

LEGEND

PERMANENT TURNAROUND AREA
(30' x 25')

EXISTING ACCESS ROAD

ESA

STABILIZED CONSTRUCTION ENTRANCE
(TC-1)

EX WATER MAIN

EX STORM DRAIN

EX SEWER MAIN

SILT FENCE (SE-1)

FIBER ROLL (SE-5)

STAGING AREA LIMITS

MAJOR CONTOUR

MINOR CONTOUR

PARCEL

HAUL ROUTE

WORK TO BE DONE

THE IMPROVEMENTS CONSIST OF THE FOLLOWING WORK TO BE DONE ACCORDING TO THESE PLANS AND THE STANDARD SPECIFICATIONS AND STANDARD DRAWINGS OF THE CITY OF SAN DIEGO.

- MAINTENANCE OF CHANNELS TO REMOVE ACCUMULATED SEDIMENT AND OTHER DEBRIS

STANDARD SPECIFICATIONS

STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK), 2012 EDITION, DOCUMENT NO. PITS070112-01

CITY OF SAN DIEGO STANDARD SPECIFICATIONS FOR PUBLICWORKS CONSTRUCTION (WHITEBOOK), 2012 EDITION, DOCUMENT NO. PITS070112-02

CALIFORNIA DEPARTMENT OF TRANSPORTATION MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 2012 EDITION, DOCUMENT NO. PITS070112-04

CALIFORNIA DEPARTMENT OF TRANSPORTATION U.S. CUSTOMARY STANDARD SPECIFICATIONS, 2010 EDITION, DOCUMENT NO. PITS070112-02

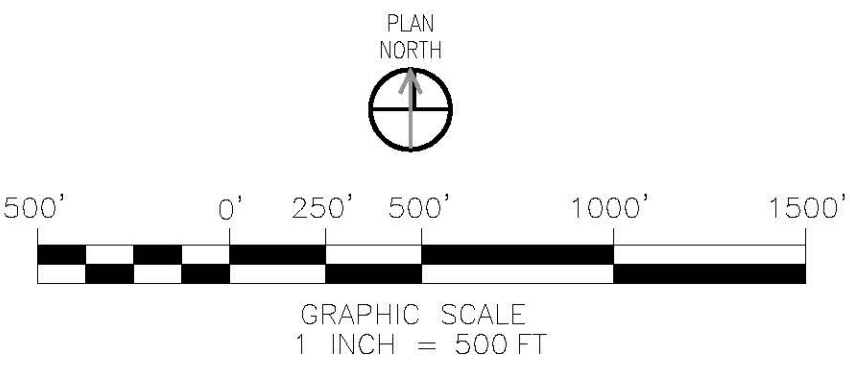
STANDARD DRAWINGS

CITY OF SAN DIEGO STANDARD DRAWINGS FOR PUBLIC WORKS CONSTRUCTION, 2012 EDITION, DOCUMENT NO. PIT070112-03

CALIFORNIA DEPARTMENT OF TRANSPORTATION U.S. CUSTOMARY STANDARD PLANS, 2010 EDITION, DOCUMENT NO. PITS070112-05

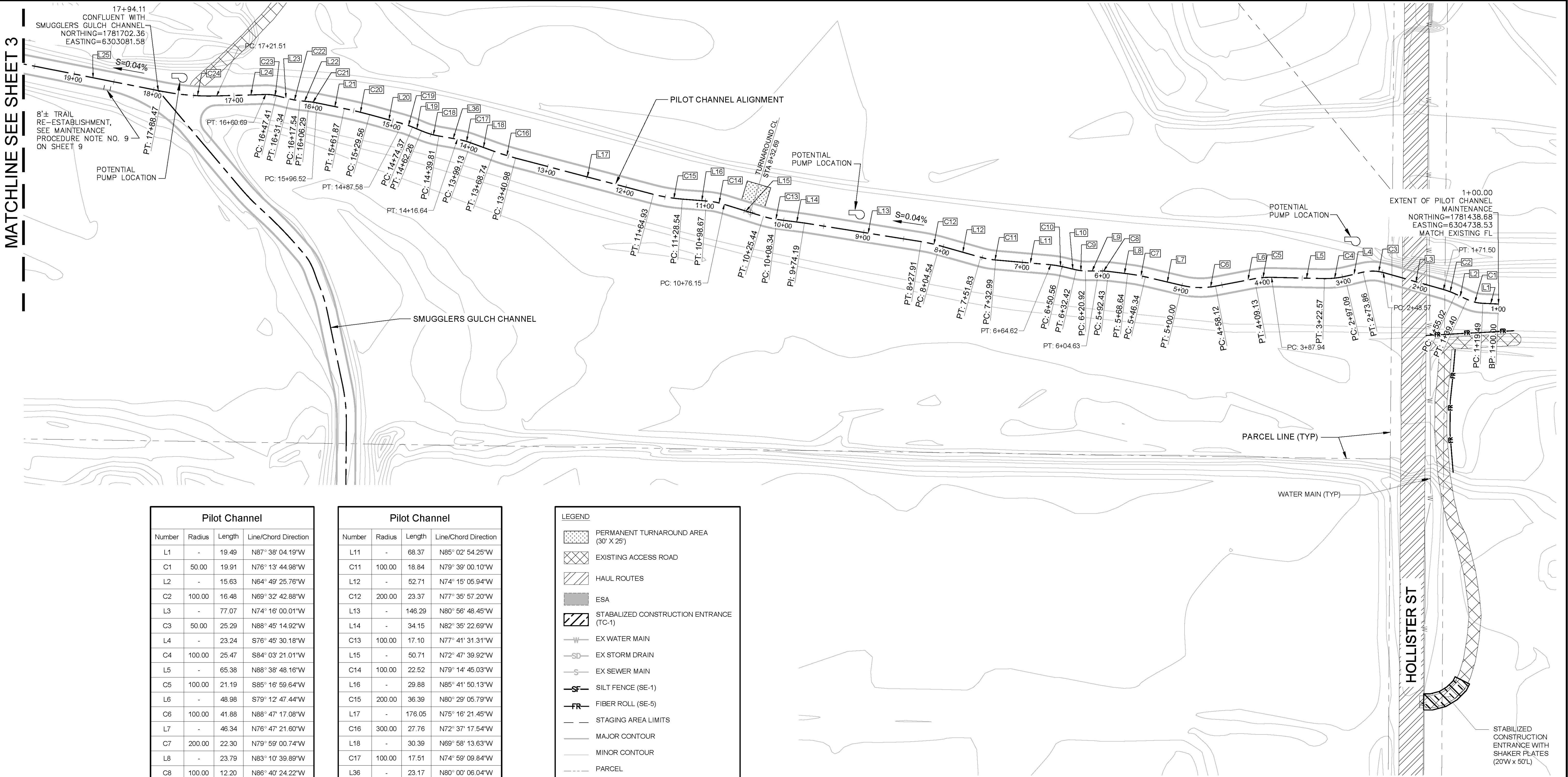
PRIOR TO THE ISSUANCE OF ANY CONSTRUCTION PERMIT, THE OWNER/PERMITTEE SHALL INCORPORATE ANY CONSTRUCTION BEST MANAGEMENT PRACTICES NECESSARY TO COMPLY WITH CHAPTER 14, ARTICLE 2, DIVISION 1 (GRADING REGULATIONS) OF THE SAN DIEGO MUNICIPAL CODE, INTO THE CONSTRUCTION PLANS OR SPECIFICATIONS. (FROM CYCLE 4)

DATUM: NAD 1983 STATEPLANE CALIFORNIA VI FIPS 0406 FEET
TOPO ELEVATIONS FOR PICTORIAL PURPOSES ONLY
TOPOGRAPHY DATE: 1998



MAINTENANCE PLANS FOR		
TIJUANA RIVER VALLEY		
OVERALL PLAN		
CITY OF SAN DIEGO, CALIFORNIA ENGINEERING DEPARTMENT SHEET 1 OF 15 SHEETS		W.O. NO. _____
FOR CITY ENGINEER		DATE
DESCRIPTION	BY	APPROVED
FILE NAME:	DATE:	DATE
		DATE
		DATE
		DATE
AS-BUILT		
CONTRACTOR INSPECTOR	DATE STARTED	DATE COMPLETED
CONTRACTOR MUST NOTIFY THE BELOW LISTED AGENCY AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION :		SECTION HEAD
		PROJECT MANAGER
		DESIGN ENGINEER
		140-1731
		LAMBERT COORDINATES
UNDERGROUND SERVICE ALERT (USA) 1-800-422-4133		

MATCHLINE SEE SHEET 3



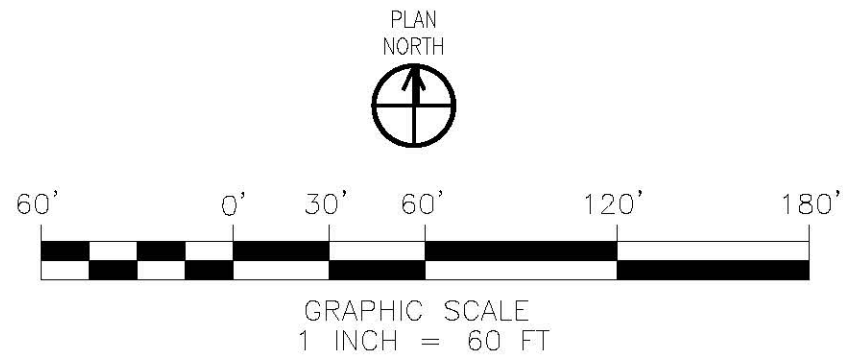
Pilot Channel			
Number	Radius	Length	Line/Chord Direction
L1	-	19.49	N87° 38' 04.19"W
C1	50.00	19.91	N76° 13' 44.98"W
L2	-	15.63	N64° 49' 25.76"W
C2	100.00	16.48	N69° 32' 42.88"W
L3	-	77.07	N74° 16' 00.01"W
C3	50.00	25.29	N88° 45' 14.92"W
L4	-	23.24	S76° 45' 30.18"W
C4	100.00	25.47	S84° 03' 21.01"W
L5	-	65.38	N88° 38' 48.16"W
C5	100.00	21.19	S85° 16' 59.64"W
L6	-	48.98	S79° 12' 47.44"W
C6	100.00	41.88	N88° 47' 17.08"W
L7	-	46.34	N76° 47' 21.60"W
C7	200.00	22.30	N79° 59' 00.74"W
L8	-	23.79	N83° 10' 39.89"W
C8	100.00	12.20	N86° 40' 24.22"W
L9	-	16.29	S89° 49' 51.44"W
C9	50.00	11.50	N83° 34' 57.05"W
L10	-	18.15	N76° 59' 45.54"W
C10	100.00	14.05	N81° 01' 19.89"W

Pilot Channel			
Number	Radius	Length	Line/Chord Direction
L11	-	68.37	N85° 02' 54.25"W
C11	100.00	18.84	N79° 39' 00.10"W
L12	-	52.71	N74° 15' 05.94"W
C12	200.00	23.37	N77° 35' 57.20"W
L13	-	146.29	N80° 56' 48.45"W
L14	-	34.15	N82° 35' 22.69"W
C13	100.00	17.10	N77° 41' 31.31"W
L15	-	50.71	N72° 47' 39.92"W
C14	100.00	22.52	N79° 14' 45.03"W
L16	-	29.88	N85° 41' 50.13"W
C15	200.00	36.39	N80° 29' 05.79"W
L17	-	176.05	N75° 16' 21.45"W
C16	300.00	27.76	N72° 37' 17.54"W
L18	-	30.39	N69° 58' 13.63"W
C17	100.00	17.51	N74° 59' 09.84"W
L36	-	23.17	N80° 00' 06.04"W
C18	100.00	22.45	N73° 34' 14.17"W
L19	-	12.11	N67° 08' 22.31"W
C19	100.00	13.21	N70° 55' 21.63"W
L20	-	41.99	N74° 42' 20.96"W

LEGEND	
	PERMANENT TURNAROUND AREA (30' X 25')
	EXISTING ACCESS ROAD
	HAUL ROUTES
	ESA
	STABILIZED CONSTRUCTION ENTRANCE (TC-1)
	EX WATER MAIN
	EX STORM DRAIN
	EX SEWER MAIN
	SILT FENCE (SE-1)
	FIBER ROLL (SE-5)
	STAGING AREA LIMITS
	MAJOR CONTOUR
	MINOR CONTOUR
	PARCEL
	MHPA
	CHANNEL MAINTENANCE CENTERLINE
	LIMITS OF CHANNEL MAINTENANCE

NOTES:

- ENTIRE CHANNEL MAINTENANCE AREA SUBJECT TO IN-CHANNEL ENHANCEMENT MITIGATION REQUIREMENTS.
- SEE SHEET 8 FOR CHANNEL SECTION.



