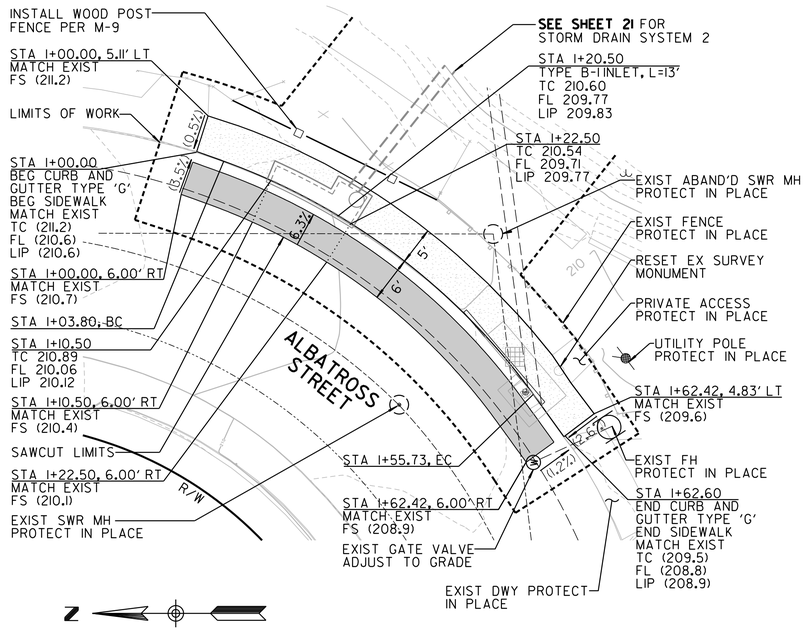
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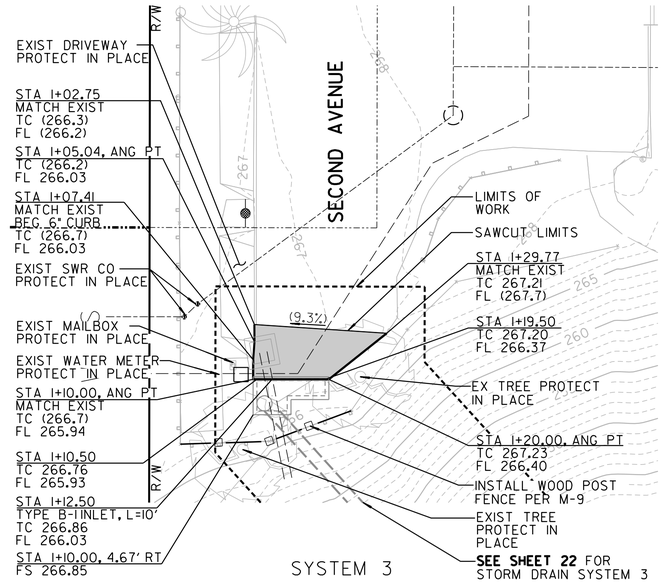
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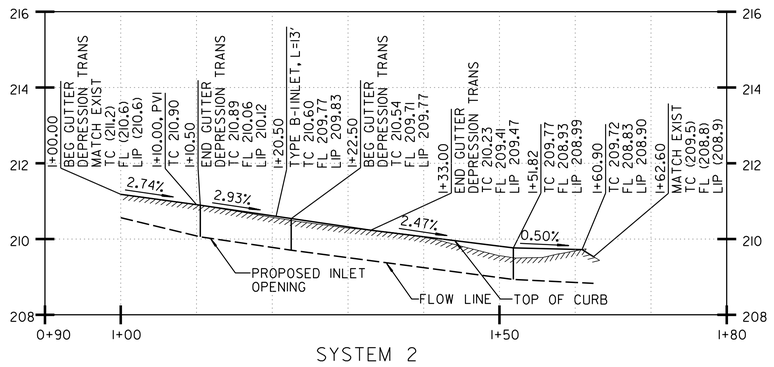
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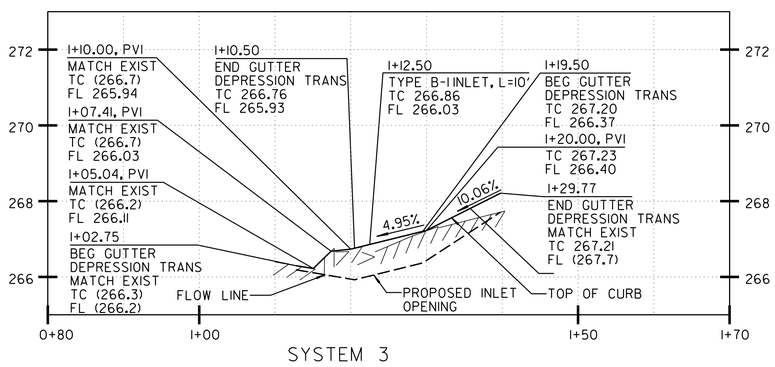
SYSTEM 2



SYSTEM 3



SYSTEM 2



SYSTEM 3

ALIGNMENT NAME:	SYSTEM 2 SURFACE IMPROVEMENTS					
HORIZONAL				VERTICAL		
	STATION	NORTHING	EASTING		STATION	ELEVATION
ELEMENT: LINEAR				ELEMENT: LINEAR		
POB	I+00.00	1848308.58	6280058.37	POB	I+00.00	211.18
BC	I+03.80	1848305.01	6280057.07	PVI	I+10.00	210.89
TANGENTIAL DIRECTION	S 19° 52'24" W			TANGENT GRADE:	-2.74%	
TANGENTIAL LENGTH:	3.80			TANGENT LENGTH:	10.00	
ELEMENT: CIRCULAR				ELEMENT: LINEAR		
BC	I+03.80	1848305.01	6280057.07	PVI	I+10.00	210.90
EC	I+55.73	1848264.13	6280026.3	PVI	I+33.00	210.23
RADIUS:	87.00			TANGENT GRADE:	-2.93%	
DELTA:	34° 11'57"	RIGHT		TANGENT LENGTH:	23.00	
LENGTH:	51.93			ELEMENT: LINEAR		
ELEMENT: LINEAR				PVI	I+33.00	210.23
EC	I+55.73	1848264.13	6280026.3	PVI	I+51.82	209.77
POE	I+62.60	1848260.1	6280020.74	TANGENT GRADE:	-2.47%	
TANGENTIAL DIRECTION	S 54° 04'22" W			TANGENT LENGTH:	18.82	
TANGENTIAL LENGTH:	6.87			ELEMENT: LINEAR		
				PVI	I+51.82	209.77
				PVI	I+60.90	209.72
				TANGENT GRADE:	-0.50%	
				TANGENT LENGTH:	9.07	
				ELEMENT: LINEAR		
				PVI	I+60.90	209.72
				POE	I+62.42	209.53
				TANGENT GRADE:	-12.32%	
				TANGENT LENGTH:	1.52	

ALIGNMENT NAME:	SYSTEM 3 SURFACE IMPROVEMENTS					
HORIZONAL				VERTICAL		
	STATION	NORTHING	EASTING		STATION	ELEVATION
ELEMENT: LINEAR				ELEMENT: LINEAR		
POB	I+00.00	1848819.37	6280863.19	POB	I+02.75	266.3
PI	I+05.04	1848814.32	6280863.2	PVI	I+05.06	266.22
TANGENTIAL DIRECTION	S 0° 10'24" E			TANGENT GRADE:	-3.32%	
TANGENTIAL LENGTH:	5.04			TANGENT LENGTH:	2.31	
ELEMENT: LINEAR				ELEMENT: LINEAR		
PI	I+05.04	1848814.32	6280863.2	PVI	I+05.06	266.22
PI	I+07.41	1848811.97	6280863.04	PVI	I+07.41	266.68
TANGENTIAL DIRECTION	S 4° 01'03" W			TANGENT GRADE:	19.52%	
TANGENTIAL LENGTH:	2.36			TANGENT LENGTH:	2.35	
ELEMENT: LINEAR				ELEMENT: LINEAR		
PI	I+07.41	1848811.97	6280863.04	PVI	I+07.41	266.68
PI	I+10.00	1848809.37	6280863.03	PVI	I+10.00	266.73
TANGENTIAL DIRECTION	S 0° 06'53" W			TANGENT GRADE:	2.06%	
TANGENTIAL LENGTH:	2.60			TANGENT LENGTH:	2.59	
ELEMENT: LINEAR				ELEMENT: LINEAR		
PI	I+10.00	1848809.37	6280863.03	PVI	I+10.00	266.73
PI	I+20.01	1848809.37	6280873.03	POE	I+20.00	267.23
TANGENTIAL DIRECTION	S 90° 00'00" E			TANGENT GRADE:	4.95%	
TANGENTIAL LENGTH:	10.00			TANGENT LENGTH:	10.00	
ELEMENT: LINEAR				ELEMENT: LINEAR		
PI	I+20.01	1848809.37	6280873.03	PVI	I+10.00	267.23
POE	I+29.77	1848815.46	6280880.67	POE	I+29.77	268.21
TANGENTIAL DIRECTION	N 51° 24'43" E			TANGENT GRADE:	10.06%	
TANGENTIAL LENGTH:	9.77			TANGENT LENGTH:	9.77	

CONTRACTOR'S NOTE:
USE EXTREME CAUTION WHEN WORKING DUE TO LOW OVERHEAD UTILITY LINES.

0 10 20 30
SCALE 1" = 10'

C-31

MAPLE CANYON RESTORATION – PHASE 1

ALBATROSS STREET / SECOND AVENUE

PALM STREET TO BARNSON PLACE — QUINCE STREET TO MAPLE CANYON

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 50 OF 98 SHEETS

STORM DRAIN WBS B-12040

REGISTERED PROFESSIONAL ENGINEER — KEVYN R. GIBSON — NO. 52295 — STATE OF CALIFORNIA

APPROVED: FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DCE NAME _____ RCE# _____

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

38321-50-D

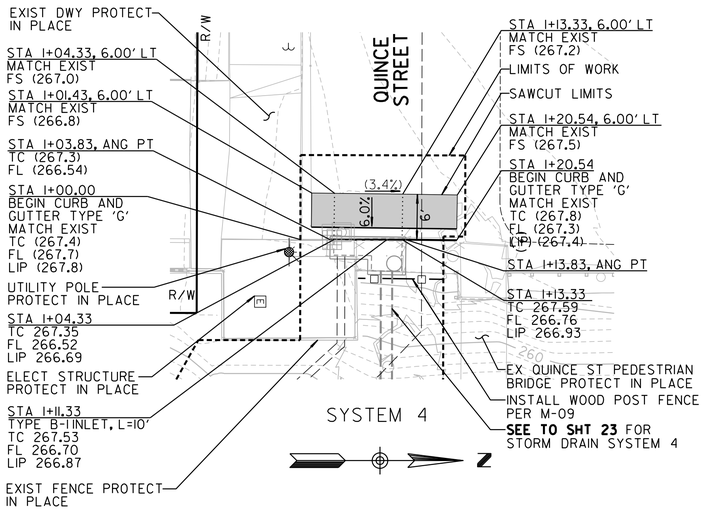
ALBATROSS STREET / SECOND AVENUE

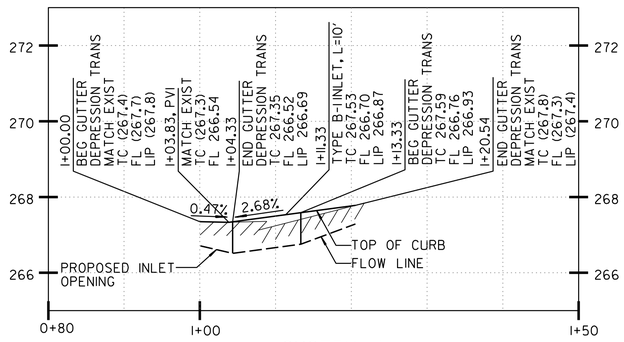
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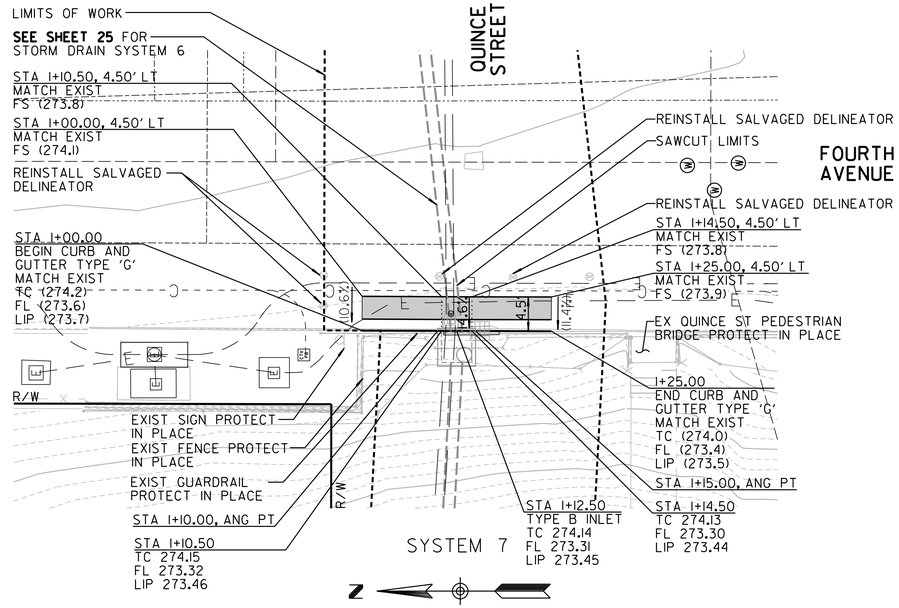
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SYSTEM 4

ALIGNMENT NAME:	SYSTEM 4 SURFACE IMPROVEMENTS					
HORIZONAL				VERTICAL		
	STATION	NORTHING	EASTING		STATION	ELEVATION
ELEMENT: LINEAR				ELEMENT: LINEAR		
POB	I+00.00	1848992.55	6281150.6	POB	I+00.00	267.35
PI	I+03.83	1848996.38	6281150.59	PVI	I+03.83	267.33
TANGENTIAL DIRECTION	N 0° 10'18" W			TANGENT GRADE:	-0.47%	
TANGENTIAL LENGTH:	3.83			TANGENT LENGTH:	3.83	
ELEMENT: LINEAR				ELEMENT: LINEAR		
PI	I+03.83	1848996.38	6281150.59	PVI	I+03.83	267.33
PI	I+13.83	1849006.38	6281150.59	POE	I+20.54	267.78
TANGENTIAL DIRECTION	N 0° 01'24" E			TANGENT GRADE:	2.68%	
TANGENTIAL LENGTH:	10.00			TANGENT LENGTH:	6.71	
ELEMENT: LINEAR						
PI	I+13.83	1849006.38	6281150.59			
POE	I+20.54	1849013.09	6281150.68			
TANGENTIAL DIRECTION	N 0° 44'37" E					
TANGENTIAL LENGTH:	6.71					



SYSTEM 7

ALIGNMENT NAME:	SYSTEM 7 SURFACE IMPROVEMENTS					
HORIZONAL				VERTICAL		
	STATION	NORTHING	EASTING		STATION	ELEVATION
ELEMENT: LINEAR				ELEMENT: LINEAR		
POB	I+00.00	1849054.15	6281428.61	POB	I+00.00	274.21
PI	I+10.00	1849044.15	6281428.59	PVI	I+25.00	274.07
TANGENTIAL DIRECTION:	S 0° 07'58" W			TANGENT GRADE:	-0.56%	
TANGENTIAL LENGTH:	10.00			TANGENT LENGTH:	25.00	
ELEMENT: LINEAR						
PI	I+10.00	1849044.15	6281428.59			
PI	I+15.00	1849039.15	6281428.56			
TANGENTIAL DIRECTION:	S 0° 15'57" W					
TANGENTIAL LENGTH:	5.00					
ELEMENT: LINEAR						
PI	I+15.00	1849039.15	6281428.56			
POE	I+25.00	1849029.15	6281428.53			
TANGENTIAL DIRECTION:	S 0° 12'15" W					
TANGENTIAL LENGTH:	10.00					

0 10 20 30
SCALE 1" = 10'

C-32

MAPLE CANYON RESTORATION – PHASE 1

QUINCE STREET / FOURTH AVENUE

THIRD AVENUE TO MAPLE CANYON — QUINCE STREET TO MAPLE CANYON

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 51 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED: FOR CITY ENGINEER SHEILA BOSE PRINT DCE NAME — DATE — RCE#

SUBMITTED BY: ELHAM LOTFI PROJECT MANAGER

DESIGNED BY: BAREAZ PIROMARI PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE

1846-6276 CCS83 COORDINATE

CONTRACTOR — DATE STARTED
INSPECTOR — DATE COMPLETED

38321-51-D

REGISTERED PROFESSIONAL ENGINEER * KEVIN R. GIBSON * NO. 52295 * STATE OF CALIFORNIA *

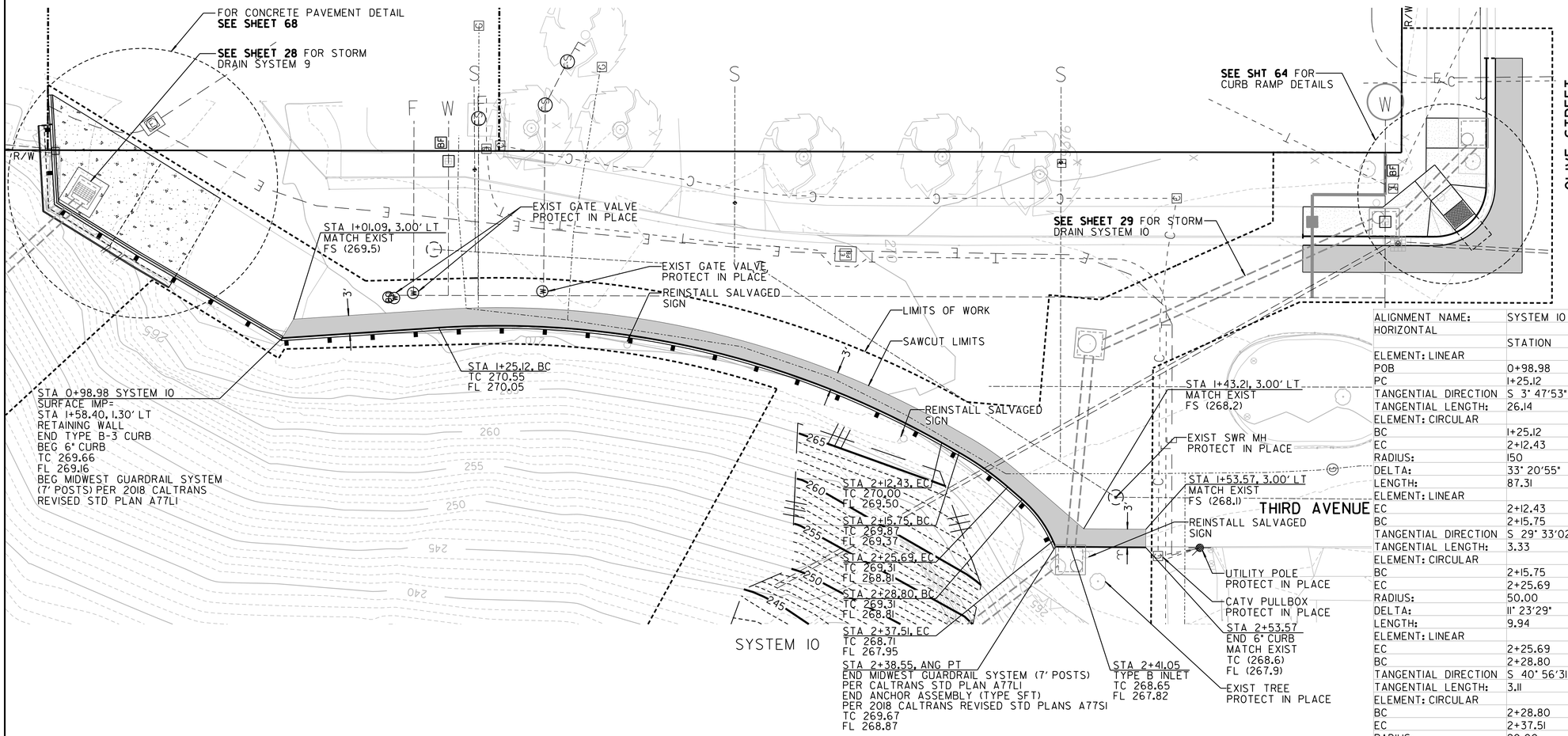
QUINCE STREET / FOURTH AVENUE

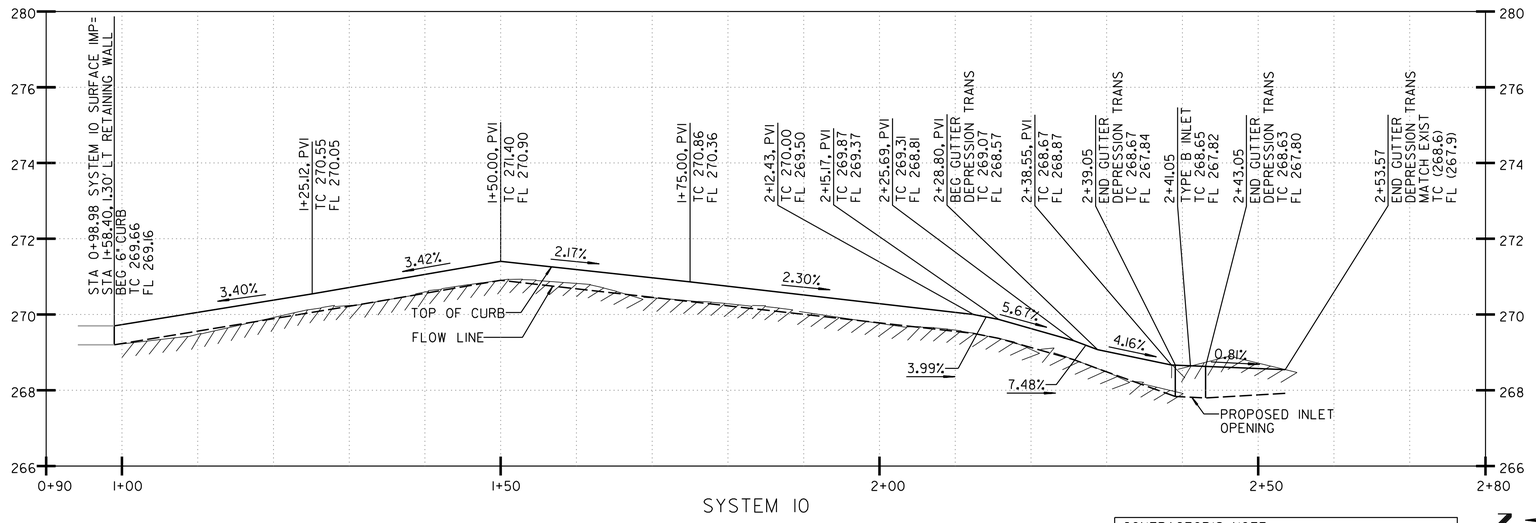
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FINAL SUBMITTAL





ALIGNMENT NAME:	SYSTEM 10 SURFACE IMPROVEMENT					
HORIZONTAL				VERTICAL		
	STATION	NORTHING	EASTING		STATION	ELEVATION
ELEMENT: LINEAR				ELEMENT: LINEAR		
POB	0+98.98	1848484.02	6281178.11	POB	0+98.98	269.66
PC	1+25.12	1848457.94	6281179.84	PVI	1+25.12	270.55
TANGENTIAL DIRECTION	S 3° 47'53" E			TANGENT GRADE:	3.40%	
TANGENTIAL LENGTH:	26.14			TANGENT LENGTH:	26.14	
ELEMENT: CIRCULAR				ELEMENT: LINEAR		
BC	1+25.12	1848457.94	6281179.84	PVI	1+25.12	270.55
EC	2+12.43	1848374.02	6281160.66	PVI	1+50.00	271.40
RADIUS:	150			TANGENT GRADE:	3.42%	
DELTA:	33° 20'55"	RIGHT		TANGENT LENGTH:	24.88	
LENGTH:	87.31			ELEMENT: LINEAR		
ELEMENT: LINEAR				PVI	1+50.00	271.40
EC	2+12.43	1848374.02	6281160.66	PVI	1+75.00	270.86
BC	2+15.75	1848371.13	6281159.02	TANGENT GRADE:	-2.17%	
TANGENTIAL DIRECTION	S 29° 33'02" W			TANGENT LENGTH:	25.00	
TANGENTIAL LENGTH:	3.33			ELEMENT: LINEAR		
ELEMENT: CIRCULAR				PVI	1+75.00	270.86
BC	2+15.75	1848371.13	6281159.02	PVI	2+12.43	270.00
EC	2+25.69	1848363.02	6281153.29	TANGENT GRADE:	-2.30%	
RADIUS:	50.00			TANGENT LENGTH:	37.43	
DELTA:	11° 23'29"	RIGHT		ELEMENT: LINEAR		
LENGTH:	9.94			PVI	2+12.43	270.00
ELEMENT: LINEAR				PVI	2+15.75	269.87
EC	2+25.69	1848363.02	6281153.29	TANGENT GRADE:	-3.99%	
BC	2+28.80	1848360.68	6281151.26	TANGENT LENGTH:	3.33	
TANGENTIAL DIRECTION	S 40° 56'31" W			ELEMENT: LINEAR		
TANGENTIAL LENGTH:	3.11			PVI	2+15.75	269.87
ELEMENT: CIRCULAR				PVI	2+25.69	269.31
BC	2+28.80	1848360.62	6281151.21	TANGENT GRADE:	-5.67%	
EC	2+37.51	1848355.47	6281144.27	TANGENT LENGTH:	9.94	
RADIUS:	20.00			ELEMENT: LINEAR		
DELTA:	24° 57'21"	RIGHT		PVI	2+25.69	269.31
LENGTH:	8.71			PVI	2+28.80	269.07
ELEMENT: LINEAR				TANGENT GRADE:	-7.48%	
EC	2+37.51	1848355.47	6281144.27	TANGENT LENGTH:	3.11	
PI	2+38.55	1848355.05	6281143.32	ELEMENT: LINEAR		
TANGENTIAL DIRECTION	S 65° 53'52" W			PVI	2+28.80	269.07
TANGENTIAL LENGTH:	1.04			PVI	2+38.55	268.67
ELEMENT: LINEAR				TANGENT GRADE:	-4.16%	
PI	2+38.55	1848355.05	6281143.32	TANGENT LENGTH:	9.75	
POE	2+53.57	1848340.03	6281143.2	ELEMENT: LINEAR		
TANGENTIAL DIRECTION	S 0° 27'02" W			PVI	2+38.55	268.67
TANGENTIAL LENGTH:	15.02			POE	2+53.57	268.55
				TANGENT GRADE:	-0.81%	
				TANGENT LENGTH:	15.02	

CONTRACTOR'S NOTE:
USE EXTREME CAUTION WHEN WORKING DUE TO LOW OVERHEAD UTILITY LINES.

SCALE 1"=10'

C-33

MAPLE CANYON RESTORATION – PHASE 1

THIRD AVENUE

PALM STREET TO OLIVE STREET

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 52 OF 98 SHEETS

STORM DRAIN WBS B-12040

REGISTERED PROFESSIONAL ENGINEER — KEVIN R. GIBSON — NO. 52295 — STATE OF CALIFORNIA

APPROVED:
FOR CITY ENGINEER _____ DATE
SHEILA BOSE
PRINT DCE NAME _____ RCE#

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

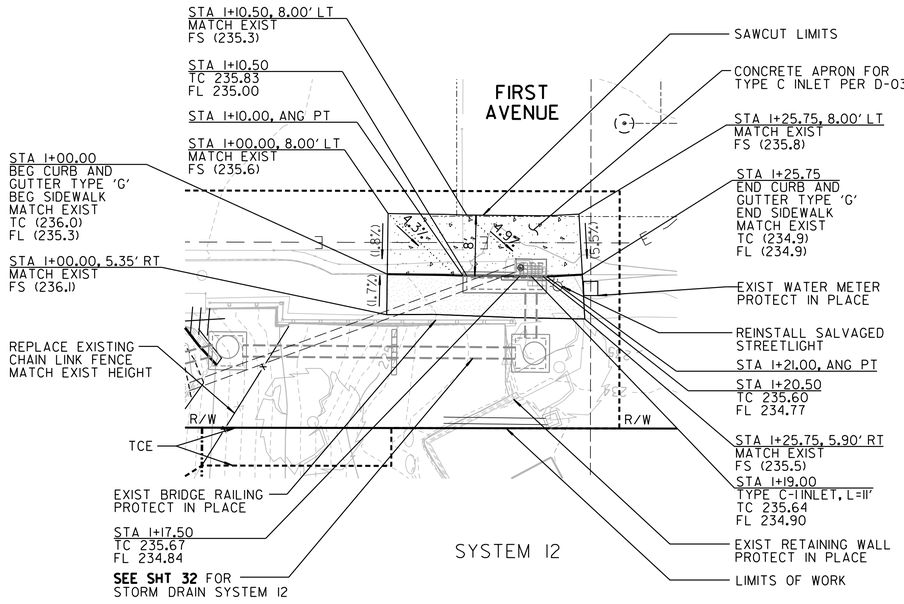
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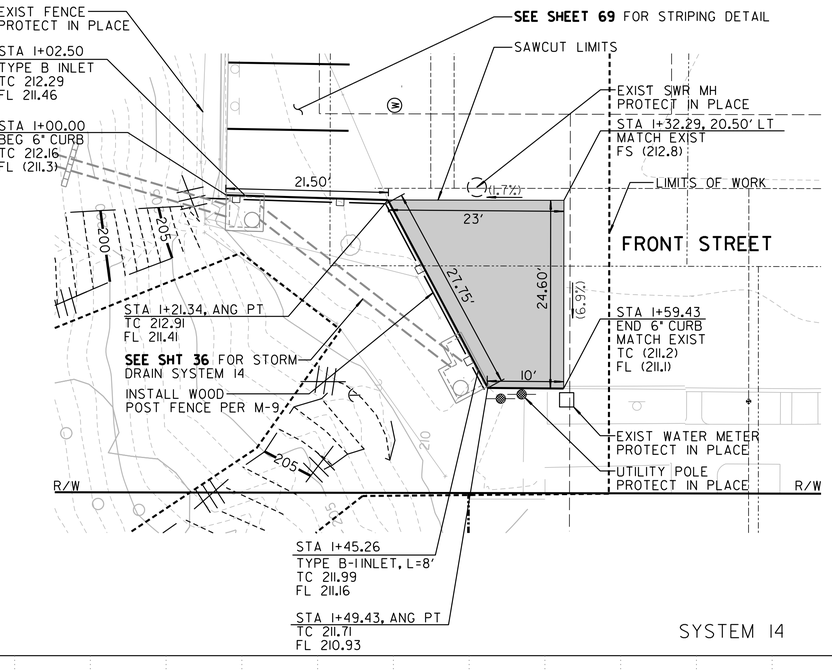
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21-JAN-2020 09:13 knguyen

FINAL SUBMITTAL



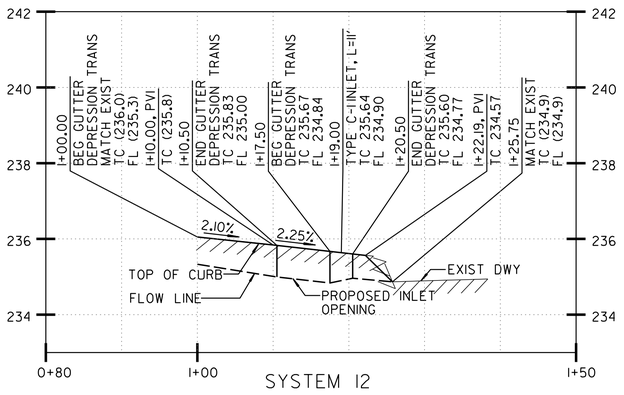
SYSTEM 12



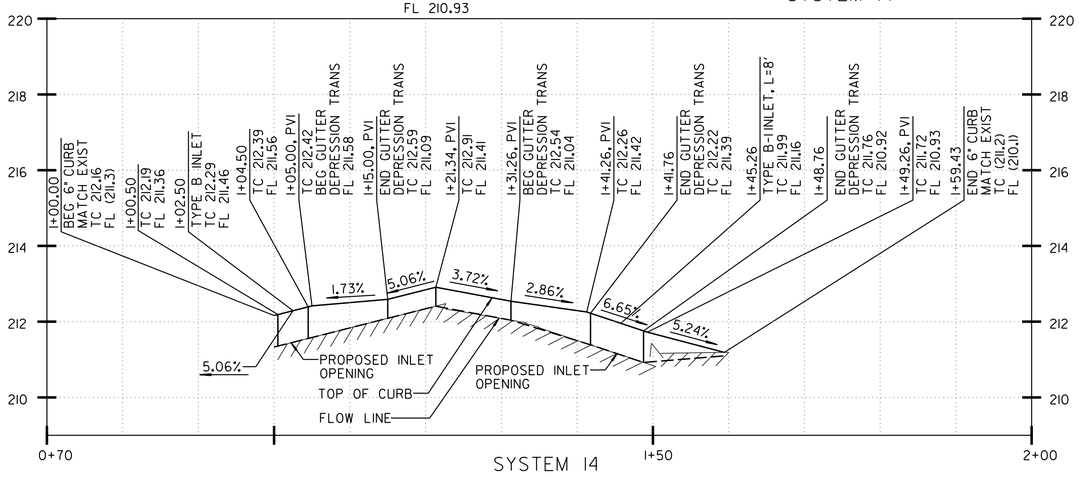
SYSTEM 14

ALIGNMENT NAME:	SYSTEM 14 SURFACE IMPROVEMENT		
HORIZONTAL			
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
POB	1+00.00	1847770.33	6280325.98
PI	1+21.34	1847749.00	6280325.33
TANGENTIAL DIRECTION	S 1° 44'44" W		
TANGENTIAL LENGTH:	21.34		
ELEMENT: LINEAR			
PI	1+21.34	1847749.00	6280325.33
PI	1+49.43	1847735.81	6280300.53
TANGENTIAL DIRECTION	S 61° 59'38" W		
TANGENTIAL LENGTH:	28.09		
ELEMENT: LINEAR			
PI	1+49.43	1847735.81	6280300.53
POE	1+59.43	1847725.81	6280300.45
TANGENTIAL DIRECTION	S 0° 27'47" W		
TANGENTIAL LENGTH:	10.00		

VERTICAL		
	STATION	ELEVATION
ELEMENT: LINEAR		
POB	1+00.00	212.16
PVI	1+05.00	212.42
TANGENT GRADE:	5.06%	
TANGENT LENGTH:	5.00	
ELEMENT: LINEAR		
PVI	1+05.00	212.42
PVI	1+15.00	212.59
TANGENT GRADE:	1.73%	
TANGENT LENGTH:	10.00	
ELEMENT: LINEAR		
PVI	1+15.00	212.59
PVI	1+21.34	212.91
TANGENT GRADE:	5.06%	
TANGENT LENGTH:	6.34	
ELEMENT: LINEAR		
PVI	1+21.34	212.91
PVI	1+31.26	212.54
TANGENT GRADE:	-3.72%	
TANGENT LENGTH:	9.92	
ELEMENT: LINEAR		
PVI	1+31.26	212.54
PVI	1+41.26	212.26
TANGENT GRADE:	-2.86%	
TANGENT LENGTH:	10.00	
ELEMENT: LINEAR		
PVI	1+41.26	212.26
PVI	1+49.26	211.72
TANGENT GRADE:	-6.65%	
TANGENT LENGTH:	8.00	
ELEMENT: LINEAR		
PVI	1+49.26	211.72
POE	1+59.43	211.19
TANGENT GRADE:	-5.24%	
TANGENT LENGTH:	10.17	



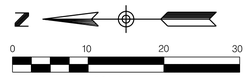
SYSTEM 12



SYSTEM 14

ALIGNMENT NAME:	SYSTEM 12 SURFACE IMPROVEMENTS					
HORIZONAL				VERTICAL		
	STATION	NORTHING	EASTING		STATION	ELEVATION
ELEMENT: LINEAR				ELEMENT: LINEAR		
POB	1+00.00	1848143.53	6280588.21	POB	1+00.00	236.05
PI	1+10.00	1848133.53	6280588.01	PVI	1+10.00	235.84
TANGENTIAL DIRECTION	S 1° 06'49" W			TANGENT GRADE:	-2.10%	
TANGENTIAL LENGTH:	10.00			TANGENT LENGTH:	10.00	
ELEMENT: LINEAR				ELEMENT: LINEAR		
PI	1+10.00	1848133.53	6280588.01	PVI	1+10.00	235.84
PI	1+21.00	1848122.54	6280587.93	PVI	1+22.19	235.57
TANGENTIAL DIRECTION	S 0° 27'38" W			TANGENT GRADE:	-2.25%	
TANGENTIAL LENGTH:	11.00			TANGENT LENGTH:	12.19	
ELEMENT: LINEAR				ELEMENT: LINEAR		
PI	1+21.00	1848122.54	6280587.93	PVI	1+22.19	235.57
POE	1+25.75	1848117.79	6280588.15	POE	1+25.75	234.87
TANGENTIAL DIRECTION	S 2° 42'40" E			TANGENT GRADE:	-19.59%	
TANGENTIAL LENGTH:	4.75			TANGENT LENGTH:	3.56	

CONTRACTOR'S NOTE:
USE EXTREME CAUTION WHEN WORKING DUE TO LOW OVERHEAD UTILITY LINES.



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C-34

MAPLE CANYON RESTORATION – PHASE 1

FRONT STREET / FIRST AVENUE

NUTMEG STREET TO OLIVE STREET

NUTMEG STREET TO MAPLE STREET

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 53 OF 98 SHEETS

STORM DRAIN WBS B-12040

REGISTERED PROFESSIONAL ENGINEER — KEVIN R. GIBSON — NO. 52295 — STATE OF CALIFORNIA

APPROVED:
FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DCE NAME RCE#

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

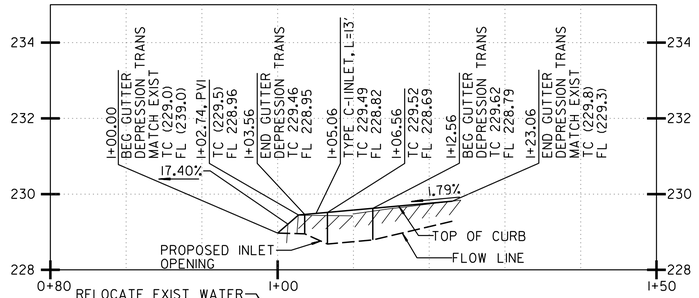
206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE
38321-53-D

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

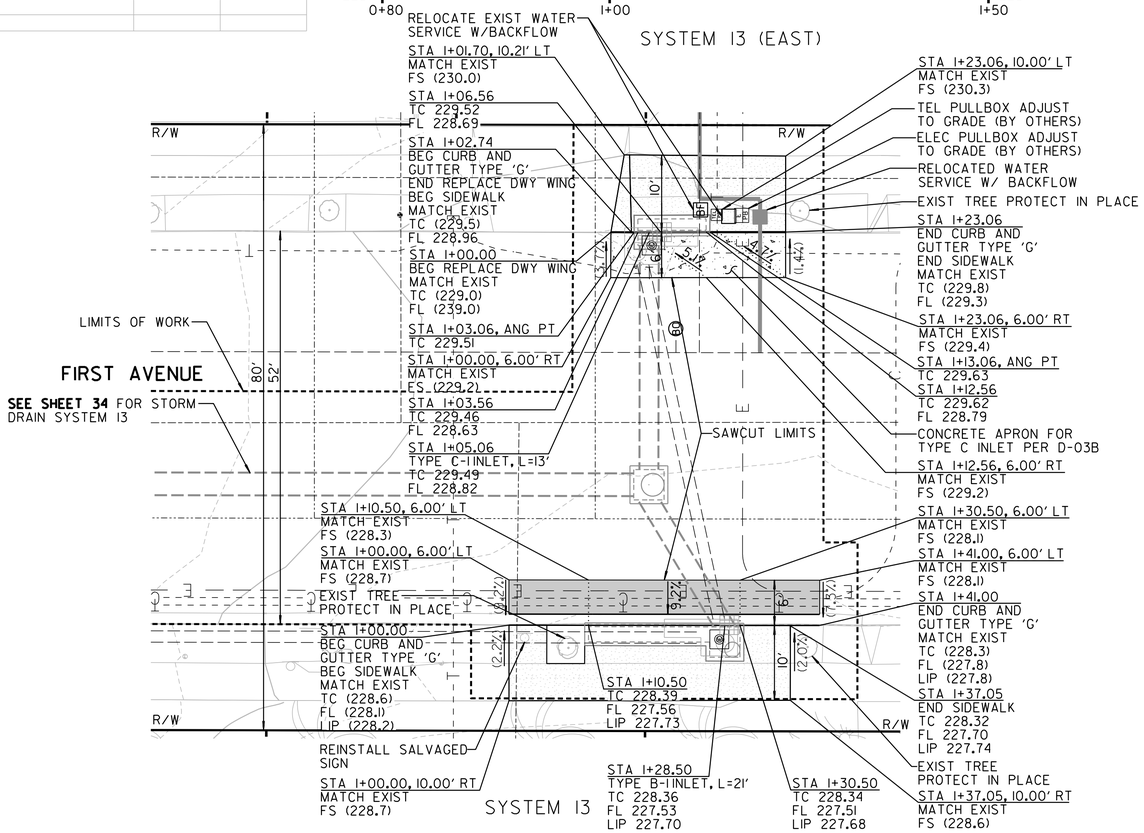
FINAL SUBMITTAL

FRONT STREET / FIRST AVENUE

ALIGNMENT NAME:	SYSTEM 13 SURFACE IMPROVEMENTS EAST					
HORIZONTAL				VERTICAL		
	STATION	NORTHING	EASTING		STATION	ELEVATION
ELEMENT: LINEAR				ELEMENT: LINEAR		
POB	1+00.00	1847742.39	6280632.94	POB	1+00.00	228.97
PI	1+03.06	1847739.33	6280632.93	PVI	1+02.74	229.45
TANGENTIAL DIRECTION	S 0° 15'38" W			TANGENT GRADE:	17.40%	
TANGENTIAL LENGTH:	3.06			TANGENT LENGTH:	2.74	
ELEMENT: LINEAR				ELEMENT: LINEAR		
PI	1+03.06	1847739.33	6280632.93	PVI	1+02.74	229.45
PI	1+13.06	1847729.33	6280632.96	POE	1+23.06	229.81
TANGENTIAL DIRECTION	S 0° 11'16" E			TANGENT GRADE:	1.79%	
TANGENTIAL LENGTH:	10.00			TANGENT LENGTH:	20.32	
ELEMENT: LINEAR						
PI	1+13.06	1847729.33	6280632.96			
POE	1+23.06	1847719.33	6280632.96			
TANGENTIAL DIRECTION	S 0° 00'10" W					
TANGENTIAL LENGTH:	10.00					

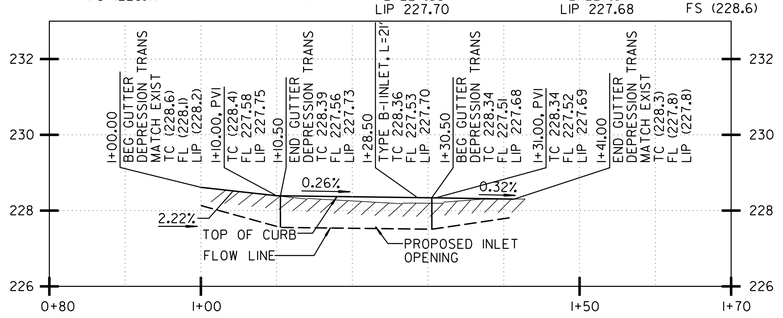


SYSTEM 13 (EAST)

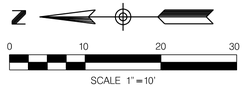


SYSTEM 13

ALIGNMENT NAME:	SYSTEM 13 SURFACE IMPROVEMENTS WEST					
HORIZONAL				VERTICAL		
	STATION	NORTHING	EASTING		STATION	ELEVATION
ELEMENT: LINEAR				ELEMENT: LINEAR		
POB	1+00.00	1847755.85	6280581.07	POB	1+00.00	228.61
POE	1+41.00	1847714.85	6280581.03	PVI	1+10.00	228.39
TANGENTIAL DIRECTION	S 0° 03'21" W			TANGENT GRADE:	-2.22%	
TANGENTIAL LENGTH:	41.00			TANGENT LENGTH:	10.00	
				ELEMENT: LINEAR		
				PVI	1+10.00	228.39
				PVI	1+31.00	228.34
				TANGENT GRADE:	-0.26%	
				TANGENT LENGTH:	21.00	
				ELEMENT: LINEAR		
				PVI	1+31.00	228.34
				POE	1+41.00	228.30
				TANGENT GRADE:	-0.32%	
				TANGENT LENGTH:	10.00	



SYSTEM 13 (WEST)



C-35

MAPLE CANYON RESTORATION – PHASE 1

FIRST AVENUE

NUTMEG STREET TO MAPLE STREET

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 54 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED: FOR CITY ENGINEER — DATE
SHEILA BOSE PRINT DCE NAME — RCE#

SUBMITTED BY: ELHAM LOTFI PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCSB3 COORDINATE
38321-54-D

CONTRACTOR — DATE STARTED
INSPECTOR — DATE COMPLETED

REGISTERED PROFESSIONAL ENGINEER * KEVIN R. GIBSON * NO. 52295 * STATE OF CALIFORNIA *

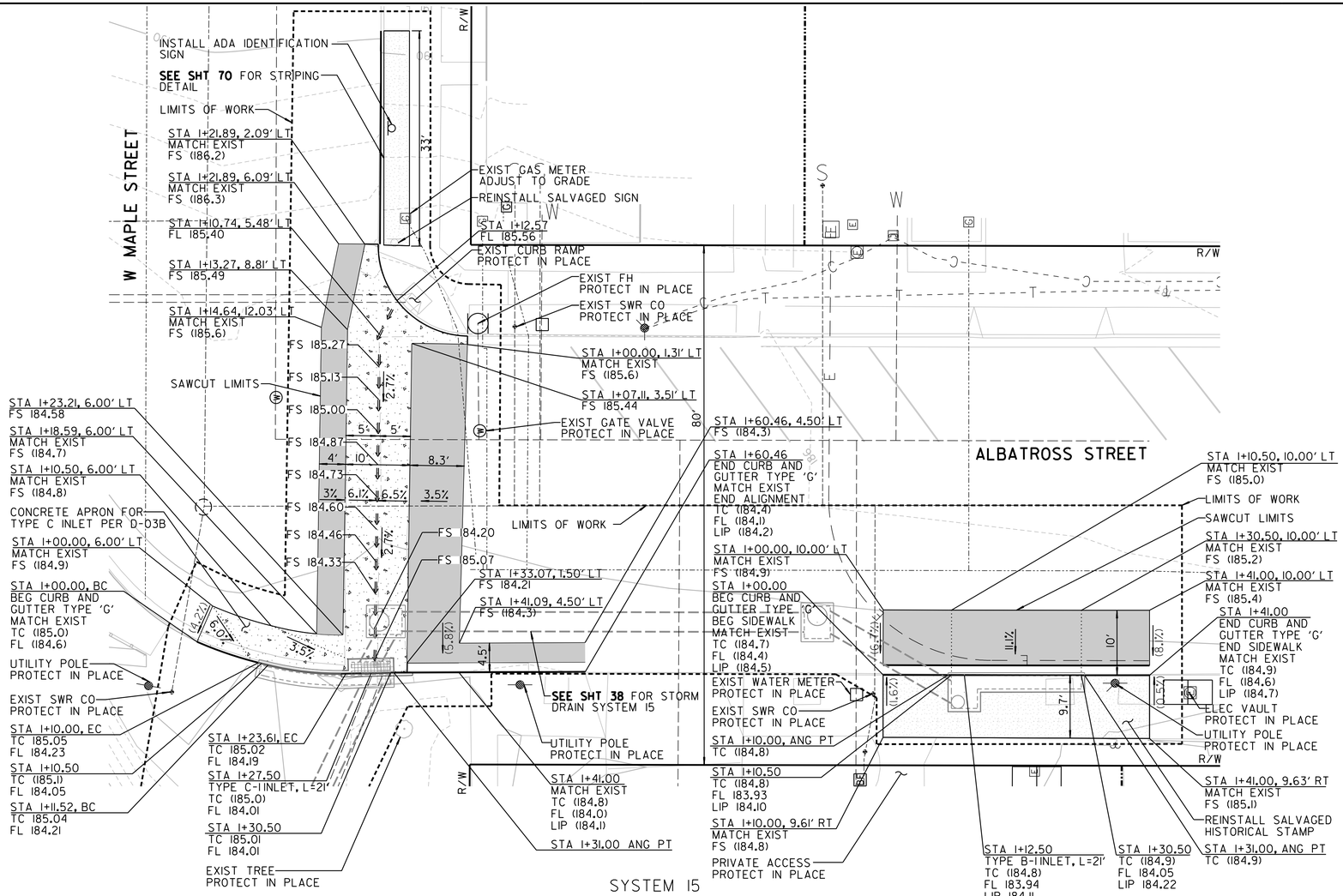
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SAN DIEGO, CA 92110
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(FAX) 619-291-4165
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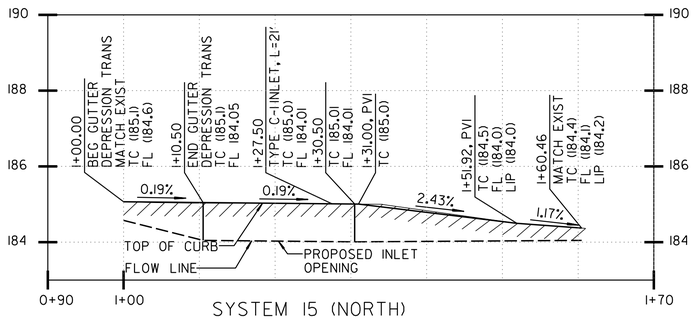
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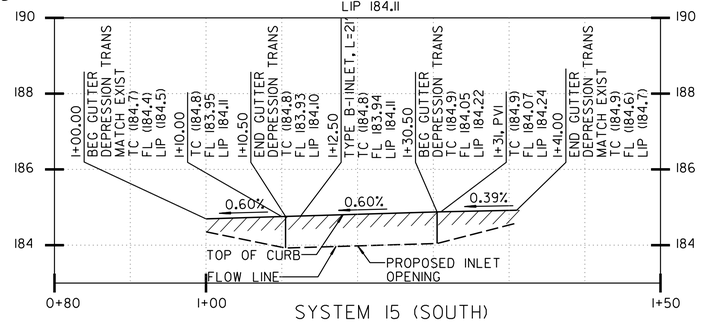
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FIRST AVENUE

FINAL SUBMITTAL







ALIGNMENT NAME:	SYSTEM 15 SURFACE IMPROVEMENT (EAST)		
	STATION	NORTHING	EASTING
ELEMENT: CIRCULAR			
BC	1+00.00	1847458.90	6280071.80
EC	1+21.89	1847472.65	6280085.94
RADIUS:	14.00		
DELTA:	89° 34'15"	RIGHT	
LENGTH:	21.89		

ALIGNMENT NAME:	SYSTEM 15 SURFACE IMPROVEMENT (NORTH)					
HORIZONTAL				VERTICAL		
	STATION	NORTHING	EASTING		STATION	ELEVATION
ELEMENT: CIRCULAR				ELEMENT: LINEAR		
BC	1+00.00	1847500.54	6280024.75	POB	1+00.00	185.07
EC	1+10.00	1847491.09	6280021.52	PVI	1+31.00	185.01
RADIUS:	60.00			TANGENT GRADE:	-0.19%	
DELTA:	9° 32'57"	LEFT		TANGENT LENGTH:	31	
LENGTH:	10.00			ELEMENT: LINEAR		
ELEMENT: LINEAR				PVI	1+31.00	185.01
EC	1+10.00	1847491.09	6280021.52	PVI	1+51.92	184.5
BC	1+11.52	1847489.61	6280021.15	TANGENT GRADE:	-2.43%	
TANGENTIAL	S 14° 03'15" W			TANGENT LENGTH:	20.92	
TANGENTIAL LENGTH:	1.52			ELEMENT: LINEAR		
ELEMENT: CIRCULAR				PVI	1+51.92	184.5
BC	1+11.52	1847489.61	6280021.15	POE	1+60.46	184.37
EC	1+23.61	1847477.63	6280019.82	TANGENT GRADE:	-1.46%	
RADIUS:	45.00			TANGENT LENGTH:	8.54	
DELTA:	15° 23'31"	LEFT				
LENGTH:	12.09					
ELEMENT: LINEAR						
EC	1+23.61	1847477.63	6280019.82			
PI	1+31.00	1847470.25	6280019.99			
TANGENTIAL	S 1° 20'16" E					
TANGENTIAL LENGTH:	7.39					
ELEMENT: LINEAR						
PI	1+31.00	1847470.25	6280019.99			
POE	1+60.46	1847440.79	6280020.12			
TANGENTIAL	S 0° 15'11" E					
TANGENTIAL LENGTH:	29.46					

ALIGNMENT NAME:	SYSTEM 15 SURFACE IMPROVEMENT (SOUTH)					
HORIZONTAL				VERTICAL		
	STATION	NORTHING	EASTING		STATION	ELEVATION
ELEMENT: LINEAR				ELEMENT: LINEAR		
POB	1+00.00	1847394.93	6280019.64	POB	1+00.00	184.69
PI	1+10.00	1847384.93	6280019.62	PVI	1+31.00	184.88
TANGENTIAL DIRECTION	S 0° 06'59" W			TANGENT GRADE:	0.60%	
TANGENTIAL LENGTH:	10.00			TANGENT LENGTH:	31.00	
ELEMENT: LINEAR				ELEMENT: LINEAR		
PI	1+10.00	1847384.93	6280019.62	PVI	1+31.00	184.88
PI	1+31.00	1847363.93	6280019.58	POE	1+41.00	184.92
TANGENTIAL DIRECTION	S 0° 06'16" W			TANGENT GRADE:	0.39%	
TANGENTIAL LENGTH:	21.00			TANGENT LENGTH:	10.00	
ELEMENT: LINEAR						
PI	1+31.00	1847363.93	6280019.58			
POE	1+41.00	1847353.93	6280019.59			
TANGENTIAL DIRECTION	S 0° 02'02" E					
TANGENTIAL LENGTH:	10.00					

CONTRACTOR'S NOTE:
USE EXTREME CAUTION WHEN WORKING DUE TO LOW OVERHEAD UTILITY LINES.

0 10 20 30
SCALE 1"=10'

C-36

MAPLE CANYON RESTORATION – PHASE 1

ALBATROSS STREET

MAPLE STREET TO LAUREL STREET

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 55 OF 98 SHEETS

STORM DRAIN WBS B-12040

REGISTERED PROFESSIONAL ENGINEER · KEVIN R. GIBSON · NO. 52295 · STATE OF CALIFORNIA

APPROVED:
FOR CITY ENGINEER _____ DATE
SHEILA BOSE
PRINT DCE NAME RCE#

SUBMITTED BY: ELHAM LOTFI PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE
38321-55-D

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

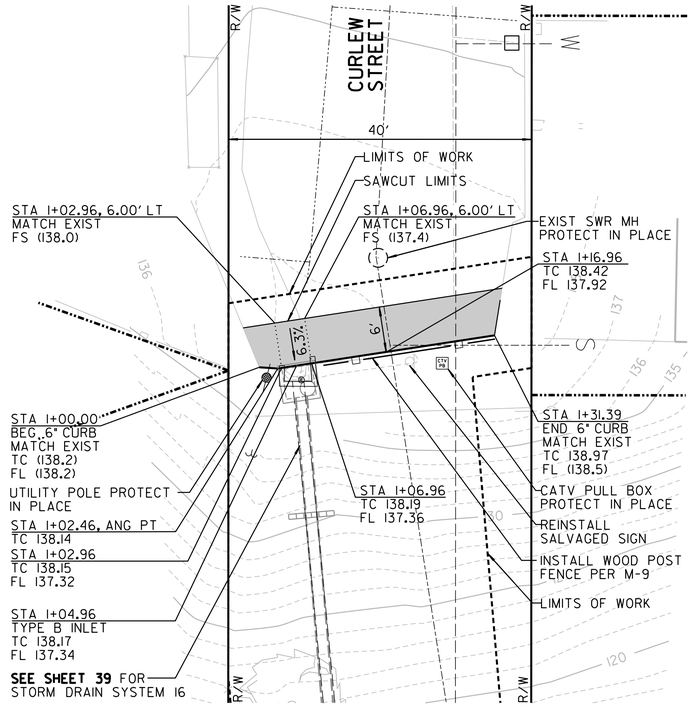
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SAN DIEGO, CA 92110
619-291-0707
(FAX) 619-291-4165
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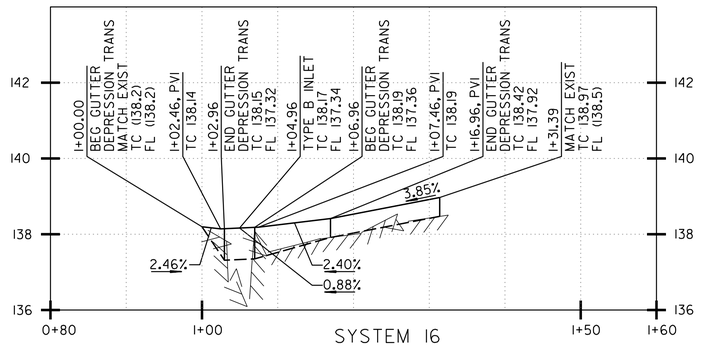
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ALBATROSS STREET

FINAL SUBMITTAL



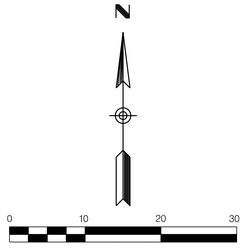
SYSTEM 16



SYSTEM 16

ALIGNMENT NAME:	SYSTEM 16 SURFACE IMPROVEMENT					
HORIZONTAL				VERTICAL		
	STATION	NORTHING	EASTING		STATION	ELEVATION
ELEMENT: LINEAR				ELEMENT: LINEAR		
POB	1+00.00	1847643.46	6279490.32	POB	1+00.00	138.20
PI	1+02.46	1847643.29	6279492.78	PVI	1+02.46	138.14
TANGENTIAL DIRECTION	S 86° 03'49" E			TANGENT GRADE:	-2.16%	
TANGENTIAL LENGTH:	2.46			TANGENT LENGTH:	2.46	
ELEMENT: LINEAR				ELEMENT: LINEAR		
PI	1+02.46	1847643.29	6279492.78	PVI	1+02.46	138.14
POE	1+31.39	1847647.67	6279521.37	PVI	1+07.46	138.19
TANGENTIAL DIRECTION	N 81° 16'56" E			TANGENT GRADE:	0.88%	
TANGENTIAL LENGTH:	28.92			TANGENT LENGTH:	5.00	
				ELEMENT: LINEAR		
				PVI	1+07.46	138.19
				PVI	1+16.96	138.42
				TANGENT GRADE:	2.40%	
				TANGENT LENGTH:	9.50	
				ELEMENT: LINEAR		
				PVI	1+16.96	138.42
				POE	1+31.39	138.97
				TANGENT GRADE:	3.85%	
				TANGENT LENGTH:	14.43	

CONTRACTOR'S NOTE:
USE EXTREME CAUTION WHEN WORKING DUE TO LOW OVERHEAD UTILITY LINES.



CURLEW STREET

C-37

MAPLE CANYON RESTORATION – PHASE 1

CURLEW STREET

W NUTMEG STREET TO MAPLE CANYON

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 56 OF 98 SHEETS

STORM DRAIN WBS B-12040

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

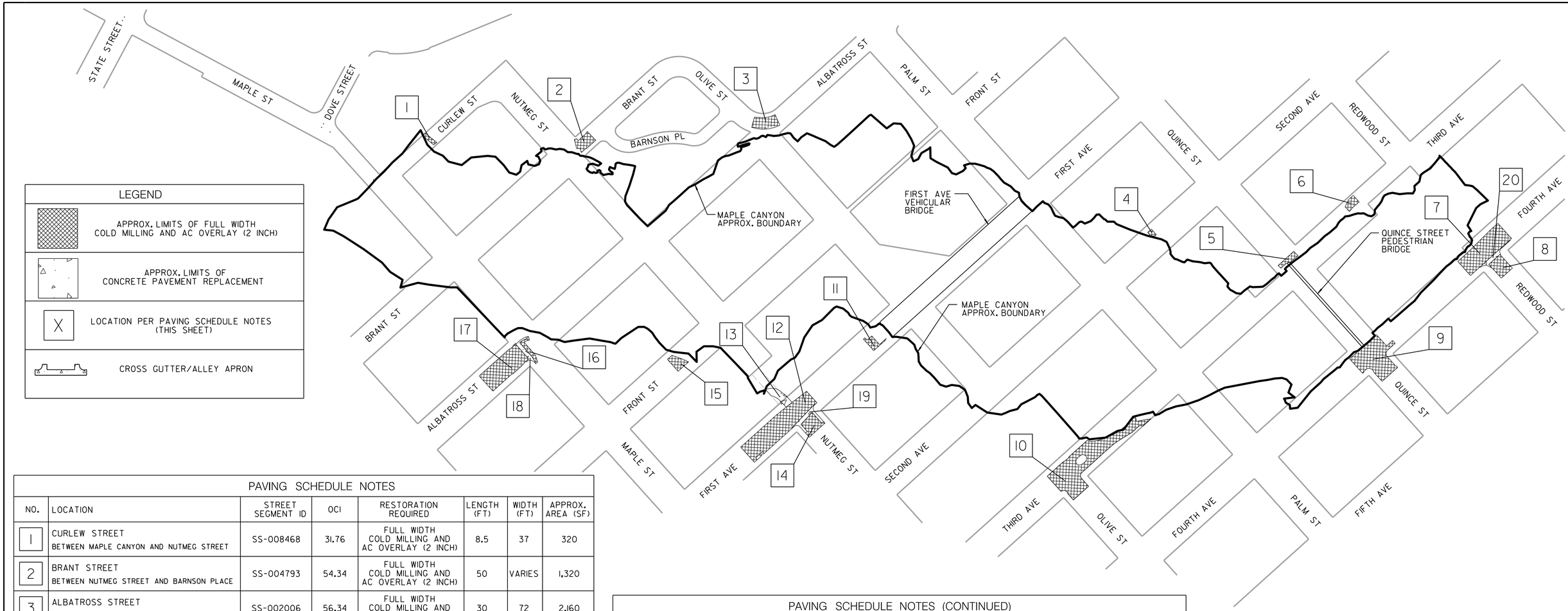
APPROVED:
FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DCE NAME _____ RCE# _____

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER
206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE
CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____
38321-56-D

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FINAL SUBMITTAL



LEGEND	
	APPROX. LIMITS OF FULL WIDTH COLD MILLING AND AC OVERLAY (2 INCH)
	APPROX. LIMITS OF CONCRETE PAVEMENT REPLACEMENT
X	LOCATION PER PAVING SCHEDULE NOTES (THIS SHEET)
	CROSS GUTTER/ALLEY APRON

PAVING SCHEDULE NOTES

NO.	LOCATION	STREET SEGMENT ID	OCI	RESTORATION REQUIRED	LENGTH (FT)	WIDTH (FT)	APPROX. AREA (SF)
1	CURLEW STREET BETWEEN MAPLE CANYON AND NUTMEG STREET	SS-008468	31.76	FULL WIDTH COLD MILLING AND AC OVERLAY (2 INCH)	8.5	37	320
2	BRANT STREET BETWEEN NUTMEG STREET AND BARNSON PLACE	SS-004793	54.34	FULL WIDTH COLD MILLING AND AC OVERLAY (2 INCH)	50	VARIES	1,320
3	ALBATROSS STREET BETWEEN OLIVE STREET AND PALM STREET	SS-002006	56.34	FULL WIDTH COLD MILLING AND AC OVERLAY (2 INCH)	30	72	2,160
4	SECOND AVENUE BETWEEN MAPLE CANYON AND QUINCE STREET	SS-000062	54.02	FULL WIDTH COLD MILLING AND AC OVERLAY (2 INCH)	12	19	230
5	QUINCE STREET BETWEEN SECOND AVENUE AND THIRD AVENUE	SS-000076	52.23	FULL WIDTH COLD MILLING AND AC OVERLAY (2 INCH)	43	15	650
6	THIRD AVENUE BETWEEN QUINCE STREET AND REDWOOD STREET	SS-000076	52.23	FULL WIDTH COLD MILLING AND AC OVERLAY (2 INCH)	34	22	750
7	FOURTH AVENUE BETWEEN QUINCE STREET AND REDWOOD STREET	SS-000116	89.19	FULL WIDTH COLD MILLING AND AC OVERLAY (2 INCH)	137	50	6,850
8	REDWOOD STREET BETWEEN FOURTH AVENUE AND FIFTH AVENUE	SS-022905	23.29	FULL WIDTH COLD MILLING AND AC OVERLAY (2 INCH)	46	37	1,710
9	FOURTH AVENUE BETWEEN QUINCE STREET AND REDWOOD STREET	SS-000116	89.19	FULL WIDTH COLD MILLING AND AC OVERLAY (2 INCH)	VARIES	VARIES	6,840
10	THIRD AVENUE BETWEEN OLIVE STREET AND MAPLE CANYON	SS-000078	42.00	FULL WIDTH COLD MILLING AND AC OVERLAY (2 INCH)	VARIES	VARIES	11,450
11	FIRST AVENUE BETWEEN NUTMEG STREET AND PALM STREET	SS-000016	69.56	FULL WIDTH COLD MILLING AND AC OVERLAY (2 INCH)	23	38	880
12	FIRST AVENUE BETWEEN MAPLE STREET AND NUTMEG STREET	SS-000018	73.39	FULL WIDTH COLD MILLING AND AC OVERLAY (2 INCH)	213	50	10,650

PAVING SCHEDULE NOTES (CONTINUED)

NO.	LOCATION	STREET SEGMENT ID	OCI	RESTORATION REQUIRED	LENGTH (FT)	WIDTH (FT)	APPROX. AREA (SF)
13	NUTMEG STREET BETWEEN FIRST AVENUE AND SECOND AVENUE	SS-020198	46.59	CONCRETE PAVEMENT REPLACEMENT	17	VARIES	1,210
14	NUTMEG STREET BETWEEN FIRST AVENUE AND SECOND AVENUE	SS-020198	46.59	FULL WIDTH COLD MILLING AND AC OVERLAY (2 INCH)	41	VARIES	1,680
15	FRONT STREET BETWEEN MAPLE STREET TO MAPLE CANYON	SS-011571	88.24	FULL WIDTH COLD MILLING AND AC OVERLAY (2 INCH)	VARIES	40	1,010
16	ALBATROSS STREET BETWEEN LAUREL STREET AND MAPLE STREET	SS-002009	78.98	FULL WIDTH COLD MILLING AND AC OVERLAY (2 INCH)	50	VARIES	660
17	ALBATROSS STREET BETWEEN LAUREL STREET AND MAPLE STREET	SS-002009	78.98	FULL WIDTH COLD MILLING AND AC OVERLAY (2 INCH)	120	50	6,000
18	ALBATROSS STREET BETWEEN LAUREL STREET AND MAPLE STREET	SS-002009	78.98	CROSS GUTTER REPLACEMENT	VARIES	63	700
19	NUTMEG STREET BETWEEN FIRST AVENUE AND SECOND AVENUE	SS-020198	46.59	CROSS GUTTER REPLACEMENT	VARIES	80	960
20	FOURTH AVENUE BETWEEN QUINCE STREET AND REDWOOD STREET	SS-000116	89.19	CROSS GUTTER REPLACEMENT	VARIES	62	610
				TOTAL AREA OF FULL WIDTH COLD MILLING AND AC OVERLAY (2 INCH)			53,160 SF
				TOTAL AREA OF CONCRETE PAVEMENT			1,210 SF
				TOTAL AREA OF CROSS GUTTER/ALLEY APRON			2,270 SF

NO SCALE

STREET RESURFACING PLAN

C-38

MAPLE CANYON RESTORATION – PHASE 1

STREET RESURFACING PLAN

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 57 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DCE NAME _____ RCE# _____

SUBMITTED BY: ELHAM LOTFI
PROJECT MANAGER

CHECKED BY: BAREAZ PIROMARI
PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE

1846-6276 CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

38321-57-D

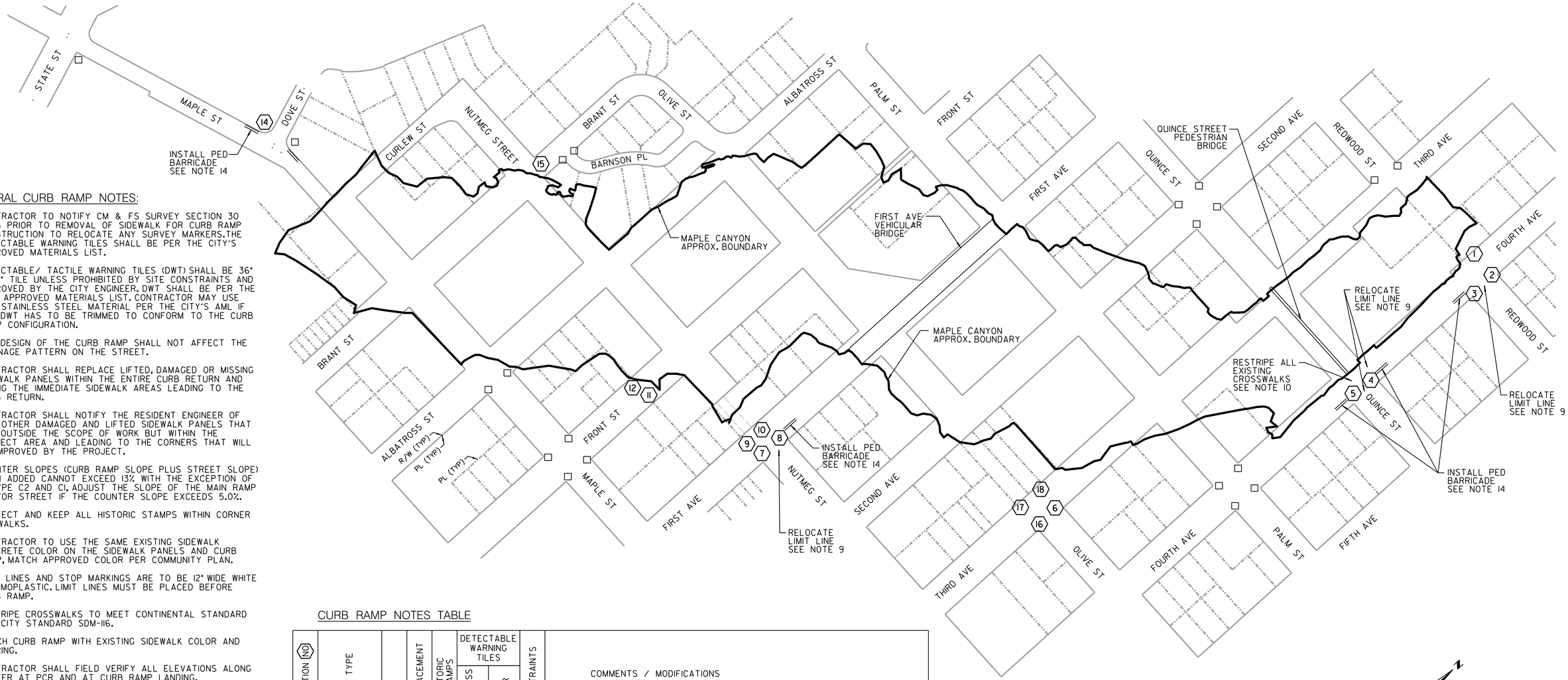
REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619-291-0707
(FAX) 619-291-4165
rickengineering.com
San Diego Riverside - Orange - Sacramento - San Luis Obispo - Phoenix - Tucson - Denver

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FINAL SUBMITTAL



GENERAL CURB RAMP NOTES:

1. CONTRACTOR TO NOTIFY CM & FS SURVEY SECTION 30 DAYS PRIOR TO REMOVAL OF SIDEWALK FOR CURB RAMP CONSTRUCTION TO RELOCATE ANY SURVEY MARKERS.THE DETECTABLE WARNING TILES SHALL BE PER THE CITY'S APPROVED MATERIALS LIST.
2. DETECTABLE/ TACTILE WARNING TILES (DWT) SHALL BE 36" X 48" TILE UNLESS PROHIBITED BY SITE CONSTRAINTS AND APPROVED BY THE CITY ENGINEER. DWT SHALL BE PER THE CITY APPROVED MATERIALS LIST. CONTRACTOR MAY USE NON STAINLESS STEEL MATERIAL PER THE CITY'S AML IF THE DWT HAS TO BE TRIMMED TO CONFORM TO THE CURB RAMP CONFIGURATION.
3. THE DESIGN OF THE CURB RAMP SHALL NOT AFFECT THE DRAINAGE PATTERN ON THE STREET.
4. CONTRACTOR SHALL REPLACE LIFTED, DAMAGED OR MISSING SIDEWALK PANELS WITHIN THE ENTIRE CURB RETURN AND ALONG THE IMMEDIATE SIDEWALK AREAS LEADING TO THE CURB RETURN.
5. CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER OF ANY OTHER DAMAGED AND LIFTED SIDEWALK PANELS THAT ARE OUTSIDE THE SCOPE OF WORK BUT WITHIN THE PROJECT AREA AND LEADING TO THE CORNERS THAT WILL BE IMPROVED BY THE PROJECT.
6. COUNTER SLOPES (CURB RAMP SLOPE PLUS STREET SLOPE) WHEN ADDED CANNOT EXCEED 13% WITH THE EXCEPTION OF A TYPE C2 AND C1, ADJUST THE SLOPE OF THE MAIN RAMP AND/OR STREET IF THE COUNTER SLOPE EXCEEDS 5.0%.
7. PROTECT AND KEEP ALL HISTORIC STAMPS WITHIN CORNER SIDEWALKS.
8. CONTRACTOR TO USE THE SAME EXISTING SIDEWALK CONCRETE COLOR ON THE SIDEWALK PANELS AND CURB RAMP, MATCH APPROVED COLOR PER COMMUNITY PLAN.
9. LIMIT LINES AND STOP MARKINGS ARE TO BE 12" WIDE WHITE THERMOPLASTIC. LIMIT LINES MUST BE PLACED BEFORE CURB RAMP.
10. RESTRIPE CROSSWALKS TO MEET CONTINENTAL STANDARD PER CITY STANDARD SDM-116.
11. MATCH CURB RAMP WITH EXISTING SIDEWALK COLOR AND SCORING.
12. CONTRACTOR SHALL FIELD VERIFY ALL ELEVATIONS ALONG GUTTER AT PCR AND AT CURB RAMP LANDING.
13. CONTRACTOR TO ENSURE PONDING SHALL NOT OCCUR AT ALL CURB RAMP AREAS.
14. INSTALL PEDESTRIAN BARRICADES PER CITY STANDARD. THE ARROW ON THE SIGN SHALL POINT TO THE NEAREST PEDESTRIAN CROSSING.
15. PATCH AND REPAIR DAMAGES ALONG CROSS GUTTERS, ROAD SURFACES, AND ALLEY APRONS AT ALL CROSSING AREAS. REPLACE AS NECESSARY PER CURRENT STANDARDS. REPLACE ALLEY APRONS PER SDG-120 AND CROSS GUTTERS PER CITY STANDARD SDG-157.
16. ALL SIGNS SHALL HAVE A 7'-0" MINIMUM HEIGHT FROM SIDEWALK SURFACE TO BOTTOM OF SIGN. RAISE AS NEEDED.
17. COLD MILL EX AC AND RECONSTRUCT CURB, GUTTER AND STREET PAVING 5 FEET BEYOND CURB RAMP FLARE UNLESS OTHERWISE NOTED.
18. CONTRACTOR TO ENSURE THAT ALL ITEMS INCLUDING SIGN POLES, MAGAZINE RACKS, BENCHES, TRASH CANS, ETC. ARE PLACED OUTSIDE OF THE PEDESTRIAN ACCESSIBLE ROUTE AREAS.
19. RETAINING CURBS BEHIND CURB RAMPS SHALL BE A MINIMUM OF 2" HIGHER THAN THE FINISH GRADE BEHIND THE SIDEWALK.

CURB RAMP NOTES TABLE

LOCATION NO	RAMP TYPE	NEW	REPLACEMENT	HISTORIC STAMPS	DETECTABLE WARNING TILES • STAINLESS STEEL	DETECTABLE WARNING TILES • OTHER	CONSTRAINTS	COMMENTS / MODIFICATIONS
1	MOD C1	X	-	-	X	-	X	DIRECTIONAL TO NE CORNER. RETAINING CURB TO FORM STEP IN FRONT OF PRIVATE ENTRANCE. SEE DETAIL SHT 59
2	A	-	X	-	X	-	X	SEE DETAIL SHT 60
3	A	-	X	-	X	-	X	DIRECTIONAL TO NE CORNER. SEE DETAIL SHT 61
4	MOD C1	-	X	-	-	X	X	SEE DETAIL SHT 62
5	A	-	X	X	X	-	X	DIRECTIONAL TO NE CORNER. MAINTAIN PRIVATE ACCESS. SEE DETAIL SHT 63
6	A	-	X	-	X	-	X	SEE DETAIL SHT 64
7	A	-	X	-	X	-	X	SEE DETAIL SHT 65
8	A	-	X	X	X	-	X	DIRECTIONAL TO SE CORNER. SEE DETAIL SHT 66
9	MOD CASE C	-	X	-	X	-	X	SEE DETAIL SHT 67
10	C1	-	X	-	X	-	X	DIRECTIONAL TO SW CORNER. MAINTAIN LEVEL LANDING IN FRONT OF PRIVATE ACCESS STAIRCASE.
11	CASE B	X	-	-	X	-	X	INSTALL BETWEEN FIRE HYDRANT AND UTILITY POLE GUY WIRE. DIRECTIONAL TO W SIDE.
12	CASE B	X	-	-	X	-	X	INSTALL BETWEEN WATER METER AND UTILITY POLE WITH NO FLARES. TRIM BACK VEGETATION BY UTILITY POLE AND REMOVE SHRUBBERY SOUTH OF RAMP FOR SIGHT DISTANCE. DIRECTIONAL TO E SIDE.
13	-	-	-	-	-	-	-	NOT USED
14	C1	-	X	-	X	-	X	PROTECT EXIST DECORATIVE PLANTER CURB IN PLACE
15	CASE C	X	-	-	X	-	X	PROTECT EXISTING FIRE HYDRANT. INSTALL SOUTH OF NEW INLET.
16	A	-	X	-	X	-	X	REPLACE RAMP DUE TO INSUFFICIENTLY SIZED DWT.
17	B	-	X	-	X	-	X	DIRECTIONAL TO SE CORNER. REPLACE RAMP DUE TO INSUFFICIENTLY SIZED DWT.
18	B	-	X	-	X	-	X	DIRECTIONAL TO NE CORNER. REPLACE RAMP DUE TO INSUFFICIENTLY SIZED DWT.

• THE DETECTABLE WARNING TILES SHALL BE PER THE CITY'S APPROVED MATERIALS LIST

LEGEND

(1) CURB RAMP NO's □ EX CURB RAMP ═ PEDESTRIAN BARRICADE

PROPOSED CURB RAMPS PER STANDARD DRAWINGS:

DETECTABLE WARNING TILES	SDG-130
GENERAL CURB RAMP NOTES	SDG-131
GENERAL CURB RAMP NOTES & SUPPLEMENTAL DETAILS	SDG-132
CURB RAMPS - TYPE A & B	SDG-133
DUAL CURB RAMPS	SDG-134
CURB RAMPS - TYPE C1& C2	SDG-135
CURB RAMPS - TYPE C1& C2 & MORE DETAILS	SDG-136
CURB RAMP - TYPE D	SDG-137
GENERAL CURB RAMPS	SDG-138
ISLAND AND PASSAGEWAY DETAILS	SDG-139
PEDESTRIAN BARRICADE - TYPE A	SDG-141
EXISTING HISTORICAL STAMP OR IMPRESSION PLACEMENT	SDG-115

NO SCALE

C-39

CURB RAMP LOCATION

MAPLE CANYON RESTORATION – PHASE 1

CURB RAMP LOCATION

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 58 OF 98 SHEETS

STORM DRAIN WBS B-12040

REGISTERED PROFESSIONAL ENGINEER — KEVIN R. GIBSON — NO. 52295 — STATE OF CALIFORNIA

APPROVED:
FOR CITY ENGINEER _____ DATE
SHEILA BOSE
PRINT DCE NAME _____ RCE#

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
DESIGNED BY: BAREAZ PIROMARI, PROJECT ENGINEER
206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE
38321-58-D

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

RICK ENGINEERING COMPANY
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619-291-0707
(FAX) 619-291-4165
rickengineering.com
San Diego | Riverside - Orange - Sacramento - San Luis Obispo - Phoenix - Tucson - Denver

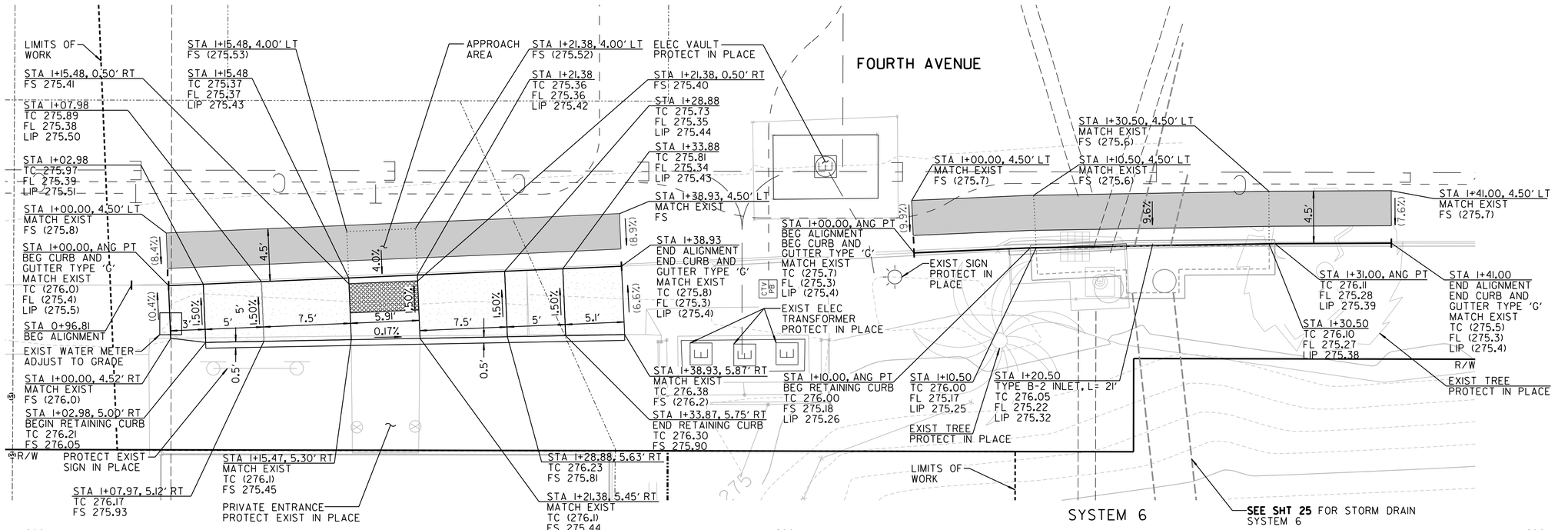
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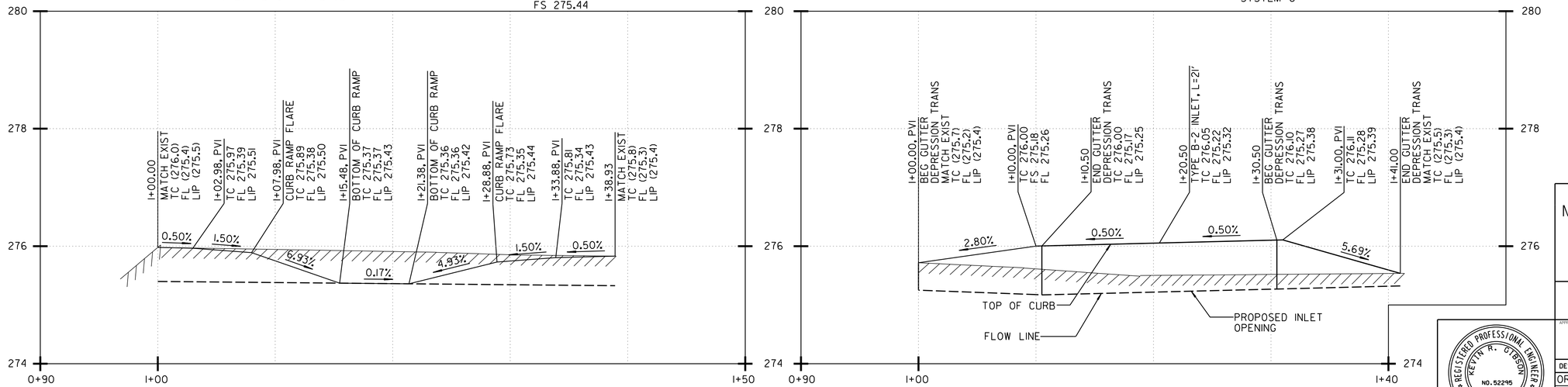
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FINAL SUBMITTAL

ALIGNMENT NAME:	SYSTEM 6 SURFACE IMPROVEMENTS					
HORIZONTAL				VERTICAL		
	STATION	NORTHING	EASTING		STATION	ELEVATION
ELEMENT: LINEAR				ELEMENT: LINEAR		
POB	1+00.00	1849378.4	6281428.5	POB	1+00.00	275.72
PI	1+10.00	1849368.4	6281429.0	PVI	1+10.00	276
TANGENTIAL DIRECTION	S 2° 27'30" E			TANGENT GRADE:	2.84%	
TANGENTIAL LENGTH:	10.00			TANGENT LENGTH:	10.00	
ELEMENT: LINEAR				ELEMENT: LINEAR		
PI	1+10.00	1849368.4	6281429.0	PVI	1+10.00	276
PI	1+31.00	1849347.4	6281429.3	PVI	1+31.00	276.11
TANGENTIAL DIRECTION	S 0° 58'57" E			TANGENT GRADE:	0.50%	
TANGENTIAL LENGTH:	21.00			TANGENT LENGTH:	21.00	
ELEMENT: LINEAR				ELEMENT: LINEAR		
PI	1+31.00	1849347.4	6281429.3	PVI	1+31.00	276.11
POE	1+41.00	1849337.4	6281429.4	POE	1+41.00	275.54
TANGENTIAL DIRECTION	S 0° 15'37" E			TANGENT GRADE:	-5.69%	
TANGENTIAL LENGTH:	10.00			TANGENT LENGTH:	10.00	

ALIGNMENT NAME:	CURB RAMP 1					
HORIZONTAL				VERTICAL		
	STATION	NORTHING	EASTING		STATION	ELEVATION
ELEMENT: LINEAR				ELEMENT: LINEAR		
POB	0+96.81	1849445.6	6281425.80	POB	1+00.00	275.98
PI	1+00.00	1849442.4	6281425.76	PVI	1+02.98	275.97
TANGENTIAL DIRECTION	S 0° 43'41" W			TANGENT GRADE:	-0.50%	
TANGENTIAL LENGTH:	3.19			TANGENT LENGTH:	2.98	
ELEMENT: LINEAR				ELEMENT: LINEAR		
PI	1+00.00	1849442.4	6281425.76	PVI	1+02.98	275.97
POE	1+38.93	1849403.5	6281427.43	PVI	1+07.98	275.89
TANGENTIAL DIRECTION	S 2° 27'06" E			TANGENT GRADE:	-1.50%	
TANGENTIAL LENGTH:	38.93			TANGENT LENGTH:	5.00	
				ELEMENT: LINEAR		
				PVI	1+07.98	275.89
				PVI	1+15.48	275.37
				TANGENT GRADE:	-6.92%	
				TANGENT LENGTH:	7.50	
				ELEMENT: LINEAR		
				PVI	1+15.48	275.37
				PVI	1+21.38	275.36
				TANGENT GRADE:	-0.18%	
				TANGENT LENGTH:	5.90	
				ELEMENT: LINEAR		
				PVI	1+21.38	275.36
				PVI	1+28.88	275.73
				TANGENT GRADE:	4.94%	
				TANGENT LENGTH:	7.50	
				ELEMENT: LINEAR		
				PVI	1+28.88	275.73
				PVI	1+33.88	275.81
				TANGENT GRADE:	1.50%	
				TANGENT LENGTH:	5.00	
				ELEMENT: LINEAR		
				PVI	1+33.88	275.81
				POE	1+38.93	275.83
				TANGENT GRADE:	0.50%	
				TANGENT LENGTH:	5.05	

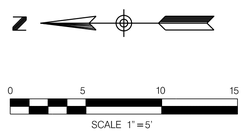




CURB RAMP 1

SYSTEM 6

SYSTEM 6



C-40

MAPLE CANYON RESTORATION – PHASE 1

CURB RAMP DETAIL 1

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 59 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED: FOR CITY ENGINEER — DATE
SHEILA BOSE
PRINT DOE NAME — RCE#

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
DESIGNED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

CONTRACTOR — DATE STARTED
INSPECTOR — DATE COMPLETED

38321-59-D

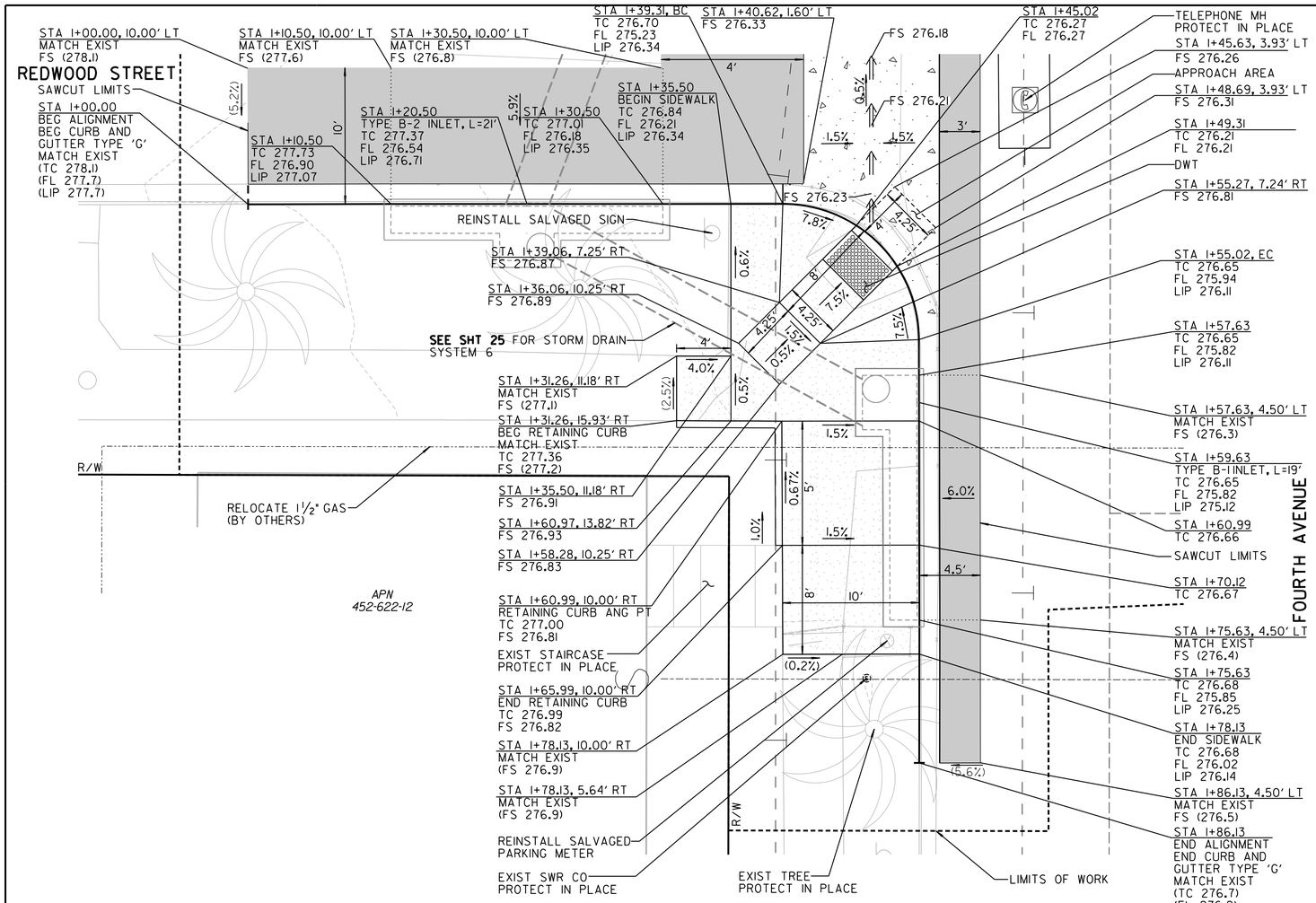
REGISTERED PROFESSIONAL ENGINEER — KEVIN R. GIBSON — NO. 52295 — STATE OF CALIFORNIA