CONTRACTOR MUST NOTIFY THE BELOW LISTED AGENCY AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION :	MAINTENANCE PLANS FOR			
	TIJUANA RIVER VALLEY			
	PILOT CHANNEL MAINTENANCE			
CITY OF SAN DIEGO, CALIFORNIA ENGINEERING DEPARTMENT SHEET 2 OF 15 SHEETS		W.O. NO. _____		
FOR CITY ENGINEER		DATE		SECTION HEAD
DESCRIPTION	BY	APPROVED	DATE	FILMED
FILE NAME:	DATE:			
AS-BUILT				
CONTRACTOR		DATE STARTED		DESIGN ENGINEER
INSPECTOR		DATE COMPLETED		140-1731
UNDERGROUND SERVICE ALERT (USA) 1-800-422-4133		LAMBERT COORDINATES		

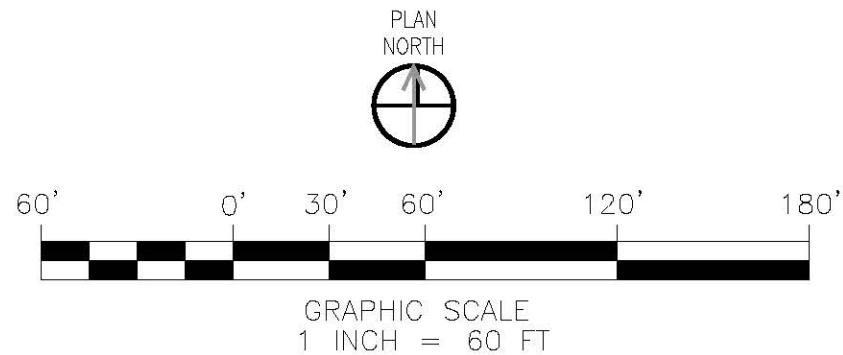
MATCHLINE - SEE SHEET 4

MATCHLINE - SEE SHEET 2

Pilot Channel			
Number	Radius	Length	Line/Chord Direction
C25	374.30	175.48	N65° 25' 35.77"W
L26	-	100.51	N51° 59' 43.87"W
C26	500.00	26.19	N53° 29' 46.21"W
L27	-	30.37	N54° 59' 48.55"W
C27	50.00	37.11	N76° 15' 38.76"W
L28	-	102.70	S82° 28' 31.03"W
C28	200.00	28.14	S86° 30' 23.65"W
L29	-	55.73	N89° 27' 43.73"W
C29	199.56	83.22	N77° 30' 57.11"W
L30	-	94.33	N65° 34' 10.48"W
C30	273.13	131.32	N79° 20' 36.90"W
L31	-	251.33	S86° 52' 56.69"W
C31	649.31	163.85	S79° 39' 11.16"W
L32	-	78.54	S72° 25' 25.63"W

Pilot Channel			
Number	Radius	Length	Line/Chord Direction
C35	50.00	14.96	N74° 58' 04.17"W
L36	-	35.99	N83° 32' 27.05"W
C36	749.95	74.11	N86° 22' 19.19"W
L37	-	14.65	N89° 12' 11.33"W
C37	500.00	8.95	N88° 41' 24.75"W
L38	-	111.93	N88° 10' 38.17"W

LEGEND	
	PERMANENT TURNAROUND AREA (30' X 25')
	EXISTING ACCESS ROAD
	HAUL ROUTES
	ESA
	STABILIZED CONSTRUCTION ENTRANCE (TC-1)
	EX WATER MAIN
	EX STORM DRAIN
	EX SEWER MAIN
	SILT FENCE (SE-1)
	FIBER ROLL (SE-5)
	STAGING AREA LIMITS
	MAJOR CONTOUR
	MINOR CONTOUR
	PARCEL
	MHPA
	CHANNEL MAINTENANCE CENTERLINE
	LIMITS OF CHANNEL MAINTENANCE



NOTES:

- ENTIRE CHANNEL MAINTENANCE AREA SUBJECT TO IN-CHANNEL ENHANCEMENT MITIGATION REQUIREMENTS.
- SEE SHEET 8 FOR CHANNEL SECTION.

MAINTENANCE PLANS FOR

TIJUANA RIVER VALLEY

PILOT CHANNEL MAINTENANCE

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 3 OF 15 SHEETS

W.O.
NO. _____

CONTRACTOR MUST NOTIFY THE BELOW LISTED AGENCY AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION :

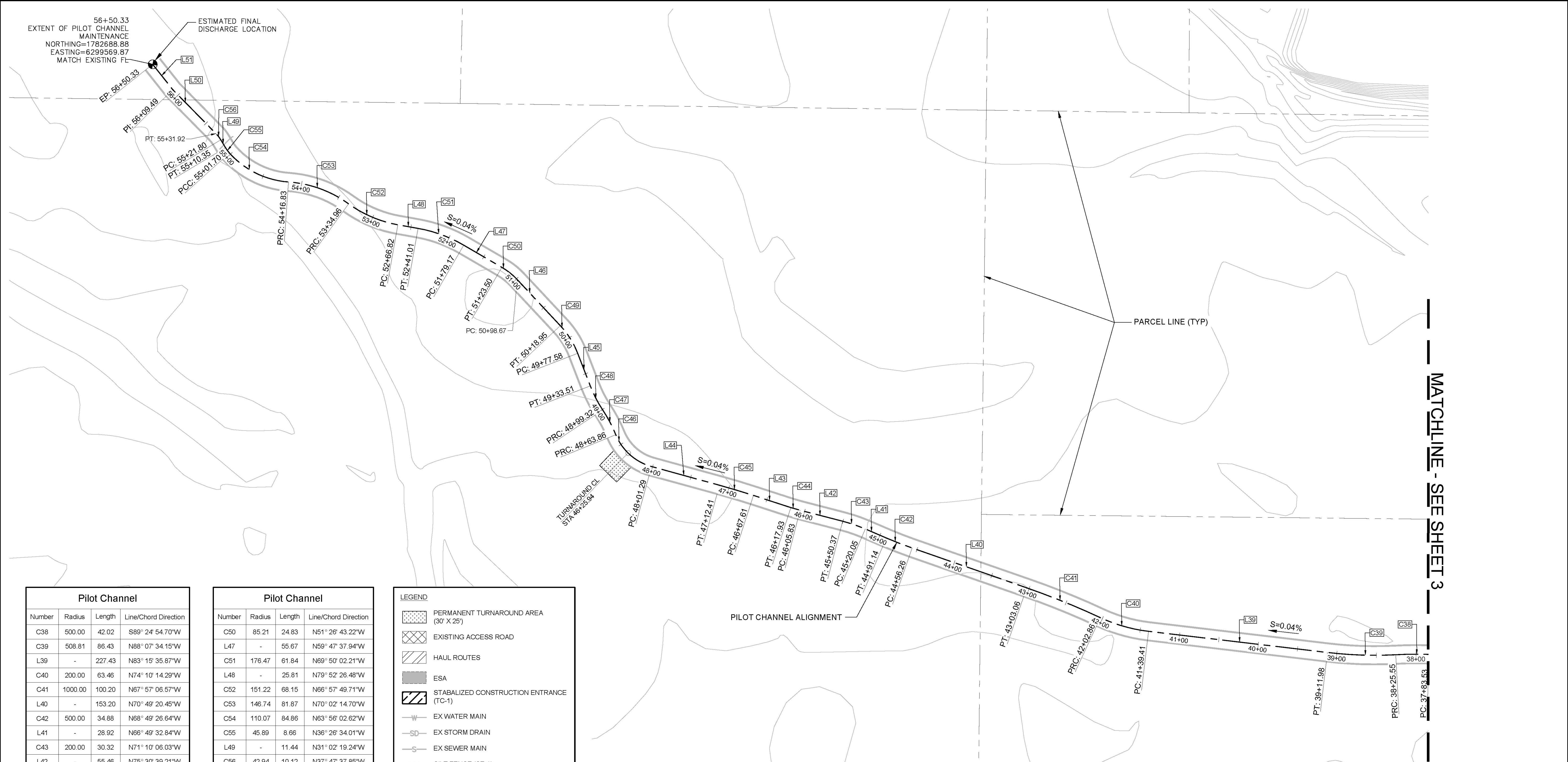
UNDERGROUND SERVICE ALERT
(USA) 1-800-422-4133

FOR CITY ENGINEER		DATE			SECTION HEAD
DESCRIPTION	BY	APPROVED	DATE	FILMED	
FILE NAME:	DATE:				PROJECT MANAGER
					DESIGN ENGINEER
					140-1731
					LAMBERT COORDINATES

AS-BUILT

CONTRACTOR
INSPECTOR

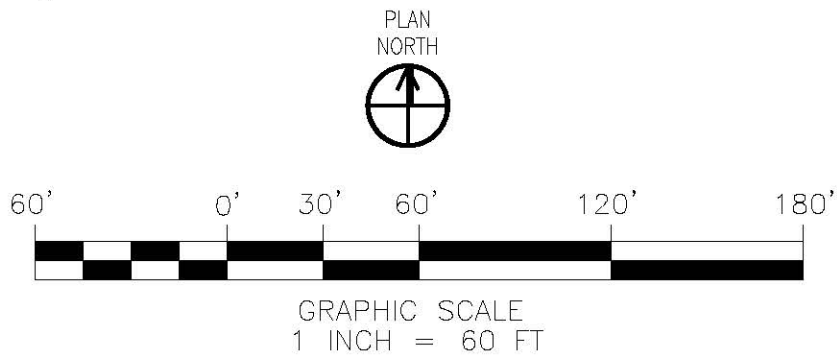
DATE STARTED
DATE COMPLETED



Pilot Channel			
Number	Radius	Length	Line/Chord Direction
C38	500.00	42.02	S89° 24' 54.70"W
C39	508.81	86.43	N88° 07' 34.15"W
L39	-	227.43	N83° 15' 35.87"W
C40	200.00	63.46	N74° 10' 14.29"W
C41	1000.00	100.20	N67° 57' 06.57"W
L40	-	153.20	N70° 49' 20.45"W
C42	500.00	34.88	N68° 49' 26.64"W
L41	-	28.92	N66° 49' 32.84"W
C43	200.00	30.32	N71° 10' 06.03"W
L42	-	55.46	N75° 30' 39.21"W
C44	200.00	12.11	N73° 46' 36.53"W
L43	-	49.68	N72° 02' 33.85"W
C45	1000.00	44.79	N73° 19' 33.60"W
L44	-	88.88	N74° 36' 33.35"W
C46	68.31	62.58	N48° 21' 57.31"W
C47	177.29	35.46	N27° 51' 08.17"W
C48	157.40	34.19	N27° 21' 33.73"W

Pilot Channel			
Number	Radius	Length	Line/Chord Direction
C50	85.21	24.83	N51° 26' 43.22"W
L47	-	55.67	N59° 47' 37.94"W
C51	176.47	61.84	N69° 50' 02.21"W
L48	-	25.81	N79° 52' 26.48"W
C52	151.22	68.15	N66° 57' 49.71"W
C53	146.74	81.87	N70° 02' 14.70"W
C54	110.07	84.86	N63° 56' 02.62"W
C55	45.89	8.66	N36° 26' 34.01"W
L49	-	11.44	N31° 02' 19.24"W
C56	42.94	10.12	N37° 47' 37.85"W
L50	-	77.56	N44° 32' 56.46"W
L51	-	40.84	N38° 26' 18.68"W