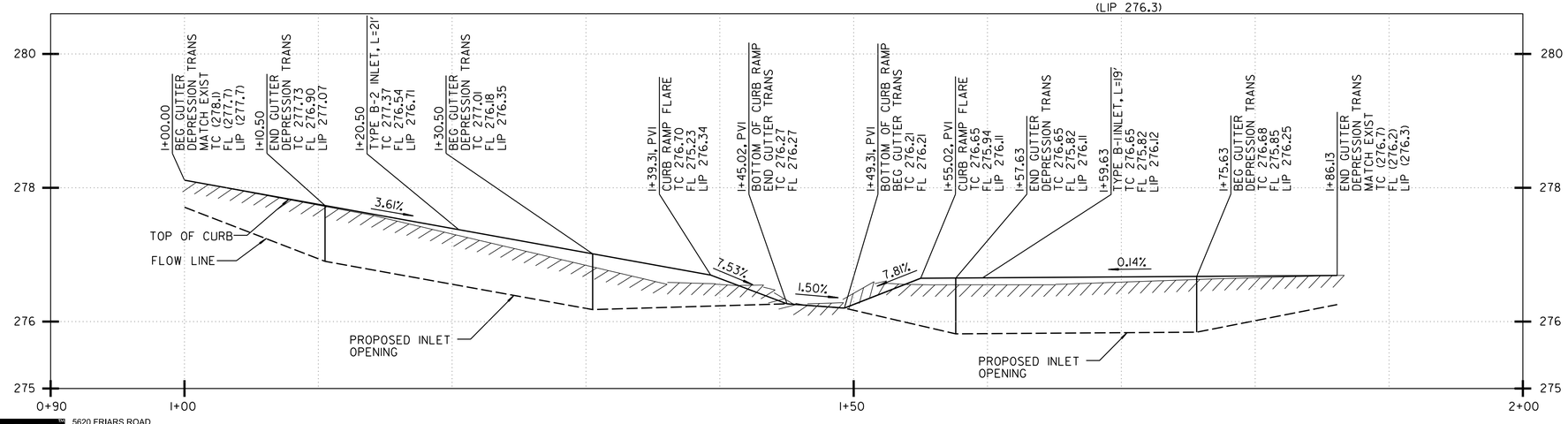
RICK ENGINEERING COMPANY
5620 FRIARS ROAD
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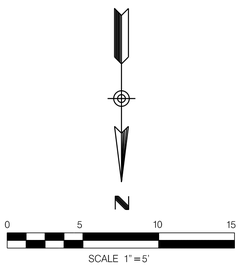
FINAL SUBMITTAL





CURB RAMP ⟨2⟩

ALIGNMENT NAME:	CURB RAMP 2					
HORIZONTAL				VERTICAL		
	STATION	NORTHING	EASTING		STATION	ELEVATION
ELEMENT: LINEAR				ELEMENT: LINEAR		
POB	I+00.00	1849419.45	6281527.03	POB	I+00.00	278.11
BC	I+39.31	1849419.42	6281487.72	PVI	I+39.32	276.70
TANGENTIAL DIRECTION:	S 89° 57'01" W			TANGENT GRADE:	-3.61%	
TANGENTIAL LENGTH:	39.31			TANGENT LENGTH:	39.32	
ELEMENT: CIRCULAR				ELEMENT: LINEAR		
BC	I+39.31	1849419.42	6281487.72	PVI	I+39.32	276.70
EC	I+55.02	1849429.41	6281477.71	PVI	I+45.02	276.27
RADIUS:	10.00			TANGENT GRADE:	-7.53%	
DELTA:	89° 59'41"	RIGHT		TANGENT LENGTH:	5.70	
LENGTH:	15.71			ELEMENT: LINEAR		
ELEMENT: LINEAR				PVI	I+45.02	276.27
EC	I+55.02	1849429.41	6281477.71	PVI	I+49.31	276.20
POE	I+86.13	1849460.51	6281477.68	TANGENT GRADE:	-1.50%	
TANGENTIAL DIRECTION:	N 0° 03'18" W			TANGENT LENGTH:	4.29	
TANGENTIAL LENGTH:	31.11			ELEMENT: LINEAR		
				PVI	I+49.31	276.20
				PVI	I+55.01	276.65
				TANGENT GRADE:	7.81%	
				TANGENT LENGTH:	5.70	
				ELEMENT: LINEAR		
				PVI	I+55.02	276.65
				PVI	I+57.13	276.65
				TANGENT GRADE:	0.14%	
				TANGENT LENGTH:	2.12	
				ELEMENT: LINEAR		
				PVI	I+57.13	276.65
				POE	I+86.13	276.69
				TANGENT GRADE:	0.14%	
				TANGENT LENGTH:	29.00	



CURB RAMP DETAIL 2

C-41

MAPLE CANYON RESTORATION – PHASE 1

CURB RAMP DETAIL 2

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 60 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DOE NAME _____ RCE# _____

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCSB3 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

38321-60-D

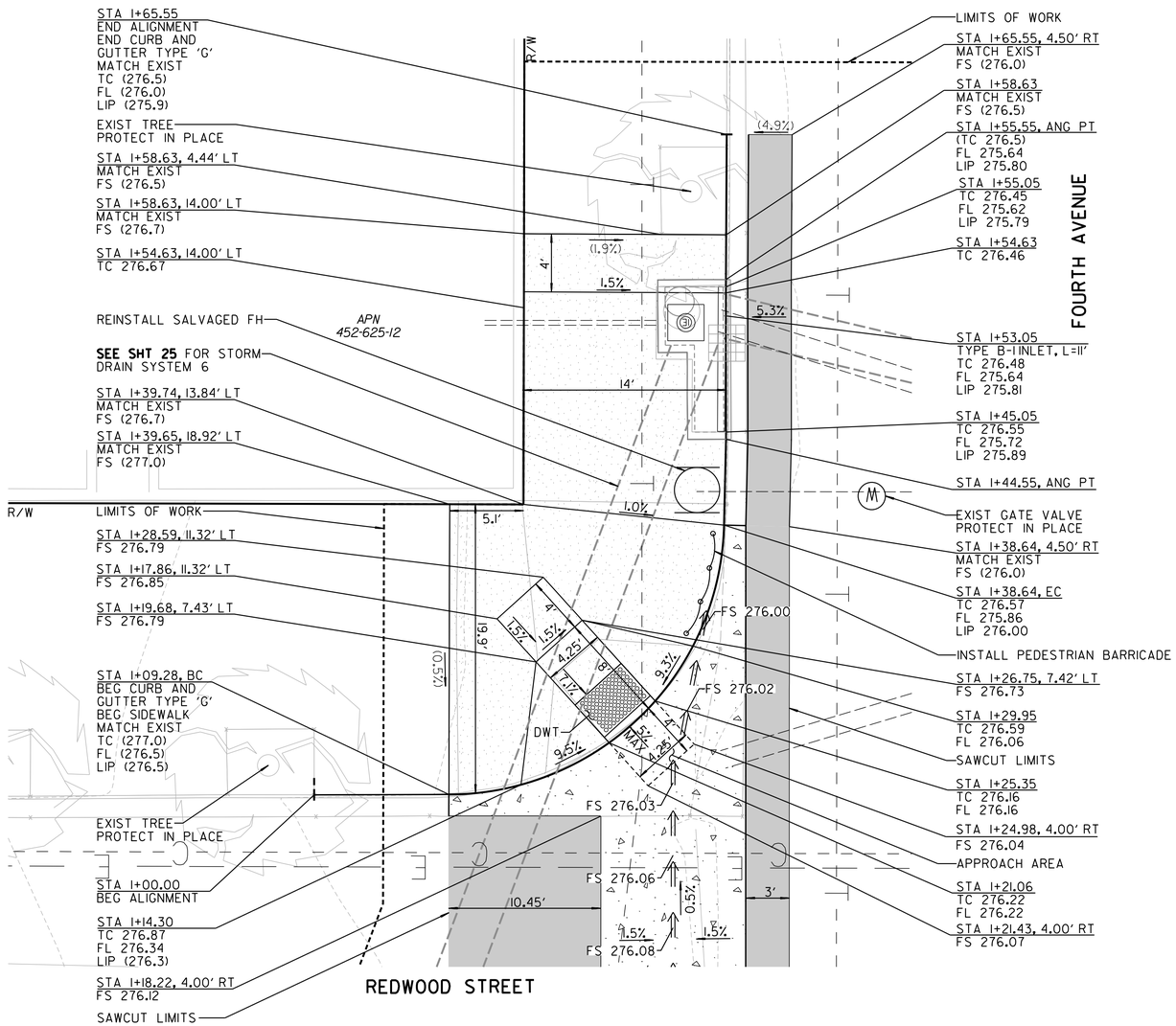
REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

RICK ENGINEERING COMPANY
San Diego
5620 FRIARS ROAD
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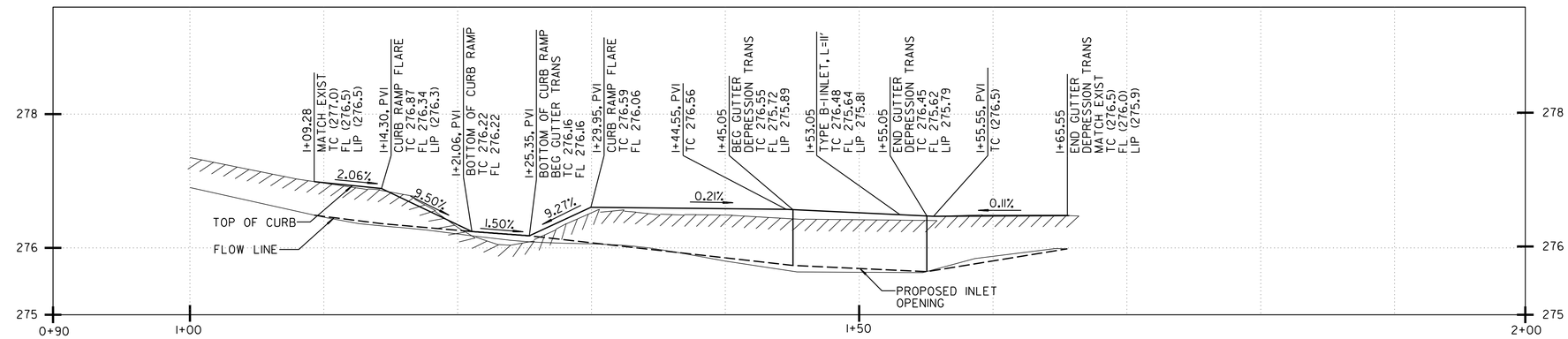
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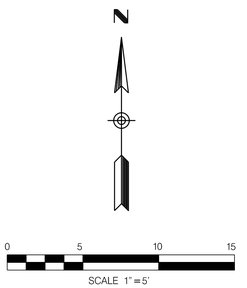
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ALIGNMENT NAME:	CURB RAMP 3					
HORIZONTAL				VERTICAL		
	STATION	NORTHING	EASTING		STATION	ELEVATION
ELEMENT: LINEAR				ELEMENT: LINEAR		
POB	1+00.00	1849379.45	6281505.92	POB	1+09.28	276.97
BC	1+09.28	1849379.43	6281496.64	PVI	1+14.30	276.87
TANGENTIAL DIRECTION:	S 89° 51'20" W			TANGENT GRADE:	-2.06%	
TANGENTIAL LENGTH:	9.28			TANGENT LENGTH:	5.02	
ELEMENT: CIRCULAR				ELEMENT: LINEAR		
BC	1+09.28	1849379.43	6281496.64	PVI	1+14.30	276.87
EC	1+38.64	1849360.87	6281477.69	PVI	1+21.06	276.22
RADIUS:	19.00			TANGENT GRADE:	-9.50%	
DELTA:	88° 31'51"	LEFT		TANGENT LENGTH:	6.76	
LENGTH:	29.36			ELEMENT: LINEAR		
ELEMENT: LINEAR				PVI	1+21.06	276.22
EC	1+38.64	1849360.87	6281477.69	PVI	1+25.35	276.16
PI	1+44.55	1849354.95	6281477.56	TANGENT GRADE:	-1.50%	
TANGENTIAL DIRECTION:	S 1° 19'28" W			TANGENT LENGTH:	4.29	
TANGENTIAL LENGTH:	5.92			ELEMENT: LINEAR		
ELEMENT: LINEAR				PVI	1+25.35	276.16
PI	1+44.55	1849354.95	6281477.56	PVI	1+29.95	276.59
PI	1+55.55	1849343.95	6281477.56	TANGENT GRADE:	9.27%	
TANGENTIAL DIRECTION:	S 0° 01'19" E			TANGENT LENGTH:	4.60	
TANGENTIAL LENGTH:	11.00			ELEMENT: LINEAR		
ELEMENT: LINEAR				PVI	1+29.95	276.59
PI	1+55.55	1849343.95	6281477.56	PVI	1+44.55	276.56
POE	1+65.55	1849333.95	6281477.51	TANGENT GRADE:	-0.21%	
TANGENTIAL DIRECTION:	S 0° 18'21" W			TANGENT LENGTH:	14.60	
TANGENTIAL LENGTH:	10.00			ELEMENT: LINEAR		
				PVI	1+44.55	276.56
				PVI	1+55.55	276.45
				TANGENT GRADE:	-0.94%	
				TANGENT LENGTH:	11.00	
				ELEMENT: LINEAR		
				PVI	1+55.55	276.45
				POE	1+65.65	276.46
				TANGENT GRADE:	0.11%	
				TANGENT LENGTH:	10.00	



CURB RAMP 3



C-42

MAPLE CANYON RESTORATION – PHASE 1

CURB RAMP DETAIL 3

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 61 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER ____ DATE
SHEILA BOSE
PRINT DCE NAME ____ RCE#

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

CONTRACTOR ____ DATE STARTED ____
INSPECTOR ____ DATE COMPLETED ____

38321-61-D

REGISTERED PROFESSIONAL ENGINEER · KEVIN R. GIBSON · NO. 52295 · STATE OF CALIFORNIA

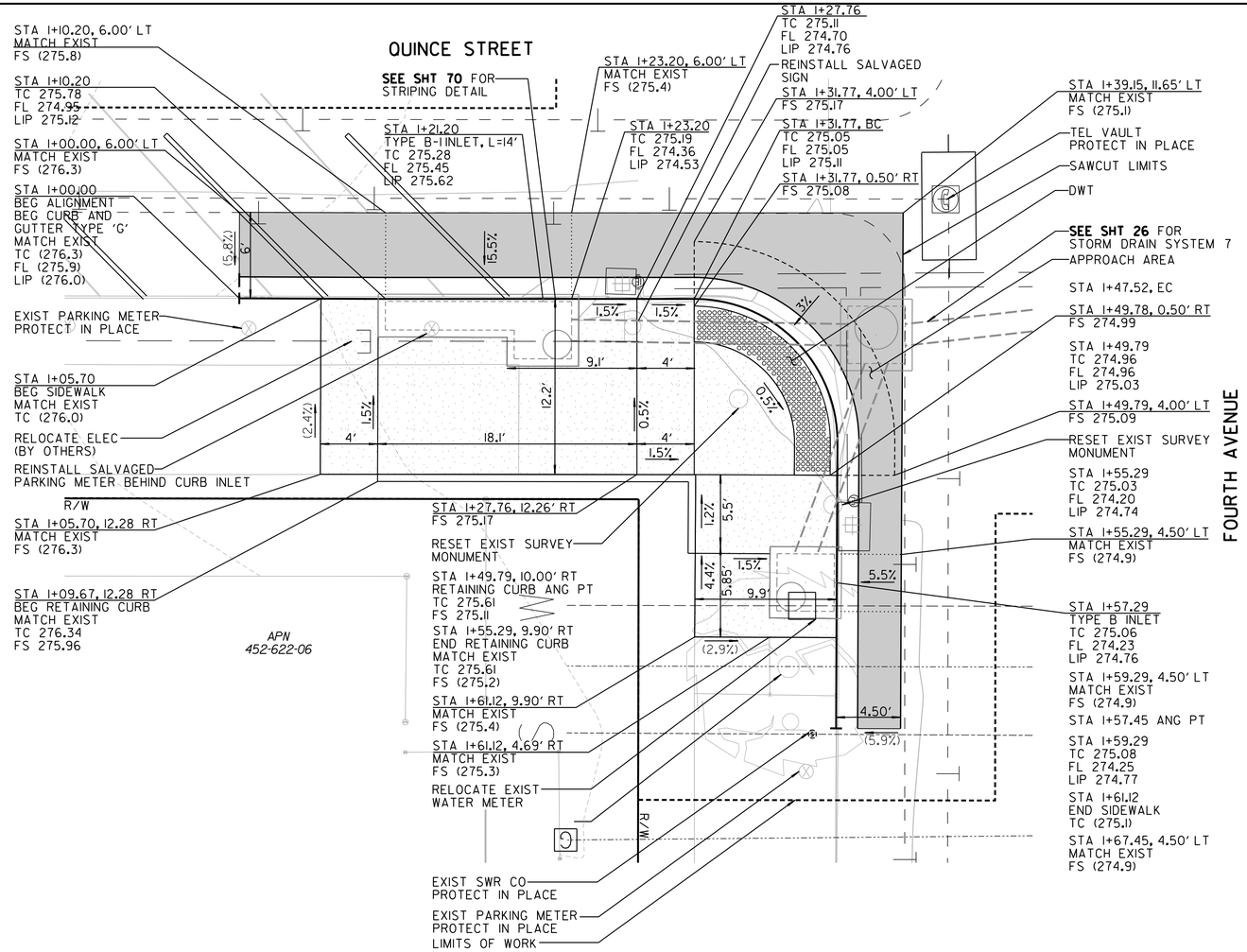
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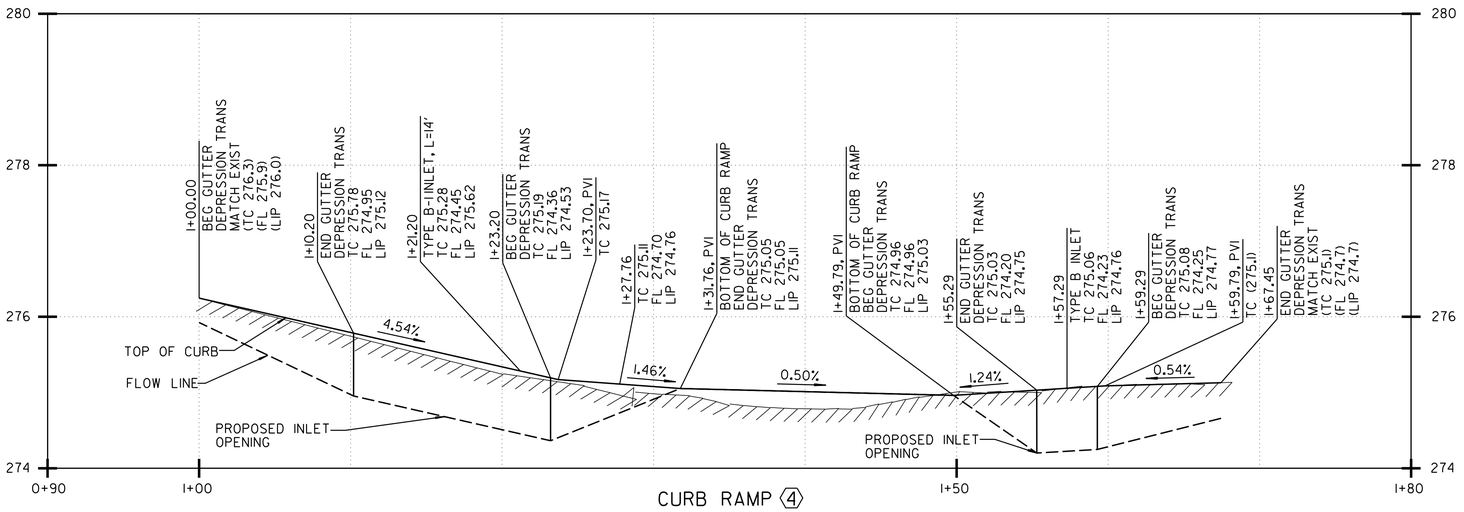
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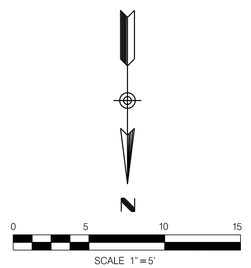
FINAL SUBMITTAL

CURB RAMP DETAIL 3



ALIGNMENT NAME	CURB RAMP 4					
HORIZONTAL				VERTICAL		
	STATION	NORTHING	EASTING		STATION	ELEVATION
ELEMENT: LINEAR				ELEMENT: LINEAR		
POB	1+00.00	1849044.04	6281518.78	POB	1+00.00	276.25
BC	1+31.77	1849044.08	6281487.01	PVI	1+23.70	275.17
TANGENTIAL DIRECTION	N 89° 55'47" W			TANGENT GRADE:	-4.54%	
TANGENTIAL LENGTH:	31.77			TANGENT LENGTH:	23.70	
ELEMENT: CIRCULAR				ELEMENT: LINEAR		
BC	1+31.77	1849044.08	6281487.01	PVI	1+23.70	275.17
EC	1+47.52	1849054.13	6281477.02	PVI	1+31.76	275.05
RADIUS:	10.00			TANGENT GRADE:	-1.46%	
DELTA:	90° 17'28"	RIGHT		TANGENT LENGTH:	8.06	
LENGTH:	15.76			ELEMENT: LINEAR		
ELEMENT: LINEAR				PVI	1+31.76	275.05
EC	1+47.52	1849054.13	6281477.02	PVI	1+49.79	274.96
PI	1+57.45	1849064.00	6281477.07	TANGENT GRADE:	-0.50%	
TANGENTIAL	N 0° 17'46" E			TANGENT LENGTH:	18.03	
TANGENTIAL LENGTH:	9.93			ELEMENT: LINEAR		
ELEMENT: LINEAR				PVI	1+49.79	274.96
PI	1+57.45	1849064.00	6281477.07	PVI	1+59.79	275.09
POE	1+67.45	1849074.06	6281477.12	TANGENT GRADE:	1.24%	
TANGENTIAL	N 0° 15'22" E			TANGENT LENGTH:	10.00	
TANGENTIAL LENGTH:	10.00			ELEMENT: LINEAR		
				PVI	1+59.79	275.09
				POE	1+67.45	275.13
				TANGENT GRADE:	0.54%	
				TANGENT LENGTH:	7.66	





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MAPLE CANYON RESTORATION – PHASE 1

CURB RAMP DETAIL 4

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 62 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER ____ DATE
SHEILA BOSE
PRINT DCE NAME ____ RCE#

SUBMITTED BY: ELHAM LOTFI PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

CONTRACTOR ____ DATE STARTED ____
INSPECTOR ____ DATE COMPLETED ____

38321-62-D

REGISTERED PROFESSIONAL ENGINEER KEVIN R. GIBSON NO. 52295 STATE OF CALIFORNIA

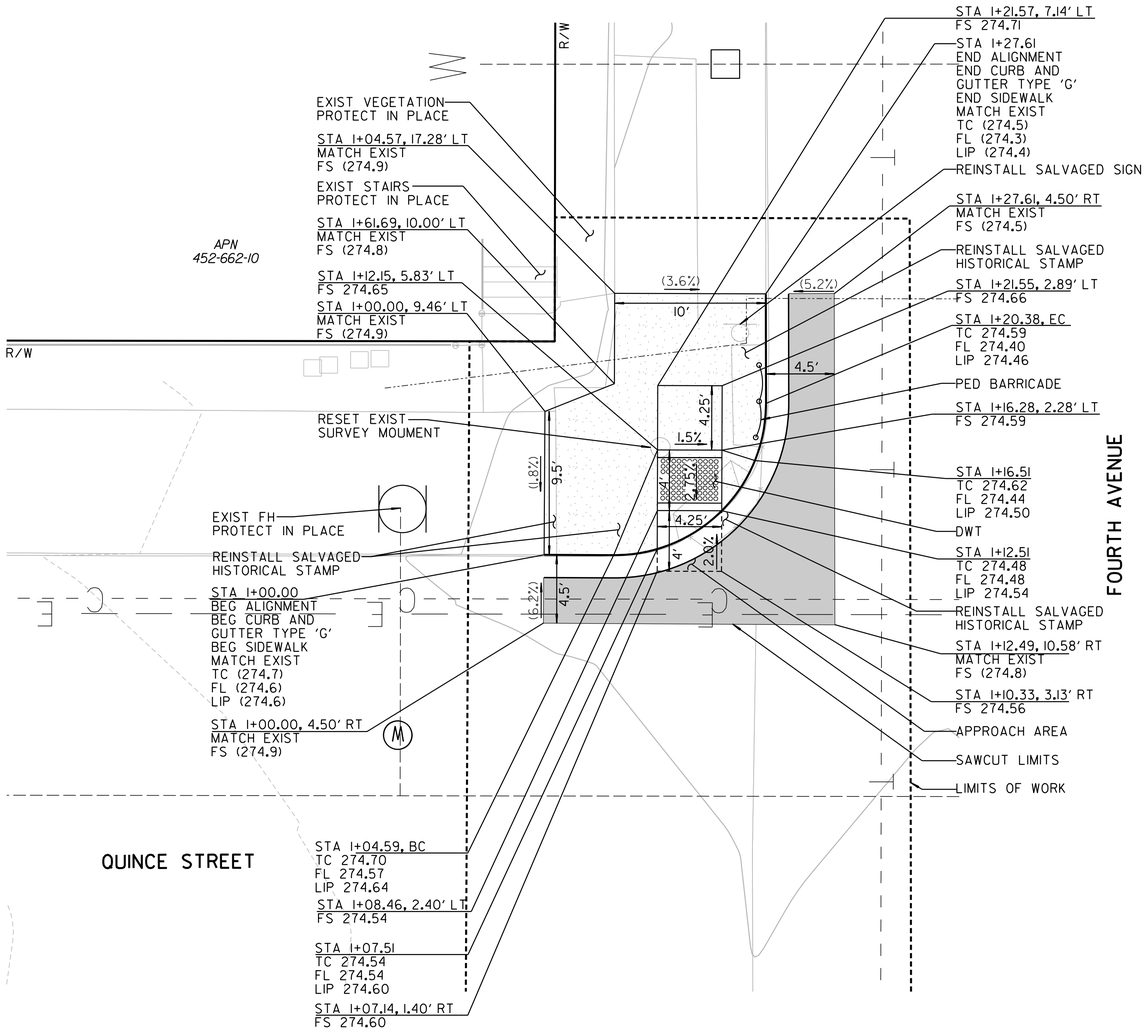
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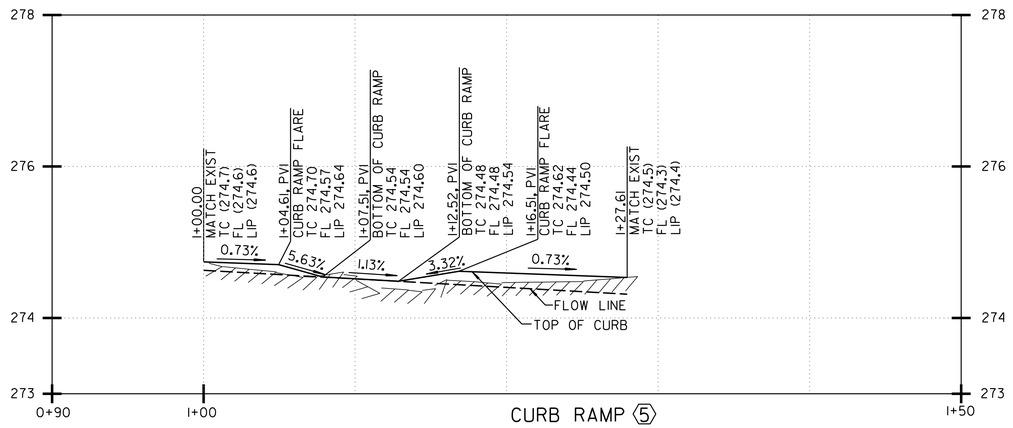
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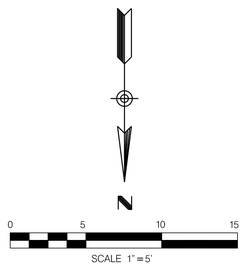
CURB RAMP DETAIL 4

FINAL SUBMITTAL





ALIGNMENT NAME:	CURB RAMP 5					
HORIZONAL				VERTICAL		
	STATION	NORTHING	EASTING		STATION	ELEVATION
ELEMENT: LINEAR				ELEMENT: LINEAR		
POB	1+00.00	1848992.15	6281491.44	POB	1+00.00	274.74
BC	1+04.59	1848992.17	6281486.85	PVI	1+04.61	274.70
TANGENTIAL DIRECTION	N 89° 40'19" W			TANGENT GRADE:	-0.73%	
TANGENTIAL LENGTH:	4.59			TANGENT LENGTH:	4.61	
ELEMENT: CIRCULAR				ELEMENT: LINEAR		
BC	1+04.59	1848992.17	6281486.85	PVI	1+04.61	274.70
EC	1+20.38	1848982.15	6281476.79	PVI	1+07.51	274.54
RADIUS:	10.00			TANGENT GRADE:	-5.63%	
DELTA:	90° 25'41"	LEFT		TANGENT LENGTH:	2.90	
LENGTH:	15.78			ELEMENT: LINEAR		
ELEMENT: LINEAR				PVI	1+07.51	274.54
EC	1+20.38	1848982.15	6281476.79	PVI	1+12.52	274.48
POE	1+27.61	1848974.92	6281476.81	TANGENT GRADE:	-1.13%	
TANGENTIAL DIRECTION	S 0° 06'01" E			TANGENT LENGTH:	5.01	
TANGENTIAL LENGTH:	7.23			ELEMENT: LINEAR		
				PVI	1+12.52	274.48
				PVI	1+16.51	274.62
				TANGENT GRADE:	3.32%	
				TANGENT LENGTH:	3.99	
				ELEMENT: LINEAR		
				PVI	1+16.51	274.62
				POE	1+27.61	274.54
				TANGENT GRADE:	-0.73%	
				TANGENT LENGTH:	11.10	



C-44

MAPLE CANYON RESTORATION – PHASE 1
CURB RAMP DETAIL 5

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 63 OF 98 SHEETS

STORM DRAIN WBS: B-12040

APPROVED:
FOR CITY ENGINEER — DATE
SHEILA BOSE
PRINT DCE NAME — RCE#

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE
38321-63-D

CONTRACTOR — DATE STARTED
INSPECTOR — DATE COMPLETED

REGISTERED PROFESSIONAL ENGINEER · KEVIN R. GIBSON · NO. 52295 · STATE OF CALIFORNIA

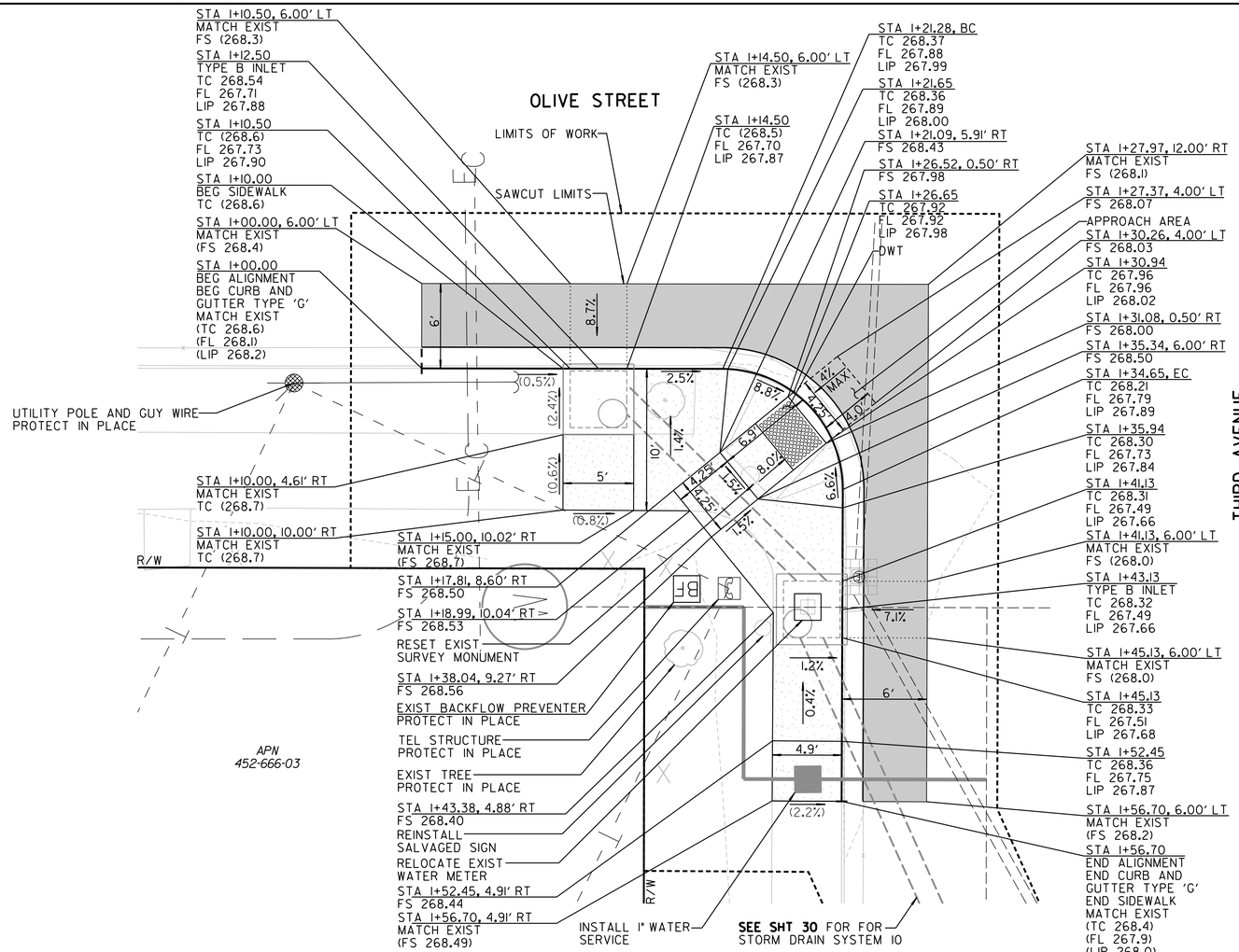
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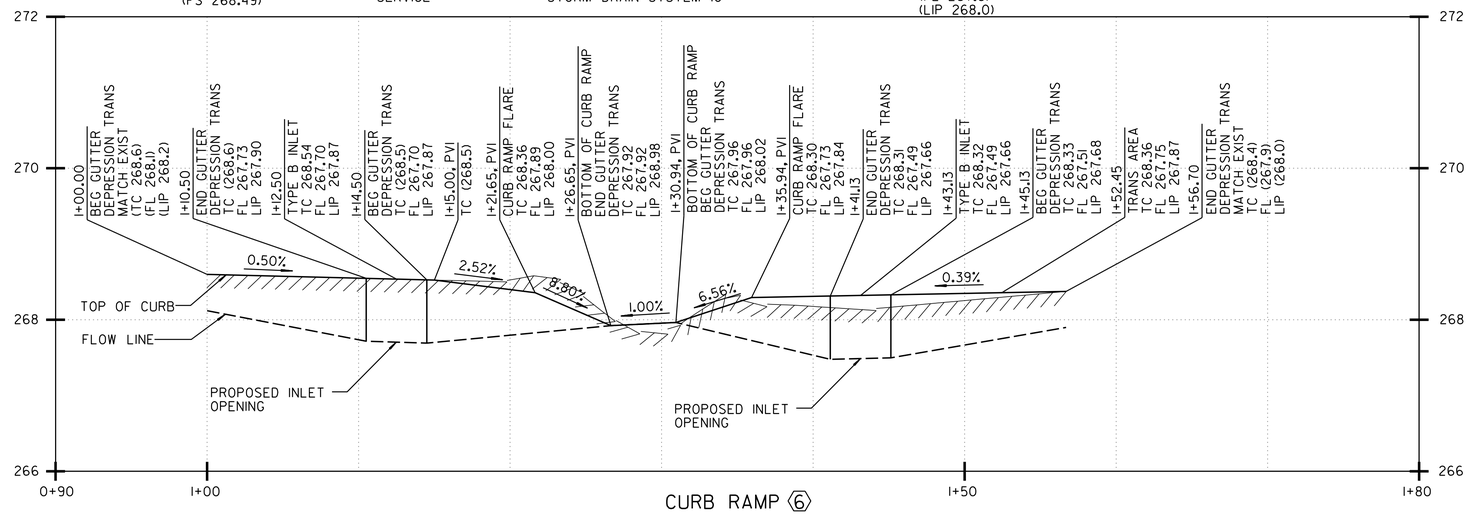
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FINAL SUBMITTAL

CURB RAMP DETAIL 5





CURB RAMP 6

ALIGNMENT NAME:	CURB RAMP 6		
HORIZONTAL			
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
POB	1+00.00	1848283.19	628224.79
BC	1+21.28	1848283.22	628203.51
TANGENTIAL DIRECTION:	N 89° 54'17" W		
TANGENTIAL LENGTH:	21.28		
ELEMENT: CIRCULAR			
BC	1+21.28	1848283.22	628203.51
EC	1+34.65	1848291.75	628195.02
RADIUS:	8.50		
DELTA:	90° 06'56"	RIGHT	
LENGTH:	13.37		
ELEMENT: LINEAR			
EC	1+34.65	1848291.75	628195.02
POE	1+56.70	1848313.80	628195.11
TANGENTIAL DIRECTION:	N 0° 12'39" E		
TANGENTIAL LENGTH:	22.05		

VERTICAL		
	STATION	ELEVATION
ELEMENT: LINEAR		
POB	1+00.00	268.60
PVI	1+15.00	268.52
TANGENT GRADE:	-0.50%	
TANGENT LENGTH:	15.00	
ELEMENT: LINEAR		
PVI	1+15.00	268.52
PVI	1+21.65	268.36
TANGENT GRADE:	-2.52%	
TANGENT LENGTH:	6.65	
ELEMENT: LINEAR		
PVI	1+21.65	268.36
PVI	1+26.65	268.03
TANGENT GRADE:	-6.56%	
TANGENT LENGTH:	5.00	
ELEMENT: LINEAR		
PVI	1+26.65	268.03
PVI	1+30.94	267.96
TANGENT GRADE:	-1.50%	
TANGENT LENGTH:	4.29	
ELEMENT: LINEAR		
PVI	1+30.94	267.96
PVI	1+35.94	268.29
TANGENT GRADE:	6.56%	
TANGENT LENGTH:	5.00	
ELEMENT: LINEAR		
PVI	1+35.94	268.29
POE	1+56.70	268.37
TANGENT GRADE:	0.39%	
TANGENT LENGTH:	20.76	

N

0 5 10 15
SCALE 1" = 5'

C-45

MAPLE CANYON RESTORATION – PHASE 1
CURB RAMP DETAIL 6

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 64 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER ____ DATE
SHEILA BOSE
PRINT DCE NAME ____ RCE#

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

CONTRACTOR ____ DATE STARTED ____
INSPECTOR ____ DATE COMPLETED ____

38321-64-D

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

RICK ENGINEERING COMPANY
San Diego
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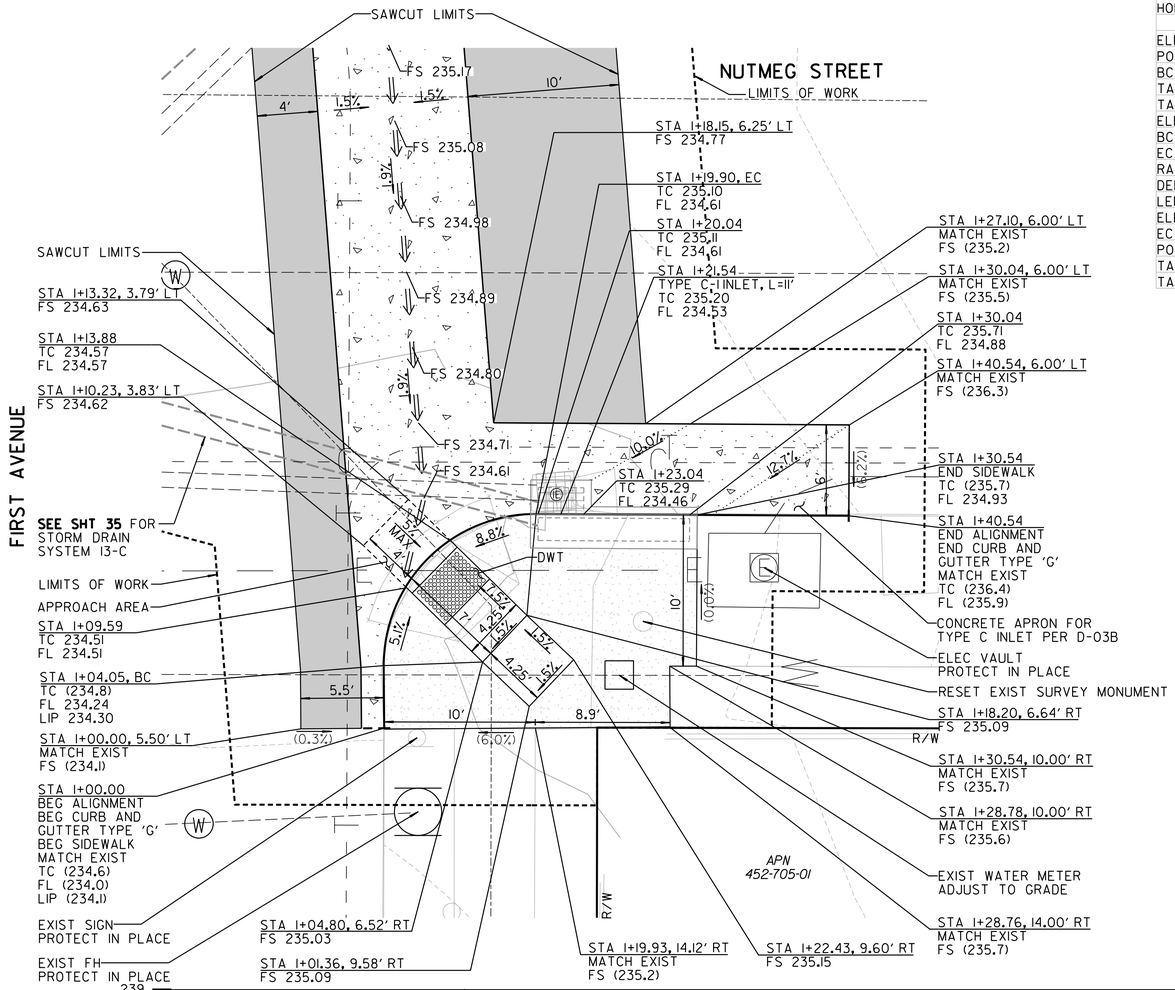
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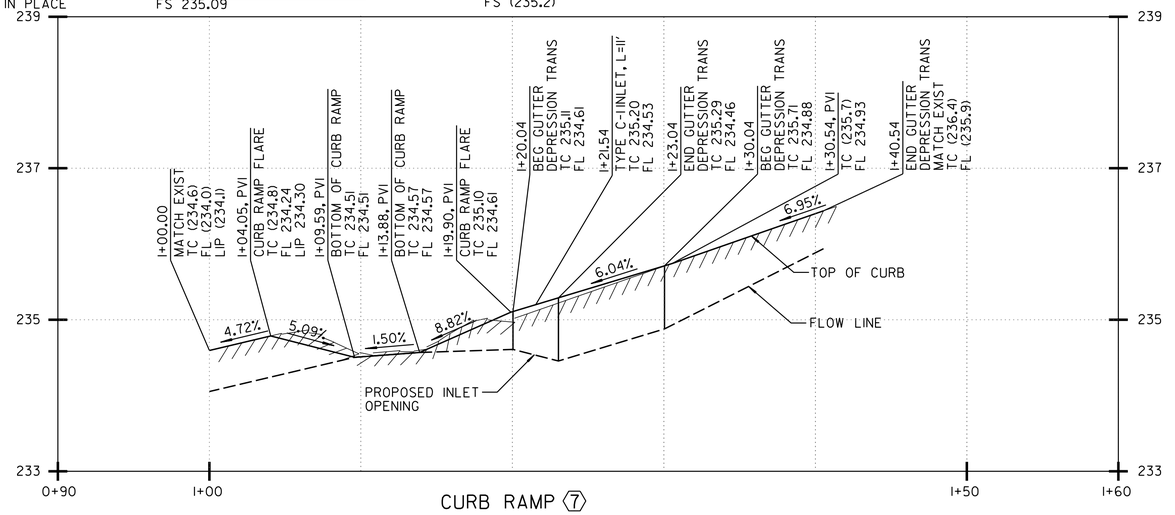
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CURB RAMP DETAIL 6