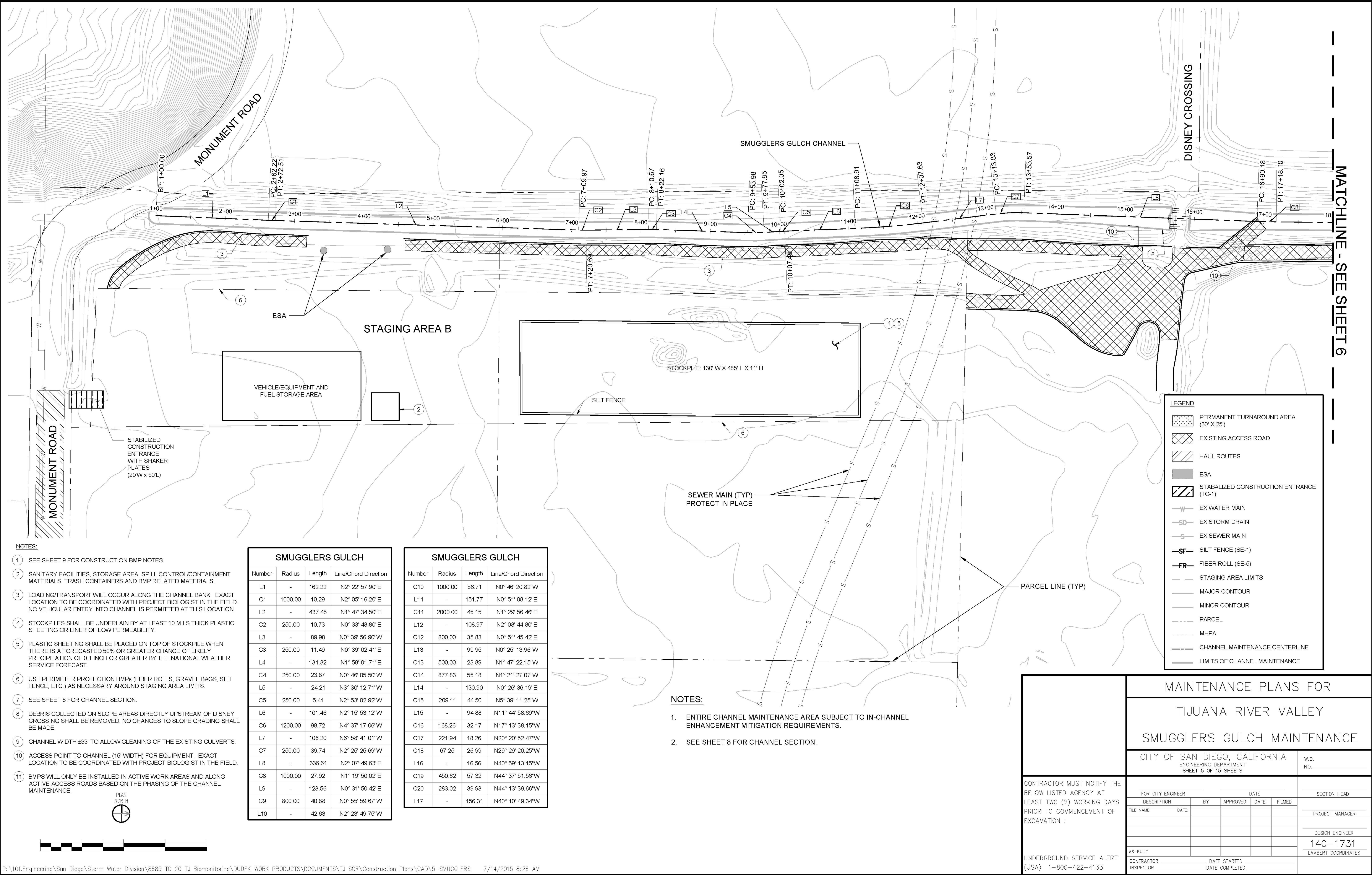
LEGEND	
	PERMANENT TURNAROUND AREA (30' X 25')
	EXISTING ACCESS ROAD
	HAUL ROUTES
	ESA
	STABILIZED CONSTRUCTION ENTRANCE (TC-1)
	EX WATER MAIN
	EX STORM DRAIN
	EX SEWER MAIN
	SILT FENCE (SE-1)
	FIBER ROLL (SE-5)
	STAGING AREA LIMITS
	MAJOR CONTOUR
	MINOR CONTOUR
	PARCEL
	MHPA
	CHANNEL MAINTENANCE CENTERLINE
	LIMITS OF CHANNEL MAINTENANCE



NOTES:

- ENTIRE CHANNEL MAINTENANCE AREA SUBJECT TO IN-CHANNEL ENHANCEMENT MITIGATION REQUIREMENTS.
- SEE SHEET 8 FOR CHANNEL SECTION.

		MAINTENANCE PLANS FOR			
		TIJUANA RIVER VALLEY			
		PILOT CHANNEL MAINTENANCE			
		CITY OF SAN DIEGO, CALIFORNIA ENGINEERING DEPARTMENT SHEET 4 OF 15 SHEETS			W.O. NO. _____
CONTRACTOR MUST NOTIFY THE BELOW LISTED AGENCY AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION :		FOR CITY ENGINEER		DATE	SECTION HEAD
		DESCRIPTION	BY	APPROVED	DATE
		FILE NAME:	DATE:		FILMED
				DESIGN ENGINEER	
				140-1731	
				LAMBERT COORDINATES	
UNDERGROUND SERVICE ALERT (USA) 1-800-422-4133		CONTRACTOR INSPECTOR		DATE STARTED	DATE COMPLETED



- NOTES:
- 1. SEE SHEET 9 FOR CONSTRUCTION BMP NOTES.
 - 2. SANITARY FACILITIES, STORAGE AREA, SPILL CONTROL/CONTAINMENT MATERIALS, TRASH CONTAINERS AND BMP RELATED MATERIALS.
 - 3. LOADING/TRANSPORT WILL OCCUR ALONG THE CHANNEL BANK. EXACT LOCATION TO BE COORDINATED WITH PROJECT BIOLOGIST IN THE FIELD. NO VEHICULAR ENTRY INTO CHANNEL IS PERMITTED AT THIS LOCATION.
 - 4. STOCKPILES SHALL BE UNDERLAIN BY AT LEAST 10 MILS THICK PLASTIC SHEETING OR LINER OF LOW PERMEABILITY.
 - 5. PLASTIC SHEETING SHALL BE PLACED ON TOP OF STOCKPILE WHEN THERE IS A FORECASTED 50% OR GREATER CHANCE OF LIKELY PRECIPITATION OF 0.1 INCH OR GREATER BY THE NATIONAL WEATHER SERVICE FORECAST.
 - 6. USE PERIMETER PROTECTION BMPs (FIBER ROLLS, GRAVEL BAGS, SILT FENCE, ETC.) AS NECESSARY AROUND STAGING AREA LIMITS.
 - 7. SEE SHEET 8 FOR CHANNEL SECTION.
 - 8. DEBRIS COLLECTED ON SLOPE AREAS DIRECTLY UPSTREAM OF DISNEY CROSSING SHALL BE REMOVED. NO CHANGES TO SLOPE GRADING SHALL BE MADE.
 - 9. CHANNEL WIDTH ±33' TO ALLOW CLEANING OF THE EXISTING CULVERTS.
 - 10. ACCESS POINT TO CHANNEL (15' WIDTH) FOR EQUIPMENT. EXACT LOCATION TO BE COORDINATED WITH PROJECT BIOLOGIST IN THE FIELD.
 - 11. BMPs WILL ONLY BE INSTALLED IN ACTIVE WORK AREAS AND ALONG ACTIVE ACCESS ROADS BASED ON THE PHASING OF THE CHANNEL MAINTENANCE.

SMUGGLERS GULCH				
Number	Radius	Length	Line/Chord Direction	
L1	-	162.22	N2° 22' 57.90"E	
C1	1000.00	10.29	N2° 05' 16.20"E	
L2	-	437.45	N1° 47' 34.50"E	
C2	250.00	10.73	N0° 33' 48.80"E	
L3	-	89.98	N0° 39' 56.90"W	
C3	250.00	11.49	N0° 39' 02.41"E	
L4	-	131.82	N1° 58' 01.71"E	
C4	250.00	23.87	N0° 46' 05.50"W	
L5	-	24.21	N3° 30' 12.71"W	
C5	250.00	5.41	N2° 53' 02.92"W	
L6	-	101.46	N2° 15' 53.12"W	
C6	1200.00	98.72	N4° 37' 17.06"W	
L7	-	106.20	N6° 58' 41.01"W	
C7	250.00	39.74	N2° 25' 25.69"W	
L8	-	336.61	N2° 07' 49.63"E	
C8	1000.00	27.92	N1° 19' 50.02"E	
L9	-	128.56	N0° 31' 50.42"E	
C9	800.00	40.88	N0° 55' 59.67"W	
L10	-	42.63	N2° 23' 49.75"W	

SMUGGLERS GULCH				
Number	Radius	Length	Line/Chord Direction	
C10	1000.00	56.71	N0° 46' 20.82"W	
L11	-	151.77	N0° 51' 08.12"E	
C11	2000.00	45.15	N1° 29' 56.46"E	
L12	-	108.97	N2° 08' 44.80"E	
C12	800.00	35.83	N0° 51' 45.42"E	
L13	-	99.95	N0° 25' 13.96"W	
C13	500.00	23.89	N1° 47' 22.15"W	
C14	877.83	55.18	N1° 21' 27.07"W	
L14	-	130.90	N0° 26' 36.19"E	
C15	209.11	44.50	N5° 39' 11.25"W	
L15	-	94.88	N11° 44' 58.69"W	
C16	168.26	32.17	N17° 13' 38.15"W	
C17	221.94	18.26	N20° 20' 52.47"W	
C18	67.25	26.99	N29° 29' 20.25"W	
L16	-	16.56	N40° 59' 13.15"W	
C19	450.62	57.32	N44° 37' 51.56"W	
C20	283.02	39.98	N44° 13' 39.66"W	
L17	-	156.31	N40° 10' 49.34"W	

- NOTES:
- 1. ENTIRE CHANNEL MAINTENANCE AREA SUBJECT TO IN-CHANNEL ENHANCEMENT MITIGATION REQUIREMENTS.
 - 2. SEE SHEET 8 FOR CHANNEL SECTION.