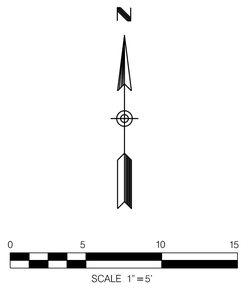
FINAL SUBMITTAL

ALIGNMENT NAME:	CURB RAMP 7					
HORIZONTAL				VERTICAL		
	STATION	NORTHING	EASTING		STATION	ELEVATION
ELEMENT: LINEAR				ELEMENT: LINEAR		
POB	1+00.00	1847837.75	6280633.23	POB	0+99.87	234.59
BC	1+04.05	1847841.80	6280633.20	PVI	1+04.05	234.79
TANGENTIAL DIRECTION	N 0° 29'06" W			TANGENT GRADE:	4.72%	
TANGENTIAL LENGTH:	4.05			TANGENT LENGTH:	4.18	
ELEMENT: CIRCULAR				ELEMENT: LINEAR		
BC	1+04.05	1847841.80	6280633.20	PVI	1+04.05	234.79
EC	1+19.90	1847851.88	6280643.26		1+09.59	234.51
RADIUS:	10.00				-5.09%	
DELTA:	90° 49'01"	RIGHT		TANGENT LENGTH:	5.54	
LENGTH:	15.85			ELEMENT: LINEAR		
ELEMENT: LINEAR				PVI	1+09.59	234.51
EC	1+19.90	1847851.88	6280643.26	PVI	1+13.88	234.57
POE	1+40.54	1847851.76	6280663.89	TANGENT GRADE:	1.50%	
TANGENTIAL DIRECTION	S 89° 40'05" E			TANGENT LENGTH:	4.29	
TANGENTIAL LENGTH:	20.64			ELEMENT: LINEAR		
				PVI	1+13.88	234.57
				PVI	1+19.90	235.10
				TANGENT GRADE:	8.82%	
				TANGENT LENGTH:	6.02	
				ELEMENT: LINEAR		
				PVI	1+19.90	235.10
				PVI	1+30.54	235.74
				TANGENT GRADE:	6.04%	
				TANGENT LENGTH:	10.64	
				ELEMENT: LINEAR		
				PVI	1+30.54	235.74
				POE	1+40.54	236.44
				TANGENT GRADE:	6.95%	
				TANGENT LENGTH:	10.00	





CURB RAMP 7



C-46

MAPLE CANYON RESTORATION – PHASE 1

CURB RAMP DETAIL 7

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 65 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER _____ DATE
SHEILA BOSE
PRINT DOE NAME _____ RCE#

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

38321-65-D

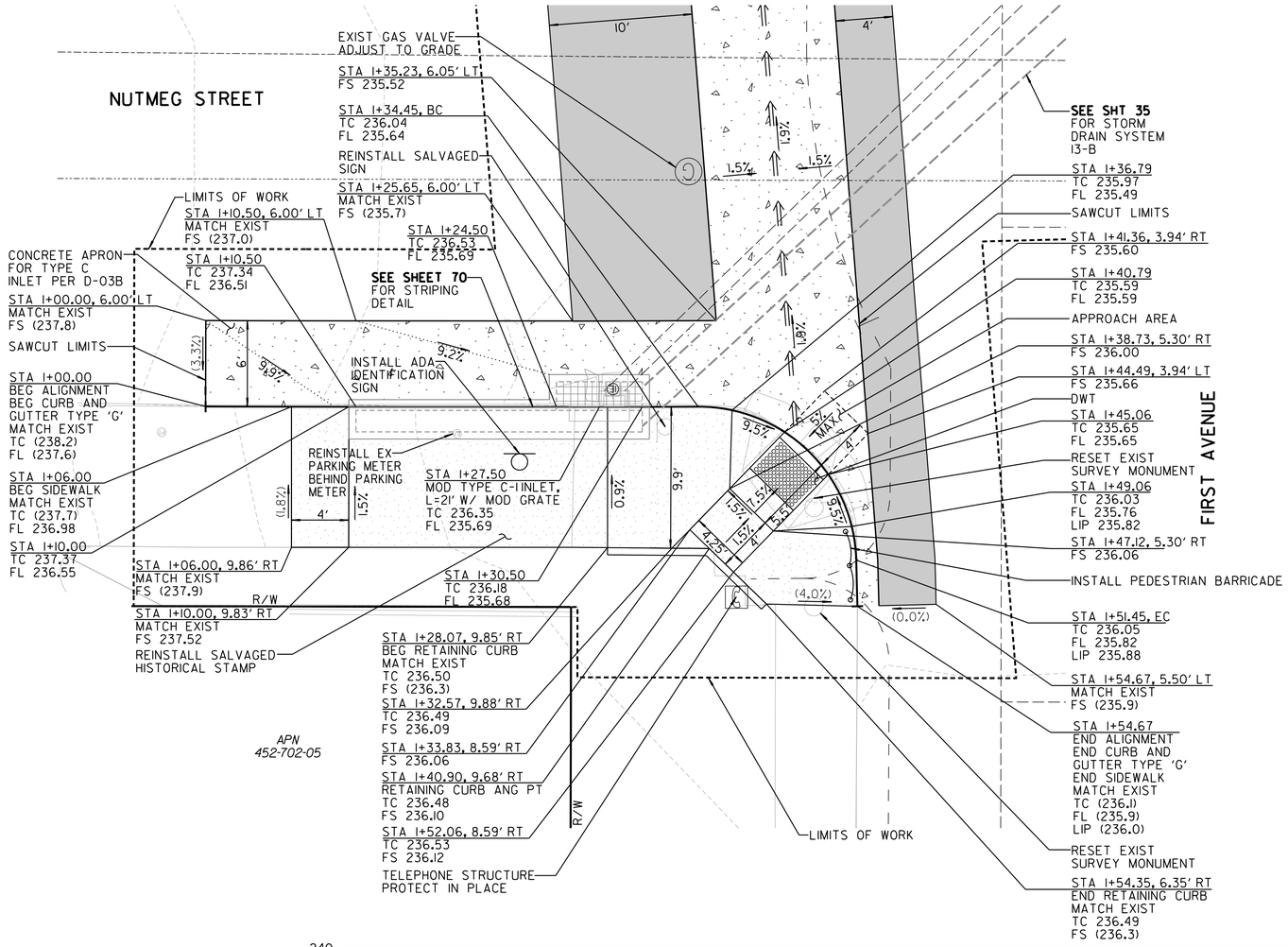
REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

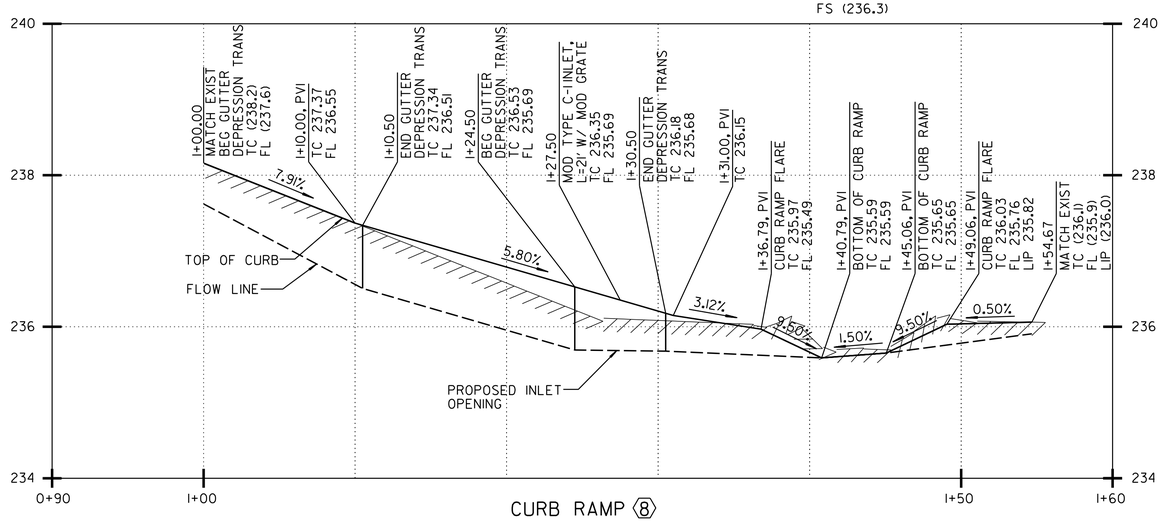
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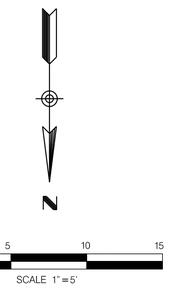
FINAL SUBMITTAL





CURB RAMP ⑧

ALIGNMENT NAME:	CURB RAMP 8					
HORIZONTAL				VERTICAL		
	STATION	NORTHING	EASTING		STATION	ELEVATION
ELEMENT: LINEAR				ELEMENT: LINEAR		
POB	1+00.00	1847903.78	6280672.98	POB	1+00.00	238.16
BC	1+34.45	1847903.79	6280638.52	PVI	1+10.00	237.37
TANGENTIAL DIRECTION	N 89° 59'03" W			TANGENT GRADE:	-7.91%	
TANGENTIAL LENGTH:	34.45			TANGENT LENGTH:	10.00	
ELEMENT: CIRCULAR				ELEMENT: LINEAR		
BC	1+34.45	1847903.79	6280638.52	PVI	1+10.00	237.37
EC	1+51.45	1847914.52	6280627.53	PVI	1+31.00	236.15
RADIUS:	11.00			TANGENT GRADE:	-5.80%	
DELTA:	88° 32'24"	RIGHT		TANGENT LENGTH:	21.00	
LENGTH:	17.00			ELEMENT: LINEAR		
ELEMENT: LINEAR				PVI	1+31.00	236.15
EC	1+51.45	1847914.52	6280627.53	PVI	1+36.79	235.97
POE	1+54.67	1847917.73	6280627.45	TANGENT GRADE:	-3.12%	
TANGENTIAL DIRECTION	N 1° 26'39" W			TANGENT LENGTH:	5.79	
TANGENTIAL LENGTH:	3.22			ELEMENT: LINEAR		
				PVI	1+36.79	235.97
				PVI	1+40.79	235.59
				TANGENT GRADE:	-9.50%	
				TANGENT LENGTH:	4.00	
				ELEMENT: LINEAR		
				PVI	1+40.79	235.59
				PVI	1+45.06	235.65
				TANGENT GRADE:	1.50%	
				TANGENT LENGTH:	4.27	
				ELEMENT: LINEAR		
				PVI	1+45.06	235.65
				PVI	1+49.06	236.03
				TANGENT GRADE:	9.50%	
				TANGENT LENGTH:	4.00	
				ELEMENT: LINEAR		
				PVI	1+49.06	236.03
				POE	1+54.67	236.06
				TANGENT GRADE:	0.50%	
				TANGENT LENGTH:	5.61	



CURB RAMP DETAIL 8

C-47

MAPLE CANYON RESTORATION – PHASE 1

CURB RAMP DETAIL 8

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 66 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER DATE
SHEILA BOSE
PRINT DOE NAME RCE#

SUBMITTED BY: ELHAM LOTFI PROJECT MANAGER

CHECKED BY: BAREAZ PIROMARI PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE

1846-6276 CCS83 COORDINATE

CONTRACTOR DATE STARTED
INSPECTOR DATE COMPLETED

38321-66-D

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

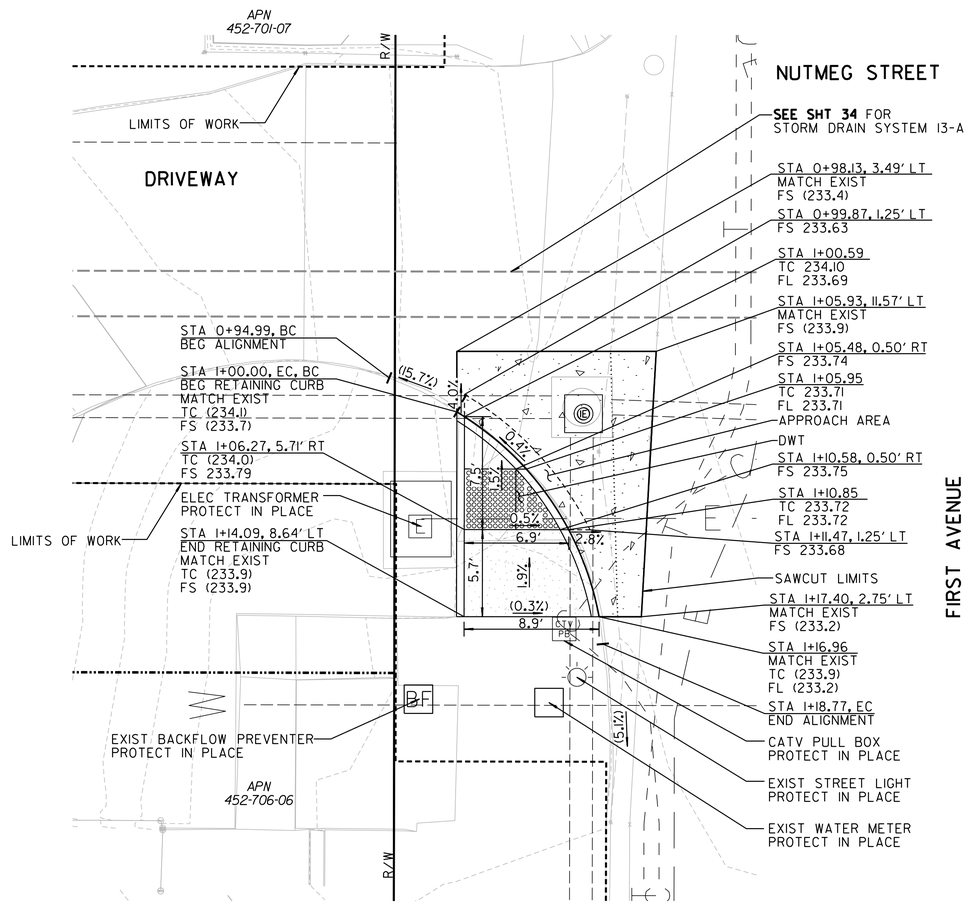
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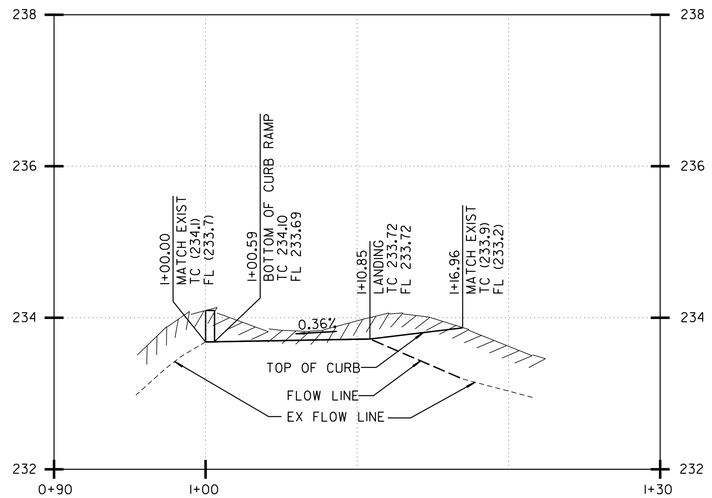
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21-JAN-2020 09:18 knguyen

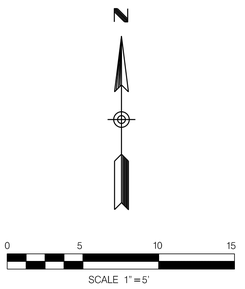
FINAL SUBMITTAL

ALIGNMENT NAME:	CURB RAMP 9					
HORIZONTAL				VERTICAL		
	STATION	NORTHING	EASTING		STATION	ELEVATION
ELEMENT: CIRCULAR				ELEMENT: LINEAR		
BC	0+94.99	1847857.36	6280566.96	POB	1+00.00	233.68
EC	1+00.00	1847855.11	6280571.43	PVI	1+10.85	233.72
RADIUS:	34.00			TANGENT GRADE:	0.36%	
DELTA:	8° 26'36"	RIGHT		TANGENT LENGTH:	10.85	
LENGTH:	5.01			ELEMENT: LINEAR		
ELEMENT: CIRCULAR				PVI	1+10.85	233.72
BC	1+00.00	1847855.11	6280571.43	POE	1+16.96	233.87
EC	1+18.77	1847839.80	6280581.06	TANGENT GRADE:	2.41%	
RADIUS:	20.00			TANGENT LENGTH:	6.11	
DELTA:	53° 46'32"	RIGHT				
LENGTH:	18.77					





CURB RAMP ⟨9⟩



C–48

MAPLE CANYON RESTORATION – PHASE 1

CURB RAMP DETAIL 9

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 67 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED: FOR CITY ENGINEER _____ DATE
SHEILA BOSE
PRINT DCE NAME RCE#

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
DRAWN BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

38321– 67–D

REGISTERED PROFESSIONAL ENGINEER * KEVIN R. GIBSON * NO. 52295 * STATE OF CALIFORNIA *

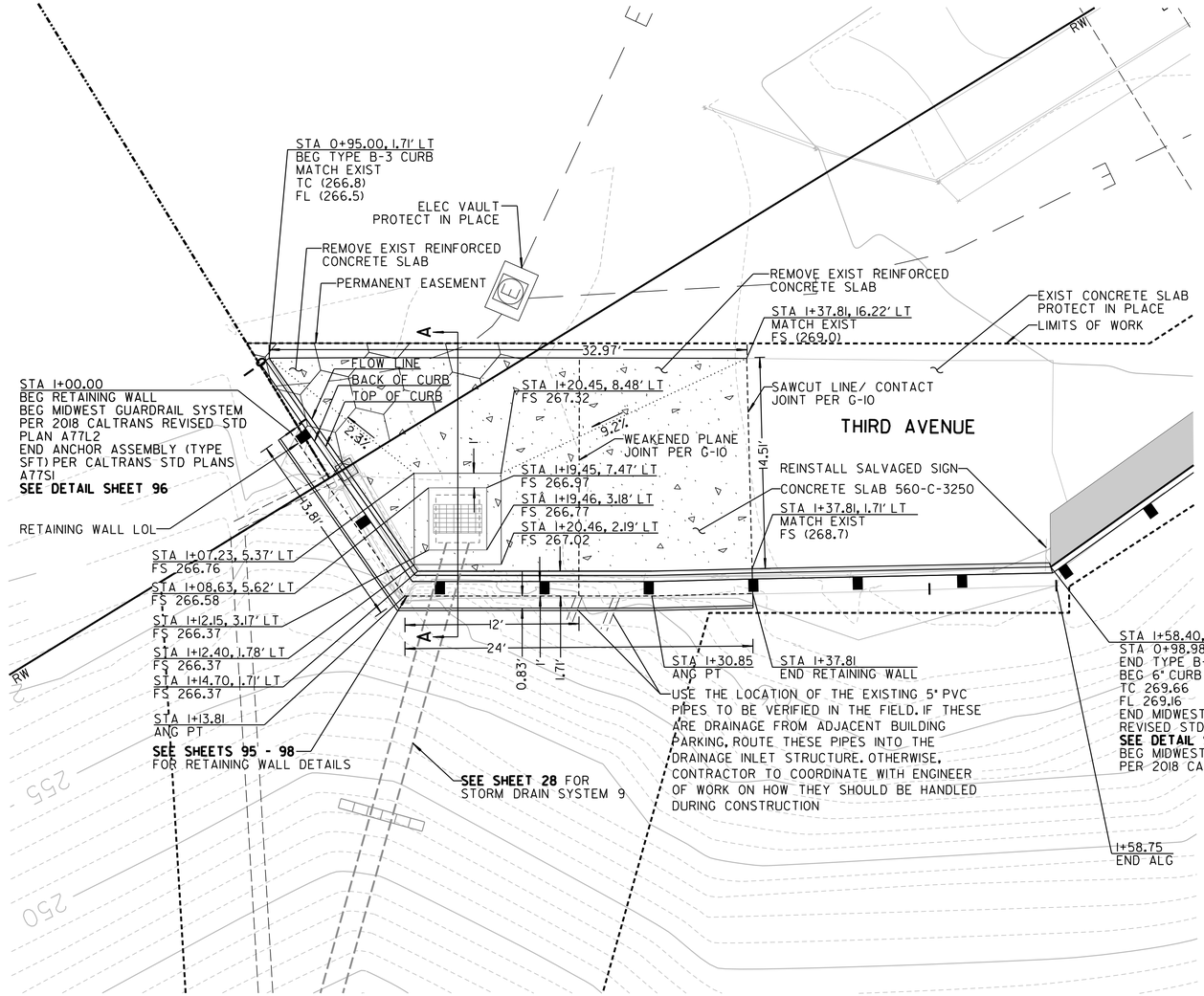
CURB RAMP DETAIL 9

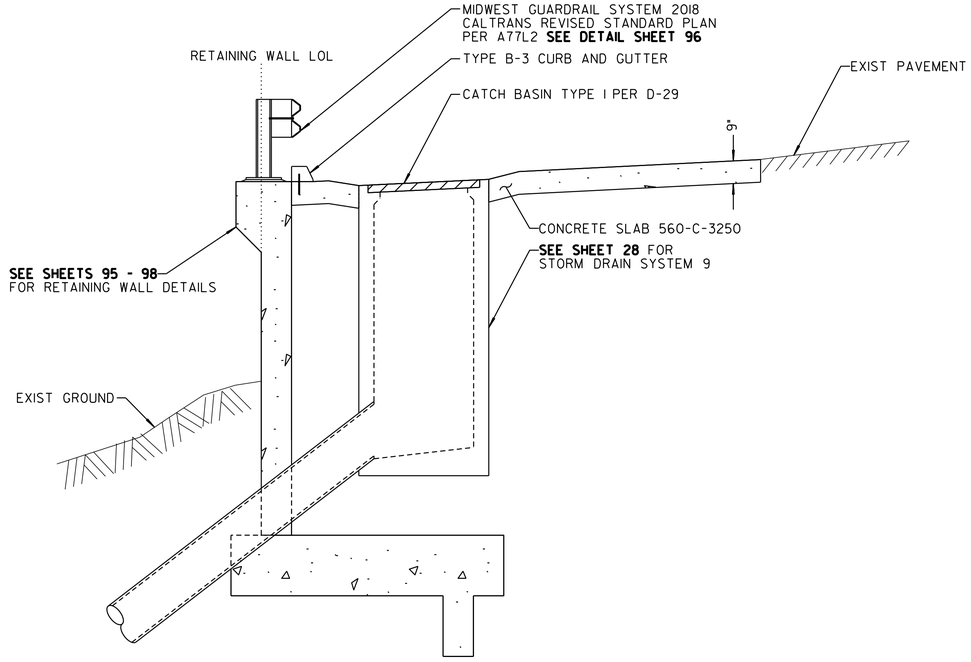
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FINAL SUBMITTAL





CONCRETE PAVEMENT SECTION A–A

NO SCALE

Alignment Name: System 9 Retaining wall			
	Station	Northing	Easting
Element: Linear			
POB	0+95.00	1848524.03	6281218.58
PI	1+00.00	1848523.75	6281213.59
Tangential Direction	S 86° 47'30" W		
Tangential Length:	5.00		
Element: Linear			
PI	1+00.00	1848523.75	6281213.59
PI	1+13.81	1848522.98	6281199.8
Tangential Direction	S 86° 47'30" W		
Tangential Length:	13.81		
Element: Linear			
PI	1+13.81	1848522.98	6281199.8
PI	1+30.85	1848508.48	6281190.85
Tangential Direction	S 31° 41'05" W		
Tangential Length:	17.04		
Element: Linear			
PI	1+30.85	1848508.48	6281190.85
PI	1+37.81	1848502.47	6281187.35
Tangential Direction	S 30° 12'49" W		
Tangential Length:	6.96		
Element: Linear			
PI	1+37.81	1848502.47	6281187.35
POE	1+58.75	1848484.37	6281176.81
Tangential Direction	S 30° 12'49" W		
Tangential Length:	20.94		

0 5 10 15

SCALE 1" = 5'

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REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

C-49

MAPLE CANYON RESTORATION – PHASE 1

THIRD AVENUE
RETAINING WALL SURFACE IMPROVEMENT DETAIL

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 68 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER DATE
SHEILA BOSE
PRINT DCE NAME RCE#

SUBMITTED BY: ELHAM LOTFI PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

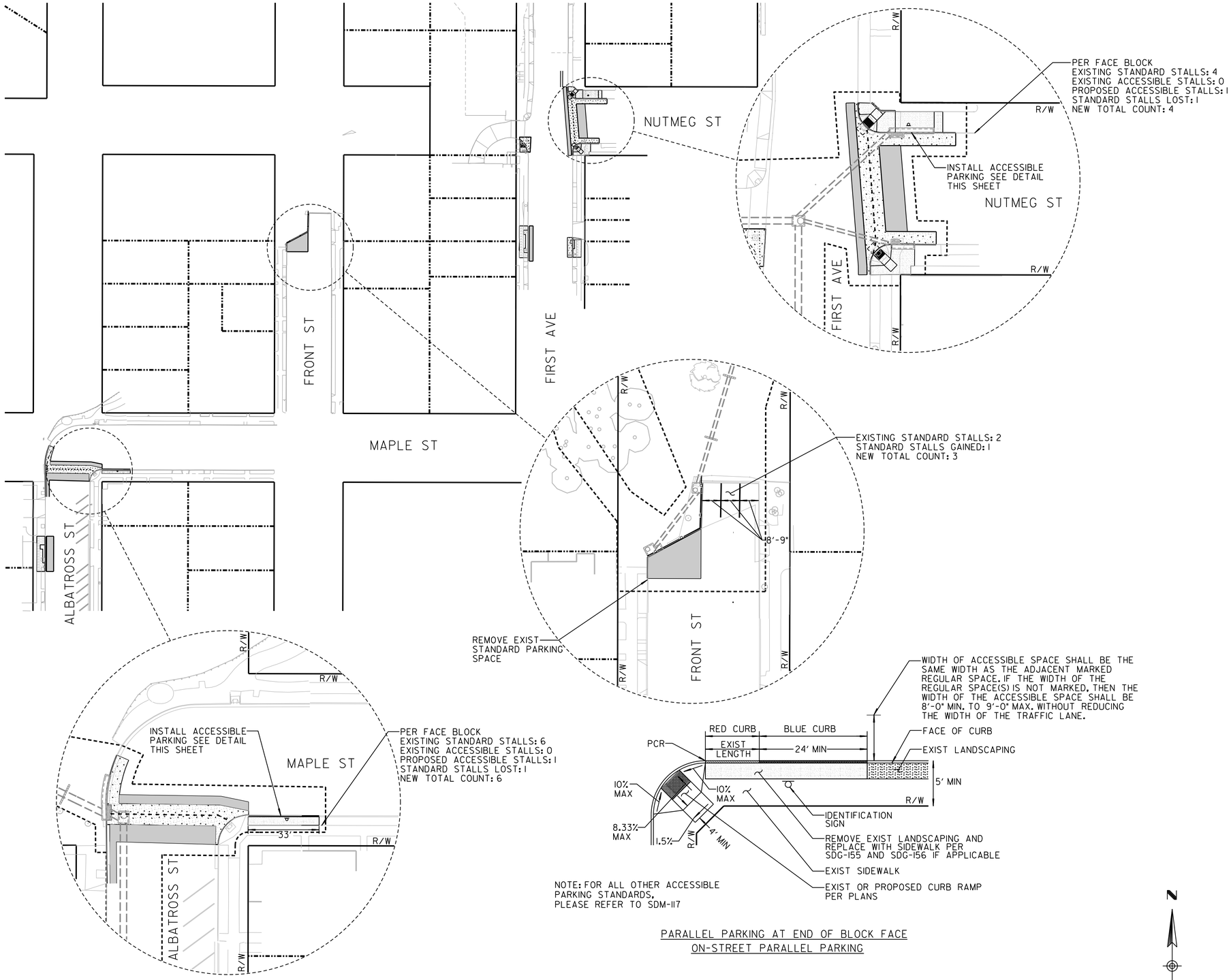
206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

CONTRACTOR DATE STARTED
INSPECTOR DATE COMPLETED

38321-68-D

THIRD AVENUE

FINAL SUBMITTAL



NOTE: FOR ALL OTHER ACCESSIBLE PARKING STANDARDS, PLEASE REFER TO SDM-117

PARALLEL PARKING AT END OF BLOCK FACE
ON-STREET PARALLEL PARKING

NO SCALE

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REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

APPROVED:
FOR CITY ENGINEER — DATE
SHEILA BOSE
PRINT DCE NAME — RCE#

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

CONTRACTOR — DATE STARTED
INSPECTOR — DATE COMPLETED

C-50

STRIPING DETAIL 1

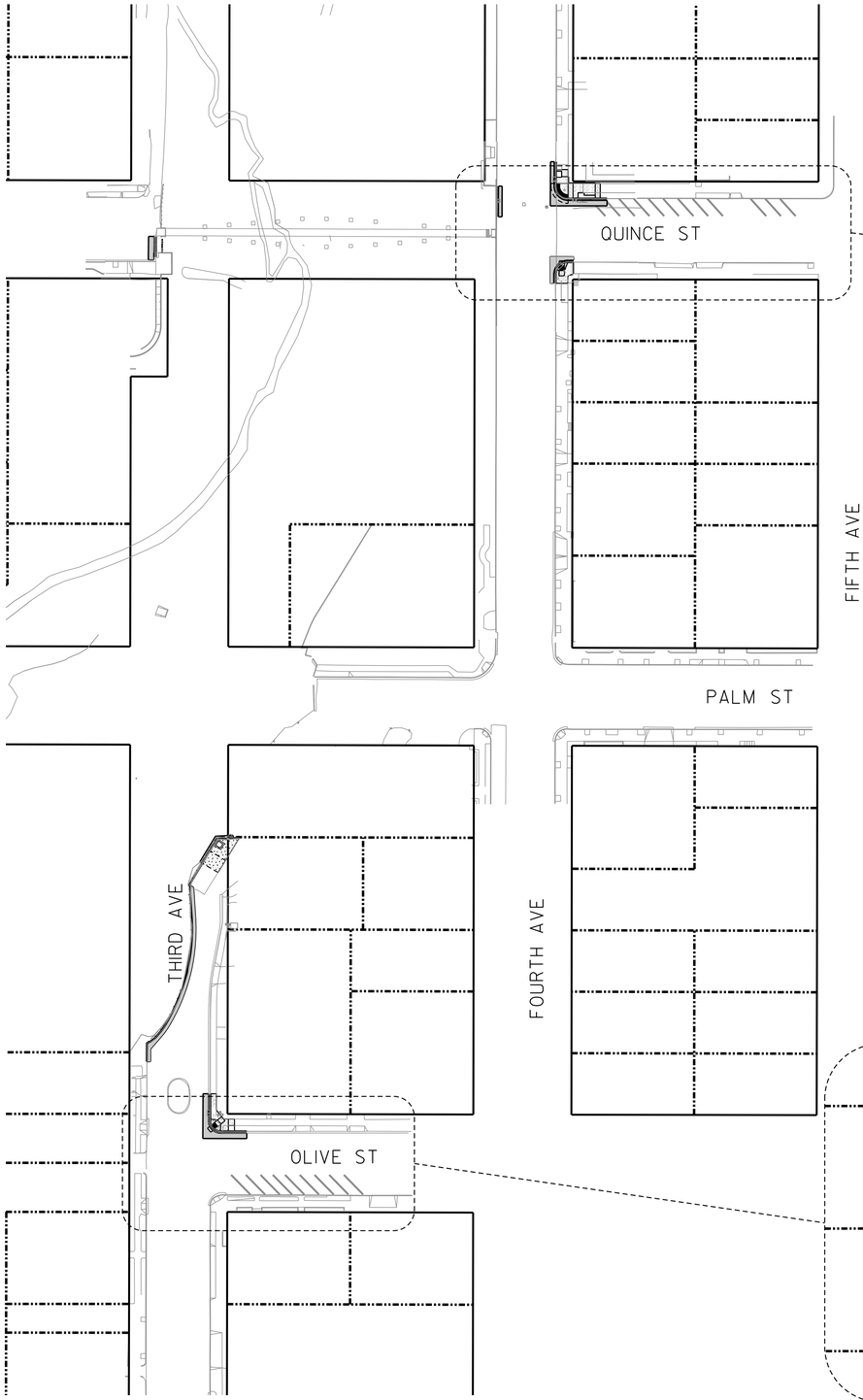
MAPLE CANYON RESTORATION – PHASE 1
STRIPING DETAIL 1

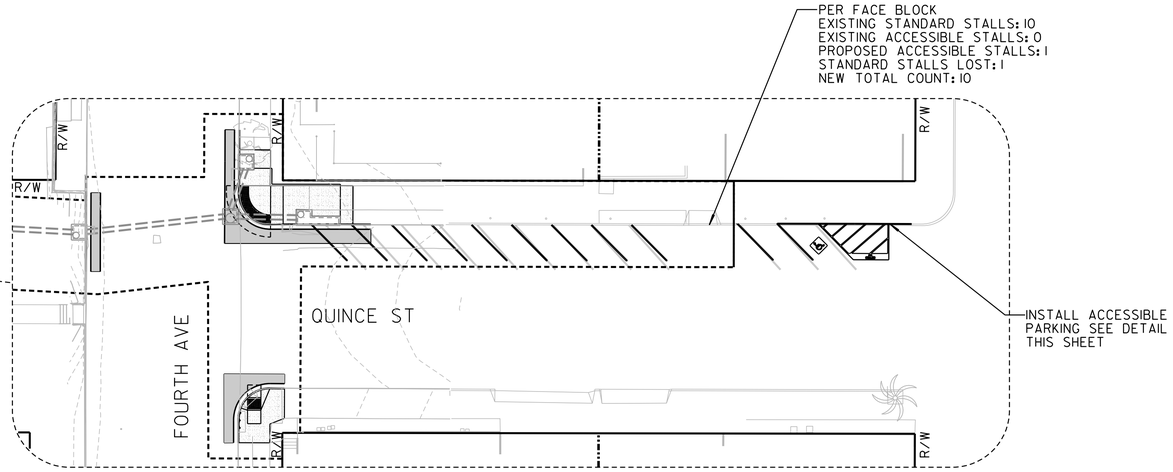
CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 69 OF 98 SHEETS

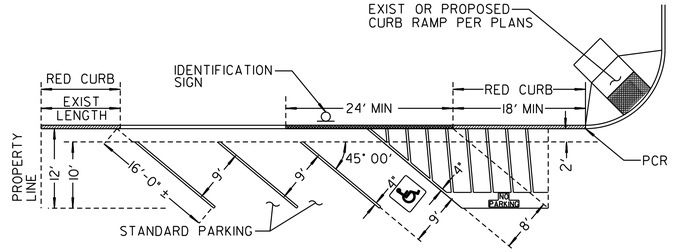
STORM DRAIN WBS B-12040

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER
206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE
38321-69-D

FINAL SUBMITTAL



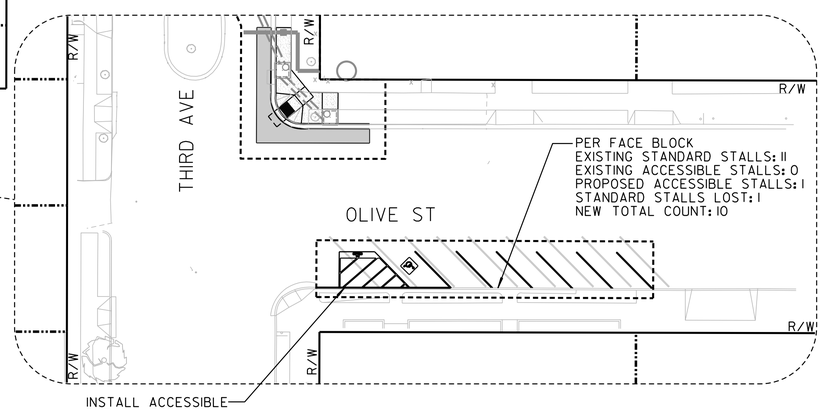




NOTE: FOR ALL OTHER ACCESSIBLE PARKING STANDARDS, PLEASE REFER TO SDM-117

ON-STREET STANDARD DETAIL

CITY STANDARDS FOR DIAGONAL SPACES (FOR NON ACCESSIBLE PARKING SPACES) DETAIL SHOWING MINIMUM DIMENSIONS



NO SCALE

STRIPING DETAIL 2

C-51

MAPLE CANYON RESTORATION – PHASE 1

STRIPING DETAIL 2

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 70 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DCE NAME _____ RCE# _____

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER
206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE
38321-70-D

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

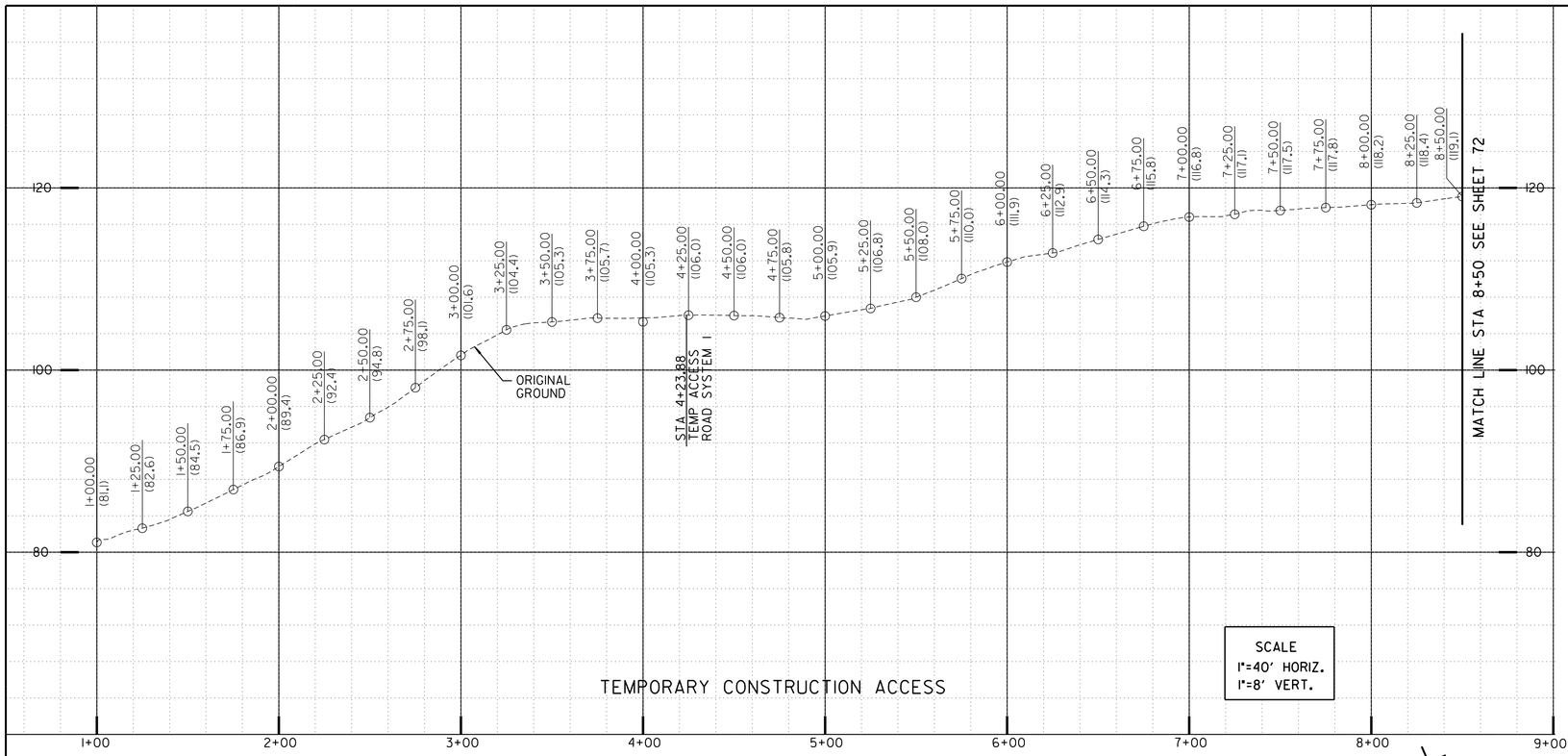
REGISTERED PROFESSIONAL ENGINEER KEVIN R. GIBSON NO. 52295 STATE OF CALIFORNIA

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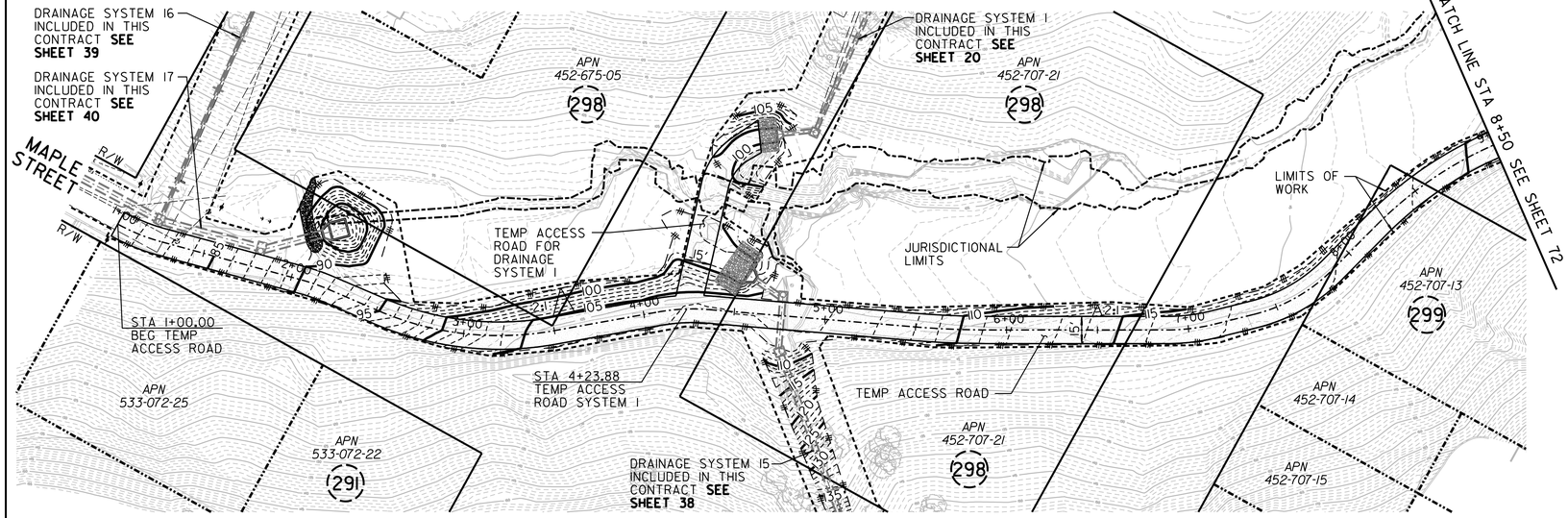


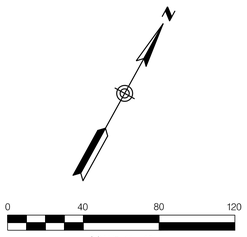
ALIGNMENT NAME:	TEMP ACCESS ROAD MAIN		
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
POB	1+00.00	1847472.76	6279489.76
BC	1+00.61	1847472.76	6279490.37
TANGENTIAL DIRECTION	N 89° 51'38" E		
TANGENTIAL LENGTH:	0.61		
ELEMENT: CIRCULAR			
BC	1+00.61	1847472.76	6279490.37
EC	1+26.04	1847475.82	6279515.56
RADIUS:	107.50		
DELTA:	13° 33'17"	LEFT	
LENGTH:	25.43		
ELEMENT: LINEAR			
EC	1+26.04	1847475.82	6279515.56
BC	2+05.85	1847494.71	6279593.10
TANGENTIAL DIRECTION	N 76° 18'21" E		
TANGENTIAL LENGTH:	79.81		
ELEMENT: CIRCULAR			
BC	2+05.85	1847494.71	6279593.10
EC	2+20.79	1847497.23	6279607.81
RADIUS:	107.50		
DELTA:	7° 57'36"	RIGHT	
LENGTH:	14.93		
ELEMENT: LINEAR			
EC	2+20.79	1847497.23	6279607.81
BC	2+51.82	1847500.33	6279638.69
TANGENTIAL DIRECTION	N 84° 15'57" E		
TANGENTIAL LENGTH:	31.03		
ELEMENT: CIRCULAR			
BC	2+51.82	1847500.33	6279638.69
EC	3+49.27	1847536.94	6279727.52
RADIUS:	167.50		
DELTA:	33° 20'00"	LEFT	
LENGTH:	97.45		
ELEMENT: LINEAR			
EC	3+49.27	1847536.94	6279727.52
BC	4+07.82	1847573.84	6279772.98
TANGENTIAL DIRECTION	N 50° 55'57" E		
TANGENTIAL LENGTH:	58.55		
ELEMENT: CIRCULAR			
BC	4+07.82	1847573.84	6279772.98
EC	4+35.94	1847588.53	6279796.87
RADIUS:	107.50		
DELTA:	14° 59'25"	RIGHT	
LENGTH:	28.13		

ALIGNMENT NAME:	TEMP ACCESS ROAD MAIN (CONTINUED)		
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
EC	4+35.94	1847588.53	6279796.87
BC	5+48.93	1847634.62	6279900.03
TANGENTIAL DIRECTION	N 65° 55'21" E		
TANGENTIAL LENGTH:	112.99		
ELEMENT: CIRCULAR			
BC	5+48.93	1847634.62	6279900.03
EC	5+90.25	1847653.04	6279937.00
RADIUS:	492.50		
DELTA:	4° 48'27"	LEFT	
LENGTH:	41.32		
ELEMENT: LINEAR			
EC	5+90.25	1847653.04	6279937.00
BC	6+88.38	1847700.44	6280022.92
TANGENTIAL DIRECTION	N 61° 06'55" E		
TANGENTIAL LENGTH:	98.12		
ELEMENT: CIRCULAR			
BC	6+88.38	1847700.44	6280022.92
EC	7+14.55	1847715.73	6280044.08
RADIUS:	107.50		
DELTA:	13° 56'52"	LEFT	
LENGTH:	26.17		
ELEMENT: LINEAR			
EC	7+14.55	1847715.73	6280044.08
BC	7+36.69	1847730.79	6280060.31
TANGENTIAL DIRECTION	N 47° 10'03" E		
TANGENTIAL LENGTH:	22.14		
ELEMENT: CIRCULAR			
BC	7+36.69	1847730.79	6280060.31
EC	7+87.29	1847773.40	6280086.42
RADIUS:	92.50		
DELTA:	31° 20'39"	LEFT	
LENGTH:	50.60		
ELEMENT: LINEAR			
EC	7+87.29	1847773.40	6280086.42
BC	8+21.28	1847806.10	6280095.69
TANGENTIAL DIRECTION	N 15° 49'24" E		
TANGENTIAL LENGTH:	33.99		
ELEMENT: CIRCULAR			
BC	8+21.28	1847806.10	6280095.69
EC	9+38.41	1847904.13	6280156.93
RADIUS:	207.50		
DELTA:	32° 20'36"	RIGHT	
LENGTH:	117.13		

SEE SHEET 72

NOTE:
GRADING LIMITS ARE APPROXIMATE AND SUBJECT TO CHANGE BASED ON VARYING FIELD CONDITIONS. CONTRACTOR TO VERIFY LIMITS OF WORK PRIOR TO CONSTRUCTION.





TEMPORARY CONSTRUCTION ACCESS

C-52

MAPLE CANYON RESTORATION – PHASE 1

TEMPORARY CONSTRUCTION ACCESS

STATION 1+00.00 TO STATION 8+50.00

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 71 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER _____ DATE
SHEILA BOSE
PRINT DCE NAME _____ RCE#

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE
38321-71-D

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

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TEMPORARY CONSTRUCTION ACCESS

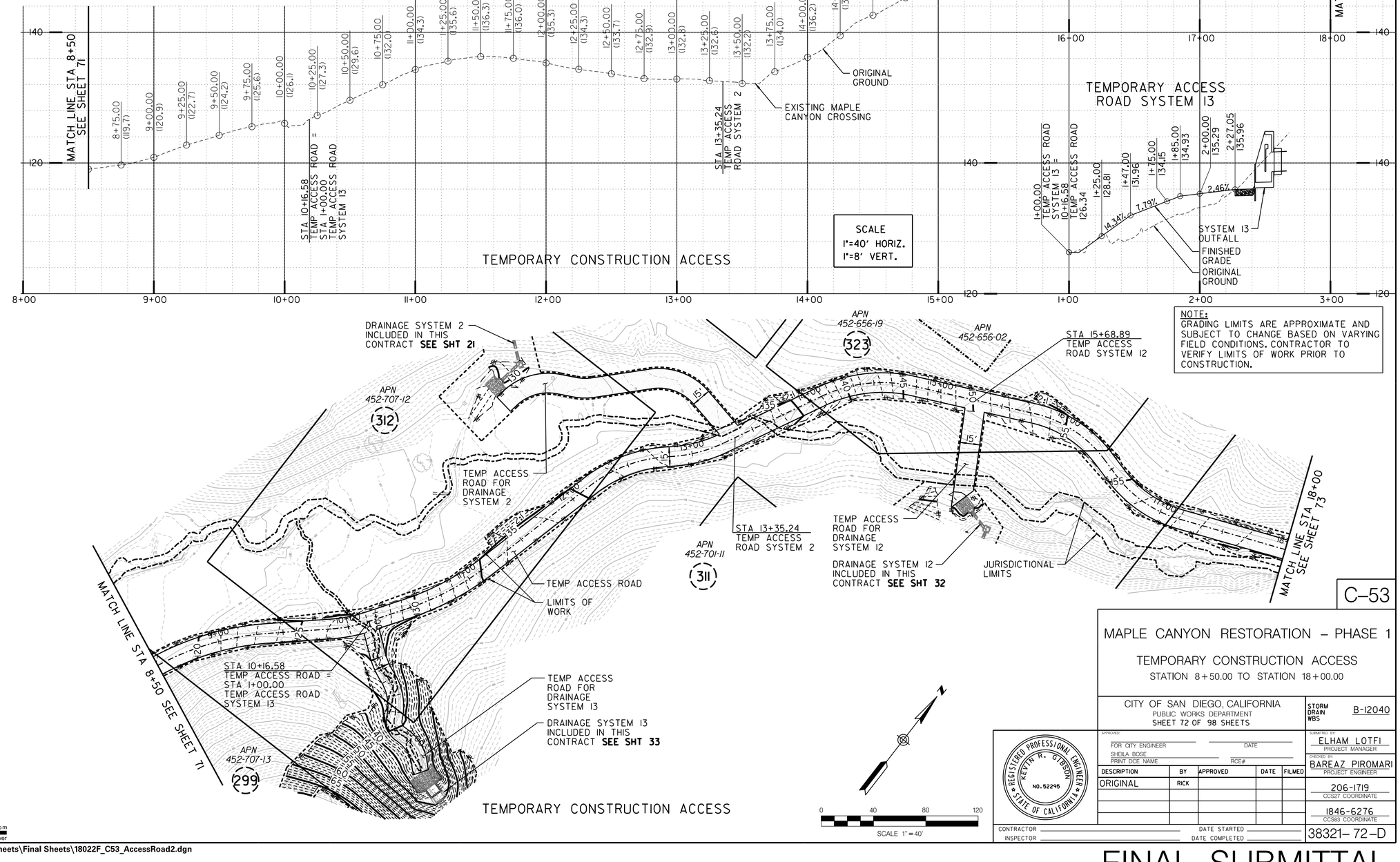
FINAL SUBMITTAL

ALIGNMENT NAME:	TEMP ACCESS ROAD MAIN		
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
EC	9+38.41	1847904.13	6280156.93
BC	9+88.02	1847937.21	6280193.89
TANGENTIAL DIRECTION	N 48° 10'00" E		
TANGENTIAL LENGTH:	49.60		
ELEMENT: CIRCULAR			
BC	9+88.02	1847937.21	6280193.89
EC	10+14.91	1847957.46	6280211.49
RADIUS:	107.50		
DELTA:	14° 20'14"	LEFT	
LENGTH:	26.90		
ELEMENT: LINEAR			
EC	10+14.91	1847957.46	6280211.49
BC	10+46.93	1847984.05	6280229.32
TANGENTIAL DIRECTION	N 33° 49'46" E		
TANGENTIAL LENGTH:	32.02		
ELEMENT: CIRCULAR			
BC	10+46.93	1847984.05	6280229.32
EC	11+17.92	1848048.57	6280258.08
RADIUS:	207.50		
DELTA:	19° 36'03"	LEFT	
LENGTH:	70.99		
ELEMENT: LINEAR			
EC	11+17.92	1848048.57	6280258.08
BC	12+16.13	1848143.77	6280282.22
TANGENTIAL DIRECTION	N 14° 13'43" E		
TANGENTIAL LENGTH:	98.21		
ELEMENT: CIRCULAR			
BC	12+16.13	1848143.77	6280282.22
PRC	12+82.48	1848199.20	6280316.74
RADIUS:	107.50		
DELTA:	35° 21'51"	RIGHT	
LENGTH:	66.35		
ELEMENT: CIRCULAR			
PRC	12+82.48	1848199.20	6280316.74
EC	13+25.47	1848232.79	6280343.11
RADIUS:	107.50		
DELTA:	22° 54'41"	LEFT	
LENGTH:	42.99		
ELEMENT: LINEAR			
EC	13+25.47	1848232.79	6280343.11
BC	14+08.54	1848307.02	6280380.41
TANGENTIAL DIRECTION	N 26° 40'53" E		
TANGENTIAL LENGTH:	83.08		
ELEMENT: CIRCULAR			
BC	14+08.54	1848307.02	6280380.41
EC	14+80.45	1848356.18	6280431.04
RADIUS:	107.50		
DELTA:	38° 19'31"	RIGHT	
LENGTH:	71.91		
TANGENT:	37.36		
ELEMENT: LINEAR			
EC	14+80.45	1848356.18	6280431.04
BC	15+75.01	1848396.14	6280516.75
TANGENTIAL DIRECTION	N 65° 00'24" E		
TANGENTIAL LENGTH:	94.56		
ELEMENT: CIRCULAR			
BC	15+75.01	1848396.14	6280516.75
EC	16+40.00	1848401.54	6280580.18
RADIUS:	92.50		
DELTA:	40° 15'10"	RIGHT	
LENGTH:	64.99		
ELEMENT: LINEAR			
EC	16+40.00	1848401.54	6280580.18
BC	16+56.20	1848397.28	6280595.81
TANGENTIAL DIRECTION	S 74° 44'26" E		
TANGENTIAL LENGTH:	16.20		
ELEMENT: CIRCULAR			
BC	16+56.20	1848397.28	6280595.81
EC	17+15.93	1848400.59	6280654.41
RADIUS:	92.50		
DELTA:	36° 59'51"	LEFT	
LENGTH:	59.73		
ELEMENT: LINEAR			
EC	17+15.93	1848400.59	6280654.41
BC	18+29.51	1848442.66	6280759.91
TANGENTIAL DIRECTION	N 68° 15'43" E		
TANGENTIAL LENGTH:	113.58		
SEE SHEET 73			

ALIGNMENT NAME:	TEMP ACCESS ROAD SYSTEM 13		
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
POB	1+00.00	1847958.84	6280212.42
BC	1+25.22	1847943.31	6280232.29
TANGENTIAL DIRECTION	S 51° 59'32" E		
TANGENTIAL LENGTH:	25.22		
ELEMENT: CIRCULAR			
BC	1+25.22	1847943.31	6280232.29
PRC	1+44.77	1847933.91	6280249.34
RADIUS:	62.76		
DELTA:	17° 50'27"	LEFT	
LENGTH:	19.54		
ELEMENT: CIRCULAR			
PRC	1+44.77	1847933.91	6280249.34
PRC	1+77.95	1847912.11	6280273.20
RADIUS:	41.83		
DELTA:	45° 27'08"	RIGHT	
LENGTH:	33.19		

ALIGNMENT NAME:	TEMP ACCESS ROAD SYSTEM 13 (CONTINUED)		
	STATION	NORTHING	EASTING
ELEMENT: CIRCULAR			
PRC	1+77.95	1847912.11	6280273.20
PRC	1+91.95	1847905.41	6280284.53
RADIUS:	11.60		
DELTA:	69° 09'45"	LEFT	
LENGTH:	14.00		
ELEMENT: CIRCULAR			
PRC	1+91.95	1847905.41	6280284.53
PRC	2+21.78	1847894.78	6280311.31
RADIUS:	32.73		
DELTA:	52° 12'55"	RIGHT	
LENGTH:	29.83		

ALIGNMENT NAME:	TEMP ACCESS ROAD SYSTEM 13 (CONTINUED)		
	STATION	NORTHING	EASTING
ELEMENT: CIRCULAR			
PRC	2+21.78	1847894.78	6280311.31
EC/POE	2+26.11	1847891.97	6280314.59
RADIUS:	17.40		
DELTA:	14° 15'27"	LEFT	
LENGTH:	4.33		



NOTE:
GRADING LIMITS ARE APPROXIMATE AND SUBJECT TO CHANGE BASED ON VARYING FIELD CONDITIONS. CONTRACTOR TO VERIFY LIMITS OF WORK PRIOR TO CONSTRUCTION.

C-53

MAPLE CANYON RESTORATION – PHASE 1

TEMPORARY CONSTRUCTION ACCESS

STATION 8+50.00 TO STATION 18+00.00

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 72 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER _____ DATE
SHEILA BOSE
PRINT DCE NAME RCE#

SUBMITTED BY:
ELHAM LOTFI
PROJECT MANAGER

CHECKED BY:
BAREAZ PIROMARI
PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719
CCS27 COORDINATE

1846-6276
CCS83 COORDINATE

38321-72-D

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

RICK ENGINEERING COMPANY
San Diego
5620 FRIARS ROAD
SAN DIEGO, CA 92110
619-291-0707
(FAX) 619-291-4165
rickengineering.com
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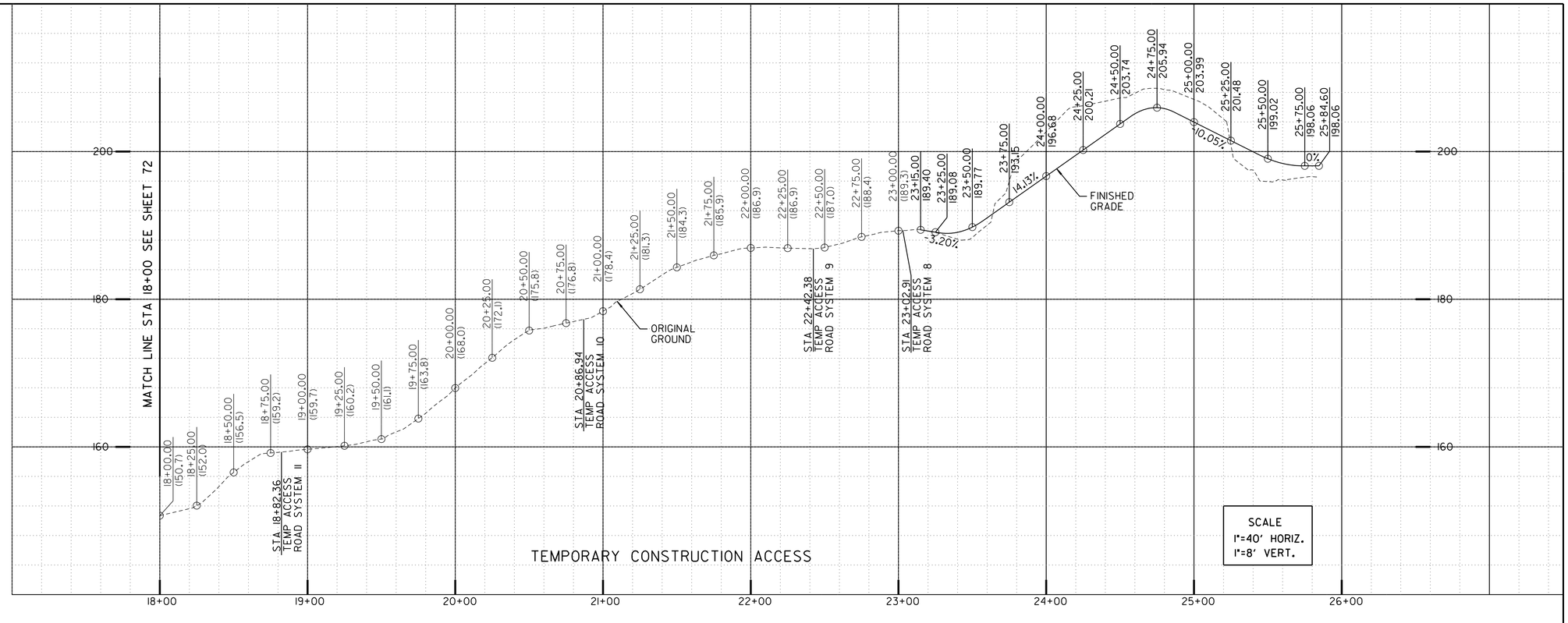
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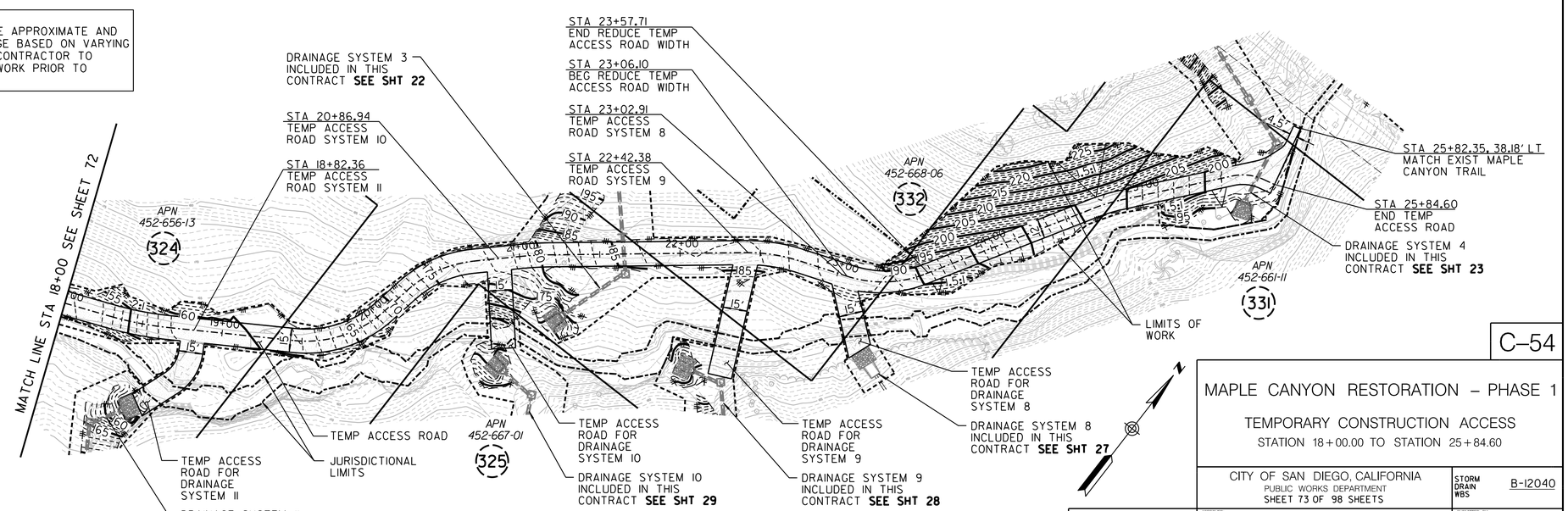
TEMPORARY CONSTRUCTION ACCESS

FINAL SUBMITTAL

ALIGNMENT NAME:	TEMP ACCESS ROAD MAIN		
	STATION	NORTHING	EASTING
ELEMENT: CIRCULAR			
BC	18+29.51	1848442.66	6280759.91
EC	18+66.35	1848459.26	6280792.75
RADIUS:	207.50		
DELTA:	10° 10'20"	LEFT	
LENGTH:	36.84		
ELEMENT: LINEAR			
EC	18+66.35	1848459.26	6280792.75
BC	19+45.31	1848501.00	6280859.77
TANGENTIAL DIRECTION	N 58° 05'23" E		
TANGENTIAL LENGTH:	78.96		
ELEMENT: CIRCULAR			
BC	19+45.31	1848501.00	6280859.77
EC	20+06.30	1848550.09	6280892.87
RADIUS:	72.50		
DELTA:	48° 12'07"	LEFT	
LENGTH:	60.99		
ELEMENT: LINEAR			
EC	20+06.30	1848550.09	6280892.87
BC	20+24.70	1848568.22	6280896.04
TANGENTIAL DIRECTION	N 9° 53'17" E		
TANGENTIAL LENGTH:	18.41		
ELEMENT: CIRCULAR			
BC	20+24.70	1848568.22	6280896.04
EC	20+70.91	1848608.28	6280917.46
RADIUS:	72.50		
DELTA:	36° 30'57"	RIGHT	
LENGTH:	46.21		
ELEMENT: LINEAR			
EC	20+70.91	1848608.28	6280917.46
BC	20+99.66	1848628.10	6280938.28
TANGENTIAL DIRECTION	N 46° 24'14" E		
TANGENTIAL LENGTH:	28.75		
ELEMENT: CIRCULAR			
BC	20+99.66	1848628.10	6280938.28
EC	21+18.27	1848640.31	6280952.32
RADIUS:	207.50		
DELTA:	5° 08'20"	RIGHT	
LENGTH:	18.61		
ELEMENT: LINEAR			
EC	21+18.27	1848640.31	6280952.32
BC	22+40.53	1848716.35	6281048.06
TANGENTIAL DIRECTION	N 51° 32'34" E		
TANGENTIAL LENGTH:	122.27		
ELEMENT: CIRCULAR			
BC	22+40.53	1848716.35	6281048.06
EC	22+75.55	1848733.32	6281078.52
RADIUS:	107.50		
DELTA:	18° 39'53"	RIGHT	
LENGTH:	35.02		
ELEMENT: LINEAR			
EC	22+75.55	1848733.32	6281078.52
BC	23+06.10	1848743.67	6281107.26
TANGENTIAL DIRECTION	N 70° 12'27" E		
TANGENTIAL LENGTH:	30.55		
ELEMENT: CIRCULAR			
BC	23+06.10	1848743.67	6281107.26
EC	23+55.88	1848774.69	6281144.94
RADIUS:	72.50		
DELTA:	39° 20'35"	LEFT	
LENGTH:	49.78		
ELEMENT: LINEAR			
EC	23+55.88	1848774.69	6281144.94
BC	24+68.81	1848871.62	6281202.87
TANGENTIAL DIRECTION	N 30° 51'52" E		
TANGENTIAL LENGTH:	112.93		
ELEMENT: CIRCULAR			
BC	24+68.81	1848871.62	6281202.87
EC	24+85.69	1848885.37	6281212.65
RADIUS:	106.00		
DELTA:	9° 07'31"	RIGHT	
LENGTH:	16.88		
ELEMENT: LINEAR			
EC	24+85.69	1848885.37	6281212.65
BC	25+57.11	1848940.08	6281258.55
TANGENTIAL DIRECTION	N 39° 59'23" E		
TANGENTIAL LENGTH:	71.42		
ELEMENT: CIRCULAR			
BC	25+57.11	1848940.08	6281258.55
EC	25+77.19	1848950.38	6281275.38
RADIUS:	31.00		
DELTA:	37° 06'21"	RIGHT	
LENGTH:	20.08		
ELEMENT: LINEAR			
EC	25+77.19	1848950.38	6281275.38
POE	25+84.60	1848952.04	6281282.61
TANGENTIAL DIRECTION	N 77° 05'44" E		
TANGENTIAL LENGTH:	7.42		



NOTE:
GRADING LIMITS ARE APPROXIMATE AND SUBJECT TO CHANGE BASED ON VARYING FIELD CONDITIONS. CONTRACTOR TO VERIFY LIMITS OF WORK PRIOR TO CONSTRUCTION.



TEMPORARY CONSTRUCTION ACCESS

0 40 80 120
SCALE 1" = 40'

TEMPORARY CONSTRUCTION ACCESS

C-54

MAPLE CANYON RESTORATION – PHASE 1

TEMPORARY CONSTRUCTION ACCESS
STATION 18+00.00 TO STATION 25+84.60

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 73 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER — DATE
SHEILA BOSE
PRINT DCE NAME — RCE#

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

CONTRACTOR — DATE STARTED
INSPECTOR — DATE COMPLETED

38321-73-D

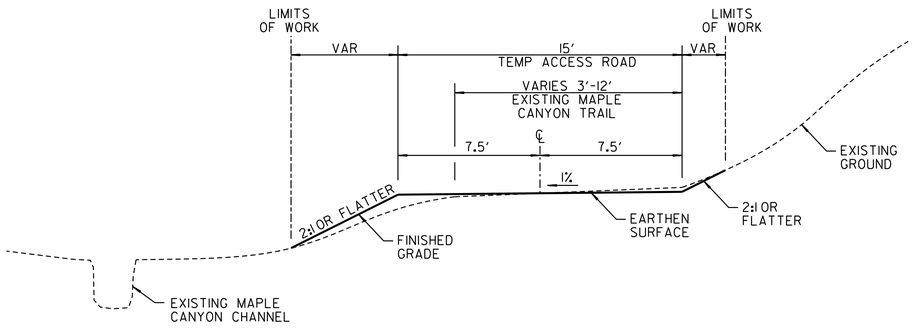
REGISTERED PROFESSIONAL ENGINEER KEVIN R. GIBSON NO. 52295 STATE OF CALIFORNIA

RICK ENGINEERING COMPANY
5620 FRIARS ROAD
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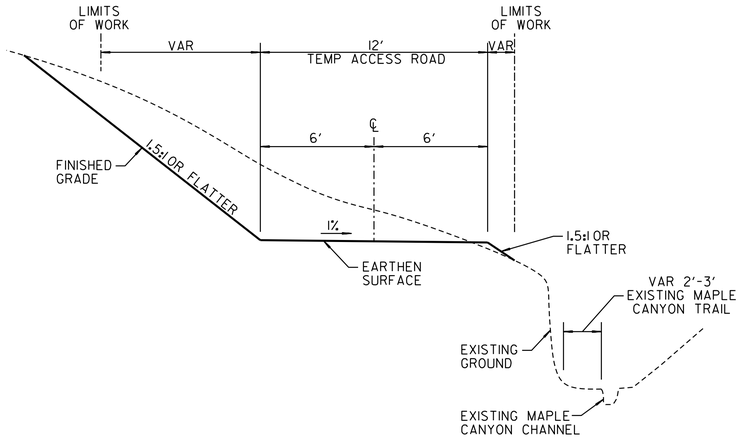
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FINAL SUBMITTAL



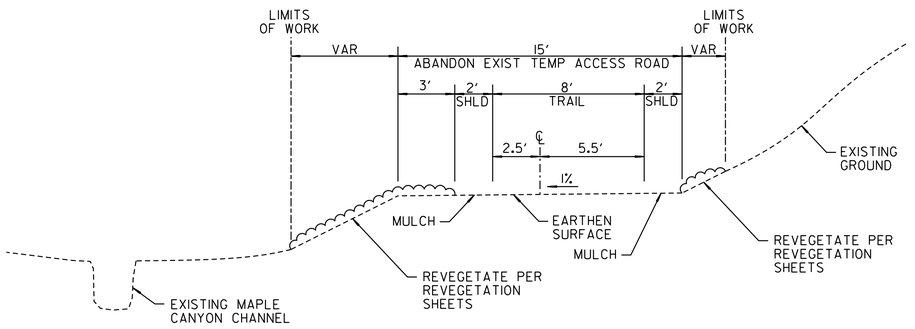
TEMPORARY ACCESS ROAD DURING CONSTRUCTION

STA 1+00.00 TO STA 23+06.10
NO SCALE



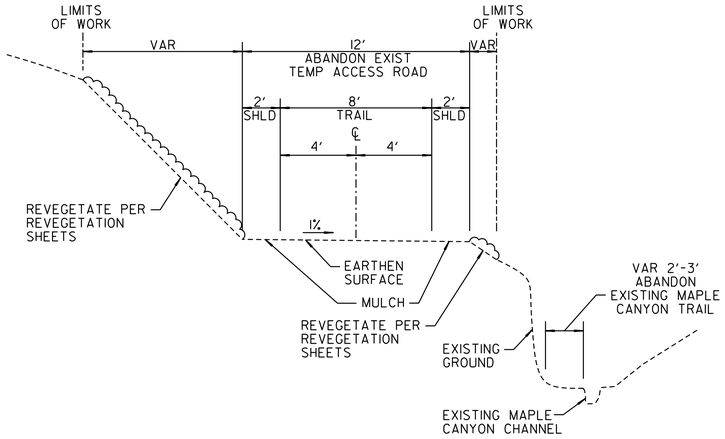
TEMPORARY ACCESS ROAD DURING CONSTRUCTION

STA 23+06.10 TO STA 25+84.60
NO SCALE



ULTIMATE TRAIL AFTER CONSTRUCTION

STA 1+00.00 TO STA 23+06.10
NO SCALE



ULTIMATE TRAIL AFTER CONSTRUCTION

STA 23+06.10 TO STA 25+84.60
NO SCALE

TEMPORARY ACCESS ROAD TYPICAL SECTIONS

TEMPORARY CONSTRUCTION ACCESS

C–55

MAPLE CANYON RESTORATION – PHASE 1

TEMPORARY CONSTRUCTION ACCESS

TYPICAL CROSS SECTIONS

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 74 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DCE NAME _____ RCE# _____

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER

CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE

1846-6276 CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

38321–74–D

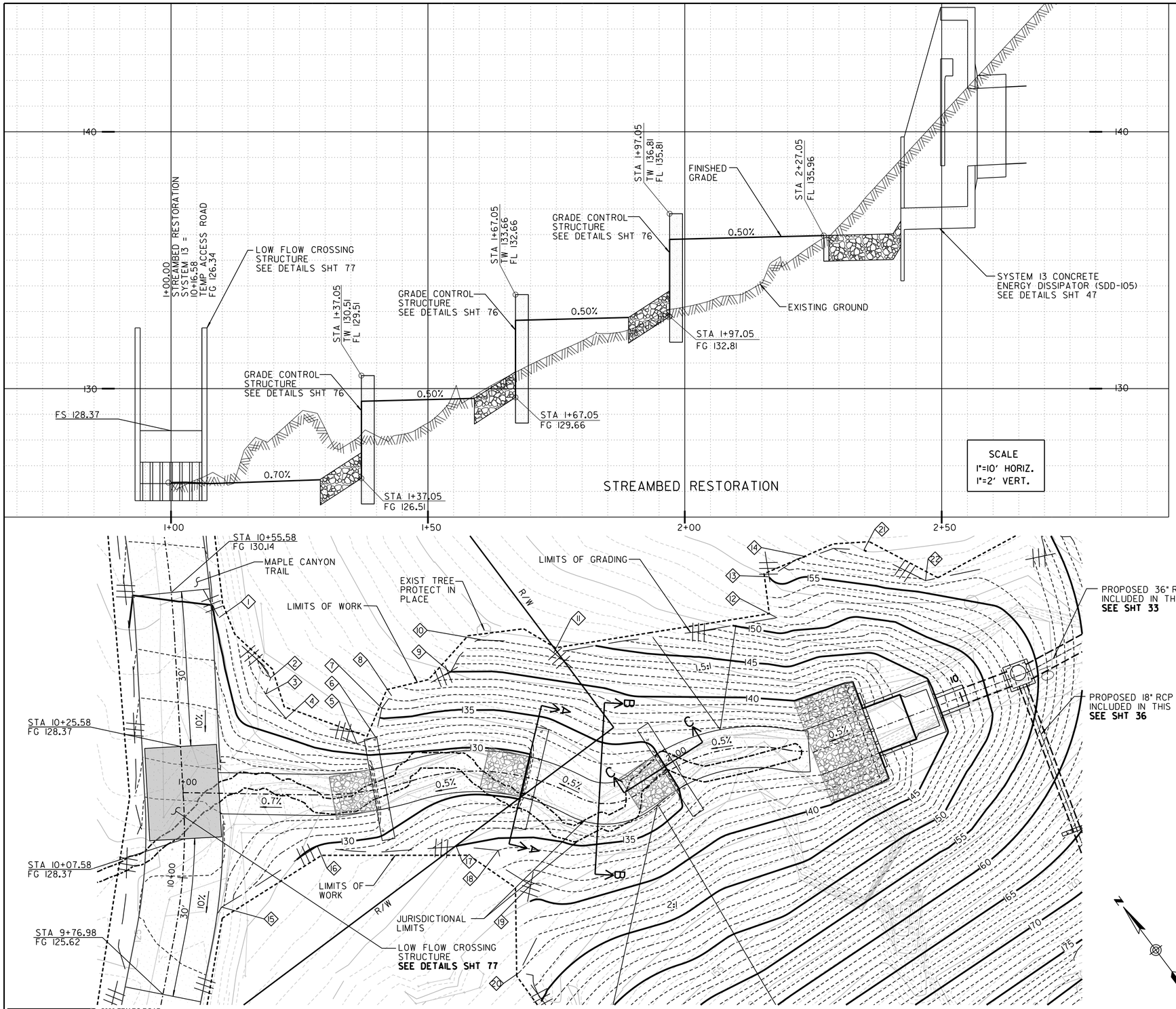
REGISTERED PROFESSIONAL ENGINEER * KEVIN R. GIBSON * NO. 52295 * STATE OF CALIFORNIA *

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FINAL SUBMITTAL



GRADING LIMITS DATA TABLE		
NO.	NORTHING	EASTING
1	1847981.85	6280238.50
2	1847966.43	6280239.44
3	1847964.51	6280236.73
4	1847958.35	6280237.10
5	1847946.09	6280245.19
6	1847944.97	6280248.83
7	1847948.69	6280253.20
8	1847949.46	6280256.17
9	1847946.24	6280268.06
10	1847947.90	6280276.50
11	1847937.19	6280286.41
12	1847916.46	6280325.24
13	1847923.89	6280328.66
14	1847922.48	6280336.99
15	1847936.53	6280205.01
16	1847934.77	6280227.02
17	1847918.47	6280248.58
18	1847912.97	6280254.63
19	1847903.77	6280255.64
20	1847891.52	6280243.56
21	1847916.86	6280346.68
22	1847904.87	6280352.67

ALIGNMENT NAME:	STREAMBED RESTORATION		
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
POB	1+00.00	1847958.84	6280212.42
PC	1+25.22	1847943.31	6280232.2
TANGENTIAL DIRECTION:	S 51° 59'32" E		
TANGENTIAL LENGTH:	25.22		
ELEMENT: CIRCULAR			
BC	1+25.22	1847943.31	6280232.2
EC	1+44.77	1847933.91	6280249.3
RADIUS:	62.76		
DELTA:	17° 50'27"	LEFT	
LENGTH:	19.54		
ELEMENT: CIRCULAR			
PRC	1+44.77	1847933.91	6280249.3
PRC	1+77.95	1847912.11	6280273.2
RADIUS:	41.83		
DELTA:	45° 27'08"	RIGHT	
LENGTH:	33.19		
ELEMENT: CIRCULAR			
PRC	1+77.95	1847912.11	6280273.2
PRC	1+91.95	1847905.41	6280284.5
RADIUS:	11.60		
DELTA:	69° 09'45"	LEFT	
LENGTH:	14.00		
ELEMENT: CIRCULAR			
PRC	1+91.95	1847905.41	6280284.5
PRC	2+21.78	1847894.78	6280311.31
RADIUS:	32.73		
DELTA:	52° 12'55"	RIGHT	
LENGTH:	29.83		
ELEMENT: CIRCULAR			
PRC	2+21.78	1847894.78	6280311.31
PT	2+26.11	1847891.97	6280314.59
RADIUS:	17.40		
DELTA:	14° 15'27"	LEFT	
LENGTH:	4.33		

NOTES:
1. GRADING LIMITS ARE APPROXIMATE AND SUBJECT TO CHANGE BASED ON VARYING FIELD CONDITIONS. CONTRACTOR TO VERIFY LIMITS OF WORK PRIOR TO CONSTRUCTION

2. FOR ADDITIONAL GRADING LIMITS **SEE SHT 33 AND 36**

3. FOR STREAMBED RESTORATION SECTIONS AND DETAILS **SEE SHT 76**

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21-JAN-2020 09:24 knguyen

C-56

MAPLE CANYON RESTORATION – PHASE 1

STREAMBED RESTORATION

SYSTEM 13

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 75 OF 98 SHEETS

STORM DRAIN WBS B-12040

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

APPROVED:
FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DCE NAME _____ RCE# _____

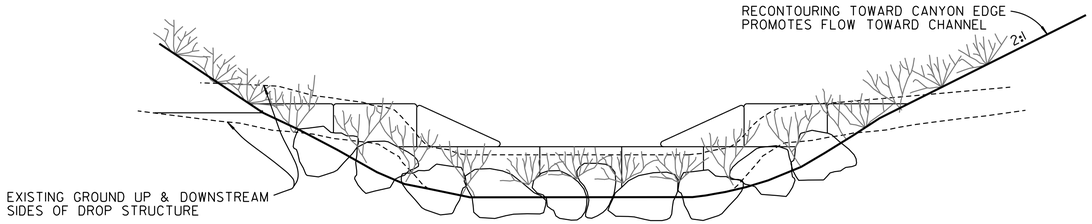
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ORIGINAL	RICK			

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER
206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE
38321-75-D

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

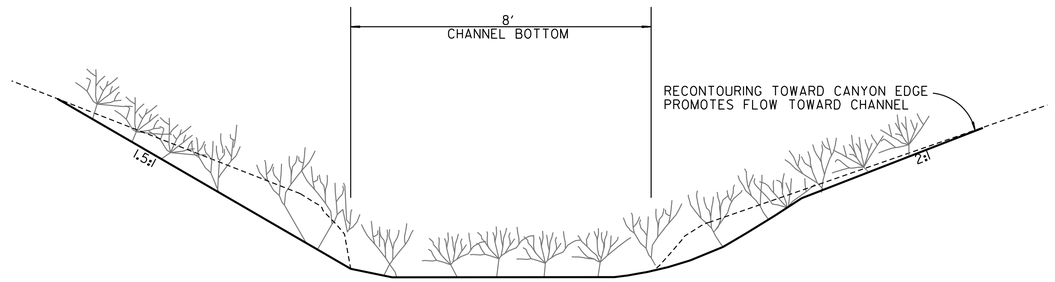
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STREAMBED RESTORATION



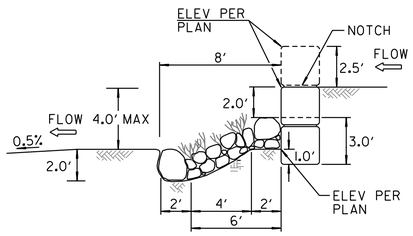
GRADE CONTROL STRUCTURE SECTION A–A

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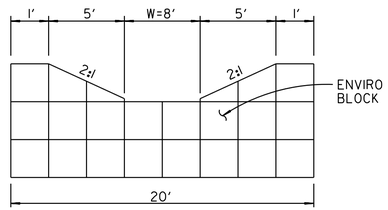
GRADE CONTROL STRUCTURE SECTION B–B

NO SCALE



GRADE CONTROL STRUCTURE SECTION C–C

NO SCALE



8 FOOT WEIR

NO SCALE

STREAMBED RESTORATION DETAILS 1

C–57

MAPLE CANYON RESTORATION – PHASE 1

STREAMBED RESTORATION DETAILS 1

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 76 OF 98 SHEETS

STORM DRAIN WBS B-12040

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

APPROVED:
FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DCE NAME _____ RCE# _____

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER

CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE

1846-6276 CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

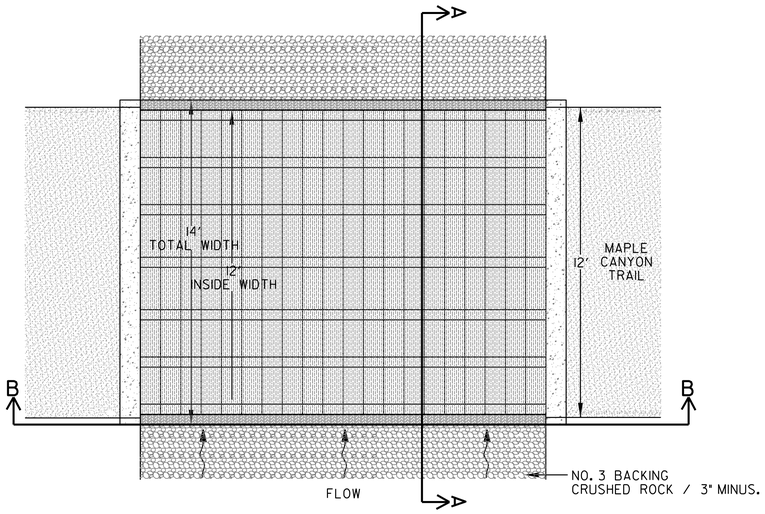
38321–76 –D

RICK ENGINEERING COMPANY
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5620 FRIARS ROAD
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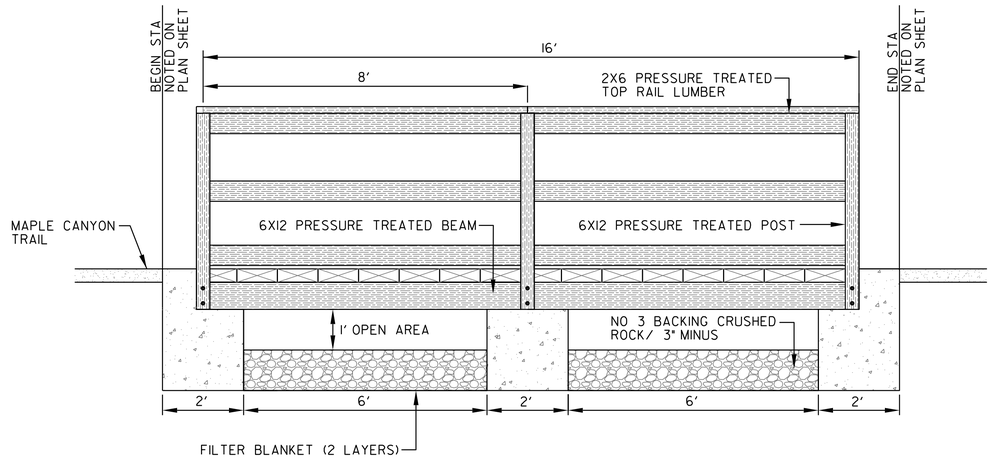
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FINAL SUBMITTAL



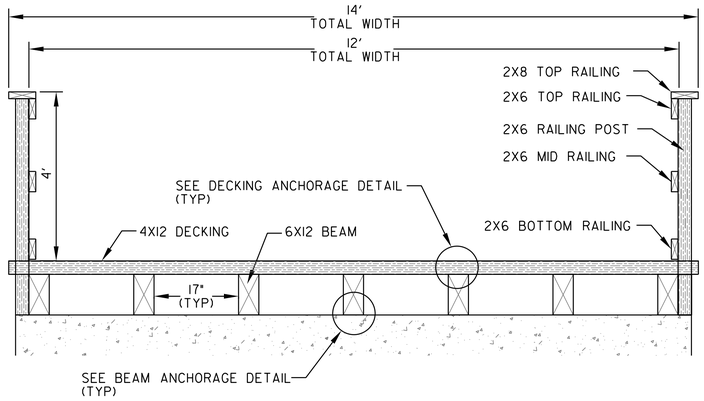
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NO SCALE



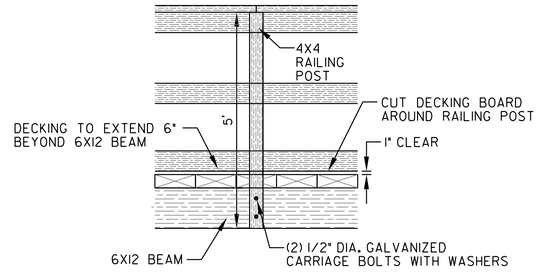
LOW FLOW CROSSING: SECTION B–B

NO SCALE

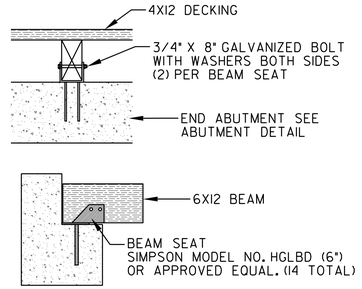


LOW FLOW CROSSING: SECTION A–A

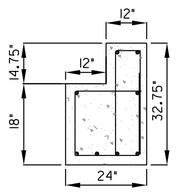
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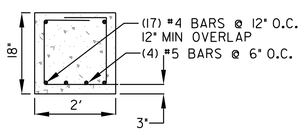
RAILING ANCHORAGE DETAIL



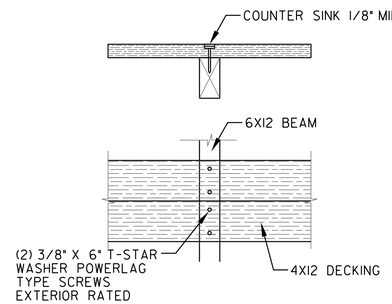
BEAM ANCHORAGE DETAIL



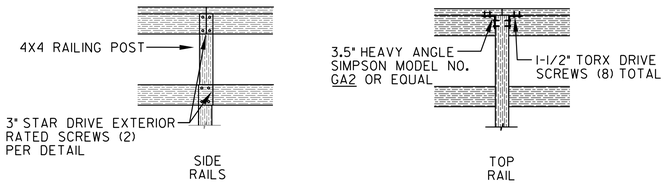
END ABUTMENT DETAIL



MID SPAN ABUTMENT DETAIL



DECKING ANCHORAGE DETAIL



RAILING CONNECTION DETAIL

LOW FLOW CROSSING: CONSTRUCTION DETAILS

NO SCALE

STREAMBED RESTORATION DETAILS 2

C–58

MAPLE CANYON RESTORATION – PHASE 1

STREAMBED RESTORATION DETAILS 2

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 77 OF 98 SHEETS

STORM DRAIN WBS B-12040

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER

CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

206-1719 CCS27 COORDINATE

1846-6276 CCS83 COORDINATE

38321–77–D

APPROVED:
FOR CITY ENGINEER _____ DATE
SHEILA BOSE
PRINT DCE NAME _____ RCE#

REGISTERED PROFESSIONAL ENGINEER * KEVIN R. GIBSON * NO. 52295 * STATE OF CALIFORNIA *

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

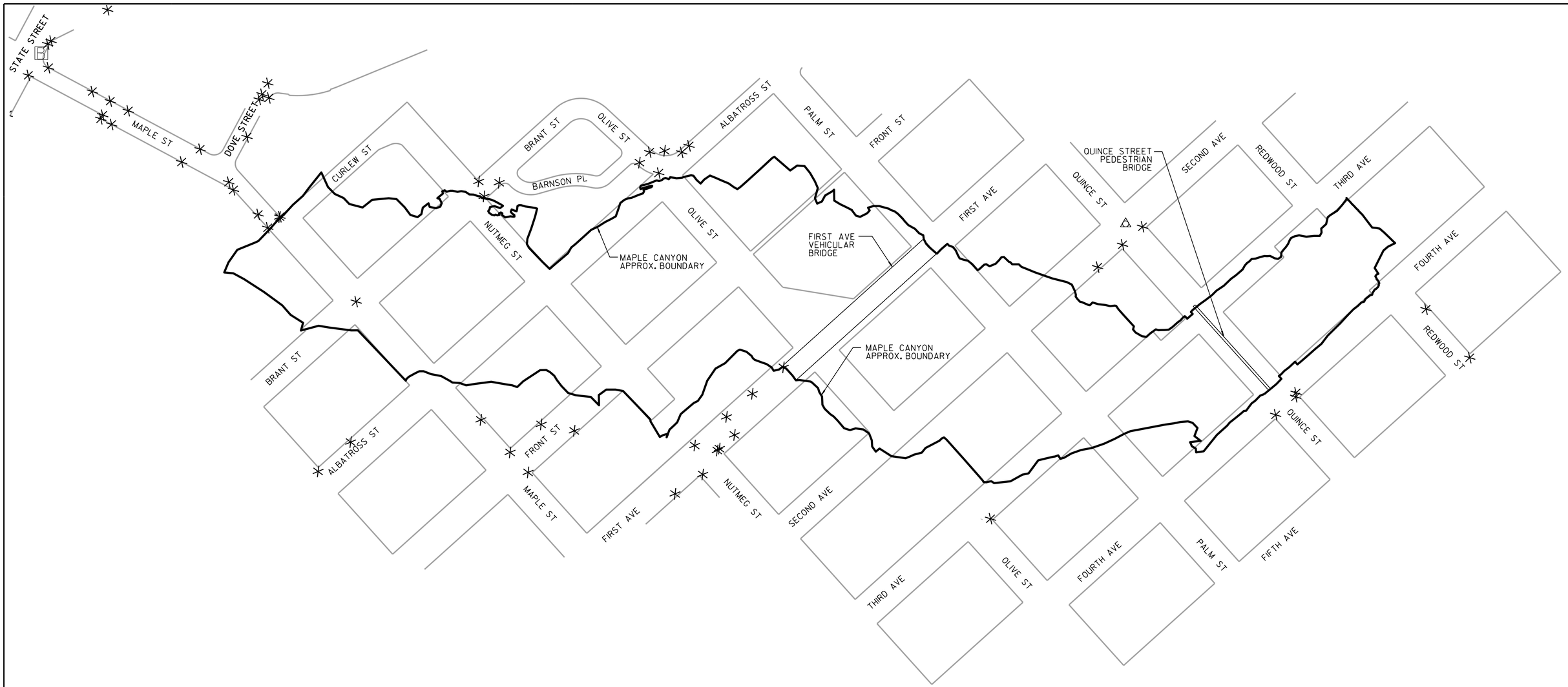
CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

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21-JAN-2020 09:24 knguyen

FINAL SUBMITTAL



MONUMENTATION / SURVEY NOTES

THIS MAP WAS CREATED FROM A PARCEL LAYER AND DOES NOT DEPICT THE ACTUAL LOCATION OF THE PROPERTY LINES. NO BOUNDARY ANALYSIS WAS PERFORMED. THE SURVEY MONUMENTS HAVE BEEN LOCATED BY SURVEY GRADE MEASUREMENTS, AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.