MAINTENANCE PLANS FOR
TIJUANA RIVER VALLEY
SMUGGLERS GULCH MAINTENANCE

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 5 OF 15 SHEETS

W.O.
NO. _____

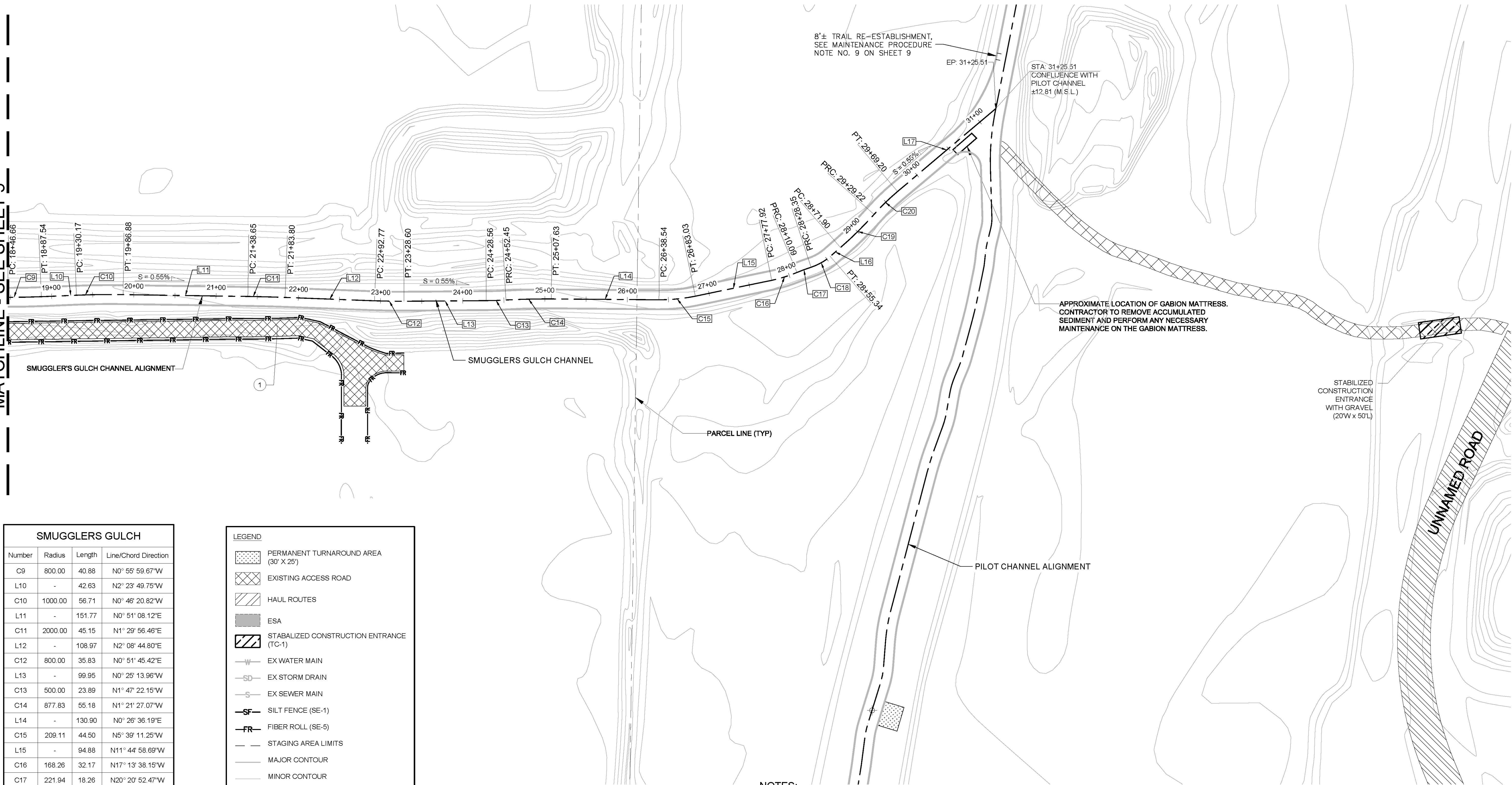
CONTRACTOR MUST NOTIFY THE
BELOW LISTED AGENCY AT
LEAST TWO (2) WORKING DAYS
PRIOR TO COMMENCEMENT OF
EXCAVATION :

UNDERGROUND SERVICE ALERT
(USA) 1-800-422-4133

FOR CITY ENGINEER		DATE		SECTION HEAD	
DESCRIPTION	BY	APPROVED	DATE	FILMED	
FILE NAME:	DATE:				PROJECT MANAGER
					DESIGN ENGINEER
					140-1731
					LAMBERT COORDINATES

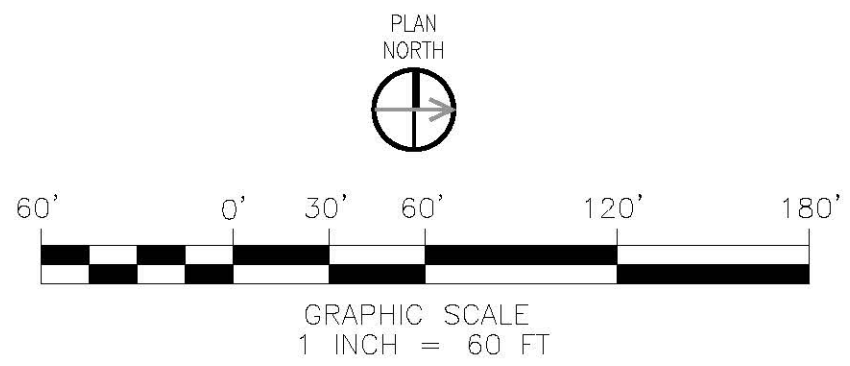
AS-BUILT
CONTRACTOR INSPECTOR _____ DATE STARTED _____
DATE COMPLETED _____

MATCHLINE - SEE SHEET 5



SMUGGLERS GULCH			
Number	Radius	Length	Line/Chord Direction
C9	800.00	40.88	N0° 55' 59.67"W
L10	-	42.63	N2° 23' 49.75"W
C10	1000.00	56.71	N0° 46' 20.82"W
L11	-	151.77	N0° 51' 08.12"E
C11	2000.00	45.15	N1° 29' 56.46"E
L12	-	108.97	N2° 08' 44.80"E
C12	800.00	35.83	N0° 51' 45.42"E
L13	-	99.95	N0° 25' 13.96"W
C13	500.00	23.89	N1° 47' 22.15"W
C14	877.83	55.18	N1° 21' 27.07"W
L14	-	130.90	N0° 26' 36.19"E
C15	209.11	44.50	N5° 39' 11.25"W
L15	-	94.88	N11° 44' 58.69"W
C16	168.26	32.17	N17° 13' 38.15"W
C17	221.94	18.26	N20° 20' 52.47"W
C18	67.25	26.99	N29° 29' 20.25"W
L16	-	16.56	N40° 59' 13.15"W
C19	450.62	57.32	N44° 37' 51.56"W
C20	283.02	39.98	N44° 13' 39.66"W
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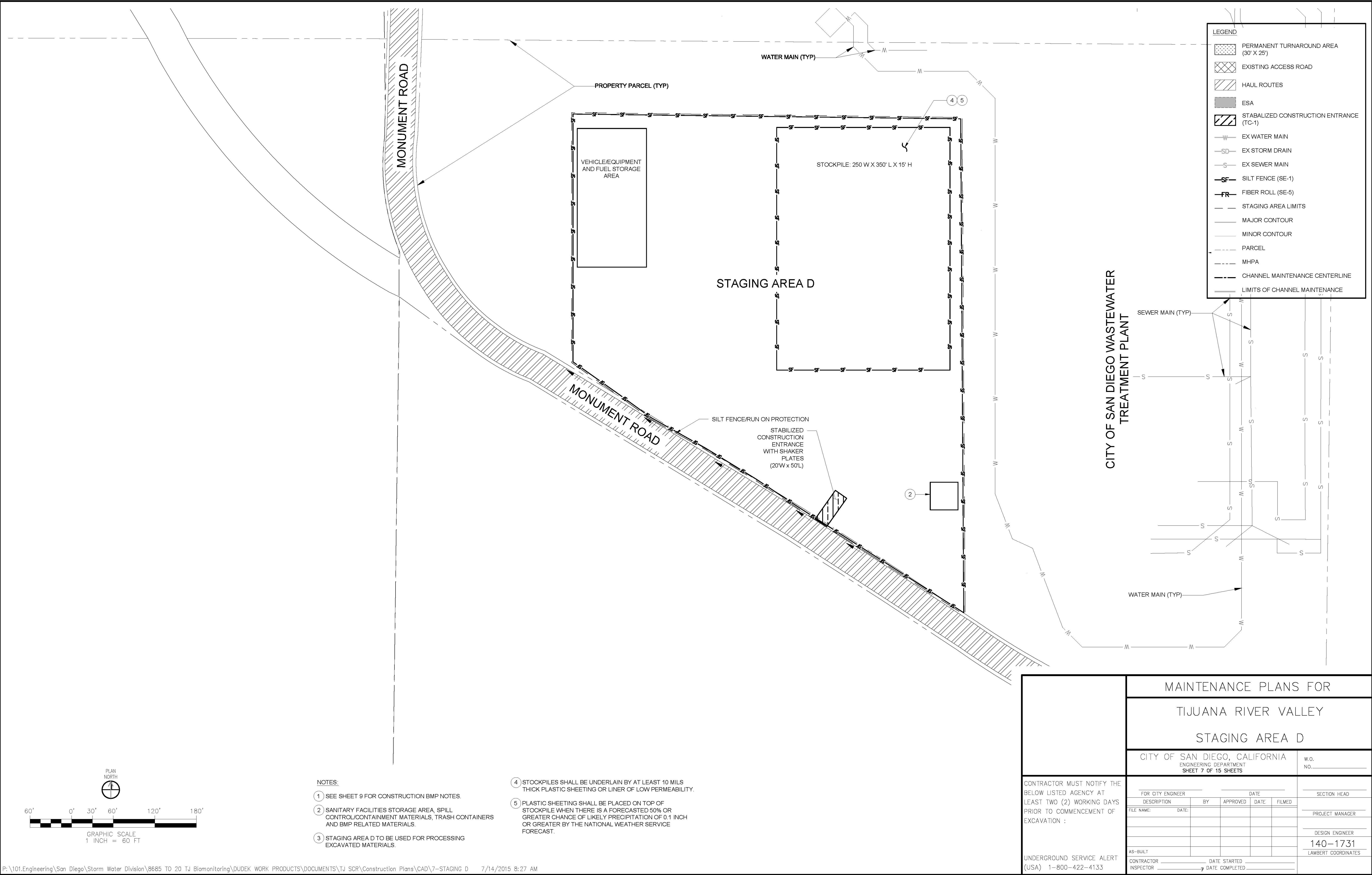
LEGEND	
	PERMANENT TURNAROUND AREA (30' X 25')
	EXISTING ACCESS ROAD
	HAUL ROUTES
	ESA
	STABILIZED CONSTRUCTION ENTRANCE (TC-1)
	EX WATER MAIN
	EX STORM DRAIN
	EX SEWER MAIN
	SILT FENCE (SE-1)
	FIBER ROLL (SE-5)
	STAGING AREA LIMITS
	MAJOR CONTOUR
	MINOR CONTOUR
	PARCEL
	MHPA
	CHANNEL MAINTENANCE CENTERLINE
	LIMITS OF CHANNEL MAINTENANCE

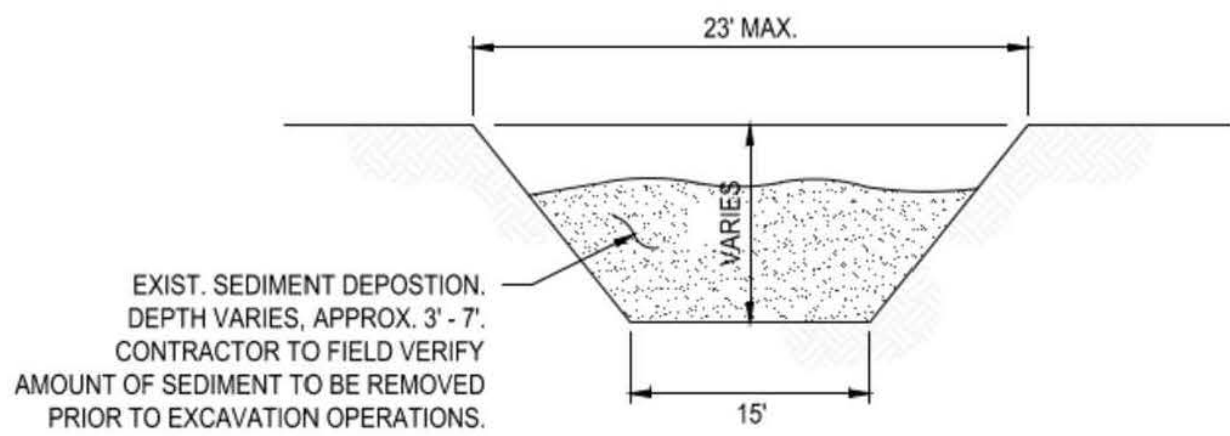


- NOTES:
- LOADING/TRANSPORT WILL OCCUR ALONG THE CHANNEL BANK. EXACT LOCATION TO BE COORDINATED WITH PROJECT BIOLOGIST IN THE FIELD. NO VEHICULAR ENTRY INTO CHANNEL IS PERMITTED AT THIS LOCATION.
 - SEE SHEET 8 FOR CHANNEL SECTION.
 - BMPs WILL ONLY BE INSTALLED IN ACTIVE WORK AREAS AND ALONG ACTIVE ACCESS ROADS BASED ON THE PHASING OF THE CHANNEL MAINTENANCE.

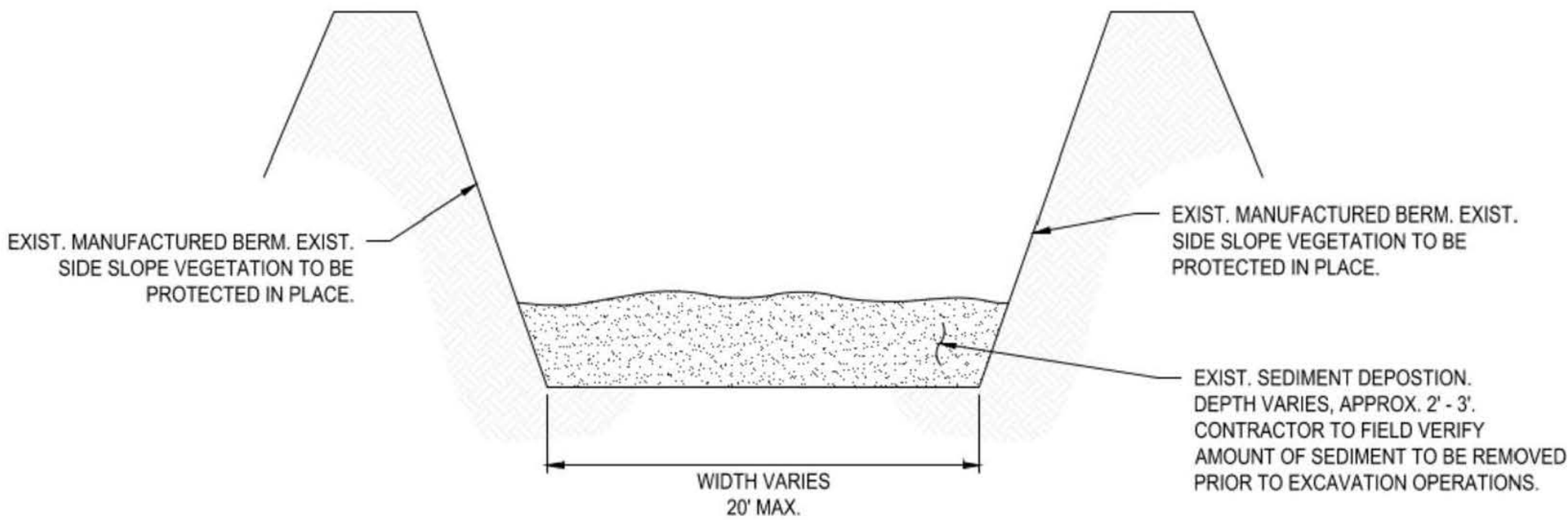
- NOTES:
- ENTIRE CHANNEL MAINTENANCE AREA SUBJECT TO IN-CHANNEL ENHANCEMENT MITIGATION REQUIREMENTS.
 - SEE SHEET 8 FOR CHANNEL SECTION.

		MAINTENANCE PLANS FOR			
		TIJUANA RIVER VALLEY			
		SMUGGLERS GULCH MAINTENANCE			
		CITY OF SAN DIEGO, CALIFORNIA ENGINEERING DEPARTMENT SHEET 6 OF 15 SHEETS			W.O. NO. _____
CONTRACTOR MUST NOTIFY THE BELOW LISTED AGENCY AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION :		FOR CITY ENGINEER		DATE	SECTION HEAD
		DESCRIPTION	BY	APPROVED	DATE
		FILE NAME:	DATE:		FILMED
		AS-BUILT			DESIGN ENGINEER
		CONTRACTOR		DATE STARTED	140-1731
		INSPECTOR		DATE COMPLETED	LAMBERT COORDINATES
		UNDERGROUND SERVICE ALERT (USA) 1-800-422-4133			





TIJUANA RIVER PILOT CHANNEL SECTION (TYPICAL)
NOT TO SCALE



SMUGGLER'S GULCH CHANNEL SECTION (TYPICAL)
NOT TO SCALE

	MAINTENANCE PLANS FOR					
	TIJUANA RIVER VALLEY					
	CROSS SECTIONS					
	CITY OF SAN DIEGO, CALIFORNIA ENGINEERING DEPARTMENT SHEET 8 OF 15 SHEETS					W.O. NO. _____
	CONTRACTOR MUST NOTIFY THE BELOW LISTED AGENCY AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION :					
FOR CITY ENGINEER _____ DATE _____						SECTION HEAD _____
DESCRIPTION		BY	APPROVED	DATE	FILMED	PROJECT MANAGER _____
FILE NAME: _____		DATE: _____	_____	_____	_____	DESIGN ENGINEER _____
_____		_____	_____	_____	_____	140-1731
_____		_____	_____	_____	_____	LAMBERT COORDINATES
AS-BUILT _____						
CONTRACTOR _____ DATE STARTED _____						
INSPECTOR _____ DATE COMPLETED _____						
UNDERGROUND SERVICE ALERT (USA) 1-800-422-4133						

CONSTRUCTION BMP NOTES:

1. ALL BEST MANAGEMENT PRACTICES (BMPs) WILL BE IMPLEMENTED PRIOR TO OR CONCURRENT WITH CONSTRUCTION AND MAINTAINED THROUGHOUT THE PROJECT. A QUALIFIED CONTACT PERSON WILL BE RESPONSIBLE FOR IMPLEMENTING THE WATER POLLUTION CONTROL PLAN (WPCP.) ALL WORK SHALL BE COMPLETED BETWEEN SEPTEMBER 15TH AND FEBRUARY 15TH UNLESS AN EXTENSION IS GRANTED IN CONFORMANCE WITH ALL APPLICABLE PERMITS.
2. CONTRACTOR WILL LIMIT ALL CONSTRUCTION RELATED ACTIVITIES TO THE PROJECT FOOTPRINT.
3. EXISTING VEGETATION TO BE PRESERVED IN PLACE SHALL BE CLEARLY MARKED WITH A BUFFER AREA FOLLOWING THE GUIDANCE OF BMP FACT SHEET EC-2.
4. REMOVAL OF VEGETATION MUST OCCUR BY HAND, MECHANICALLY, OR USING U.S. ENVIRONMENTAL PROTECTION AGENCY APPROVED HERBICIDES DEPLOYED WITH APPLICABLE BMPs TO PREVENT IMPACTS TO BENEFICIAL USES OF WATERS OF THE U.S. AND/OR STATE. USE OF AQUATIC PESTICIDES MUST BE DONE IN ACCORDANCE WITH STATE WATER RESOURCES CONTROL BOARD WATER QUALITY ORDER NO. 2004-0009-DWQ. AND ANY SUBSEQUENT REISSUANCE AS APPLICABLE. REMOVAL OF VEGETATION MUST OCCUR OUTSIDE OF THE AVIAN NESTING SEASON (MARCH 15-AUGUST 31).
5. REMOVAL AND DISPOSAL OF EXOTIC INVASIVE SPECIES SHALL BE DONE IN A MANNER THAT PREVENTS THE SPREAD OF EXOTIC INVASIVE SPECIES TO OTHER AREAS.
6. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ADEQUATE WIND EROSION CONTROL IS AVAILABLE ONSITE FOLLOWING BMP FACT SHEET WE-1.
7. STABILIZED CONSTRUCTION ROADWAYS AND ENTRANCE/EXITS WILL BE INSTALLED TO PREVENT TRACKING FOLLOWING THE GUIDANCE OF BMP FACT SHEET TC-1 AND TC-2.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP OF SILT AND MUD ON STREETS DUE TO EXCAVATION AND STOCKPILING ACTIVITIES. STREET SWEEPING AND VACUUMING WILL BE MANAGED FOLLOWING THE GUIDANCE OF BMP FACT SHEET SE-7.
9. THE PERIMETER OF THE SITES SHALL BE PROTECTED AGAINST RUN-ON AND RUNOFF USING LINEAR SEDIMENT BARRIERS SUCH AS DRAINAGE SWALES, SILT FENCE, FIBER ROLLS, AND/OR GRAVEL BAG BERMS. THE SEDIMENT CONTROL BMPs MAY BE USED INTERCHANGEABLY BASED ON SITE CONDITIONS AND STORMWATER CONCENTRATION.
10. CONTRACTOR TO PLACE LINEAR SEDIMENT BARRIERS AROUND WORK ZONE FOLLOWING THE GUIDANCE OF BMP FACT SHEETS SC-1, SC-5, SC-6 AND/OR SC-8. SC-1 OR SC-5 SHALL BE USED WHERE APPROPRIATE IN CONJUNCTION WITH CONSTRUCTION FENCE, WHICH WILL BE USED AS SUPPORT. FIBER ROLLS MUST BE ADEQUATELY SECURED SO THAT STORMWATER CANNOT GET AROUND OR UNDER THEM.
11. GRAVEL BAG BERMS MAY BE USED TO FORM BARRIERS ACROSS SLOPES TO INTERCEPT RUNOFF AND RELEASE IT AS SHEET FLOW, PROVIDING SOME SEDIMENT REMOVAL. GRAVEL BAGS CAN BE USED WHERE FLOWS ARE MODERATELY CONCENTRATED, SUCH AS IN DITCHES AND SWALES. GRAVEL BAGS SHALL BE USED AS A LINEAR SEDIMENT BARRIER IF FLOW EXCEEDS THE ABILITY OF FIBER ROLLS TO CONTROL. GRAVEL BAG BERMS WILL BE IMPLEMENTED FOLLOWING THE GUIDANCE OF BMP FACT SHEET SE-6.
12. FIBER ROLLS SHALL ALSO BE USED IN VEGETATED AREAS, ON SLOPES, AND TO FORM BERMS AROUND STOCKPILES. FIBER ROLLS SHALL BE IMPLEMENTED FOLLOWING THE GUIDANCE OF BMP FACT SHEET SC-5. SILT FENCE MAY ALSO BE USED AT TOES OF STOCKPILES.
13. WEATHER TRIGGERED ACTION PLAN SHALL BE IMPLEMENTED WHEN THERE IS A FORECASTED 50% OR GREATER CHANCE OF LIKELY PRECIPITATION OF 0.1 INCH OR GREATER BY THE NATIONAL WEATHER SERVICE FORECAST.
14. SOIL ROUGHENING CAN BE USED IN CONJUNCTION WITH HYDRAULICALLY APPLIED STABILIZATION METHODS, GEOTEXTILES, FIBER ROLLS, OR MULCH TO PROTECT, TEMPORARY STOCKPILES, OR SWALES FOLLOWING THE GUIDANCE OF BMP FACT SHEETS EC-4, EC-5, & EC-7.
15. CONTRACTOR SHALL RESTORE ALL EROSION CONTROL DEVICES TO WORKING ORDER AFTER EACH RUNOFF-PRODUCING RAINFALL.
16. TEMPORARY EROSION OR SEDIMENT CONTROL MEASURES WILL BE REMOVED UPON COMPLETION OF MAINTENANCE UNLESS THEIR REMOVAL WOULD RESULT IN GREATER ENVIRONMENTAL IMPACT THAN LEAVING THEM IN PLACE.
17. WASTE AND STOCKPILES SHALL BE MANAGED FOLLOWING THE GUIDANCE OF BMP FACT SHEETS WM-3, WM-5, WM-6, WM-7, AND WM-10. COMPOSTABLE GREEN WASTE MATERIALS SHALL BE TRANSPORTED TO AN APPROVED COMPOSTING FACILITY WHEN FEASIBLE.
18. EXPOSED WASTE MATERIALS AND SOIL STOCKPILES SHALL BE TEMPORARILY STORED IN STAGING AREAS B AND D UNTIL REMOVAL TO A PERMITTED DISPOSAL FACILITY. EXPOSED WASTE MATERIALS AND SOIL STOCKPILES SHALL BE PROTECTED IN PLACE USING SILT FENCE, FIBER ROLLS, GRAVEL BAGS, PLASTIC COVERS, AND/OR DRAINAGE SWALES FOLLOWING THE GUIDANCE OF BMP FACT SHEETS SE-1, SE-5, SE-6, EC-7 AND/OR EC-9. MANAGEMENT OF STOCKPILES TEMPORARILY MUST ALSO COMPLY WITH R9-2007-0104, CONDITIONAL WAIVERS OF WASTE DISCHARGE REQUIREMENTS FOR SPECIFIC TYPES OF DISCHARGE WITHIN THE SAN DIEGO REGION, CONDITIONAL WAIVER 8.
19. EXCAVATED MATERIALS FROM THE CHANNELS SHALL BE TRANSFERED TO STAGING AREA D TO BE SUFFICIENTLY DRIED AND TO BE PROCESSED TO SEPARATE OUT SEDIMENT, VEGETATION, TRASH AND TIRES.