THE CITY OF SAN DIEGO LAND SURVEYORS SHALL REPLACE SUCH MONUMENTS WITH APPROPRIATE MONUMENTS. WHEN SETTING SURVEY MONUMENTS USED FOR RE-ESTABLISHMENT OF THE DISTURBED CONTROLLING SURVEY MONUMENTS AS REQUIRED BY SECTIONS 6730.2 AND 8771OF THE BUSINESS AND PROFESSIONS CODE OF THE STATE OF CALIFORNIA, A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE, SHALL BE FILED WITH THE COUNTY SURVEYOR.

IF ANY HORIZONTAL OR 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 ANY HORIZONTAL CONTROL AND VERTICAL CONTROL BENCHMARKS DESTROYED BY THE CONSTRUCTION IF THE CITY OF SAN DIEGO SURVEY SECTION IS NOT NOTIFIED PRIOR TO CONSTRUCTION. THE FILING OF A CORNER RECORD OR RECORD OF SURVEY, AS APPROPRIATE SHALL BE FILED WITH COUNTY SURVEYOR. A COPY OF THE FILED DOCUMENT SHALL BE FURNISHED TO THE CITY OF SAN DIEGO SURVEY SECTION.

LEGEND	
✳	LOCATION OF EXISTING SURVEY MONUMENT
△	LOCATION OF EXISTING M-10
B	LOCATION OF SURVEY BENCH MARK

NO SCALE

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C-59

SURVEY MONUMENT SHEET

MAPLE CANYON RESTORATION – PHASE 1

SURVEY MONUMENT SHEET

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 78 OF 98 SHEETS

STORM DRAIN WBS B-12040

REGISTERED PROFESSIONAL ENGINEER — KEVIN A. GIBSON — NO. 52295 — STATE OF CALIFORNIA

APPROVED:
FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DOE NAME _____ RCE# _____

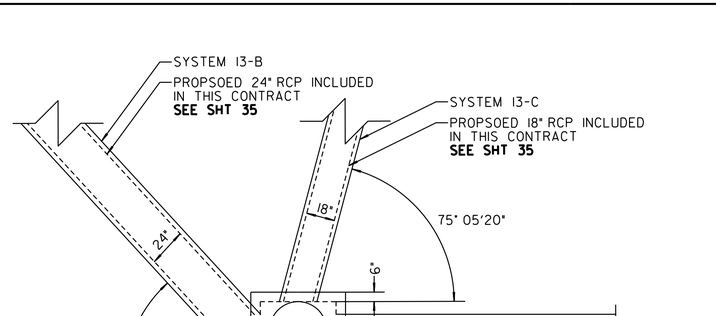
DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER
206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

38321-78-D

FINAL SUBMITTAL



MODIFIED TYPE A–5 CLEANOUT

NO SCALE

STORM DRAIN DETAILS 2

C–60

MAPLE CANYON RESTORATION – PHASE 1

STORM DRAIN DETAILS 2

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 79 OF 98 SHEETS

STORM DRAIN WBS B-12040

REGISTERED PROFESSIONAL ENGINEER
KEVIN R. GIBSON
NO. 52295
STATE OF CALIFORNIA

APPROVED:
FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DCE NAME _____ RCE# _____

SUBMITTED BY: ELHAM LOTFI
PROJECT MANAGER

CHECKED BY: BAREAZ PIROMARI
PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719
CCS27 COORDINATE

1846-6276
CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

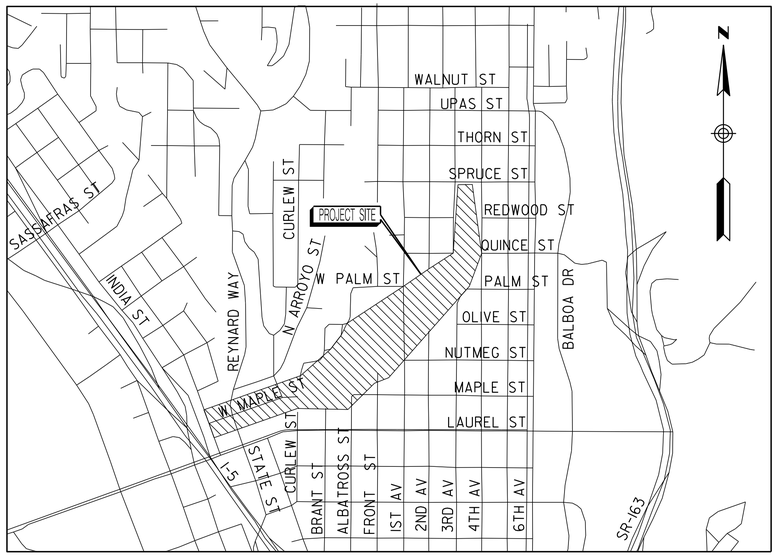
38321-79-D

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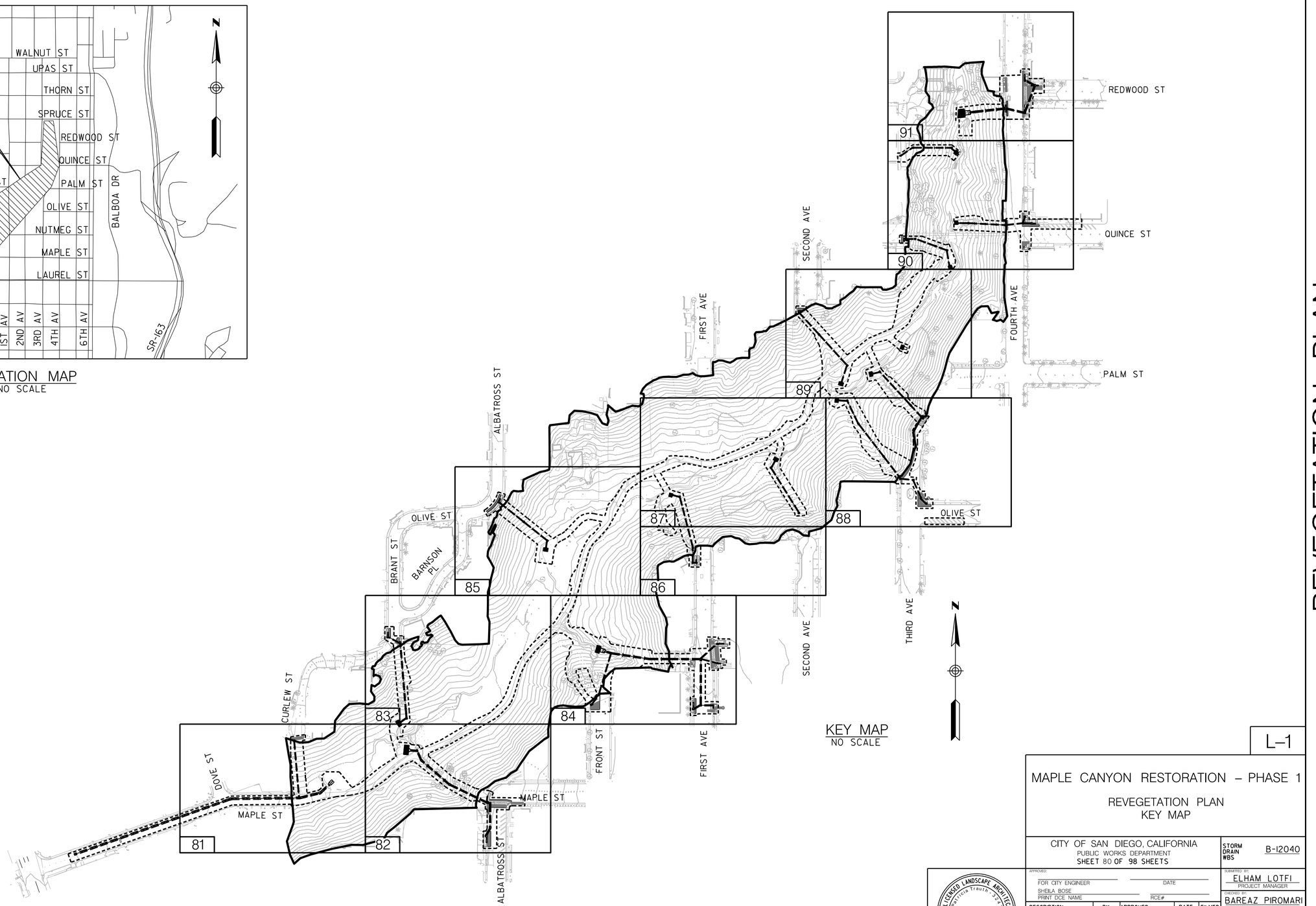
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21-JAN-2020 09:24 knguyen

FINAL SUBMITTAL



LOCATION MAP
NO SCALE



KEY MAP
NO SCALE

REVEGETATION PLAN

L–1

MAPLE CANYON RESTORATION – PHASE 1

REVEGETATION PLAN
KEY MAP

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 80 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DCE NAME _____ RCE# _____

SUBMITTED BY:
ELHAM LOTFI
PROJECT MANAGER

DESIGNED BY:
BAREAZ PIROMARI
PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719
CCS27 COORDINATE

1846-6276
CCS83 COORDINATE

LICENSED LANDSCAPE ARCHITECT
Patricia Traut-Jaret
Signature of Permittee Date
11/30/2021
Date
STATE OF CALIFORNIA

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

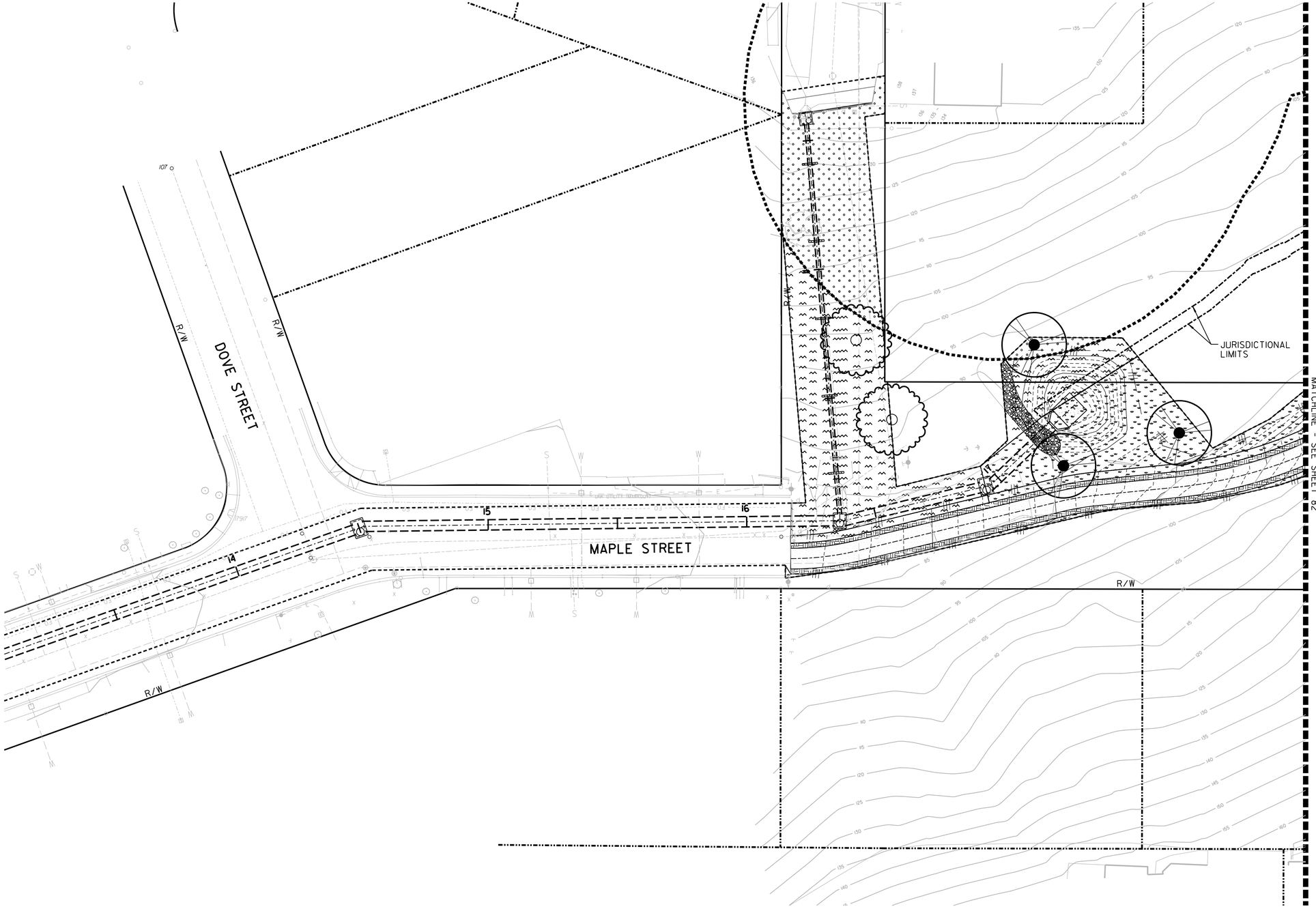
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20–JAN–2020 15:47 erowan

100% SUBMITTAL



PLANT LEGEND

- PLATANUS RACEMOSA
- QUERCUS AGRIFOLIA
- CSS NORTH/EAST-FACING, CONTAINER STOCK & HYDROSEED
- CSS NORTH/EAST-FACING, HYDROSEED ONLY
- CSS SOUTH/WEST-FACING, CONTAINER STOCK & HYDROSEED
- CSS SOUTH/WEST-FACING, HYDROSEED ONLY
- WOOD MULCH
- EARTHEN SURFACE
- OUTER LIMITS OF BMZ 2 (100')

REVEGETATION GENERAL NOTES

1. CONTRACTOR SHALL REVIEW PLANTING INSTALLATION DETAILS, NOTES AND SPECIFICATIONS PRIOR TO BEGINNING WORK.
2. CONTRACTOR SHALL VISIT AND BECOME FAMILIAR WITH CONDITIONS UNDER WHICH WORK SHALL BE DONE PRIOR TO BIDDING.
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6. PLANT SYMBOLS TAKE PRECEDENCE OVER PLANT QUANTITIES SPECIFIED. WHERE SHRUB SYMBOLS ARE MASSED, CONTRACTOR SHALL MAINTAIN A CONSISTENT ON CENTER, TRIANGULAR SPACING AS SPECIFIED IN SPECIFICATIONS. CONTRACTOR SHALL VERIFY PLANT TOTALS FOR BID PURPOSES.
7. MATERIAL MAY BE REJECTED BY THE PROJECT BIOLOGIST DUE TO HEALTH FORM OR DAMAGE BEFORE OR AFTER PLANTING.
8. SEE SHEET 80 FOR REVEGETATION KEY MAP.
9. SEE SHEET 93 FOR REVEGETATION LEGEND.
10. ALL SYMBOLS ARE TYPICAL.

N

0 20 40 60

SCALE 1"=20'

REVEGETATION PLAN

L-2

MAPLE CANYON RESTORATION – PHASE 1

REVEGETATION PLAN

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 81 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED: _____ DATE _____
FOR CITY ENGINEER
SHEILA BOSE
PRINT DCE NAME RCE#

SUBMITTED BY: ELHAM LOTFI
PROJECT MANAGER

CHECKED BY: BAREAZ PIROMARI
PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719
CCS27 COORDINATE

1846-6276
CCS83 COORDINATE

38321-81-D

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

LICENSED LANDSCAPE ARCHITECT
Patricia Trauth
Signature
11/30/2021
Renewal Date
STATE OF CALIFORNIA

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20-JAN-2020 16:25 knguyen

100% SUBMITTAL

MATCHLINE - SEE SHEET 83

MATCHLINE - SEE SHEET 81

JURISDICTIONAL LIMITS

R/W

MAPLE STREET

ALBATROSS STREET

PLANT LEGEND

PLATANUS RACEMOSA

QUERCUS AGRIFOLIA

CSS NORTH/EAST-FACING, CONTAINER STOCK & HYDROSEED

CSS NORTH/EAST-FACING, HYDROSEED ONLY

CSS SOUTH/WEST-FACING, CONTAINER STOCK & HYDROSEED

CSS SOUTH/WEST-FACING, HYDROSEED ONLY

WOOD MULCH

EARTHEN SURFACE

OUTER LIMITS OF BMZ 2 (100')

REVEGETATION GENERAL NOTES

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7. MATERIAL MAY BE REJECTED BY THE PROJECT BIOLOGIST DUE TO HEALTH FORM OR DAMAGE BEFORE OR AFTER PLANTING.
8. SEE SHEET 80 FOR REVEGETATION KEY MAP.
9. SEE SHEET 93 FOR REVEGETATION LEGEND.
10. ALL SYMBOLS ARE TYPICAL.

REVEGETATION PLAN

L-3

MAPLE CANYON RESTORATION – PHASE 1

REVEGETATION PLAN

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 82 OF 98 SHEETS

STORM DRAIN WBS B-12040

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER

CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

206-1719 CCS27 COORDINATE

1846-6276 CCS83 COORDINATE

38321-82-D

APPROVED:
FOR CITY ENGINEER _____ DATE
SHEILA BOSE
PRINT DCE NAME RCE#

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

LICENSED LANDSCAPE ARCHITECT — Patricia Trauth — 2927 — Signature 11/30/2021 Renewal Date — STATE OF CALIFORNIA

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

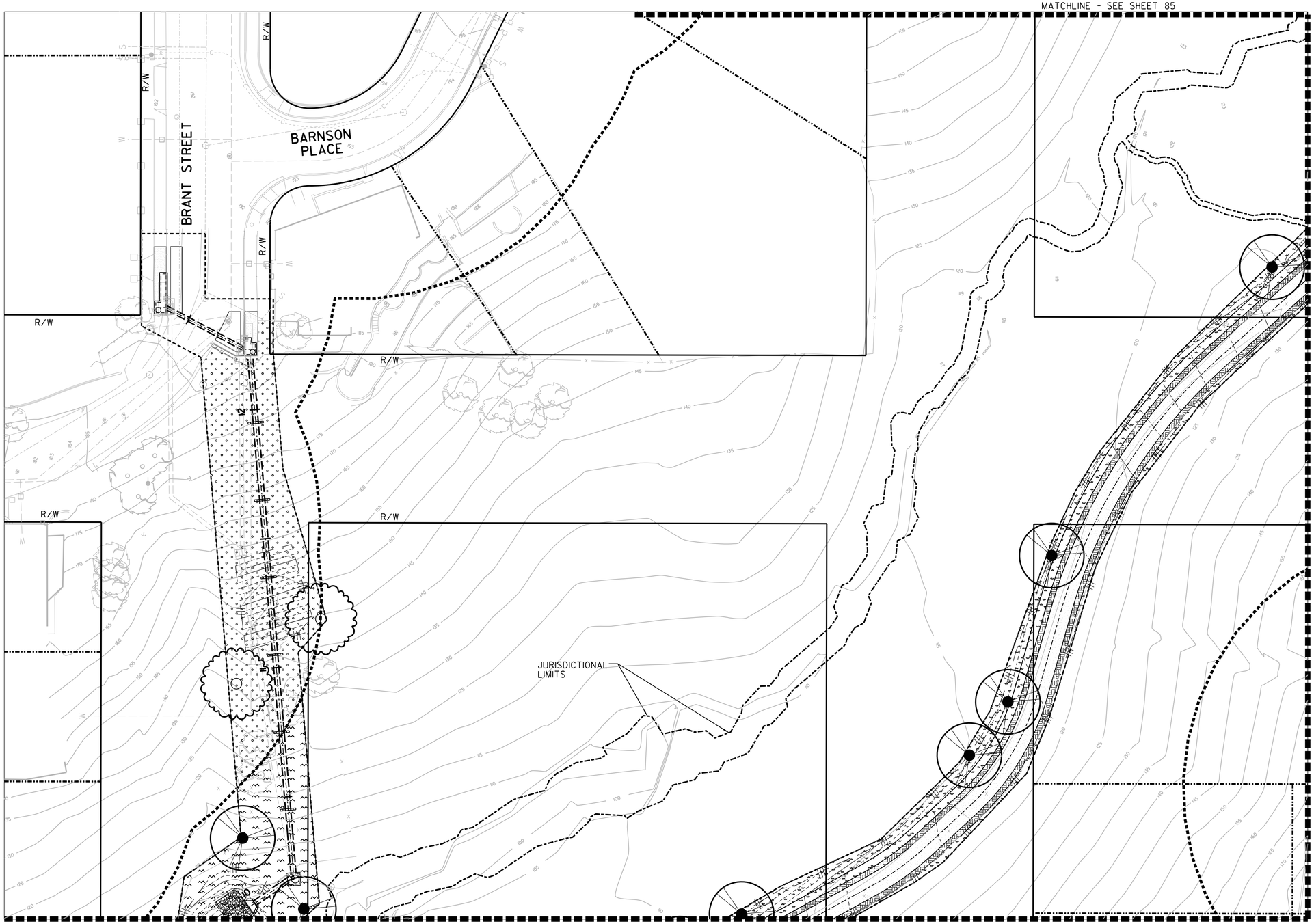
0 20 40 60
SCALE 1"=20'

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PLANT LEGEND

- PLATANUS RACEMOSA
- QUERCUS AGRIFOLIA
- CSS NORTH/EAST-FACING, CONTAINER STOCK & HYDROSEED
- CSS NORTH/EAST-FACING, HYDROSEED ONLY
- CSS SOUTH/WEST-FACING, CONTAINER STOCK & HYDROSEED
- CSS SOUTH/WEST-FACING, HYDROSEED ONLY
- WOOD MULCH
- EARTHEN SURFACE
- OUTER LIMITS OF BMZ 2 (100')

REVEGETATION GENERAL NOTES

1. CONTRACTOR SHALL REVIEW PLANTING INSTALLATION DETAILS, NOTES AND SPECIFICATIONS PRIOR TO BEGINNING WORK.
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8. SEE SHEET 80 FOR REVEGETATION KEY MAP.
9. SEE SHEET 93 FOR REVEGETATION LEGEND.
10. ALL SYMBOLS ARE TYPICAL.

REVEGETATION PLAN

L-4

MAPLE CANYON RESTORATION – PHASE 1

REVEGETATION PLAN

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 83 OF 98 SHEETS

STORM DRAIN WBS B-12040

SCALE 1"=20'

LICENSED LANDSCAPE ARCHITECT — Patricia Trauth — Signature 11/30/2021 — Renewal 10/16 — Date — STATE OF CALIFORNIA

APPROVED:
FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DCE NAME _____ RCE# _____

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER
206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE
38321-83-D

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

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100% SUBMITTAL

MATCHLINE - SEE SHEET 85

MATCHLINE - SEE SHEET 86

MATCHLINE - SEE SHEET 83

R/W

JURISDICTIONAL LIMITS

NUTMEG STREET

FIRST AVENUE

12

13

14

PLANT LEGEND

PLATANUS RACEMOSA

QUERCUS AGRIFOLIA

CSS NORTH/EAST-FACING, CONTAINER STOCK & HYDROSEED

CSS NORTH/EAST-FACING, HYDROSEED ONLY

CSS SOUTH/WEST-FACING, CONTAINER STOCK & HYDROSEED

CSS SOUTH/WEST-FACING, HYDROSEED ONLY

WOOD MULCH

EARTHEN SURFACE

OUTER LIMITS OF BMZ 2 (100')

REVEGETATION GENERAL NOTES

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7. MATERIAL MAY BE REJECTED BY THE PROJECT BIOLOGIST DUE TO HEALTH FORM OR DAMAGE BEFORE OR AFTER PLANTING.
8. SEE SHEET 80 FOR REVEGETATION KEY MAP.
9. SEE SHEET 93 FOR REVEGETATION LEGEND.
10. ALL SYMBOLS ARE TYPICAL.

REVEGETATION PLAN

L-5

MAPLE CANYON RESTORATION – PHASE 1

REVEGETATION PLAN

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 84 OF 98 SHEETS

STORM DRAIN WBS B-12040

SCALE 1" = 20'

0 20 40 60

LICENSED LANDSCAPE ARCHITECT — Patricia Trauth — 2927 — Signature — 11/30/2021 Renewal Date — Date — STATE OF CALIFORNIA

APPROVED:
FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DCE NAME RCE#

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

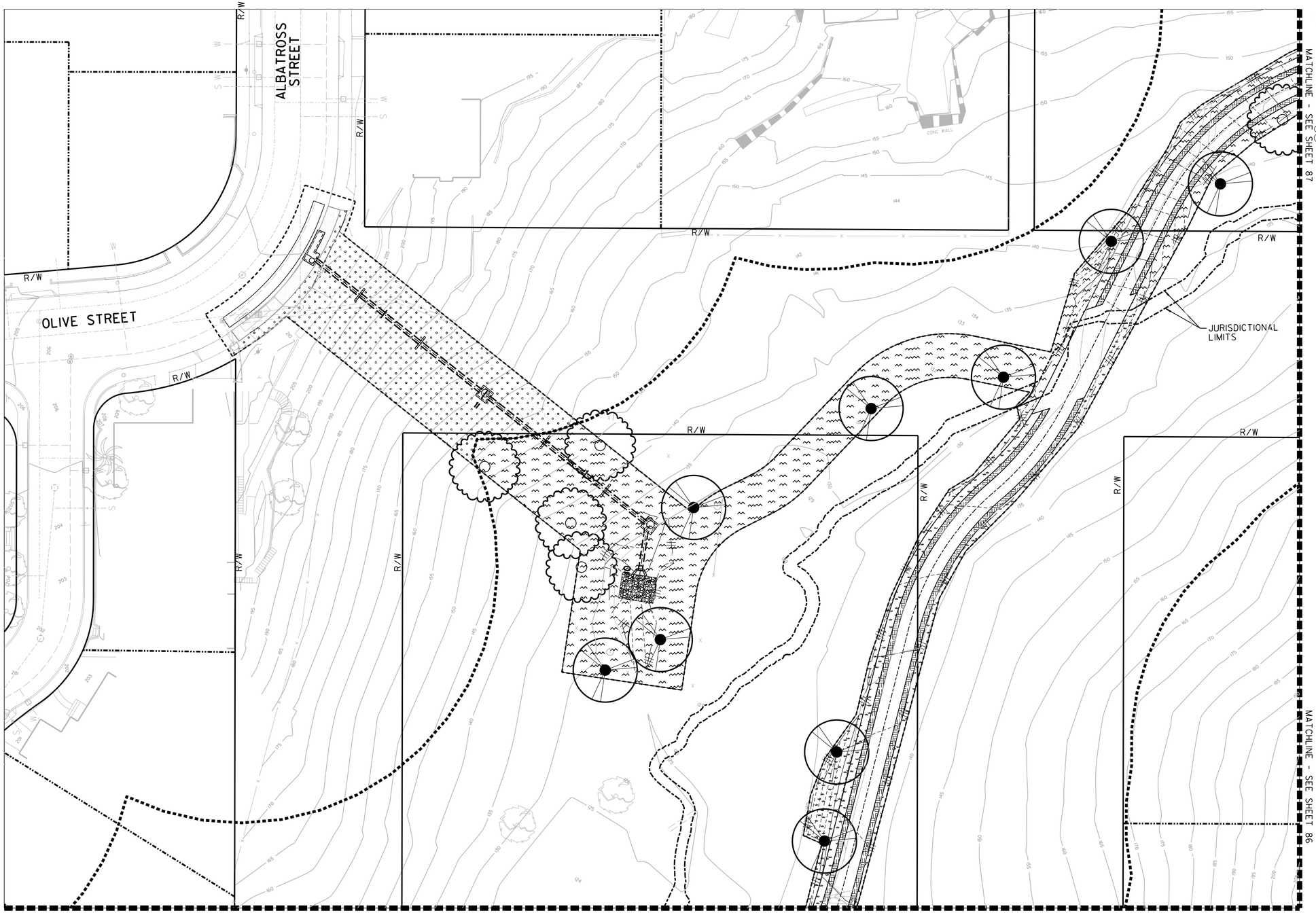
SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER
206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE
38321-84-D

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20-JAN-2020 15:48 erowan

100% SUBMITTAL



PLANT LEGEND

- PLATANUS RACEMOSA
- QUERCUS AGRIFOLIA
- CSS NORTH/EAST-FACING, CONTAINER STOCK & HYDROSEED
- CSS NORTH/EAST-FACING, HYDROSEED ONLY
- CSS SOUTH/WEST-FACING, CONTAINER STOCK & HYDROSEED
- CSS SOUTH/WEST-FACING, HYDROSEED ONLY
- WOOD MULCH
- EARTHEN SURFACE
- OUTER LIMITS OF BMZ 2 (100')

REVEGETATION GENERAL NOTES

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8. SEE SHEET 80 FOR REVEGETATION KEY MAP.
9. SEE SHEET 93 FOR REVEGETATION LEGEND.
10. ALL SYMBOLS ARE TYPICAL.

REVEGETATION PLAN

L-6

MAPLE CANYON RESTORATION – PHASE 1

REVEGETATION PLAN

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 85 OF 98 SHEETS

STORM DRAIN WBS B-12040

SCALE 1"=20'

LICENSED LANDSCAPE ARCHITECT — Patricia Trauth — 2527 — Signature 11/30/2021 Renewal Date — Date — STATE OF CALIFORNIA

APPROVED: FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE PRINT DCE NAME _____ RCE# _____

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

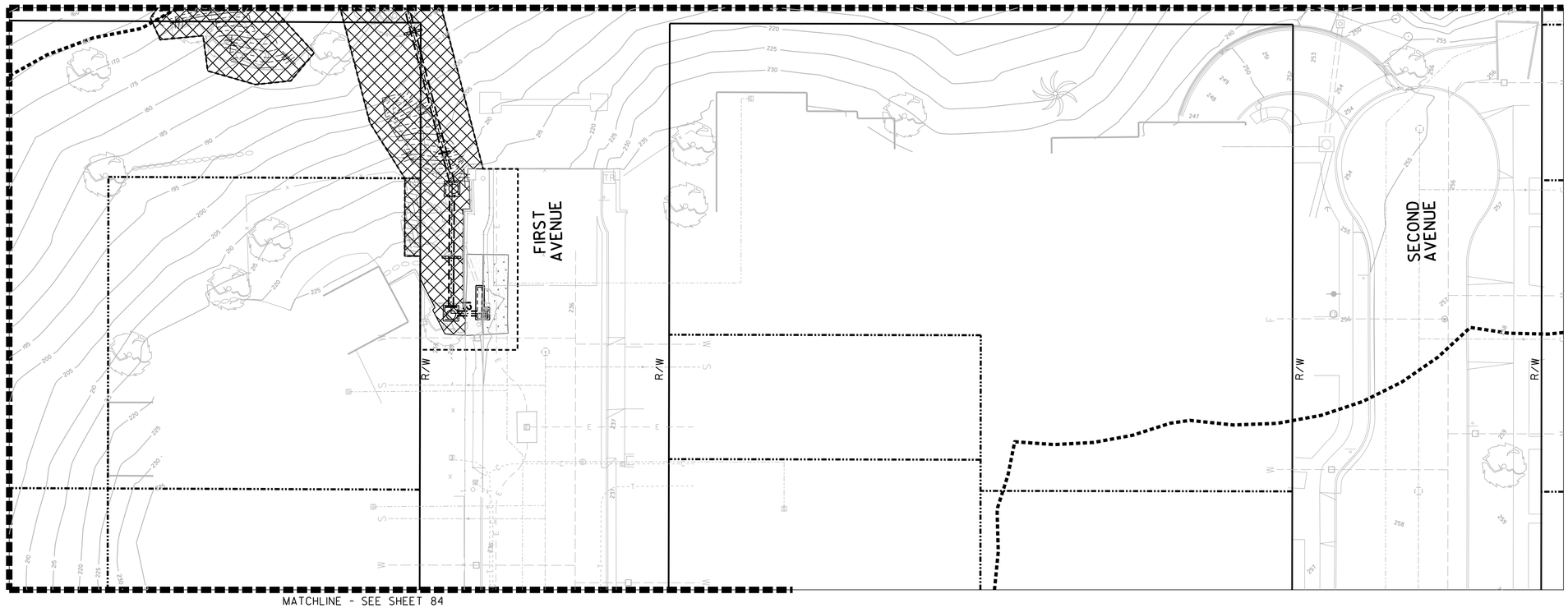
SUBMITTED BY: ELHAM LOTFI PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI PROJECT ENGINEER
206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE
38321-85-D

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PLANT LEGEND

- PLATANUS RACEMOSA
- QUERCUS AGRIFOLIA
- CSS NORTH/EAST-FACING, CONTAINER STOCK & HYDROSEED
- CSS NORTH/EAST-FACING, HYDROSEED ONLY
- CSS SOUTH/WEST-FACING, CONTAINER STOCK & HYDROSEED
- CSS SOUTH/WEST-FACING, HYDROSEED ONLY
- WOOD MULCH
- EARTHEN SURFACE
- OUTER LIMITS OF BMZ 2 (100')

REVEGETATION GENERAL NOTES

1. CONTRACTOR SHALL REVIEW PLANTING INSTALLATION DETAILS, NOTES AND SPECIFICATIONS PRIOR TO BEGINNING WORK.
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8. SEE SHEET 80 FOR REVEGETATION KEY MAP.
9. SEE SHEET 93 FOR REVEGETATION LEGEND.
10. ALL SYMBOLS ARE TYPICAL.

REVEGETATION PLAN

L-7

MAPLE CANYON RESTORATION – PHASE 1

REVEGETATION PLAN

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 86 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER _____ DATE
SHEILA BOSE
PRINT DCE NAME _____ RCE#

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

38321-86-D

LICENSED LANDSCAPE ARCHITECT — Patricia Trauth — 2927 — Signature — 11/30/2021 Renewal Date — Date — STATE OF CALIFORNIA

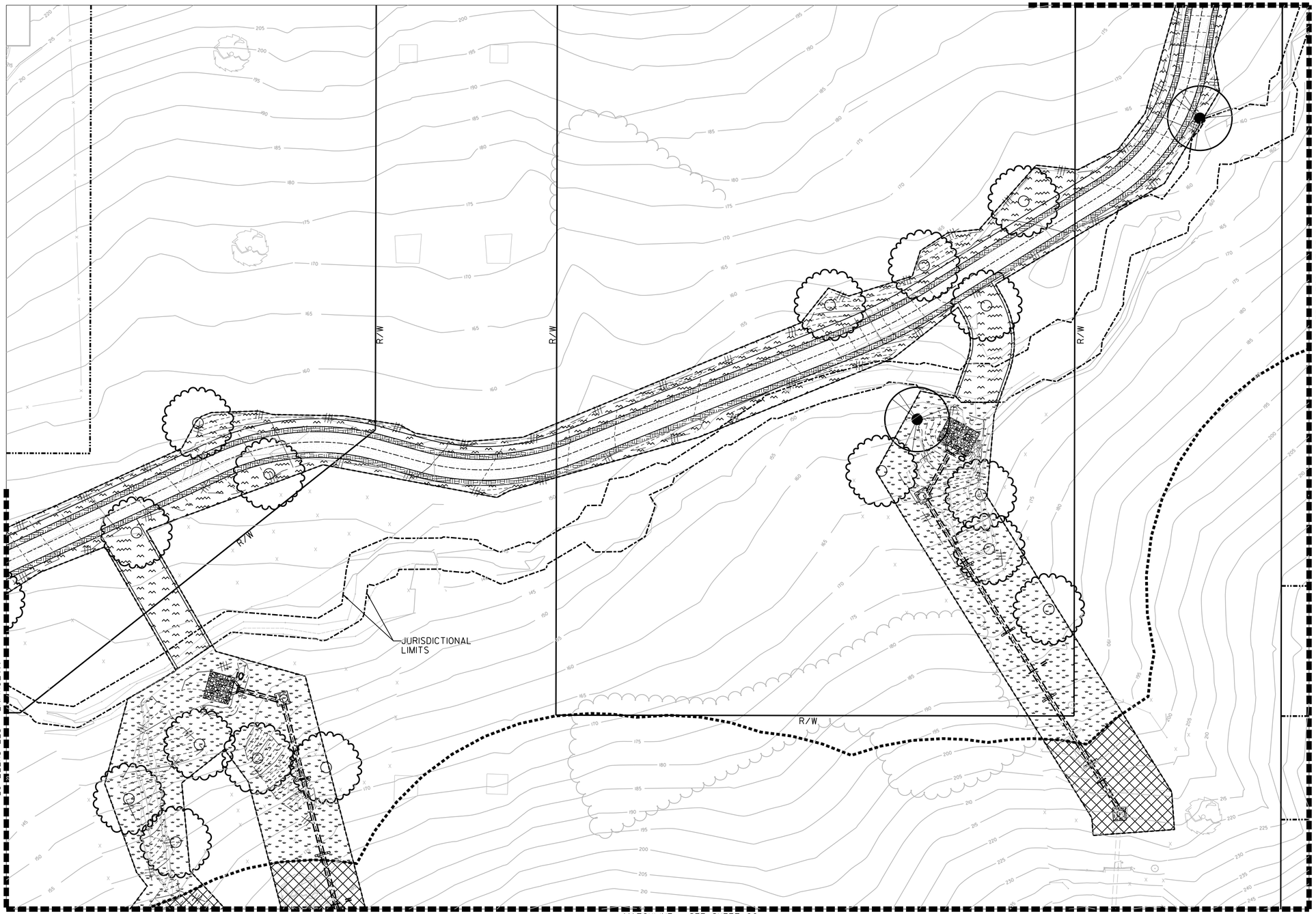
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PLANT LEGEND

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- QUERCUS AGRIFOLIA
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REVEGETATION PLAN

L-8

MAPLE CANYON RESTORATION – PHASE 1

REVEGETATION PLAN

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 87 OF 98 SHEETS

STORM DRAIN WBS B-12040

SCALE 1"=20'

LICENSED LANDSCAPE ARCHITECT — Patricia Trauth — 2577 — Signature — 11/30/2021 Renewal Date — Date — STATE OF CALIFORNIA

APPROVED:
FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DCE NAME _____ RCE# _____

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER
206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE
38321-87-D

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PLANT LEGEND

- PLATANUS RACEMOSA
- QUERCUS AGRIFOLIA
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- CSS NORTH/EAST-FACING, HYDROSEED ONLY
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- EARTHEN SURFACE
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REVEGETATION PLAN

L-9

MAPLE CANYON RESTORATION – PHASE 1

REVEGETATION PLAN

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 88 OF 98 SHEETS

STORM DRAIN WBS B-12040

SCALE 1" = 20'

APPROVED:
FOR CITY ENGINEER _____ DATE
SHEILA BOSE
PRINT DCE NAME RCE#

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

LICENSED LANDSCAPE ARCHITECT — Patricia Trauth — 2527 — Signature — 11/30/2021 Renewal Date — Date — STATE OF CALIFORNIA

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER
206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE
38321-88-D

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MATCHLINE - SEE SHEET 90

SECOND AVENUE

R/W

JURISDICTIONAL LIMITS

PALM STREET

MATCHLINE - SEE SHEET 87

MATCHLINE - SEE SHEET 88

PLANT LEGEND

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- QUERCUS AGRIFOLIA
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REVEGETATION PLAN

L-10

MAPLE CANYON RESTORATION – PHASE 1

REVEGETATION PLAN

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 89 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED: FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DOE NAME _____ RCE# _____

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
DRAWN BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

LICENSED LANDSCAPE ARCHITECT – Patricia Trauth – Signature 11/30/2021 – Renewal Date – Date – STATE OF CALIFORNIA

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

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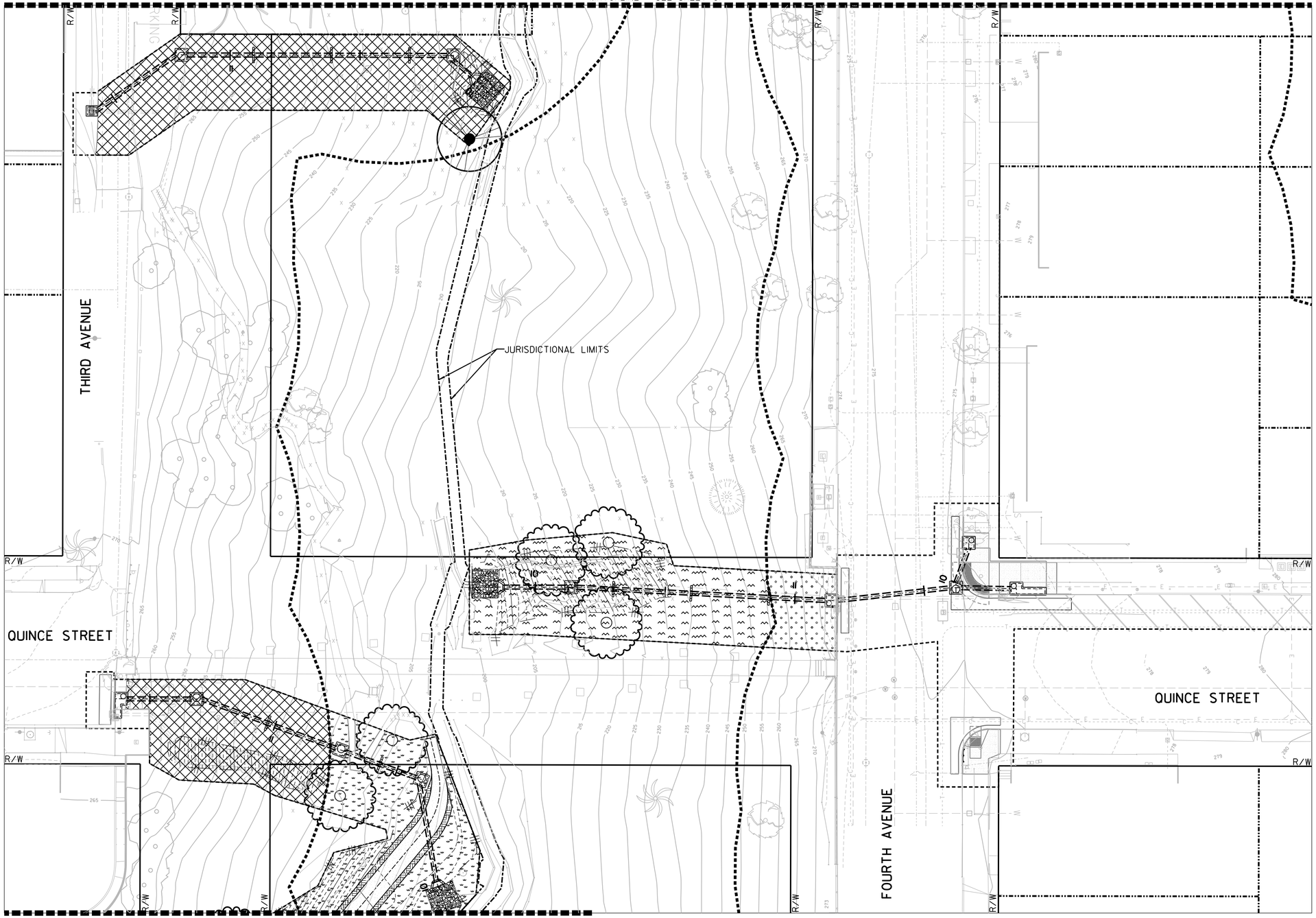
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SCALE 1" = 20'

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PLANT LEGEND

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- QUERCUS AGRIFOLIA
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REVEGETATION PLAN

L-11

MAPLE CANYON RESTORATION – PHASE 1

REVEGETATION PLAN

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 90 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED: FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DOE NAME _____ RCE# _____

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

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38321-90-D

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LICENSED LANDSCAPE ARCHITECT — Patricia Trauth — Signature 11/30/2021 Renewal 10/16 Date — STATE OF CALIFORNIA

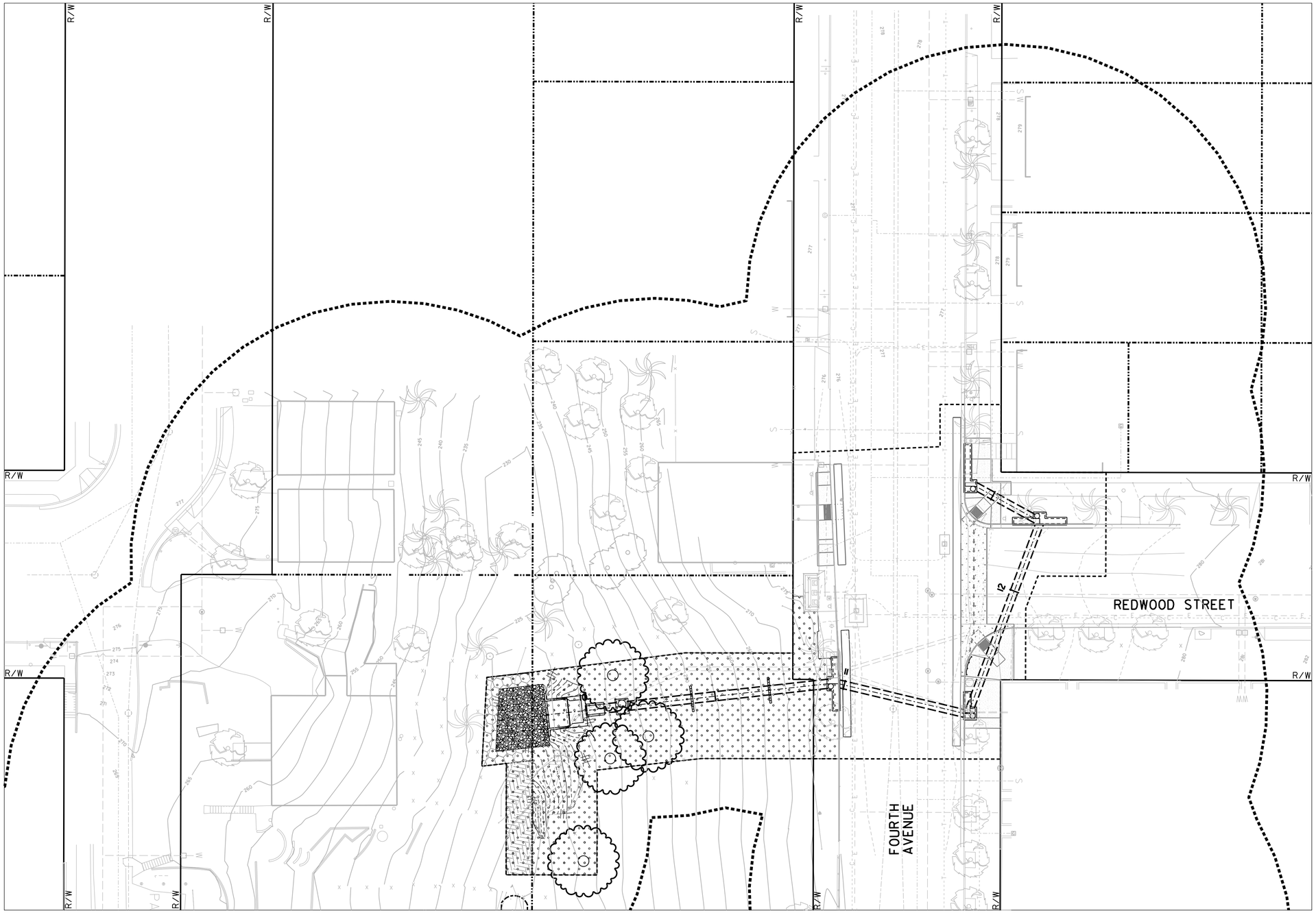
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PLANT LEGEND

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- QUERCUS AGRIFOLIA
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- CSS NORTH/EAST-FACING, HYDROSEED ONLY
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REVEGETATION PLAN

L-12

MAPLE CANYON RESTORATION – PHASE 1

REVEGETATION PLAN

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 91 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
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SHEILA BOSE
PRINT DCE NAME _____ RCE# _____

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SCALE 1"=20'

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REVEGETATION NOTES

GENERAL REVEGATION NOTES

1. REVEGETATION OF THE PROJECT AREA SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE CITY OF SAN DIEGO GREENBOOK 2018, WHITEBOOK 2015, LANDSCAPE STANDARDS, AND SEWER DESIGN GUIDELINES.
2. REVEGETATION OF THE SITE WILL INCLUDE THE TREATEMENT AND REMOVAL OF NON-NATIVE VEGETATION, STOCKPILE OF TOPSOIL, APPLICATION OF NATIVE SEED MIX HYDROSEED SLURRY, INSTALLATION OF NATIVE CONTAINER PLANTINGS, APPLICATION OF MULCH, SUPPLEMENTAL IRRIGATION, AND LONG TERM MAINTENANCE.
3. THESE PLANS ARE TO BE USED AS A GENERAL GUIDE WITH THE FINAL LAYOUT TO BE DETERMINED ON SITE BY THE PROJECT BIOLOGIST.
4. 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 CONTSRUCTION ACTIVITIES.
5. CONTRACTOR SHALL REPAIR AND/OR REPLACE ALL ABOVE GROUND EROSION CONTROL BMP'S DAMAGED DURING THE 120 PEP AND 25 MONTH MAINTENANCE AND MONITORING PERIOD. ANY ABOVE GRADE EROSION CONTROL MEASURES OR BMP'S SHALL BE REMOVED BY THE CONTRACTOR AND AS DIRECTED BY THE PROJECT BIOLOGIST.
6. CONTRACTOR SHALL REMOVE ALL TRASH AND/OR DEBRIS FROM THE REVEGETATION SITE PRIOR TO AND FOLLOWING THE REVEGETATION INSTALLATION, AND UNTIL THE END OF THE 25 MONTH MAINTENANCE AND MONITORING PERIOD.
7. ORANGE CONSTRUCTION FENCE (OR IF IN A WILDLIFE AREA, A YELLOW ROPE BARRIER AS DIRECTED BY THE PROJECT BIOLOGIST) 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.
8. PARK AND RECREATION DEPARTMENT OPEN SPACE STAFF SHALL BE INVITED TO QUARTERLY SITE INSPECTIONS, MUST BE PRESENT AT THE FINAL INSPECTION, AND MUST APPROVE THE PROJECT PRIOR TO FINAL ACCEPTANCE. PLEASE CONTACT THE OPEN SPACE SENIOR PLANNER, PAUL KILBURG, AT (619) 685-1327.