20. WASTE TIRES SHALL BE SEPARATED FROM EXCAVATED MATERIALS AND TRANSPORTED TO AN APPROPRIATE DISPOSAL FACILITY.. IF MORE THAN NINE TIRES ARE IN A VEHICLE OR WASTE BIN AT ANY ONE TIME, THEY SHALL BE TRANSPORTED UNDER A COMPLETED COMPREHENSIVE TRIP LOG (CTL) TO DOCUMENT THAT THE TIRES WERE TAKEN TO AN APPROPRIATE DISPOSAL FACILITY.
21. EXCAVATED MATERIALS WILL BE REUSED, WHENEVER POSSIBLE, AS FILL MATERIAL, AGGREGATE, SAND REPLENISHMENT OR OTHER RAW MATERIAL USES. RE-USED MATERIAL (AGGREGATES, SOIL, SAND, OR SILT) SHALL BE DOCUMENTED IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.
22. HAZARDOUS MATERIALS USED DURING MAINTENANCE WILL NOT BE STORED WITHIN 50 FEET FROM STORM WATER FACILITIES. HAZARDOUS MATERIALS SHALL BE MANAGED AND STORED IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. A REGISTERED FIRST-RESPONSE, PROFESSIONAL HAZARDOUS MATERIALS CLEAN-UP/REMEDIATION SERVICE SHALL BE LOCALLY AVAILABLE ON CALL.
23. MAINTENANCE-RELATED TRASH WILL BE STORED IN AN APPROPRIATE RECEPTACLE WITH A COVER IN THE STAGING AREAS AT LEAST 150 FEET FROM STORM WATER FACILITIES, AND TRASH RECEPTACLES WILL BE EMPTIED/REMOVED REGULARLY (AT LEAST ONCE PER WEEK).
24. THE TREATMENT, STORAGE, AND DISPOSAL OF WASTEWATER DURING THE LIFE OF THE PROJECT MUST BE DONE IN ACCORDANCE WITH WASTE DISCHARGE REQUIREMENTS ESTABLISHED BY THE SAN DIEGO WATER BOARD PURSUANT TO CWC 13260.
25. CONSTRUCTION DEWATERING OPERATIONS ARE NOT ANTICIPATED FOR THE MAINTENANCE ACTIVITIES DUE TO DRY WEATHER EXCAVATION REQUIREMENTS. IF THEY ARE NEEDED, CONSTRUCTION DEWATERING OPERATIONS SHALL BE MANAGED FOLLOWING THE GUIDANCE OF BMP FACT SHEET NS-2. GROUNDWATER DEWATERING SHALL BE MANAGED IN ACCORDANCE WITH THE GENERAL WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES FROM TEMPORARY GROUNDWATER EXTRACTION AND SIMILAR WASTE DISCHARGES TO SAN DIEGO BAY, TRIBUTARIES THERETO UNDER TIDAL INFLUENCE, AND STORM DRAINS OR OTHER CONVEYANCE SYSTEMS TRIBUTARY THERETO (WDR) ORDER NO. R9-2007-0034, NPDES NO. CAG919001.
26. SANITARY FACILITIES WILL BE PROVIDED ONSITE FOR THE USE OF PERSONNEL AND WILL BE PROPERLY MAINTAINED, INCLUDING BEING EQUIPPED WITH SECONDARY CONTAINMENT FOLLOWING THE GUIDANCE OF BMP FACT SHEET WM-9
27. SPILLS SHALL BE MANAGED FOLLOWING THE GUIDANCE OF BMP FACT SHEET WM-4. SPILL CLEANUP MATERIALS SHALL BE AVAILABLE ONSITE AT ALL TIMES.
28. MATERIAL USE, DELIVERY AND STORAGE SHALL BE MANAGED FOLLOWING THE GUIDANCE OF BMP FACT SHEETS WM-1 AND WM-2.
29. WATER SHALL BE CONSERVED FOLLOWING THE GUIDANCE OF BMP FACT SHEET NS-1 SO AS NOT TO ALLOW UNAUTHORIZED NON-STORMWATER DISCHARGES.
30. BMP MATERIAL SHALL BE STORED ONSITE TO PROVIDE COMPLETE PROTECTION OF EXPOSED AREAS AND PREVENT OFFSITE SEDIMENT TRANSPORT.
31. VEHICLE AND EQUIPMENT FUELING/MAINTENANCE SHALL BE MANAGED FOLLOWING THE GUIDANCE OF BMP FACT SHEETS NS-9 AND NS-10. THE FUELING AREA SHALL BE LOCATED AT LEAST 100 FEET AWAY FROM THE CHANNELS IN STAGING AREAS B AND D. NO ROUTINE MAINTENANCE AND NO STORAGE OF PETROLEUM PRODUCTS OR CHEMICALS ARE PERMITTED ONSITE. RE-FUELING WILL BE RESTRICTED TO HEAVY EARTH MOVING EQUIPMENT (NOT DUMP TRUCKS) AND RESTRICTED TO THE STAGING AREA. EQUIPMENT WILL BE INSPECTED DAILY FOR FLUID LEAKS AND PROMPTLY CLEANED UP.
32. STATIONARY EQUIPMENT (CRANES, MOTORS, PUMPS, ETC.) LOCATED IN OR ADJACENT TO THE CHANNELS SHALL BE POSITIONED OVER DRIP PANS.
33. THE CONTRACTOR SHALL PROVIDE EQUIPMENT NECESSARY TO EXTINGUISH SMALL BRUSH FIRES (FROM SPARKING VEHICLES, ETC.) ON-SITE DURING ALL PHASES OF PROJECT ACTIVITIES, ALONG WITH TRAINED PERSONNEL FOR USE OF SUCH EQUIPMENT.
34. THE CONTRACTOR SHALL MONITOR THE 5 DAY WEATHER FORECAST. IF ANY PRECIPITATION IS FORECASTED, THE SITE SHALL BE SECURED TO PREVENT ANY CONSTRUCTION RELATED MATERIALS FROM LEAVING THE SITE AND ENTERING THE CHANNELS. THE SITE SHALL BE COMPLETELY SECURED ONE DAY PRIOR TO EXPECTED PRECIPITATION UNLESS PRIOR WRITTEN APPROVAL IS PROVIDED BY THE DEPARTMENT OF FISH AND GAME (DFG). NO CONSTRUCTION ACTIVITIES SHALL OCCUR DURING RAIN EVENTS. IF THE AMOUNT OF RAINFALL ACCUMULATED IN THE WATERSHED IS ONE INCH OR GREATER, CONSTRUCTION ACTIVITIES SHALL BE HALTED FOR TWO WEEKS OR UNTIL THE FLOWS HAVE RECEDED AND THE MOISTURE CONTENT OF THE SOILS HAVE STABILIZED.
35. SAMPLING AND ANALYSIS, MONITORING AND REPORTING, AND POST-MAINTENANCE MANAGEMENT OF THE PROJECT SHALL BE CONDUCTED AS DETERMINED NECESSARY BY THE CITY OF SAN DIEGO.
36. CHANNELS WILL BE INSPECTED WITHIN 72 HOURS OF THE FIRST 2-YEAR STORM FOLLOWING MAINTENANCE. IF SUBSTANTIAL EROSION HAS OCCURRED, EROSION CONTROL MEASURES RECOMMENDED BY THE FIELD ENGINEER WILL BE IMPLEMENTED TO REMEDIATE EROSION AREAS AND TO MINIMIZE FUTURE EROSION.
37. CONTRACTOR SHALL PROVIDE TRAINING FOR ALL PERSONNEL RESPONSIBLE FOR THE PROPER INSTALLATION, INSPECTION, AND MAINTENANCE OF ONSITE BMPs.

38. THE QUALIFIED CONTACT PERSON WILL ASSIGN A MONITOR FOR DAILY INSPECTION OF THE BMPs. EACH MORNING, THE MONITOR WILL CHECK THE NATIONAL WEATHER SERVICE FORECAST, COMPLETE BMP INSPECTION CHECKLIST, PERFORM ANY NECESSARY BMP MAINTENANCE/REPAIRS, AND REPORT THE RESULTS TO THE QUALIFIED CONTACT PERSON.COMPLETED INSPECTION CHECKLISTS WILL BE KEPT WITH THE WPCP.
39. PREVIOUSLY UNDISTURBED STAGING AREAS WILL BE REVEGETATED WITHIN 30 DAYS OF COMPLETION OF MAINTENANCE ACTIVITIES. THE REVEGETATED AREAS WILL BE MONITORED FOR A PERIOD OF NOT LESS THAN 25 MONTHS AFTER PLANTING.
40. FINAL LOCATION OF CHANNEL CENTERLINE WILL BE DETERMINED IN THE FIELD AND COORDINATED WITH NECESSARY PROJECT SPECIALISTS (BIOLOGIST, HISTORICAL MONITOR, ETC.).

MAINTENANCE PROCEDURE:

- PRE-MAINTENANCE ACTIVITIES:
1. PRECONSTRUCTION MEETING - CONDUCT A PRE-MAINTENANCE MEETING ON-SITE PRIOR TO THE START OF ANY MAINTENANCE ACTIVITY. QUALIFIED SPECIALISTS SHALL: INDICATE/IDENTIFY ANY SENSITIVE BIOLOGICAL/HISTORICAL/WATER QUALITY RESOURCES TO BE AVOIDED DURING MAINTENANCE, FLAG/DELINEATE SENSITIVE RESOURCES TO BE AVOIDED DURING MAINTENANCE, REVIEW SPECIFIC MEASURES TO BE IMPLEMENTED TO MINIMIZE DIRECT/INDIRECT IMPACTS, AND DIRECT CREWS OR OTHER PERSONNEL TO PROTECT SENSITIVE RESOURCES AS NECESSARY.
2. TRAINING - CONDUCT TRAINING FOR PERSONNEL RESPONSIBLE FOR THE PROPER INSTALLATION, INSPECTION, AND MAINTENANCE OF ON-SITE BMPs.
3. PRE-MAINTENANCE AND (POTENTIAL) DURING-MAINTENANCE PUMPING - COORDINATE WITH QUALIFIED BIOLOGIST TO DETERMINE LEAST-SENSITIVE PUMP INSTALLATION LOCATION. ENSURE NOISE ATTENUATION, IF NEEDED, BETWEEN THE PUMP AND SENSITIVE BIOLOGICAL RESOURCES. INSTALL CRITICALLY-SILENCED PUMP ADJACENT TO PONDED WATER PRESENT IN EASTERN PORTION OF PILOT CHANNEL. PUMP PONDED WATER WESTWARD THROUGH TEMPORARY HOSE(S) CONTAINED IN / ADJACENT TO CHANNEL TO LOCATION(S) DOWNSTREAM. DISCHARGE PUMPED WATER WITHIN CHANNEL ALLOWING FOR DISTRIBUTED DISCHARGE AND INFILTRATION. IF NEEDED, CONTINUE PUMPING ACTIVITIES DURING MAINTENANCE TO TRANSPORT PONDED WATER FROM WORK AREA TO WESTERN PORTION OF PILOT CHANNEL.
4. BMP INSTALLATION - INSTALL CONSTRUCTION BMPs (SEDIMENT, EROSION CONTROL, ETC.) IN ACCORDANCE WITH THE WATER POLLUTION CONTROL PLAN ALONG ALL EXISTING ACCESS ROADS AND STAGING AREAS.
5. MOBILIZE EQUIPMENT AT STAGING AREAS B AND D.
6. PERFORM NECESSARY MAINTENANCE ACTIVITIES ALONG THE EXISTING ACCESS ROADS.

- METHODOLOGY
1. SG NORTH OF DISNEY CROSSING TOWARD CONFLUENCE AND CULVERTS UNDER DISNEY CROSSING
- 1.1. EQUIPMENT ENTERS SG AT TEMPORARY ACCESS RAMP NORTH OF DISNEY CROSSING.
- 1.2. BULLDOZER PUSHES MATERIAL TO A CENTRAL LOCATION IN CHANNEL.
- 1.3. EXCAVATOR STATIONED AT CENTRAL LOCATION SCOOPS ACCUMULATED MATERIAL AND LOADS INTO ROCK TRUCK
- 1.4. ROCK TRUCK (USING DESIGNATED TURNAROUND AND ACCESS ROADS) HAULS MATERIAL TO STAGING AREA B
- 1.5. PLACE BARRIERS AT TRAIL HEADS AND DISNEY CROSSING.
2. CULVERTS UNDER DISNEY BRIDGE
- 2.1. SKID-STEER (BOBCAT) ENTERS SG AT TEMPORARY ACCESS RAMP.
- 2.2. SKID-STEER PUSHES MATERIAL IN CULVERTS TO EXCAVATOR STATIONED AT ACCESS RAMP.
- 2.3. EXCAVATOR LOADS ROCK TRUCK/DUMP TRUCK.
- 2.4. ROCK/DUMP TRUCK HAULS MATERIAL TO STAGING AREA B.
3. SG SOUTH OF DISNEY CROSSING TOWARD MONUMENT ROAD
- 3.1. BULLDOZER TO ENTER CHANNEL FROM DESIGNATED ACCESS POINT ALONG ACCESS ROUTE.
- 3.2. BULLDOZER PUSHES MATERIAL TO CENTRAL LOCATION.
- 3.3. EXCAVATOR STATIONED ON ACCESS ROAD SCOOPS MATERIAL FROM CENTRAL LOCATION.
- 3.4. EXCAVATOR LOAD MATERIAL INTO ROCK TRUCK.
- 3.5. ROCK TRUCK USES EXISTING ACCESS ROADS TO HAUL MATERIALS TO STAGING AREA B.
- 3.6. MAINTENANCE SHALL BE PERFORMED SUCH THAT IDENTIFIED SENSITIVE RESOURCES ARE AVOIDED. SENSITIVE RESOURCES ARE LOCATED ON THE EARTHEN BERM OF SG AS INDICATED ON THE PLAN SHEETS.
4. CULVERTS UNDER MONUMENT ROAD
- 4.1. VACTOR TRUCK STATIONED ON MONUMENT ROAD FLUSHES ACCUMULATED MATERIAL IN CULVERT AND VACUUMS MATERIAL.
- 4.2. MATERIALS TO BE HAULED TO AN APPROPRIATE DISPOSAL FACILITY.
5. PILOT CHANNEL
- 5.1. FOLLOW SG NORTH OF DISNEY CROSSING METHODOLOGY.
- 5.2. CONSTRUCT NEW TURNAROUND ALONG NORTH BANK AND MAINTAIN EXISTING TURNAROUNDS.
- 5.3. PERFORM INSPECTION/MAINTENANCE OF GABION ROCK MATTRESS LOCATED NEAR CONFLUENCE OF SG AND PILOT CHANNELS.
6. STAGING AREA B
- 6.1. ROCK TRUCK TRANSPORTS/DUMPS SPOILS TO STAGING AREA B.
- 6.2. BULLDOZER MANAGES STOCKPILE.
- 6.3. LOADER DUMPS MATERIAL INTO DUMP TRUCK.
- 6.4. DUMP TRUCK HAULS MATERIAL TO STAGING AREA D.

7. STAGING AREA D
- 7.1. DUMP TRUCK TRANSPORTS/DUMPS SPOILS TO STAGING AREA D.
- 7.2. BULLDOZER MANAGES STOCKPILE.
- 7.3. BACKHOE SEPERATES AND SORTS MATERIALS (WASTE TIRES,VEGETATION, TRASH) FROM STOCKPILE.
- 7.4. LOADER DUMPS MATERIAL INTO DUMP TRUCK.
- 7.5. DUMPTRUCK HAULS TO APPROPRIATE DISPOSAL FACILITY.
8. AS PONDED WATER IS REMOVED FROM EASTERN END OF PILOT CHANNEL, ASSESS THE AMOUNT OF ACCUMULATED SEDIMENT, TRASH AND DEBRIS PRESENT IN THE PILOT CHANNEL EAST OF THE HOLLISTER STREET BRIDGE WITHIN THE PROJECT AREA. BASED ON THE ASSESSMENT, CONDUCT CHANNEL CLEARING TO RESTORE THE APPROXIMATE 5 FEET DEEP, WITH A 23-FOOT TOP WIDTH, AND A 15-FOOT STREAMBED WIDTH OF THE PILOT CHANNEL IN THIS AREA AS NECESSARY.
9. AT THE CONCLUSION OF MAINTENANCE ACTIVITIES, RESTORE TRAIL ACCESS FROM THE AREA NORTH OF THE PILOT CHANNEL ADJACENT TO THE CONFLUENCE OF THE PILOT CHANNEL AND SMUGGLER'S GULCH CHANNEL TO THE AREA SOUTH OF THE PILOT CHANNEL. WEST OF SMUGGLER'S GULCH AS NECESSARY. REPAIR TO INCLUDE GRADING OF APPROXIMATE 8 FOOT WIDE SECTION WITHIN THE 23-FOOT TOP WIDTH OF THE PILOT CHANNEL USING NATIVE SOILS TO RE-ESTABLISH THE TRAIL CONNECTION USING A MAXIMUM 3:1 SLOPE WITH A 4:1 SLOPE PREFERRED.

- POST-CONSTRUCTION
1. DEMOBILIZE EQUIPMENT.
2. REMOVE TEMPORARY CONSTRUCTION BMPs.

- CONSTRUCTION STORMWATER BMP REQUIREMENTS
1. THIS CONSTRUCTION SITE IS HIGH PRIORITY.

OTHER BMP REQUIREMENTS:

1. THE MASTER LIST OF BMPs, INCLUDED AS APPENDIX B IN THE WPCP, SHOULD BE CONSULTED FOR ADDITIONAL BIOLOGICAL, CULTURAL, AND WATER QUALITY RELATED REQUIREMENTS.
2. AN ONSITE PRE-MAINTENANCE MEETING SHOULD BE CONDUCTED PRIOR TO THE START OF THE PROJECT. IN ATTENDANCE AT THE MEETING SHOULD BE THE: MAINTENANCE CONTRACTOR, CITY STORM WATER DIVISION REPRESENTATIVES, MITIGATION MONITORING COORDINATOR, QUALIFIED WATER QUALITY SPECIALIST, PROJECT BIOLOGIST/MONITOR, QUALIFIED ARCHAEOLOGIST/HISTORICAL MONITOR/PALEONTOLOGICAL MONITOR, AND ANY OTHER KEY PERSONNEL. SENSITIVE HISTORICAL AND BIOLOGICAL RESOURCES SHOULD BE IDENTIFIED TO BE AVOIDED DURING THE MAINTENANCE ACTIVITIES AS WELL AS ANY CONDITIONS FOR POSSIBLE NIGHT AND/OR WEEKEND WORK. THE WATER QUALITY SPECIALIST SHOULD IDENTIFY MITIGATION MEASURES, PROTOCOLS AND BMPs TO BE CARRIED OUT DURING THE MAINTENANCE. THE MASTER LIST OF BMPs PROVIDES DETAILED INFORMATION ON PROCEDURES TO BE FOLLOWED.
3. THE CITY SHALL NOTIFY DFG, IN WRITING, AT LEAST FIVE DAYS PRIOR TO INITIATION OF CONSTRUCTION (PROJECT) ACTIVITIES AND AT LEAST FIVE DAYS PRIOR TO COMPLETION OF CONSTRUCTION (PROJECT) ACTIVITIES, EACH TIME PROJECT ACTIVITIES OCCUR. NOTIFICATION SHALL BE SENT TO DFG'S SOUTH COAST OFFICE, ATTN: STREAMBED ALTERATION PROGRAM - SM # 1600-2011-0271-R5.
4. AVOID THE INTRODUCTION OF INVASIVE PLANT SPECIES WITH PHYSICAL EROSION CONTROL MEASURES.
5. REMOVE ARUNDO THROUGH ONE, OR A COMBINATION OF, THE FOLLOWING METHODS : (1) FOLIAR SPRAY (SPRAYING HERBICIDE ON LEAVES AND STEMS WITHOUT CUTTING FIRST) WHEN ARUNDO OCCURS IN MONOTYPIC STANDS, OR (2) CUT AND PAINT (CUTTING STEMS CLOSE TO THE GROUND AND SPRAYING OR PAINTING HERBICIDE ON CUT STEM SURFACE) WHEN ARUNDO IS INTERMIXED WITH NATIVE PLANTS. WHEN SEDIMENT SUPPORTING ARUNDO MUST BE REMOVED, THE SEDIMENT SHALL BE EXCAVATED TO A DEPTH SUFFICIENT TO REMOVE THE RHIZOMES, WHEREVER FEASIBLE. FOLLOWING REMOVAL OF SEDIMENT CONTAINING RHIZOMES, LOOSE RHIZOME MATERIAL SHALL BE REMOVED FROM THE CHANNEL AND DISPOSED OFFSITE. AFTER THE INITIAL TREATMENT, THE AREA OF REMOVAL SHALL BE INSPECTED ON A QUARTERLY BASIS FOR UP TWO YEARS, OR UNTIL NO RESPROUTING IS OBSERVED DURING AN INSPECTION. IF RESPROUTING IS OBSERVED, THE CUT AND PAINT METHOD SHALL BE APPLIED TO ALL RESPROUTS.
6. PRIOR TO COMMENCING ANY MAINTENANCE ACTIVITY WHICH MAY IMPACT SENSITIVE BIOLOGICAL RESOURCES, THE MONITORING BIOLOGIST SHALL VERIFY THAT THE FOLLOWING ACTIONS HAVE BEEN TAKEN, AS APPROPRIATE:

FENCING, FLAGGING, SIGNAGE, OR OTHER MEANS TO PROTECT SENSITIVE RESOURCES TO REMAIN AFTER MAINTENANCE HAS BEEN IMPLEMENTED;

NOISE ATTENUATION MEASURES NEEDED TO PROTECT SENSITIVE WILDLIFE ARE IN PLACE AND EFFECTIVE; AND/OR

NESTING RAPTORS HAVE BEEN IDENTIFIED AND NECESSARY MAINTENANCE SETBACKS HAVE BEEN ESTABLISHED IF MAINTENANCE IS TO OCCUR BETWEEN JANUARY 15 AND AUGUST 31. SEE THE MASTER LIST OF BMPs FOR ADDITIONAL INFORMATION.
7. A QUALIFIED BIOLOGICAL MONITOR THAT CAN RECOGNIZE CLAPPER RAILS AND THEIR VOCALIZATIONS SHALL BE PRESENT DURING ALL THE PROJECT MAINTENANCE ACTIVITY WITHIN THE CHANNELS, ENFORCE THE LIMITS OF MAINTENANCE AND ENSURE THAT NO HARM TO CLAPPER RAILS OCCURS. BEFORE EACH WORKDAY IN THE PILOT CHANNEL BEGINS, THE BIOLOGICAL MONITOR SHALL WALK UPSTREAM TO DOWNSTREAM ON EITHER SIDE OF THE CHANNEL TO EVALUATE IF CLAPPER RAILS HAVE ENTERED THE PROJECT AREA. THE BIOLOGICAL MONITOR WILL FOLLOW PROCEDURES OUTLINED IN THE MASTER LIST OF BMPs.
8. CONTRACTOR SHALL HAVE A QUALIFIED BIOLOGIST ON SITE DAILY DURING PROJECT ACTIVITY TO ENSURE THAT AGREEMENT CONDITIONS ARE BEING MET AND MINIMIZE IMPACTS TO HABITAT. THE BIOLOGIST WILL BE KNOWLEDGEABLE OF VIREO BIOLOGY AND ECOLOGY. THE BIOLOGIST SHALL BE AUTHORIZED TO STOP CONSTRUCTION IF NECESSARY TO PROTECT FISH AND WILDLIFE RESOURCES. IF ANY PROTECTED SPECIES ARE FOUND THE BIOLOGIST SHALL INFORM DFG. IF THERE IS A THREAT OF HARM TO ANY PROTECTED SPECIES OR OTHER AQUATIC WILDLIFE THE BIOLOGIST SHALL HALT CONSTRUCTION AND NOTIFY DFG. CONSULTATION WITH DFG IS REQUIRED BEFORE RE-COMMENCING WORK. THE QUALIFIED BIOLOGIST WILL FOLLOW PROCEDURES OUTLINED IN THE MASTER LIST OF BMPs.
9. IF ANY WILDLIFE IS ENCOUNTERED DURING THE COURSE OF CONSTRUCTION, SAID WILDLIFE SHALL BE ALLOWED TO LEAVE THE CONSTRUCTION AREA UNHARMED.
10. PRIOR TO THE START OF MAINTENANCE ACTIVITIES, ALL HISTORICAL RESOURCES AREAS SHALL BE FLAGGED, CAPPED OR FENCED.
11. AREAS IDENTIFIED AS MODERATE TO HIGH POTENTIAL FOR THE OCCURRENCE OF SIGNIFICANT HISTORICAL RESOURCES SHALL BE IDENTIFIED FOLLOWING THE PROCEDURES OUTLINES IN THE MASTER LIST OF BMPs. AN ARCHAEOLOGICAL MONITOR SHALL BE PRESENT ONSITE FULL TIME DURING CONSTRUCTION ACTIVITIES IN AREAS IDENTIFIED AS ARCHEOLOGICAL RESOURCES.
12. IF HUMAN REMAINS ARE DISCOVERED, WORK SHALL HALT IN THAT AREA AND NO SOIL SHALL BE EXPORTED OFF-SITE UNTIL A DETERMINATION CAN BE MADE. THE PROCEDURES OUTLINED IN THE MASTER LIST OF BMPs SHALL BE FOLLOWED.
13. IF A LISTED SPECIES IS LOCATED WITHIN 500 FEET OF A PROPOSED MAINTENANCE ACTIVITY AND MAINTENANCE WOULD OCCUR DURING THE