SITE PREPERATION

1. NON-NATIVE SPECIES CURRENTLY OCCUPYING REVEGETATION AREAS SHALL BE REMOVED OR TREATED WITH HEBERBICIDE PRIOR TO INSTALLATION OF NATIVE PLANT MATERIAL AS APPROVED BY THE PROJECT BIOLOGIST. THE CONTRACTOR SHALL COORDINATE WITH THE PROJECT BIOLOGIST REGARDING IDENTIFICATION OF EXOTIC WEED SPECIES TO BE REMOVED/TREATED.
2. IF EROSION CONTROL MATERIALS SUCH AS SILT FENCING AND FIBER ROLLS REMAIN ON SITE PRIOR TO PLANTING, THEY MUST BE IN A SERVICEABLE CONDITION PRIOR TO THE RESTORATION IMPLEMENTATION AND SHOULD REMAIN IN PLACE. IF THEY ARE DEGRADED HOWEVER, THEY SHOULD BE REPLACED PRIOR TO PLANTING AND HYDROSEEDING THE AREA, AND SHALL REMAIN UNTIL THE VEGETATION HAS BEEN ESTABLISHED.
3. EXISTING ACCESS PATHS PROPOSED FOR REVEGETATION THAT ARE CURRENTLY COVERED WITH MULCH SHALL HAVE ALL MULCH REMOVED PRIOR TO INSTALLATION OF ANY NATIVE SEED OR HYDROSEED.
4. AREAS THAT WILL BY HYDROSEEDED OR HAND-SEEDED MUST BE CLEARED OF LOOSE ROCKS AND DEBRIS PRIOR TO SEED APPLICATION. COMPACTED SOIL SURFACES SHOULD BE SCARIFIED TO A DEPTH BETWEEN 0.25"-0.50" FOR INCREASED SOIL CONTACT AND SEED BEDDING.

SUPPLEMENTAL IRRIGATION SYSTEM

1. TEMPORARY IRRIGATION VIA IRRIGATION LINES (OR ALTERNATE METHOD APPROVED BY RE AND PROJECT BIOLOGIST) SHALL BE PROVIDED BY THE CONTRACTOR FOR A PERIOD SUFFICIENT TO ESTABLISH PLANT MATERIAL AND TO PROVIDE VEGETATIVE COVER THAT PREVENTS SOIL EROSION. METHODS OF TEMPORARY IRRIGATION SHALL BE TESTED IN THE PRESENCE OF PROJECT BIOLOGIST AND/OR CITY REPRESENTATIVE TO ENSURE FULL IRRIGATION COVERAGE AND PROPER OPERATION BY THE SYSTEM AND CONTRACTOR.
2. THE AMOUNT OF IRRIGATION MUST BE ADJUSTED WHEN WARRANTED BY SITE CONDITIONS. PROJECT BIOLOGIST AND CONTRACTOR SHALL MONITOR SOIL MOISTURE TO DETERMINE SUCCESS AND ANY ADDED REQUIREMENTS OR MODIFICATIONS FOR TEMPORARY IRRIGATION.
3. IRRIGATION SHALL BE PERFORMED IN A LOW VOLUME, VARYING SPRAY PATTERN THAT AVOIDS RUNOFF, SEEPAGE, AND OVERSPRAY ONTO ADJACENT PROPERTIES, NON-IRRIGATED AREAS, OR ADJACENT NATIVE OR NON NATIVE VEGETATION.
4. THE WATER DELIVERY RATE SHALL BE MATCHED TO THE SLOPE GRADIENT AND THE PERCOLATION RATE OF THE SOIL.
5. IRRIGATION SHALL DELIVER WATER SUFFICIENTLY AND UNIFORMLY AND SHALL BE APPROPRIATE TO THE NEEDS OF THE PLANT MATERIALS. OVERWATERING AS EVIDENCED BY SOGGY SOILS, STANDING WATER, RUNOFF, EROSION OR OTHER SIMILAR CONDITIONS SHALL BE MANAGED AND PREVENTED BY THE CONTRACTOR.
6. REPAIRS TO THE IRRIGATION SYSTEM DUE TO VANDALISM OR ANY OTHER REASON SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
7. IRRIGATION SHALL BE DISCONTINUED PRIOR TO THE END OF THE 25 MONTH MAINTENANCE AND MONITORING PERIOD OR EARLIER, AS DIRECTED BY THE PROJECT BIOLOGIST.
8. AFTER FINAL 25 MONTH SUCCESS CRITERIA ARE MET AND THE REVEGETATION AND MONITORING PROGRAM HAS BEEN SIGNED OFF, ALL ABOVE-GRADE COMPONENTS OF THE IRRIGATION SYSTEM SHALL BE CAREFULLY REMOVED FROM THE SITE WITHOUT ADVERSLY IMPACTING ADJACENT NATIVE VEGETATION.

SEED MIXES

1. ALL SEEDS SHALL MEET THE MIMIMUM % PURE LIVE SEED AS NOTED IN TABLES. IF MINIMUM % PURE LIVE SEED COUNT CANNOT BE MET, CONTRACTOR TO COORDINATE AND OBTAIN WRITTEN APPROVAL FROM THE PROJECT BIOLOGIST FOR ALTERNATIVE COMPLIANCE.
2. ALL SEEDS SHALL ORIGINATE FROM WITHIN A 25 MILE RADIUS OF THE COAST AND PROJECT SITE OR CONTRACTOR TO PROVIDE EVIDENCE THAT THE SEED IS NOT AVAILABLE AND NOTIFY THE CITY REPRESENTATIVE AND THE PROJECT BIOLOGIST FOR ALTERNATIVE COMPLIANCE.
3. ALL AREAS WHERE MINOR GROUND DISTURBANCE OCCURRED AS THE RESULT OF ABANDOMENT ACTIVITIES (MANHOLD AND CONCRETE REMOVAL), SHALL BE HAND SEEDED. SEED MIX SHALL BE HAND BROADCASTED AND RAKED INTO DISTURBED SOILS.

HYDROSEEDING PROCEDURES

1. AREAS TO BE HYDROSEEDED SHALL INCLUDE ALL AREAS IDENTIFIED ON THE REVEGETATION PLANS AND ALL AREAS IMPACTED BY THE CONTRACTOR DURING ABANDONMENT WORK. AREAS WHERE MINOR GROUND DISTURBANCE OCCURRED (LESS THAN 25 SQUARE FEET) MAY BE HAND SEEDED, PER THE DISCRETION OF THE PROJECT BIOLOGIST.
2. HYDROSEEDING SHALL OCCUR ONLY AFTER THE PROJECT BIOLOGIST HAS OBSERVED AND APPROVED THAT THE SITE HAS BEEN PROPERLY PREPARED.
3. HYDROSEED SLURRY SHALL BE APPLIED AT THE RATES SHOWN ON THE PLANS OR AS DIRECTED BY THE PROJECT BIOLOGIST.
4. EQUIPMENT USED FOR THE APPLICATION OF SLURRY SHALL HAVE A BUILT-IN AGITATION SYSTEM TO SUSPEND AND HOMOGENEOUSLY MIX THE SLURRY. THE SLURRY MIX SHALL BE DYED GREEN. THE EQUIPEMENT MUST HAVE A PUMP CAPABLE OF APPLYING SLURRY UNIFORMLY.

CONTAINER PLANT PROCEDURES

1. CONTAINER PLANTS SHALL BE PROCURED FROM A NURSERY QUALIFIED TO PROPAGATE AND CARE FOR NATIVE PLANT SPECIES. SOURCES FOR ANY NATIVE CONTAINER PLANT MATERIALS SHALL ORIGINATE WITHIN A 25-MILE RADIUS OF THE SAN DIEGO COAST AND/OR PROJECT SITE, OR AS DETERMINED BY THE PROJECT BIOLOGIST.
2. CONTAINER PLANT MATERIAL MUST BE DELIVERED TO THE PROJECT SITE AT THE APPROPRIATE TIME AND IN A HEALTHY AND VIGOROUS CONDITION. THE PROJECT BIOLOGIST WILL REJECT PLANT MATERIAL DELIVERED TO ITS PLANTING DATE. SPECIMENS SHOWING EVIDENCE OF DISEASE, MISHANDLING, DEFECTS OR DAMAGE, OVER OR UNDER WATERING, OR OTHER DEFICIENCY AT THE TIME OF DELIVERY WILL BE REJECTED.
3. CONTAINER PLANTS WILL BE PLACED BY THE CONTACTOR 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.
4. PLANTING PITS FOR CONATINER 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.
5. THE HOLE SHALL BE BACKFILLED WITH AN EQUAL COMBINATION OF NATIVE SOIL AND WEED-FREE TOPSOIL, AND AN EARTHEN WATERING BASIN SHALL BE CREATED IN A TWO FOOT DIAMETER AROUND EACH ROOTBALL. THE PLANT SHALL THEN BE WATERED IN BY HAND IMMEDIATELY AFTER PLANTING.

MAINTENANCE REQUIREMENTS

1. THE 120 DAY PEP WILL BEGIN FOLLOWING SUCCESSFUL COMPLETION OF REVEGETATION INSTALLATION AND ACCEPTANCE BY THE PROJECT BIOLOGIST.
2. THE MAINTENANCE PERIOD BEGINS FOLLOWING COMPLETION AND ACCEPTANCE OF THE 120 DAY PEP AND MAY BE EXTENDED AT THE DETERMINATION OF THE PROJECT BIOLOGIST. REVEGETATION AREA SHALL BE MAINTAINED FOR A PERIOD OF NOT LESS THAN 25 MONTHS. ALL REVEGETATED AREAS SHALL BE MAINTAINTED BY THE CONTRACTOR UNTIL FINAL APPROVAL BY THE CITY REPRESENTATIVE AND THE PROJECT BIOLOGIST.
3. PRIOR TO FINAL APPROVAL, THE CITY REPRESENTATIVE MAY REQUIRE CORRECTIVE ACTION INCLUDING BUT NOT LIMITED TO RESEEDING AND THE REPAIR OF ANY SOIL EROSION OR SLOPE SLIPPAGE, IN CONSULTATION WITH THE PROJECT BIOLOGIST.
4. WEEDING AND/OR HERBICIDE APPLICATION SHALL BE DONE REGULARLY BY THE CONTRACTOR. WEEDING SHALL BE DONE AT A MINIMUM OF BIWEEKLY UNTIL THE END OF THE 120 DAY PEP, AND MONTHLY THROGHOUT THE 25 MONTHS OF MAINTANANCE.
5. CONTRACTOR SHALL CONTROL WEEDS AS IDENTIFIED BY THE PROJECT BIOLOGIST SUCH THAT NO WEED COVER EXCEEDS 5% OF THE PROJECT SITE, BEFORE THEY EXCEED SIX INCHES (6") IN HEIGHT, AND BEFORE THEY SET SEED. IN ADDITION, THERE WILL BE 0% NON-NATIVE INVASIVE WEED COVER THROUGHOUT THE DURATION OF THE PROJECT. INVASIVE WEEDS ARE IDENTIFIED IN THE CITY LANDSCAPE GUIDLINES AS INVASIVE PLANT SPECIES OR RATED BY THE CALIFORNIA INVASIVE PLANT COUNCIL AS HIGHLY INVASIVE.

BRUSH MANAGEMENT REQUIREMENTS

1. REVEGATION AREAS WITHIN 100 FEET OF HABITABLE STRUCTURES (I.E. BRUSH MANAGEMENT ZONE) NEED TO BE MARKED IN THE FIELD PRIOR TO PLANT INSTALLATION. WITHIN THESE AREAS, BRUSH MANAGEMENT REQUIREMENTS SHALL BE IMPLEMENTED.
2. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING BRUSH MANAGEMENT ACTIVITIES FOR ALL REVEGEATION AREAS WITHIN THE BRUSH MANAGEMENT ZONE.

TABLE 1: SUCCESS CRITERIA

Upland Scrub Revegetation		Performance Standard		
	Percent Cover Native Vegetation	Percent Cover Nonnative Vegetation		Container Plant Survival
		Herbaceous	CAL-IPC Listed Species	
Year 1	25	<10	0	100
Year 2	80	<10	0	80

Note: final success criteria may be lowered by Biologist if natural site conditions prevent the establishment of vegetation.

TABLE 2: SUMMARY AND SCHEDULE FOR MAINTENANCE, MONITORING AND REPORTING FOR THE PROJECT

Period	Contractor Responsibilities	Project Biologist Responsibilities	Reporting & 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 BMPs) 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 & Monitoring	Contractor is responsible for all necessary maintenance (watering, weed abatement, replacement planting, maintain BMPs) to meet success criteria. Maintenance activities shall occur as-needed, but not less than: ▪ Year 1 - Monthly ▪ Year 2 - Bi-monthly	Project Biologist is responsible for monitoring revegetation and providing maintenance recommendations. Monitoring shall occur quarterly.	Project Biologist to submit Quarterly/Annual monitoring memo to City Representative. Project Biologist shall submit annual reports (Year 1 and 2) within 30 days of monitoring period.

REVEGETATION PLAN

L-13

MAPLE CANYON RESTORATION – PHASE 1

REVEGETATION
NOTES & REFERENCE TABLES

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 92 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED: FOR CITY ENGINEER — DATE
SHEILA BOSE, PRINT DCE NAME — RCE#

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

CONTRACTOR ____ DATE STARTED ____
INSPECTOR ____ DATE COMPLETED ____

38321-92-D

LICENSED LANDSCAPE ARCHITECT — Patricia Trauth Jones — Signature — 11/30/2021 Renewal Date — Date — STATE OF CALIFORNIA

RICK ENGINEERING COMPANY
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San Diego — Riverside - Orange - Sacramento - San Luis Obispo - Phoenix - Tucson - Denver

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PLANT LEGEND

SOUTH/WEST FACING SLOPE DCSS CONTAINER STOCK & HYDROSEED MIX

SOUTH/WEST FACING SLOPE DCSS CONTAINER STOCK				
Scientific Name	Common Name	Plant Size	Spacing (feet)	Plants/ acre
Artemisia californica	Coast sagebrush	1 Gallon	10	70
Bahiopsis laciniata	San Diego sunflower	1 Gallon	10	70
Cylindropuntia prolifera	Coast cholla	1 Gallon	5	125
Encelia californica	Coast sunflower	1 Gallon	10	70
Eriogonum fasciculatum var. fasciculatum	Coast buckwheat	1 Gallon	5	100
Malosma laurina	Laurel leaf sumac	1 Gallon	20	25
Opuntia littoralis	Coast prickly-pear	1 Gallon	5	125
Rhus integrifolia	Lemonade berry	1 Gallon	20	25
Ribes speciosum	Fuchsia flowered gooseberry	1 Gallon	15	25
Salvia mellifera	Black sage	1 Gallon	10	70
Stipa lepida	Foothill needlegrass	Liner	2	200
			TOTAL	905

SOUTH/WEST FACING SLOPE DCSS Plant Palette - Hydroseed Mix				
Scientific Name	Common Name	Purity/ Germination	% Live Seed	Pounds/ acre
Acmispon glaber	Deer weed	95/80	85	1
Cryptantha muricata	Popcorn flower	15/50	10	3
Deinandra fasciculata	Fascicled tarweed	20/80	20	3
Eriogonum fasciculatum var. fasciculatum	Coast buckwheat	50/20	10	5
Eriophyllum confertiflorum	Golden yarrow	30/70	25	3
Stipa lepida	Foothill needlegrass	90/60	65	6
			TOTAL	21

SOUTH/WEST FACING SLOPE DCSS HYDROSEED MIX ONLY

SOUTH/WEST FACING SLOPE DCSS Plant Palette - Hydroseed Mix				
Scientific Name	Common Name	Purity/ Germination	% Live Seed	Pounds/ acre
Acmispon glaber	Deer weed	95/80	85	1
Cryptantha muricata	Popcorn flower	15/50	10	3
Deinandra fasciculata	Fascicled tarweed	20/80	20	3
Eriogonum fasciculatum var. fasciculatum	Coast buckwheat	50/20	10	5
Eriophyllum confertiflorum	Golden yarrow	30/70	25	3
Stipa lepida	Foothill needlegrass	90/60	65	6
			TOTAL	21

NORTH/EAST FACING SLOPE DCSS CONTAINER STOCK & HYDROSEED MIX

NORTH/EAST FACING SLOPE DCSS CONTAINER STOCK				
Scientific Name	Common Name	Plant Size	Spacing (feet)	Plants/ acre
Ceanothus verrucosus	Wart-stemmed ceanothus	1 Gallon	6	70
Eriogonum fasciculatum var. fasciculatum	Coast buckwheat	1 Gallon	5	100
Heteromeles arbutifolia	Toyon	1 Gallon	10	30
Malosma laurina	Laurel sumac	1 Gallon	10	30
Quercus agrifolia	Coast live oak	1 Gallon	50	5
Quercus dumosa	Nuttall's scrub oak	1 Gallon	10	70
Rhus integrifolia	Lemonade berry	1 Gallon	20	25
Ribes speciosum	Fuchsia flowered gooseberry	1 Gallon	15	25
Salvia mellifera	Black sage	1 Gallon	5	100
Stipa lepida	Foothill needlegrass	Liner	2	200
			TOTAL	655

NORTH/EAST FACING SLOPE CSS Plant Palette - Hydroseed Mix				
Scientific Name	Common Name	Purity/ Germination	% Live Seed	Pounds/ acre
Acmispon glaber	Deer weed	95/80	76	2
Acmispon heermanii	Prostrate deerweed	90/20	18	2
Astragalus tricopodus	Ocean locoweed	95/60	57	1
Crypthantha muricata	Popcorn flower	15/50	7.5	0.5
Deinandra fasciculata	Fascicled tarweed	20/80	16	0.5
Lupinus bicolor	Miniature lupine	98/85	83.3	2
Trifolium gracilentum	Pin-point clover	98/85	83.3	1
			TOTAL	9

NORTH/EAST FACING SLOPE DCSS HYDROSEED MIX ONLY

NORTH/EAST FACING SLOPE CSS Plant Palette - Hydroseed Mix				
Scientific Name	Common Name	Purity/ Germination	% Live Seed	Pounds/ acre
Acmispon glaber	Deer weed	95/80	76	2
Acmispon heermanii	Prostrate deerweed	90/20	18	2
Astragalus tricopodus	Ocean locoweed	95/60	57	1
Crypthantha muricata	Popcorn flower	15/50	7.5	0.5
Deinandra fasciculata	Fascicled tarweed	20/80	16	0.5
Lupinus bicolor	Miniature lupine	98/85	83.3	2
Trifolium gracilentum	Pin-point clover	98/85	83.3	1
			TOTAL	9

TREES

SYMBOL	BOTANICAL NAME / COMMON NAME	SIZE	QUANTITY	WUCOLS
	PLATANUS RACEMOSA / CALIFORNIA SYCAMORE	5 GALLON	38	MODERATE
	QUERCUS AGRIFOLIA / COAST LIVE OAK	5 GALLON	60	LOW

REVEGETATION PLAN

L–14

MAPLE CANYON RESTORATION – PHASE 1

REVEGETATION LEGEND

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 93 OF 98 SHEETS

STORM DRAIN W.O. B-12040

APPROVED:
FOR CITY ENGINEER _____ DATE
SHEILA BOSE
PRINT DCE NAME _____ RCE#

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	RICK			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE
38321-93-D

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

LICENSED LANDSCAPE ARCHITECT — Patricia Trauth — Signature — 11/30/2021 Renewal Date — Date — STATE OF CALIFORNIA

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GENERAL

1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND CONDITIONS AT THE JOB SITE BEFORE STARTING WORK, AND SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
2. ALL OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH ANY WORK SO INVOLVED.
3. NOTES AND DETAILS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER THESE GENERAL NOTES AND TYPICAL DETAILS IN CASE OF CONFLICT.
4. IN NO CASE SHALL WORKING DIMENSIONS BE SCALED FROM PLANS, SECTIONS OR DETAILS ON THESE STRUCTURAL DRAWINGS.
5. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH LOCAL STANDARDS AND THE APPLICABLE PROVISIONS OF THE 2017 AASHTO LRFD BRIDGE DESIGN SPECIFICATION AND THE 2019 CALIFORNIA BUILDING CODE (CBC) AS AMENDED BY THE CITY OF SAN DIEGO.
6. WHERE NO CONSTRUCTION DETAILS ARE SHOWN OR NOTED FOR ANY PART OF THE WORK, SUCH DETAILS SHALL BE THE SAME AS FOR SIMILAR WORK SHOWN ON THE DRAWINGS. MEMBER SIZES ARE GENERALLY FOUND ON PLANS. DETAILS AND SECTIONS GENERALLY REFER TO GENERIC ELEMENTS.
7. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE, UNLESS OTHERWISE INDICATED. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE, WORKMEN, AND OTHER PERSONS DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING FOR CONSTRUCTION EQUIPMENT, SHORING FOR THE STRUCTURE, SHORING FOR EARTH BANKS, FORMS, SCAFFOLDING, PLANKING, SAFETY NETS, SUPPORT AND BRACING FOR CRANES AND GIN POLES, ETC. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND HE OR SHE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. OBSERVATION VISITS TO THE SITE BY THE ENGINEER SHALL NOT CONSTITUTE INSPECTION OF THE ABOVE ITEMS.
8. NOTIFY THE STRUCTURAL ENGINEER WHEN DRAWINGS BY OTHERS SHOW OPENINGS, POCKETS, ETC, NOT SHOWN ON THE STRUCTURAL DRAWINGS, BUT WHICH ARE LOCATED IN THE STRUCTURAL MEMBERS.
9. NO PIPES OR DUCTS SHALL BE PLACED IN FOUNDATION SLABS UNLESS SPECIFICALLY SHOWN OR NOTED ON THESE STRUCTURAL DRAWINGS. NO STRUCTURAL MEMBER SHALL BE CUT FOR PIPES, DUCTS, ETC, UNLESS SPECIFICALLY SHOWN.
10. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF DETAILS FOR AVOIDING THE INTERFERENCE OF MATERIALS TO BE EMBEDDED IN CONCRETE INCLUDING BUT NOT LIMITED TO REINFORCING STEEL, PRESTRESSING STEEL AND HARDWARE, MISCELLANEOUS STEEL AND CONDUITS. THIS IS BEST ACCOMPLISHED THROUGH CAREFUL COORDINATION OF SHOP DRAWINGS.
11. PRIOR TO BEGINNING EXCAVATION, THE CONTRACTOR SHALL LOCATE EXISTING UTILITY SERVICES IN AREAS TO BE EXCAVATED.
12. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING UTILITIES IN THE WORK AREA AND SHALL REPAIR ANY DAMAGE CAUSED BY HIS OR HER OPERATIONS AT HIS OR HER OWN COST.
13. ALL SPECIFICATIONS AND CODES NOTED SHALL BE THE LATEST APPROVED EDITIONS AND REVISIONS BY THE GOVERNMENTAL AGENCY HAVING JURISDICTION OVER THIS PROJECT.
14. CONTRACTOR SHALL INVESTIGATE THE SITE DURING CLEARING AND EARTH WORK OPERATIONS FOR FILLED EXCAVATIONS OR BURIED STRUCTURES SUCH AS CESSPOOLS, CISTERNS, FOUNDATIONS, UTILITIES, ETC. IF ANY SUCH STRUCTURES ARE FOUND, THE STRUCTURAL ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
15. CONSTRUCTION MATERIALS SHALL BE SPREAD OUT WHEN PLACED ON FLOORS OR ROOFS. THE CONSTRUCTION MATERIAL LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT. PROVIDE ADEQUATE SHORING AND/OR BRACING WHERE STRUCTURE HAS NOT ATTAINED DESIGN STRENGTH.
16. SHOP DRAWINGS SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW SHALL CONSIST OF ELECTRONIC DRAWING FORMAT OR 2 BLUELINE SETS MINIMUM.

MARTIN & LIBBY
STRUCTURAL ENGINEERS
4452 Glacier Avenue, San Diego, CA 92120
Ph (619) 280-9307 F (619) 284-3533
Job No 7203.02

DESIGN CRITERIA

1. LIVE LOAD SURCHARGE – 250 P.S.F.
2. SEISMIC DESIGN DATA:
   RISK CATEGORY = II (CBC TABLE 1604.5)
   SEISMIC IMPORTANCE FACTOR = Ie = 1.0 (ASCE7 11.5.1)
   SITE CLASS = D (ASCE7 20.3)
   SEISMIC DESIGN CATEGORY D (ASCE7 11.6)
   MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETERS (ASCE7 11.4.2)
   Ss = 1.432
   S1 = 0.487
   DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS (ASCE7 11.4.5)
   Sds = 0.955
   HORIZ DESIGN FORCE, Fp = 0.4Wp (ASCE7 12.11.1)

SOILS CONDITION & FOUNDATION

1. THE CHARACTER OF SOIL AT THIS SITE IS CONTAINED IN THE GEOTECHNICAL (SOILS) REPORT PREPARED BY ALLIED GEOTECHNICAL ENGINEERS, INC PROJECT NO 190 GS-18-E JANUARY 8, 2020.
2. THE DESIGN IS BASED UPON:
   A. THE ALLOWABLE SOIL BEARING PRESSURE IS 3500 P.S.F. THIS ALLOWABLE SOIL BEARING PRESSURE MAY BE INCREASED BY 700 P.S.F. FOR ADDITIONAL FOOT OF DEPTH AND 300 P.S.F. FOR EACH ADDITIONAL FOOT OF WIDTH, TO A MAXIMUM BEARING CAPACITY OF 5500 P.S.F. ALL SOIL PRESSURE VALUES MAY BE INCREASED BY 1/3 WHEN CONSIDERING TRANSIENT LOADS DUE TO WIND OR SEISMIC FORCES.
   B. A SOIL PASSIVE PRESSURE OF 350 P.S.F. PER FOOT OF DEPTH TO A MAXIMUM PASSIVE RESISTANCE OF 3500 P.S.F.
   C. A SLIDING COEFFICIENT OF 0.40.
   D. RETAINING WALL DESIGN LOADS AS FOLLOWS:
      1. ACTIVE SOIL PRESSURES:
         UNRESTRAINED (CANTILEVER) RETAINING WALLS:
         SUPPORTING LEVEL BACKFILL-DRY . . . . 35 P.C.F.
         SUPPORTING BACKFILL WITH A MAXIMUM SLOPE OF 2:1-DRY . . . . . 62 P.C.F.
      2. SEISMIC LOADS:
         ADD INVERTED TRIANGULAR PRESSURE DISTRIBUTION WITH A MAXIMUM SOIL PRESSURE OF 12 P.C.F.
      3. CANTILEVERED RETAINING WALLS SHALL NOT BE BACKFILLED UNTIL THE CONCRETE HAS ATTAINED ITS MINIMUM SPECIFIED COMPRESSIVE STRENGTH BUT IN NO CASE EARLIER THAN 14 DAYS AFTER PLACING OF CONCRETE.
3. FOOTING ELEVATIONS SHOWN ARE FOR BIDDING PURPOSES ONLY AND ARE ASSUMED TO BE IN SUITABLE BEARING MATERIALS. THE ACTUAL ADEQUACY OF THE BEARING MATERIAL SHALL BE DETERMINED BY A REPRESENTATIVE OF THE GEOTECHNICAL ENGINEER PRIOR TO PLACING OF REINFORCING OR POURING OF CONCRETE, AND FOOTING ELEVATIONS SHALL BE ADJUSTED, OR OTHER REMEDIAL ACTION TAKEN, AS DIRECTED BY THIS REPRESENTATIVE AND APPROVED BY THE OWNER AND THE ENGINEER.
4. IF THE BUILDING INSPECTOR SUSPECTS EXPANSIVE SOILS BASED ON OBSERVATION OF THE FOUNDATION EXCAVATION, HE MAY REQUIRE SOIL EXPANSION INDEX TESTS.
5. CONTRACTOR SHALL PROVIDE FOR PROPER DEWATERING OF EXCAVATIONS FROM SURFACE WATER, GROUND WATER, SEEPAGE, ETC.
6. CONTRACTOR SHALL PROVIDE FOR THE DESIGN AND INSTALLATION OF ALL CRIBBING, SHEATHING AND SHORING REQUIRED TO SAFELY AND ADEQUATELY RETAIN THE EARTH BANKS AND ANY EXISTING STRUCTURE.
7. SOIL COMPACTION AND SITE PREPARATION SHALL BE IN ACCORDANCE WITH THE SOILS REPORT.
8. ALL SOILS SITE WORK SHALL BE DONE UNDER THE DIRECT OBSERVATION OF THE SOILS ENGINEER.

SOILS CONDITION & FOUNDATION (CONTINUED)

9. FOOTING BACKFILL AND UTILITY TRENCH BACKFILL SHALL BE MECHANICALLY COMPACTED IN LAYERS, TO THE APPROVAL OF THE GEOTECHNICAL ENGINEER. FLOODING WILL NOT BE PERMITTED.

CONCRETE

1. ALL CONCRETE SHALL BE NORMAL WEIGHT, 150 P.C.F. USE 1-INCH NOMINAL AGGREGATE WITH WATER/CEMENT RATIO NOT TO EXCEED 0.50.
2. CONCRETE STRENGTHS:

ITEM OF CONSTRUCTION	STRENGTH (P.S.I.)	SLUMP (INCHES) MAX
FOUNDATIONS	4,000	4
RETAINING WALLS	4,000	4

3. CONCRETE PROTECTION FOR REINFORCEMENT. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT:

	MIN COVER (INCHES)
A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH:	3
B. CONCRETE EXPOSED TO EARTH OR WEATHER: NO 5 THROUGH NO 18 BAR	2

4. ANCHOR BOLTS AND DOWELS: SECURELY HELD IN PLACE PRIOR TO PLACING CONCRETE.
5. PIPES, DUCTS, VENTS AND SIMILAR OPENINGS ARE NOT PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS.
6. CHAMFER: 3/4" ON ALL EXPOSED CORNERS.
7. THE ENGINEER SHALL BE NOTIFIED 2 WORK DAYS IN ADVANCE OF ALL CONCRETE PLACEMENT.
8. CEMENT SHALL BE ASTM C150 TYPE II OR TYPE V. USE TYPE V CEMENT AND CONCRETE COMPLYING WITH ACI 318 SECTION 19.3.2 WHEN CONCRETE IS EXPOSED TO SOILS CONTAINING SULFATES.
9. CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGNS TO THE E.O.R. FOR REVIEW PRIOR TO CASTING CONCRETE.
10. WHERE CONTINUOUS BARS ARE CALLED OUT, PROVIDE TIED CONTACT SPLICES AS REQUIRED. STAGGER SPLICES OF ALTERNATE BARS BY THE FULL SPLICE LENGTH.
11. CONCRETE MIXES MAY CONTAIN FLY ASH. THE FLY ASH SHALL CONFORM TO ASTM C618 CLASS F AND THE LOSS OF IGNITION SHALL BE LIMITED TO 2%. THE ADDITION RATE SHALL NOT EXCEED 15% OF THE CEMENT WEIGHT. THE CONTRACTOR SHALL SUBMIT ALL CERTIFICATES SHOWING THE FLY ASH CONFORMS TO THE ABOVE CRITERIA.
12. AGGREGATE FOR HARD ROCK CONCRETE SHALL CONFORM TO ALL REQUIREMENTS AND TESTS OF ASTM C33 AND PROJECT SPECIFICATIONS. EXCEPTIONS MAY BE USED ONLY WITH PERMISSION OF THE STRUCTURAL ENGINEER.
13. HORIZONTAL CONSTRUCTION JOINTS IN FOUNDATIONS SHALL BE RAISED TO MINIMUM 1/4" AMPLITUDE. ALL LAITANCE SHALL BE REMOVED PRIOR TO CASTING OVER THE CONSTRUCTION JOINT AND CONCRETE SURFACES SHALL BE MOISTENED TO A SATURATED SURFACE DRY CONDITION. REINF SHALL REMAIN CONTINUOUS ACROSS JOINTS.
14. LOCATION OF ALL CONSTRUCTION CONTROL, WEAKENED PLANE JOINTS NOT SPECIFICALLY SHOWN ON THE DRAWINGS SHALL REVIEWED BY THE ENGINEER PRIOR TO PLACING REBAR.

REINFORCING STEEL

1. REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A615 GRADE 60.
2. ALL BARS SHALL BE DEFORMED BARS U.O.N.
3. VERTICAL REINFORCEMENT SHALL BE DOWELED TO THE SUPPORTING MEMBERS WITH THE SAME SIZE AND SPACING OF REINFORCEMENT AS CALLED FOR IN THE DRAWINGS OR STANDARD NOTES.
4. WELDING OF REINFORCEMENT IS NOT PERMITTED.
5. SPACER TIES: FURNISH #3 TIES AT 24" O.C. IN ALL BEAMS AND FOOTINGS, UNLESS OTHERWISE SHOWN IN DETAILS.

GROUT FOR COLUMN BASES

1. GROUT SHALL BE NON-SHRINK TYPE CONFORMING TO ASTM C1107 WITH A 28 DAY COMPRESSION STRENGTH EQUAL TO 7000 P.S.I. MINIMUM.
2. GROUTING PROCEDURES, INCLUDING PREPARATION, MIXING, PLACING AND CURING, SHALL BE AS RECOMMENDED BY THE MANUFACTURER OF THE GROUT.
3. DATA FOR GROUT SHALL BE SUBMITTED FOR APPROVAL. PRODUCT SHALL BE SPECIFICALLY DESIGNED FOR THE USE AND PROCEDURES PROPOSED.
4. GROUT SHALL NOT CONTAIN METALLIC AGGREGATES AND SHALL BE FREE OF AGENTS THAT PRODUCE OR RELEASE GAS, BE FREE OF OXIDIZING CATALYSTS AND BE FREE OF INORGANIC ACCELERATORS.
5. GROUT SHALL BE FORMED USING WATER-TIGHT FORMS.

ANCHOR BOLTS

1. ANCHOR BOLTS FOR CONCRETE SHALL BE HEAVY HEX HEADED AND COMPLY WITH ASTM F1554, GRADE 105.
2. THE EMBEDDED END SHALL BE HEADED OR THE EQUIVALENT SIZE. BENT SO CALLED "J" BOLTS ARE NOT PERMITTED.
3. WHERE PERMISSION TO USE HEADLESS ANCHOR BOLTS IS REQUESTED AND PERMITTED BY THE ENGINEER, A STANDARD HEXNUT COMPLYING WITH ASTM A563 MAY BE USED. THE HEXNUT SHALL BE HELD IN PLACE BY JAMB NUT OR TACK WELDING.
4. WHERE BOLTS AND HARDWARE, NUTS AND WASHERS ARE SPECIFIED TO BE GALVANIZED, GALVANIZING SHALL COMPLY WITH ASTM A153 WITH THE COATING THICKNESS PER TABLE 1.

STRUCTURAL STEEL

1. ALL STRUCTURAL STEEL WIDE FLANGE POSTS SHALL CONFORM TO ASTM A992, GRADE 50 U.O.N. AND SHALL BE FABRICATED ACCORDING TO AISC PRACTICE AND SPECIFICATIONS FOR BUILDINGS (UNLESS OTHERWISE SPECIFIED).
2. STRUCTURAL STEEL PLATES, CHANNELS, AND ANGLES SHALL CONFORM TO ASTM A572 (Fy = 50 K.S.I.).
3. BOLTS SHALL CONFORM TO ASTM A325, U.O.N. ALL BOLTS SHALL BE INSTALLED WITH CUT STEEL WASHERS. BOLT HOLES SHALL BE 1/16-INCH LARGER THAN THE BOLT DIAMETER AND OVERSIZED ACCORDING TO AISC 360 TABLE J3.3.
4. ALL WELDING SHALL BE PERFORMED BY CERTIFIED OPERATORS UNDER THE SUPERVISION OF AN APPROVED FABRICATOR USING THE ELECTRIC SHIELDED ARC PROCESS AS FORMULATED BY THE AMERICAN WELDING SOCIETY.
5. STEEL SHALL BE IDENTIFIED BY HEAT OR MELT NUMBERS AND SHALL BE ACCOMPANIED BY TEST REPORTS.
6. ALL STEEL SHALL BE FABRICATED TO FIT TOGETHER PLUMB AND TRUE IN THE FIELD WITHOUT ALTERATION.
7. WELDING ELECTRODES FOR MANUAL SHIELDED METAL-ARC WELDING SHALL CONFORM TO SPECIFICATIONS FOR MILD STEEL COVERED ARC WELDING ELECTRODES, AWS A5.1, OR SPECIFICATION FOR LOW-ALLOY STEEL COVERED ARC-WELDING ELECTRODES AWS A5.5. ELECTRODES SHALL BE E70 SERIES.
8. ELECTRODES USED IN THE GAS METAL ARC PROCESS SHALL CONFORM TO SPECIFICATION FOR MILD STEEL ELECTRODES FOR GAS METAL-ARC WELDING AWS A5.18.
9. ALL TESTING AND WELDING OF STRUCTURAL STEEL AND ALL CERTIFICATION OF WELDERS SHALL BE PER AWS D1.1. REFER TO SPECIAL INSPECTION NOTES FOR ADDITIONAL WELDING REQUIREMENTS.
10. STRUCTURAL STEEL SURFACES EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED.
11. BASE PLATES SHALL BE BEDDED WITH A MINIMUM OF 1-INCH DRY PACK GROUT (NON-SHRINK) CONFORMING TO ASTM C1107.
12. SHOP DRAWINGS SHALL BE REVIEWED BY ENGINEER PRIOR TO FABRICATION.

QUALITY CONTROL

1. THE SPECIAL INSPECTOR MUST BE REGISTERED BY THE CITY OF SAN DIEGO, DEVELOPMENT SERVICES, IN THE CATEGORY OF WORK REQUIRED TO HAVE SPECIAL INSPECTION.
2. THE CONSTRUCTION MATERIALS TESTING LABORATORY MUST BE APPROVED BY THE CITY OF SAN DIEGO, DEVELOPMENT SERVICES, FOR TESTING OF MATERIALS, SYSTEMS, COMPONENTS AND EQUIPMENT.
3. OFFSITE FABRICATOR MUST BE REGISTERED AND APPROVED BY THE CITY OF SAN DIEGO, DEVELOPMENT SERVICES, FOR THE FABRICATION OF MEMBERS AND ASSEMBLIES ON THE PREMISES OF THE FABRICATOR'S SHOP.
4. OFFSITE FABRICATOR SHALL SUBMIT AN "APPLICATION TO PERFORM OFF-SITE FABRICATION" TO THE INSPECTION SERVICES DIVISION FOR APPROVAL PRIOR TO THE COMMENCEMENT OF FABRICATION.
5. OFFSITE FABRICATOR SHALL SUBMIT A "CERTIFICATE OF COMPLIANCE FOR OFF-SITE FABRICATION" TO THE INSPECTION SERVICES DIVISION PRIOR TO ERECTION OF FABRICATED ITEMS AND ASSEMBLIES.
6. THE SPECIAL INSPECTIONS IDENTIFIED ON PLANS ARE, IN ADDITION TO, AND NOT SUBSTITUTE FOR, THOSE INSPECTIONS REQUIRED TO BE PERFORMED BY A CITY'S BUILDING INSPECTOR.
7. FABRICATION OF MEMBERS AND ASSEMBLIES DONE IN FABRICATOR'S SHOP APPROVED BY INSPECTION SERVICES NEED NOT HAVE CONTINUOUS OR PERIODIC SPECIAL INSPECTION. AT COMPLETION OF FABRICATION, THE APPROVED FABRICATOR SHALL SUBMIT THE "CERTIFICATE OF COMPLIANCE" FORM TO INSPECTION SERVICES.

SPECIAL INSPECTION

1. THE SPECIAL INSPECTIONS LISTED ARE IN ADDITION TO THE CALLED INSPECTIONS REQUIRED BY CHAPTER 17 OF THE CBC, AS AMENDED. SPECIAL INSPECTION IS NOT A SUBSTITUTE FOR INSPECTION BY A CITY INSPECTOR.
2. CONTINUOUS INSPECTION IS ALWAYS REQUIRED DURING THE PERFORMANCE OF THE WORK UNLESS OTHERWISE SPECIFIED. WHEN WORK IN MORE THAN ONE CATEGORY OF WORK REQUIRING SPECIAL INSPECTION IS TO BE PERFORMED SIMULTANEOUSLY, OR THE GEOGRAPHIC LOCATION OF THE WORK IS SUCH THAT IT CANNOT BE CONTINUOUSLY OBSERVED IN ACCORDANCE WITH THE PROVISIONS OF CBC CHAPTER 17, IT IS THE OWNER'S AGENT'S RESPONSIBILITY TO EMPLOY A SUFFICIENT NUMBER OF INSPECTORS TO ASSURE THAT ALL THE WORK IS INSPECTED IN ACCORDANCE WITH THOSE PROVISIONS.
3. THE SPECIAL INSPECTORS MUST BE CERTIFIED BY THE CITY OF SAN DIEGO TO PERFORM THE TYPE OF INSPECTION SPECIFIED. EXCEPTIONS:
   A. SOILS INSPECTIONS BY THE GEOGECHNICAL ENGINEER OF RECORD.
   B. WHEN WAIVED BY THE BUILDING OFFICIAL.
4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE SPECIAL INSPECTOR OR INSPECTION AGENCY AT LEAST ONE WORKING DAY PRIOR TO PERFORMING ANY WORK THAT REQUIRES SPECIAL INSPECTION.
5. SPECIALLY INSPECTED WORK THAT IS INSTALLED OR COVERED WITHOUT THE APPROVAL OF THE CITY INSPECTOR IS SUBJECT TO REMOVAL OR EXPOSURE.

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THIRD AVE

MAPLE CANYON RESTORATION - PHASE 1
THIRD AVE
STRUCTURAL GENERAL NOTES

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 94 OF 98 SHEETS

STORM DRAIN WBS B-12040

REGISTERED PROFESSIONAL ENGINEER DONALD ROLLA LIBBY No. 2878 Exp. 12-31-20 STRUCTURAL STATE OF CALIFORNIA

APPROVED:
FOR CITY ENGINEER ____ DATE
SHEILA BOSE
PRINT DCE NAME ____ RCE#

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	DRL			

SUBMITTED BY: ELHAM LOTFI PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI PROJECT ENGINEER
206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE
38321-94-D

CONTRACTOR ____ DATE STARTED ____
INSPECTOR ____ DATE COMPLETED ____

1/14/20 * 1:47 pm * 7203.02 MAPLE CANYON RESTORATION-P1.dwg

FINAL SUBMITTAL

SPECIAL INSPECTION (CONTINUED)

6. THE SPECIAL INSPECTOR SHALL SUBMIT IN WRITING A REPORT OF OBSERVATIONS AND TESTING FOR EACH INSPECTION.

7. THE INSPECTOR SHALL REPORT IN ADVANCE THEIR ASSIGNMENT TO THE CITY OF SAN DIEGO RESIDENT ENGINEER.

8. A CERTIFICATE OF SATISFACTORY COMPLETION OF WORK REQUIRING SPECIAL INSPECTION MUST BE COMPLETED AND SUBMITTED TO THE CITY OF SAN DIEGO RESIDENT ENGINEER.

9. OFFSITE FABRICATOR MUST BE APPROVED BY THE CITY OF SAN DIEGO RESIDENT ENGINEER FOR THE FABRICATION OF MEMBERS AND ASSEMBLIES ON THE PREMISES OF THE FABRICATOR'S SHOP.

10. OFFSITE FABRICATOR SHALL SUBMIT AN "APPLICATION TO PERFORM OFF-SITE FABRICATION" TO THE CITY OF SAN DIEGO RESIDENT ENGINEER FOR APPROVAL PRIOR TO COMMENCEMENT OF FABRICATION.

11. OFFSITE FABRICATOR SHALL SUBMIT A "CERTIFICATE OF COMPLIANCE FOR OFF-SITE FABRICATION" TO THE CITY OF SAN DIEGO RESIDENT ENGINEER PRIOR TO ERECTION OF FABRICATED ITEMS AND ASSEMBLIES.

12. THE CONSTRUCTION MATERIALS TESTING LABORATORY MUST BE APPROVED BY THE CITY OF SAN DIEGO RESIDENT ENGINEER FOR TESTING OF MATERIALS, SYSTEMS, COMPONENTS, AND EQUIPMENT.

13. SPECIAL INSPECTOR SHALL BE HIRED BY THE OWNER (CBC SECTION 1704).

14. REQUIRED VERIFICATION, TESTING, QUALIFICATION AND/OR SPECIAL INSPECTION SHALL BE IN ACCORDANCE WITH FOLLOWING:

    A. STRUCTURAL STEEL, HIGH STRENGTH BOLTING AND WELDING: CBC SECTION 1705.2.1 AND THE QUALITY ASSURANCE INSPECTION REQUIREMENTS OF AISC 360.

    B. CONCRETE CONSTRUCTION: CBC SECTION 1705.3 AND TABLE 1705.3.

    C. SOIL CONDITIONS, FILL PLACEMENT AND LOAD BEARING REQUIREMENTS CBC SECTION 1705.6 AND TABLE 1705.6.

15. CONTRACTOR OR CONSTRUCTION MANAGER SHALL PROVIDE A WRITTEN STATEMENT ACKNOWLEDGING SPECIAL INSPECTIONS, STATING QUALITY CONTROL PROCEDURES INCLUDING METHOD, FREQUENCY & DISTRIBUTION OF REPORTS. THE STATEMENT SHALL ALSO IDENTIFY INDIVIDUALS EXERCISING CONTROL INCLUDING QUALIFICATIONS AND POSITION IN ORGANIZATION. THIS SHALL BE SUBMITTED TO THE CITY OF SAN DIEGO RESIDENT ENGINEER PRIOR TO THE START OF WORK.

16. REFER TO "STRUCTURAL OBSERVATION" NOTES FOR LIST OF REQUIRED STRUCTURAL OBSERVATIONS.

17. NOTICE TO THE APPLICANT/OWNER/OWNER'S AGENT/ARCHITECT OR ENGINEER OF RECORD: BY USING THIS PERMITTED CONSTRUCTION DRAWINGS FOR CONSTRUCTION/INSTALLATION OF THE WORK SPECIFIED HEREIN, YOU AGREE TO COMPLY WITH THE REQUIREMENTS OF CITY OF SAN DIEGO FOR SPECIAL INSPECTIONS, STRUCTURAL OBSERVATIONS, CONSTRUCTION MATERIAL TESTING AND OFF-SITE FABRICATION OF BUILDING COMPONENTS, CONTAINED IN THE STATEMENT OF SPECIAL INSPECTIONS AND, AS REQUIRED BY THE CALIFORNIA CONSTRUCTION CODES.

18. NOTICE TO THE CONTRACTOR/BUILDER/INSTALLER/ SUB-CONTRACTOR/OWNER-BUILDER: BY USING THIS PERMITTED CONSTRUCTION DRAWINGS FOR CONSTRUCTION/INSTALLATION/ OF THE WORK SPECIFIED HEREIN, YOU ACKNOWLEDGE AND ARE AWARE OF, THE REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTIONS. YOU AGREE TO COMPLY WITH THE REQUIREMENTS OF CITY OF SAN DIEGO FOR SPECIAL INSPECTIONS, STRUCTURAL OBSERVATIONS, CONSTRUCTION MATERIAL TESTING AND OFF-SITE FABRICATION OF BUILDING COMPONENTS, CONTAINED IN THE STATEMENT OF SPECIAL INSPECTIONS AND, AS REQUIRED BY THE CALIFORNIA CONSTRUCTION CODES.

SPECIAL INSPECTION (CONTINUED)

REQUIRED VERIFICATION AND INSPECTION OF STRUCTURAL STEEL (CBC 1705.2.1, 1705.11 & 1705.12.1)

VERIFICATION AND INSPECTION TASK	CONTIN-UOUS	PERI-ODIC
PRIOR TO WELDING (TABLE N5.4-1, AISC 360-10):		
VERIFY WELDING PROCEDURE SPECIFICATIONS (WPS) AND CERTIFICATIONS FOR WELDING CONSUMABLES.	X	–
MATERIAL IDENTIFICATION. VERIFY TYPE AND GRADE OF MATERIAL.	–	X
WELDER IDENTIFICATION. A SYSTEM SHALL BE MAINTAINED BY WHICH A WELDER WHO HAS WELDED A JOINT OR MEMBER CAN BE IDENTIFIED.	–	X
FIT-UP GROOVE WELDS. VERIFY JOINT PREPARATION, JOINT GEOMETRY, DIMENSION, CLEANLINESS, TACKING, AND BACKING TYPE AND FIT.	–	X
VERIFY CONFIGURATION AND FINISH OF ACCESS HOLES.	–	X
FIT-UP OF FILLET WELDS. VERIFY ALIGNMENT, GAPS AT ROOT, CLEANLINESS OF STEEL SURFACES, AND TACK WELD QUALITY AND LOCATION.	–	X
CHECK WELDING EQUIPMENT.	–	X
DURING WELDING (TABLE N5.4-2, AISC 360-10):		
USE OF QUALIFIED WELDERS.	–	X
CONTROL AND HANDLING OF WELDING CONSUMABLES: VERIFY PACKAGING AND EXPOSURE CONTROL.	–	X
VERIFY THAT WELDING DOES NOT OCCUR OVER CRACKED TACK WELDS.	–	X
ENVIRONMENTAL CONDITIONS: VERIFY WIND SPEED IS WITHIN LIMITS, PRECIPITATION AND TEMPERATURE.	–	X
WPS FOLLOWED: VERIFY SETTINGS ON WELDING EQUIPMENT, TRAVEL SPEED, WELDING MATERIALS, SHIELDING GAS TYPE/FLOW RATE, PREHEAT APPLIED, INTERPASS TEMPERATURE MAINTAINED, AND PROPER POSITION.	–	X
WELDING TECHNIQUES: VERIFY INTERPASS, FINAL CLEANING AND THAT EACH PASS IS WITHIN PROFILE LIMITATIONS AND MEETS REQUIREMENTS.	–	X
AFTER WELDING (TABLE N5.4-3, AISC 360-10):		
VERIFY THAT WELDS HAVE BEEN PROPERLY CLEANED.	–	X
SIZE, LENGTH, AND LOCATION OF WELDS.	X	–
WELDS MEET VISUAL ACCEPTANCE CRITERIA.	X	–
ARC STRIKES.	X	–
K-AREA.	X	–
BACKING & WELD TABS REMOVED.	X	–
REPAIR ACTIVITIES.	X	–
DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT/MEMBER.	X	–
NONDESTRUCTIVE TESTING (SECTION N5.5, AISC 360-10):		
CJP GROOVE WELDS (RISK CAT II) ULTRASONIC TESTING SHALL BE PERFORMED ON 10% OF CJP GROOVE WELDS SUBJECT TO TRANSVERSELY APPLIED TENSION LOADING IN BUTT, T- AND CORNER JOINTS, IN MATERIALS 5/16 INCH THICK OR GREATER. TESTING RATE MUST BE INCREASED TO 100% IF MORE THAN 5% OF WELDS TESTED HAVE UNACCEPTABLE DEFECTS.	–	X
CJP GROOVE WELDS (RISK CAT III & IV) ULTRASONIC TESTING SHALL BE PERFORMED ON ALL CJP GROOVE WELDS SUBJECT TO TRANSVERSELY APPLIED TENSION LOADING IN BUTT, T- AND CORNER JOINTS, IN MATERIALS 5/16 INCH THICK OR GREATER. A REDUCTION IN THE RATE OF ULTRASONIC TESTING IS ALLOWED PER SECTION N5.5E.	X	–

SPECIAL INSPECTION (CONTINUED)

REQUIRED VERIFICATION AND INSPECTION OF STRUCTURAL STEEL (CBC 1705.2.1, 1705.11 & 1705.12.1) (CONTINUED)

VERIFICATION AND INSPECTION TASK	CONTIN-UOUS	PERI-ODIC
ACCESS HOLES THERMALLY CUT SURFACES OF ACCESS HOLES SHALL BE TESTED USING MAGNETIC PARTICLE TESTING (MT) OR PENETRANT TESTING (PT) WHEN FLANGE THICKNESS EXCEEDS 2 INCHES FOR ROLLED SHAPES, OR WHEN THE WEB THICKNESS EXCEEDS 2 INCHES FOR BUILT UP SHAPES. ANY CRACK SHALL BE DEEMED UNACCEPTABLE REGARDLESS OF SIZE AND LOCATION.	X	–
WELDED JOINTS SUBJECTED TO FATIGUE WHEN REQUIRED BY APPENDIX 3, TABLE A-3.1, WELDED JOINTS REQUIRING WELD SOUNDNESS TO BE ESTABLISHED BY RADIOGRAPHIC OR ULTRASONIC INSPECTION SHALL BE TESTED AS PRESCRIBED. REDUCTION IN THE RATE OF ULTRASONIC TESTING IS PROHIBITED.	X	–

REQUIRED VERIFICATION, SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION (CBC TABLE 1705.3)

VERIFICATION AND INSPECTION TASK	CONTINUOUS	PERIODIC	REFERENCED STANDARD[a]	IBC REFERENCE
1. INSPECT REINFORCEMENT AND VERIFY PLACEMENT.	–	X	ACI 318 CH 20,25.2, 25.3, 26.5.1-26.5.3	1908.4
2. INSPECT ANCHORS CAST IN CONCRETE.	–	X	ACI 318 17.8.2	–
3. VERIFYING USE OF REQUIRED DESIGN MIX.	–	X	ACI 318: CH 19, 26.4.3, 26.4.4	1904.1 1904.2 1908.2 1908.3
4. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	–	ASTM C172 ASTM C31 ACI 318: 26.4.5, 26.12	1908.10
5. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	–	X	ACI 318: 26.4.7-26.4.9	1908.9
6. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS.	–	X	ACI 318: CH 26.8	–
7. VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	–	X	ACI 318: 26.10.2	–
8. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	–	X	ACI 318: 26.10.1(b)	–

a. WHERE APPLICABLE, SEE ALSO SECTION 1705.12, SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE.
b. SPECIFIC REQUIREMENTS FOR SPECIAL INSPECTION SHALL BE INCLUDED IN THE RESEARCH REPORT FOR THE ANCHOR ISSUED BY AN APPROVED SOURCE IN ACCORDANCE WITH 17.8.2 IN ACI 318, OR OTHER QUALIFICATION PROCEDURES. WHERE SPECIFIC REQUIREMENTS ARE NOT PROVIDED, SPECIAL INSPECTION REQUIREMENTS SHALL BE SPECIFIED BY THE REGISTERED DESIGN PROFESSIONAL AND SHALL BE APPROVED BY THE BUILDING OFFICIAL PRIOR TO THE COMMENCEMENT OF THE WORK.

SPECIAL INSPECTION (CONTINUED)

REQUIRED VERIFICATION, SPECIAL INSPECTIONS AND TESTS OF SOILS (CBC TABLE 1705.6)

VERIFICATION AND INSPECTION TASK	CONTINUOUS	PERIODIC
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	–	X
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	–	X
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	–	X
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	X	–
5. PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	–	X

STRUCTURAL OBSERVATION

1. STRUCTURAL OBSERVATION SHALL BE PROVIDED BY A CALIFORNIA REGISTERED DESIGN PROFESSIONAL.

    A. CAST-IN-PLACE FOUNDATIONS.
    B. CAST-IN-PLACE REINFORCED CONCRETE WALLS.

2. STRUCTURAL OBSERVATION IS REQUIRED IN ADDITION TO INSPECTIONS REQUIRED BY THE GOVERNING AUTHORITY AND SPECIAL INSPECTIONS.

3. STRUCTURAL OBSERVATION MEANS THE VISUAL OBSERVATION OF THE STRUCTURAL SYSTEM BY THE ENGINEER OF RECORD, FOR GENERAL CONFORMATION TO THE APPROVED PLANS AND SPECIFICATIONS, AT SIGNIFICANT CONSTRUCTION STAGES FOR THE ITEMS LISTED AND AT COMPLETION OF THE STRUCTURAL SYSTEM. STRUCTURAL OBSERVATION DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR THE INSPECTIONS REQUIRED BY GOVERNING AUTHORITY.

4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REQUEST STRUCTURAL OBSERVATION BY THE ENGINEER. THE ENGINEER SHALL BE GIVEN A MINIMUM OF 2 WORK DAYS NOTICE BY THE CONTRACTOR PRIOR TO PERFORMING STRUCTURAL OBSERVATION.

ABBREVIATIONS

&	AND
@	AT
ABV	ABOVE
ADDL	ADDITIONAL
ALT	ALTERNATE
APPROX	APPROXIMATE
ARCH	ARCHITECT(URAL)
ART	ARTICLE
BLDG	BUILDING
BLW	BELOW
B.O.F.	BOTTOM OF FOOTING
BRG	BEARING
BTM (B)	BOTTOM
BTWN	BETWEEN
CBC	CALIFORNIA BUILDING CODE
C.F.	CUBIC FEET
C.I.P.	CAST IN PLACE
C.J.	CONSTRUCTION JOINT
C.L. (℄)	CENTER LINE
CLR	CLEAR(ANCE)
CNTR	CENTER(ED)
CONC	CONCRETE
CONST	CONSTRUCT(ION)
CONT	CONTINUOUS
C.Y.	CUBIC YARD(S)
d	PENNY (NAILS)
DBL	DOUBLE
DEPT	DEPARTMENT
DIA (ø)	DIAMETER
DIAG	DIAGONAL
DWG	DRAWING
DWL	DOWEL
EA	EACH
E.F.	EACH FACE
E.J.	EXPANSION JOINT
EL	ELEVATION
EQ	EQUAL
E.S.	EACH SIDE
E.W.	EACH WAY
EXIST (E)	EXISTING
FDN	FOUNDATION
F.O.	FACE OF
F.O.C.	FACE OF CONCRETE
FT	FOOT
FTG	FOOTING
F.V.	FIELD VERIFY
GRD	GRADE
HORIZ (H)	HORIZONTAL
HT	HEIGHT
I.C.C.	INTERNATIONAL CODE COUNCIL
IN	INCH(ES)
JT	JOINT
L	LONG (LENGTH)
LB	POUND
LD	DEVELOPMENT LENGTH
LONGIT	LONGITUDINAL
MATL	MATERIAL
MAX	MAXIMUM
MIN	MINIMUM
MISC	MISCELLANEOUS
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
OPP	OPPOSITE
PC	PIECE
P.C.F.	POUNDS PER CUBIC FOOT
P.L.F.	POUNDS PER LINEAR FOOT
P.S.F.	POUNDS PER SQUARE FOOT
P.S.I.	POUNDS PER SQUARE INCH
REF	REFERENCE
REINF	REINFORCE(ING) (MENT)
REQD	REQUIRED
R.W.	RETAINING WALL
SCHED	SCHEDULE(D)
SECT	SECTION
SHT	SHEET
SIM	SIMILAR
S.O.G.	SLAB ON GRADE
SPEC	SPECIFICATION
SQ	SQUARE
STD	STANDARD
STRUCT	STRUCTURAL
SYMM	SYMMETRICAL
T (T)	TOP
T&B	TOP & BOTTOM
THK	THICK(NESS)
T.O.	TOP OF
T.O.C.	TOP OF CONCRETE
T.O.F.	TOP OF FOOTING
TOT	TOTAL
T.O.W.	TOP OF WALL
TRANS	TRANSVERSE
TYP	TYPICAL
ULT	ULTIMATE
U.O.N.	UNLESS OTHERWISE NOTED
VERT (V)	VERTICAL
W/	WITH
W/O	WITHOUT
WT	WEIGHT
YD	YARD

THIRD AVE

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MAPLE CANYON RESTORATION - PHASE 1
THIRD AVE
STRUCTURAL GENERAL NOTES AND ABBREVIATIONS

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 95 OF 98 SHEETS

STORM DRAIN WBS: B-12040

APPROVED: FOR CITY ENGINEER — DATE
SHEILA BOSE
PRINT DCE NAME — RCE#

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	DRL			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

CONTRACTOR — DATE STARTED
INSPECTOR — DATE COMPLETED

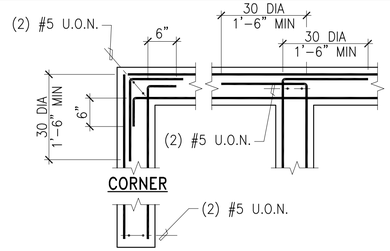
38321-95-D

REGISTERED PROFESSIONAL ENGINEER — DONALD ROLLA LIBBY — No. 2878 — Exp. 12-31-20 — STRUCTURAL — STATE OF CALIFORNIA

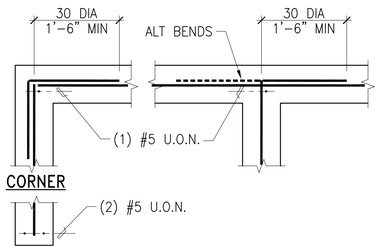
MARTIN & LIBBY
STRUCTURAL ENGINEERS
4452 Glacier Avenue, San Diego, CA 92120
Ph (619) 280-9307 F (619) 284-3533
Job No 7203.02

1/14/20 * 1:47 pm * 7203.02 MAPLE CANYON RESTORATION-P1.dwg

FINAL SUBMITTAL



DOUBLE CURTAIN

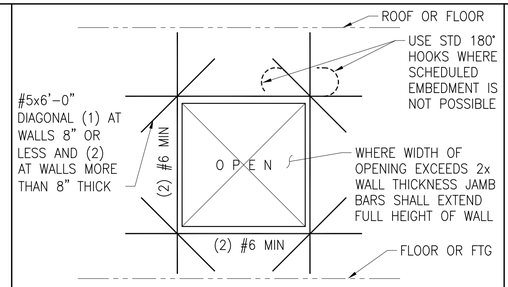


SINGLE CURTAIN

CONCRETE WALL OR FOOTING INTERSECTIONS

SCALE: 3/4" = 1'-0"

2

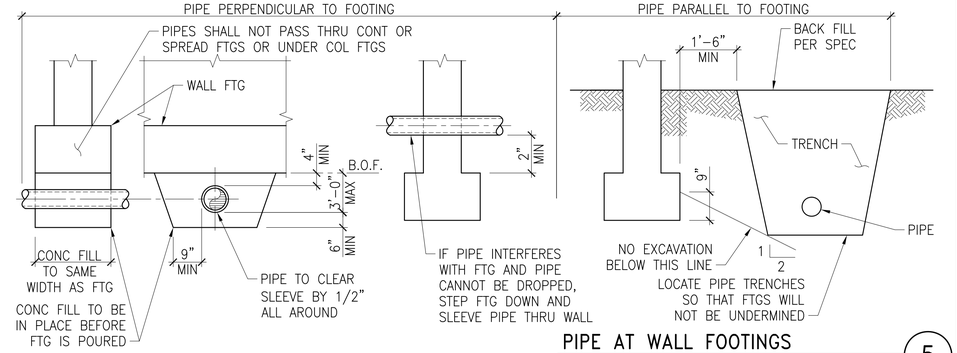


NOTE:
PROVIDE ONE HALF OF THE INTERRUPTED VERTICAL AND HORIZONTAL STEEL EACH SIDE OF OPENING.

OPENINGS IN CONCRETE WALLS

SCALE: NONE

3



PIPE AT WALL FOOTINGS

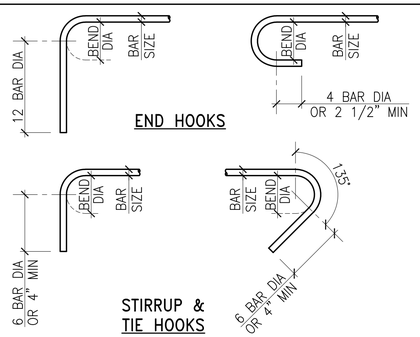
SCALE: NONE

5

TABLE 1 – PRIMARY REINFORCEMENT		
BAR BEND	BAR SIZE	MIN BEND DIA*
ALL GRADES OF REINFORCEMENT	#3 THRU #8	6 BAR DIA
	#9, #10 & #11	8 BAR DIA
	#14 & #18	10 BAR DIA

TABLE 2 – STIRRUP & TIE REINFORCEMENT	
BAR SIZE	MIN BEND DIA*
#3 THRU #5	4 BAR DIA
ALL OTHER BARS	SEE TABLE 1

NOTES:
* MEASURED ON INSIDE OF BAR.
1. ALL REINFORCEMENT BENT COLD.
2. FIELD BENDING NOT PERMITTED U.N.O.



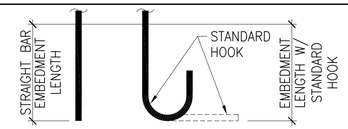
REINFORCEMENT HOOKS

SCALE: NONE

7

REINFORCEMENT LAP SPLICE AND EMBEDMENT LENGTH					
BAR SIZE	** MIN LAP LENGTH (IN)		** MIN EMBED LENGTH (IN)		
	TOP BARS	OTHER BARS	STRAIGHT BARS		W/STD HOOK
			TOP BARS	OTHER BARS	
#3	17	15	13	12	6
#4	22	20	17	12	7
#5	28	25	21	15	9
#6	34	30	26	18	10
#7	42	35	32	23	12
#8	54	40	42	30	14
#9	70	50	53	38	16
#10	88	62	68	48	18
#11	108	78	82	60	20

fc = 4,000 P.S.I. Fy = 60,000 P.S.I.



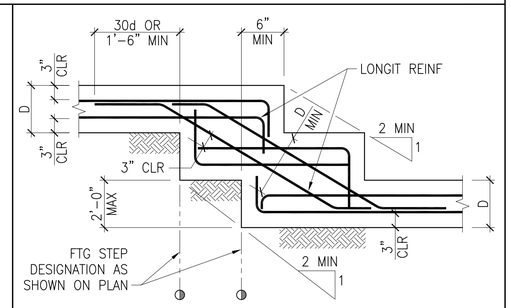
** FOR BAR CLEAR SPACING LESS THAN 2 BAR DIAMETERS, ADD 50%.

NOTES:
1. MIN LAP ALL BARS CLASS 'B' UNLESS OTHERWISE NOTED.
2. STAGGER LAP OF HORIZONTAL WALL BARS.
3. TOP BARS ARE HORIZONTAL BARS W/MORE THAN 12" DEPTH OF CONCRETE CAST BELOW THE REINFORCEMENT. MULTIPLE HORIZONTAL BARS IN A SINGLE VERTICAL PLAN SUCH AS COLUMN TIES OR HORIZONTAL BARS IN WALLS ARE NOT TOP BARS.
4. EMBEDMENT W/STD HOOK INCLUDES 0.7 REDUCTION FOR PROPER COVER PER AASHTO SECTION 5.11.2.4.

REBAR SPLICE (CLASS B) & EMBEDMENT (F'c = 4,000 P.S.I.)

SCALE: NONE

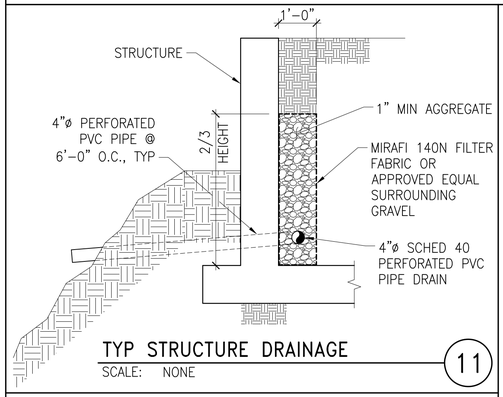
9



STEPPED FOOTING

SCALE: NONE

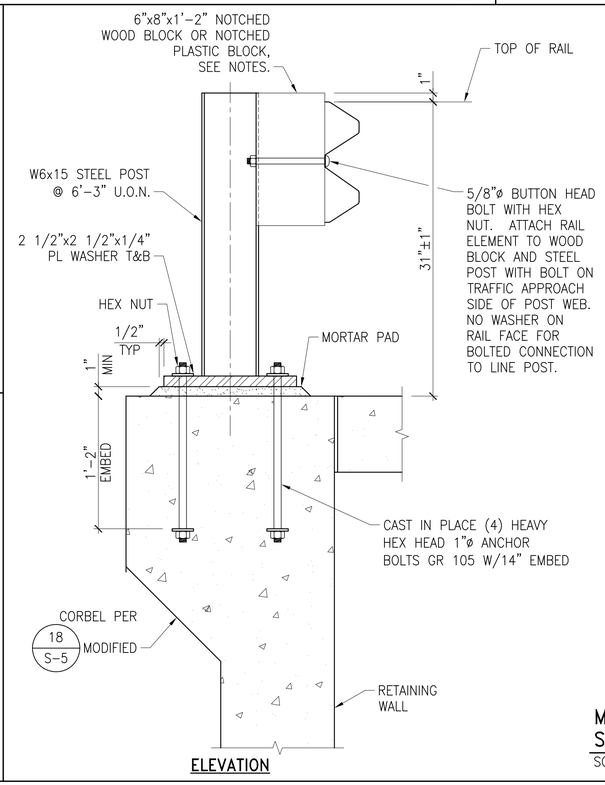
10



TYP STRUCTURE DRAINAGE

SCALE: NONE

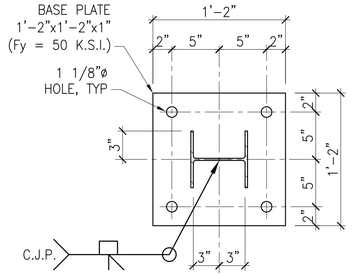
11



ELEVATION

NOTES:

1. SEE ALSO 2018 CALTRANS REVISED STANDARD PLAN A77L2 FOR STEEL POST WITH NOTCHED WOOD BLOCK CONSTRUCTION DETAILS.
2. FOR DETAILS OF STEEL POSTS AND NOTCHED WOOD BLOCKS USED TO CONSTRUCT MGS, SEE REVISED STANDARD PLAN RSP 177N2.
3. NOTCHED FACE OF BLOCK FACES STEEL POST.
4. 6"x12"x1'-2" BLOCK MUST BE USED WITH 6" DIKE.
5. THIS BARRIER IS INTENDED FOR TEST LEVEL ONE (TL-1).

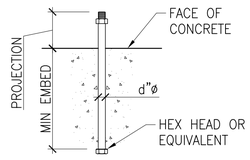


BASE PLATE PLAN

MIDWEST GUARDRAIL SYSTEM MOUNTING DETAIL

SCALE: 1 1/2" = 1'-0"

18



ANCHOR BOLTS EMBEDMENT

SCALE: NONE

14

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S-3

MAPLE CANYON RESTORATION - PHASE 1
THIRD AVE
RETAINING WALL DETAILS

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 96 OF 98 SHEETS

STORM DRAIN WBS B-12040

REGISTERED PROFESSIONAL ENGINEER DONALD ROLLA LIBBY No. 2878 Exp. 12-31-20 STRUCTURAL STATE OF CALIFORNIA

APPROVED:
FOR CITY ENGINEER _____ DATE _____
SHEILA BOSE
PRINT DCE NAME _____ RCE# _____

SUBMITTED BY: ELHAM LOTFI, PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI, PROJECT ENGINEER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	DRL			

206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

38321-96-D

THIRD AVE

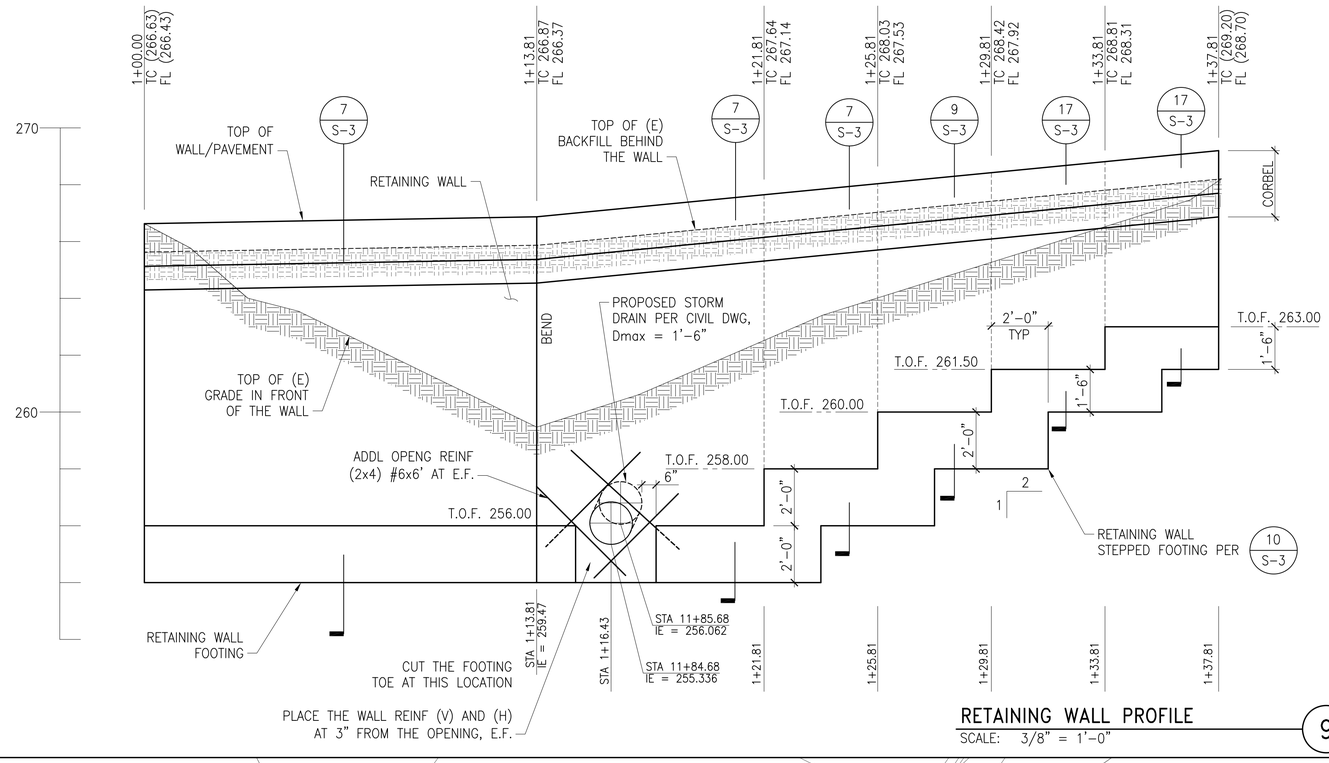
FINAL SUBMITTAL

1/14/20 * 1:47 pm * 7203.02 MAPLE CANYON RESTORATION-P1.dwg

Alignment Name: System 9 Retaining wall			
	Station	Northing	Easting
Element: Linear			
POB	0+95.00	1848524.03	6281218.58
PI	1+00.00	1848523.75	6281213.59
Tangential Direction:	S 86^47'30" W		
Tangential Length:	5.00		
Element: Linear			
PI	1+00.00	1848523.75	6281213.59
PI	1+13.81	1848522.98	6281199.80
Tangential Direction:	S 86^47'30" W		
Tangential Length:	13.81		
Element: Linear			
PI	1+13.81	1848522.98	6281199.80
PI	1+30.85	1848508.48	6281190.85
Tangential Direction:	S 31^41'05" W		
Tangential Length:	17.04		
Element: Linear			
PI	1+30.85	1848508.48	6281190.85
PI	1+37.81	1848502.47	6281187.35
Tangential Direction:	S 30^12'49" W		
Tangential Length:	6.96		
Element: Linear			
PI	1+37.81	1848502.47	6281187.35
POE	1+58.75	1848484.37	6281176.81
Tangential Direction:	S 30^12'49" W		
Tangential Length:	20.94		

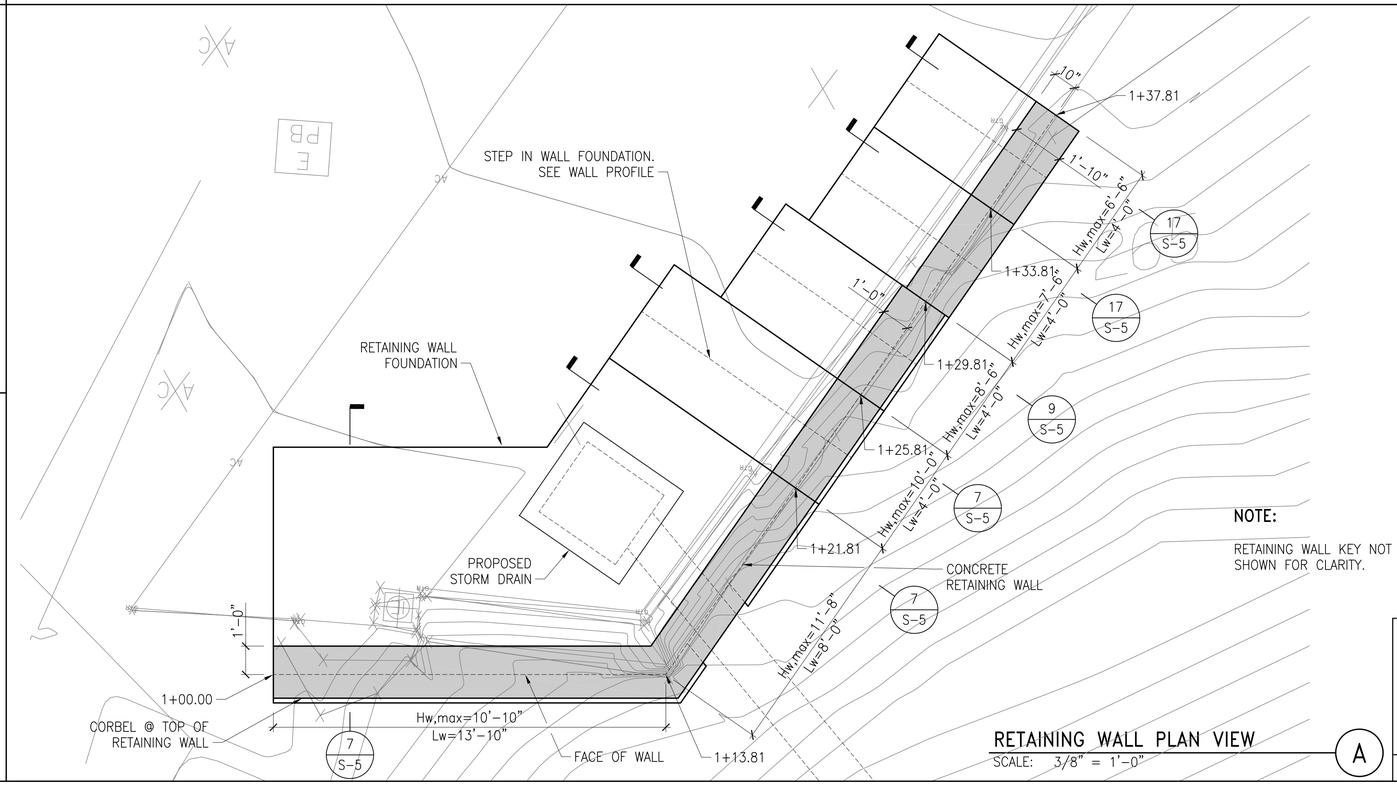
WALL ALIGNMENT DATA
SCALE: NONE

6



RETAINING WALL PROFILE
SCALE: 3/8" = 1'-0"

9



RETAINING WALL PLAN VIEW
SCALE: 3/8" = 1'-0"

A

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1/14/20 * 1:47 pm * 7203.02 MAPLE CANYON RESTORATION-P1.dwg

S-4

MAPLE CANYON RESTORATION - PHASE 1
THIRD AVE
RETAINING WALL PLAN AND PROFILE

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 97 OF 98 SHEETS

STORM DRAIN WBS B-12040

REGISTERED PROFESSIONAL ENGINEER DONALD ROLLA LIBBY No. 2878 Exp. 12-31-20 STRUCTURAL STATE OF CALIFORNIA

APPROVED:
FOR CITY ENGINEER _____ DATE
SHEILA BOSE
PRINT DCE NAME _____ RCE#

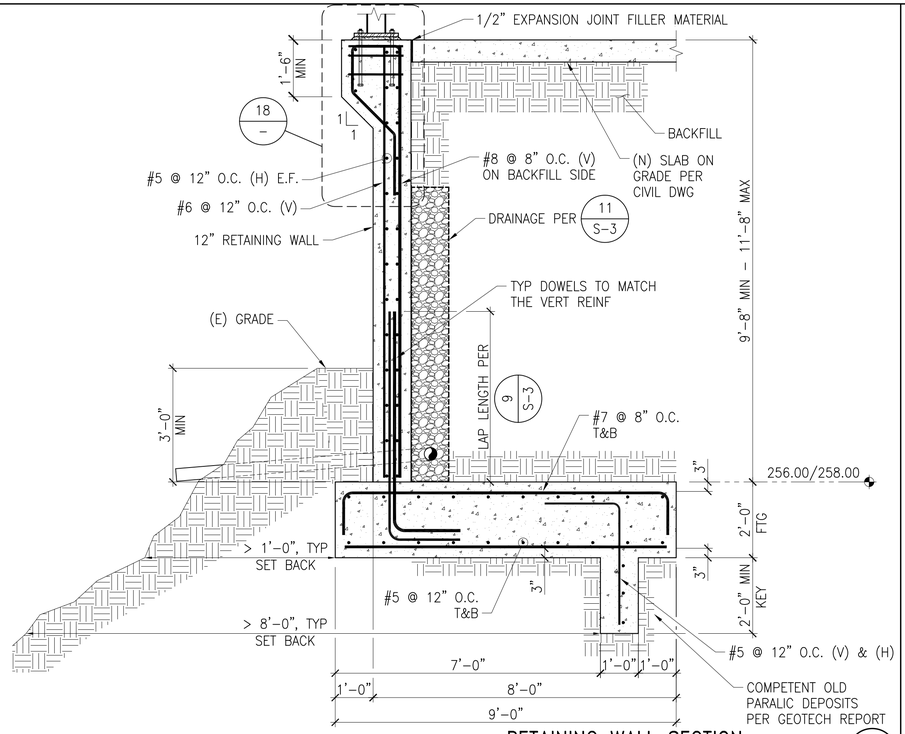
DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	DRL			

SUBMITTED BY: ELHAM LOTFI PROJECT MANAGER
CHECKED BY: BAREAZ PIROMARI PROJECT ENGINEER
206-1719 CCS27 COORDINATE
1846-6276 CCS83 COORDINATE
38321-97-D

CONTRACTOR _____ DATE STARTED _____
INSPECTOR _____ DATE COMPLETED _____

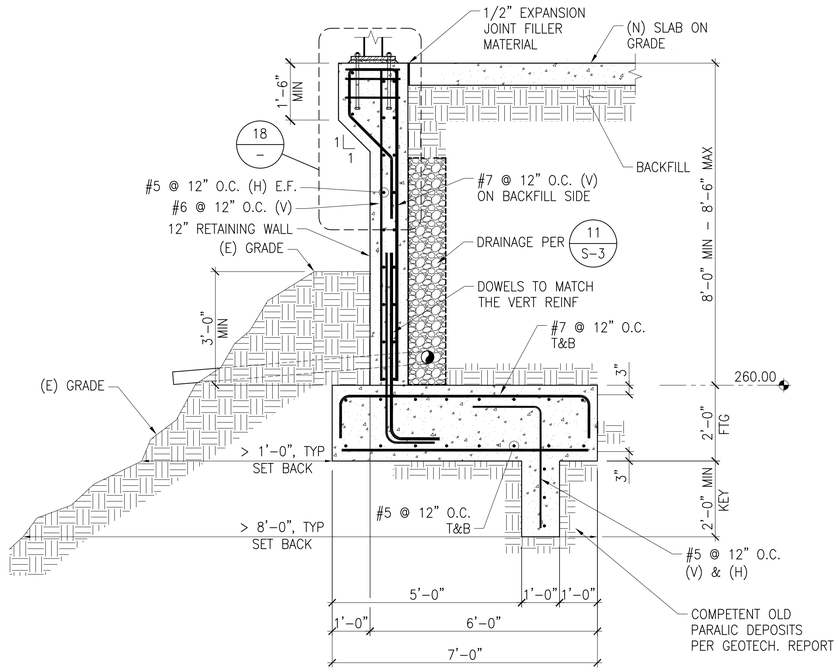
THIRD AVE

FINAL SUBMITTAL



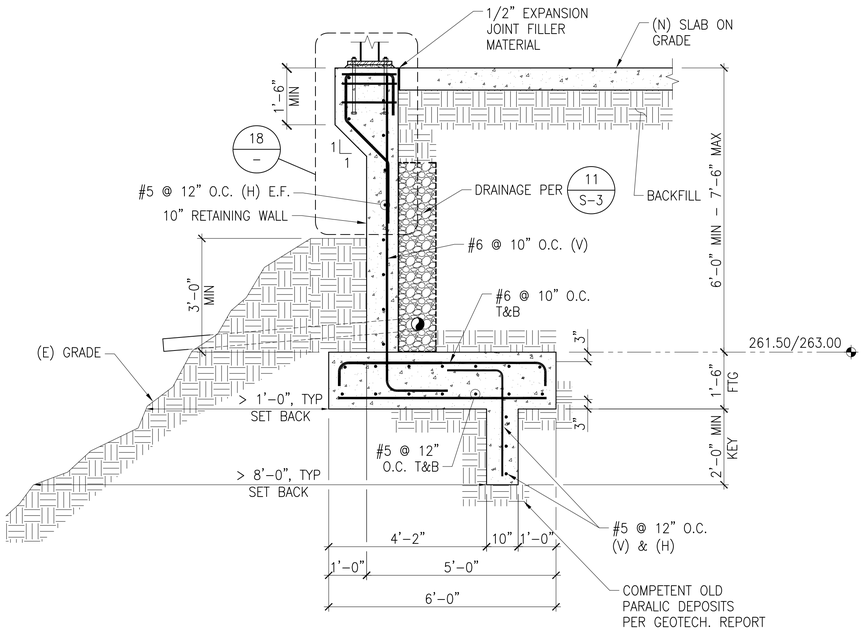
RETAINING WALL SECTION
SCALE: 1/2" = 1'-0"

7



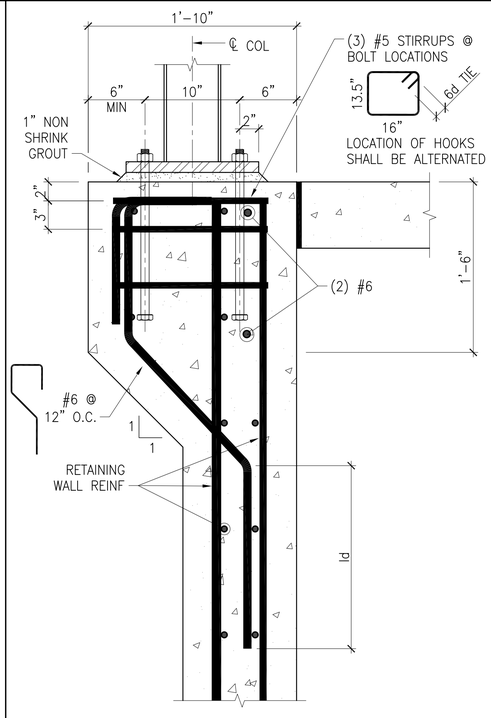
RETAINING WALL SECTION
SCALE: 1/2" = 1'-0"

9



RETAINING WALL SECTION
SCALE: 1/2" = 1'-0"

17



CORBEL REINF DETAIL
SCALE: 1 1/2" = 1'-0"

18

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S-5

MAPLE CANYON RESTORATION - PHASE 1
THIRD AVE
RETAINING WALL SECTIONS

CITY OF SAN DIEGO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
SHEET 98 OF 98 SHEETS

STORM DRAIN WBS B-12040

APPROVED:
FOR CITY ENGINEER _____ DATE
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DESCRIPTION	BY	APPROVED	DATE	FILMED
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206-1719 CCS27 COORDINATE
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38321-98-D

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THIRD AVE

FINAL SUBMITTAL

1/14/20 * 1:47 pm * 7203.02 MAPLE CANYON RESTORATION-P1.dwg