ASSOCIATED BREEDING SEASON, AN ANALYSIS OF THE NOISE GENERATED BY MAINTENANCE ACTIVITY SHALL BE COMPLETED BY A QUALIFIED ACOUSTICIAN (POSSESSING CURRENT NOISE ENGINEER LICENSE OR REGISTRATION WITH MONITORING NOISE LEVEL EXPERIENCE WITH LISTED ANIMAL SPECIES) AND APPROVED BY THE ADD ENVIRONMENTAL DESIGNEE. THE MASTER LIST OF BMPs PROVIDES DETAILED INFORMATION ON PROCEDURES TO BE FOLLOWED.

14. ALL LIGHTING ADJACENT TO, OR WITHIN, THE MHPA SHALL BE SHIELDED, UNIDIRECTIONAL, LOW PRESSURE SODIUM ILLUMINATION (OR SIMILAR) AND DIRECTED AWAY FROM SENSITIVE AREAS USING APPROPRIATE PLACEMENT AND SHIELDS. IF LIGHTING IS REQUIRED FOR NIGHTTIME MAINTENANCE, IT SHALL BE DIRECTED AWAY FROM THE PRESERVE AND THE TOPS OF ADJACENT TREES WITH POTENTIALLY NESTING RAPTORS, USING APPROPRIATE PLACEMENT AND SHIELDING.

	MAINTENANCE PLANS FOR				
	TIJUANA RIVER VALLEY				
	CONSTRUCTION BMP NOTES				
	CITY OF SAN DIEGO, CALIFORNIA ENGINEERING DEPARTMENT SHEET 10 OF 15 SHEETS				W.O. NO. _____
CONTRACTOR MUST NOTIFY THE BELOW LISTED AGENCY AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION :	FOR CITY ENGINEER				SECTION HEAD
	DESCRIPTION	BY	APPROVED	DATE	FILMED
	FILE NAME:	DATE:			
AS-BUILT					DESIGN ENGINEER
CONTRACTOR INSPECTOR	DATE STARTED _____ DATE COMPLETED _____				140-1731 LAMBERT COORDINATES
UNDERGROUND SERVICE ALERT (USA) 1-800-422-4133					

ENVIRONMENTAL MITIGATION REQUIREMENTS:

CHAPTER 11.0 MITIGATION MONITORING AND REPORTING PROGRAM

Section 21081.6 of the State of California Public Resources Code requires a Lead or Responsible Agency that approves or carries out a project where an environmental impact report (EIR) has identified significant environmental effects to adopt a “reporting or monitoring program for adopted or required changes to mitigate or avoid significant environmental effects.” The City of San Diego is the lead Agency for the Master Program PEIR, and, therefore, is responsible for implementation of the MMRP. Because the PEIR recommends measures to mitigate these impacts, an MMRP is required to ensure that adopted mitigation measures are implemented.

As Lead Agency for the proposed project under CEQA, the City of San Diego will administer the MMRP for the following environmental issue areas: biological resources, historical resources, land use policies, paleontological resources, and water quality.

GENERAL

General Mitigation 1: Prior to commencement of work, the ADD Environmental Designee of the Entitlements Division shall verify that mitigation measures for impacts to biological resources (Mitigation Measures 4.3.1 through 4.3.20), historical resources (Mitigation Measures 4.4.1 and 4.4.2), land use policy (Mitigation Measures 4.1.1 through 4.1.13), paleontological resources (Mitigation Measure 4.7.1), and water quality (Mitigation Measures 4.8.1 through 4.8.3) have been included in entirety on the submitted maintenance documents and contract specifications, and included under the heading, "Environmental Mitigation Requirements." In addition, the requirements for a Pre-maintenance Meeting shall be noted on all maintenance documents.

General Mitigation 2: Prior to the commencement of work, a Pre-maintenance Meeting shall be conducted and include, as appropriate, the MMC, SWD Project Manager, Biological Monitor, Historical Monitor, Paleontological Monitor, Water Quality Specialist, and Maintenance Contractor, and other parties of interest.

General Mitigation 3: Prior to the commencement of work, evidence of compliance with other permitting authorities is required, if applicable. Evidence shall include either copies of permits issued, letters of resolution issued by the Responsible Agency documenting compliance, or other evidence documenting compliance and deemed acceptable by the ADD Environmental Designee.

General Mitigation 4: Prior to commencement of work and pursuant to Section 1600 et seq. of the State of California Fish & Game Code, evidence of compliance with Section 1605 is required, if applicable. Evidence shall include either copies of permits issued, letters of resolution issued by the Responsible Agency documenting compliance, or other evidence documenting compliance and deemed acceptable by the ADD Environmental Designee.

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Mitigation which involves habitat enhancement, restoration or creation shall include a wetland mitigation plan containing the following information:

- Conceptual planting plan including planting zones, grading, and irrigation;
- Seed mix/planting palette;
- Planting specifications;
- Monitoring program including success criteria; and
- Long-term maintenance and preservation plan.

Mitigation which involves habitat acquisition and preservation shall include the following:

- Location of proposed acquisition;
- Description of the biological resources to be acquired including support for the conclusion that the acquired habitat mitigates for the specific maintenance impact; and
- Documentation that the mitigation area would be adequately preserved and maintained in perpetuity.

Mitigation which involves the use of mitigation credits shall include the following:

- Location of the mitigation bank;
- Description of the credits to be acquired including support for the conclusion that the acquired habitat mitigates for the specific maintenance impact; and
- Documentation that the credits are associated with a mitigation bank which has been approved by the appropriate Resource Agencies.

Mitigation Measure 4.3.11: Upland impacts shall be mitigated through payment into the City's Habitat Acquisition Fund, acquisition and preservation of specific land, or purchase of mitigation credits in accordance with the ratios identified in Table 4.3-11. Upland mitigation shall be completed within six months of the date the related maintenance has been completed.

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BIOLOGICAL RESOURCES

Potential impacts to biological resources would be reduced to below a level of significance through implementation of the following mitigation measures as well as Mitigation Measures 4.1-1 through 4.1-25.

Mitigation Measure 4.3.1: Prior to commencement of any activity within a specific annual maintenance program, a qualified biologist shall prepare an IBA for each area proposed to be maintained. The IBA shall be prepared in accordance with the specifications included in the Master Program.

Mitigation Measure 4.3.2: No maintenance activities within a proposed annual maintenance program shall be initiated before the City's Assistant Deputy Director (ADD) Environmental Designee and state and federal agencies with jurisdiction over maintenance activities have approved the IMPs and IBAs including proposed mitigation for each of the proposed activities. In their review, the ADD Environmental Designee and agencies shall confirm that the appropriate maintenance protocols have been incorporated into each IMP.

Mitigation Measure 4.3.3: No maintenance activities within a proposed annual maintenance program shall be initiated until the City's ADD Environmental Designee and Mitigation Monitoring Coordinator (MMC) have approved the qualifications for biologist(s) who shall be responsible for monitoring maintenance activities which may impact sensitive biological resources.

Mitigation Measure 4.3.4: Prior to undertaking any maintenance activity included in an annual maintenance program, a mitigation account shall be established to provide sufficient funds to implement all biological mitigation associated with the proposed maintenance activities. The fund amount shall be determined by the ADD Environmental Designee. The account shall be managed by the City's SWD, with quarterly status reports submitted to DSD. The status reports shall separately identify upland and wetland account activity. Based upon the impacts identified in the IBAs, money shall be deposited into the account, as part of the project submittal, to ensure available funds for mitigation.

Mitigation Measure 4.3.5: Prior to commencing any activity that could impact wetlands, evidence of compliance with other permitting authorities is required, if applicable. Evidence shall include copies of permits issued, letters of resolution issued by the Responsible Agency documenting compliance, or other evidence documenting compliance and deemed acceptable by the ADD Environmental Designee.

Mitigation Measure 4.3.6: Prior to commencing any activity where the IBA indicates significant impacts to biological resources may occur, a pre-maintenance meeting shall be held on site with the following in attendance: City's SWD Maintenance Manager (MM), MMC, and Maintenance Contractor (MC). The biologist selected to monitor the activities shall be present. At this meeting, the monitoring biologist shall identify and discuss the maintenance protocols that apply to the maintenance activities.

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Table 4.3-11
UPLAND HABITAT MITIGATION RATIOS¹

Vegetation Type	Tier	Location of Impact with Respect to the MHPA	
		Inside	Outside
Coast live oak woodland	I	2:1	1:1
Scrub oak chaparral	I	2:1	1:1
Southern foredunes	I	2:1	1:1
Beach	I	2:1	1:1
Diegan coastal sage scrub	II	1:1	1:1
Coastal sage-chaparral scrub	II	1:1	1:1
Broom baccharis scrub	II	1:1	1:1
Southern mixed chaparral	IIA	1:1	0.5:1
Non-native grassland	IIIB	1:1	0.5:1
Eucalyptus woodland	IV	--	--
Non-native vegetation/ornamental	IV	--	--
Disturbed habitat/ruderal	IV	--	--
Developed	IV	--	--

¹Assumes mitigation occurs within an MHPA

Mitigation Measure 4.3.12: Loss of habitat for the coastal California gnatcatcher shall be mitigated through the acquisition of suitable habitat or mitigation credits at a ratio of 1:1. Mitigation shall take place within the MHPA, and shall be accomplished within six months of the date maintenance is completed.

Mitigation Measure 4.3.13: Prior to commencing any maintenance activity which may impact sensitive biological resources, the monitoring biologist shall verify that the following actions have been taken, as appropriate:

- Fencing, flagging, signage, or other means to protect sensitive resources to remain after maintenance have been implemented;
- Noise attenuation measures needed to protect sensitive wildlife are in place and effective; and/or
- Nesting raptors have been identified and necessary maintenance setbacks have been established if maintenance is to occur between January 15 and August 31.

The designated biological monitor shall be present throughout the first full day of maintenance, whenever mandated by the associated IBA. Thereafter, through the duration of the maintenance activity, the monitoring biologist shall visit the site weekly to confirm that measures required to protect sensitive resources (e.g., flagging, fencing, noise barriers) continue to be effective. The monitoring biologist shall document monitoring events via a Consultant Site Visit Record. This record shall be sent to the MM each month. The MM will forward copies to MMC.

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At the pre-maintenance meeting, the monitoring biologist shall submit to the MMC and MC a copy of the maintenance plan (reduced to 11"x17") that identifies areas to be protected, fenced, and monitored. This data shall include all planned locations and design of noise attenuation walls or other devices. The monitoring biologist also shall submit a maintenance schedule to the MMC and MC indicating when and where monitoring is to begin and shall notify the MMC of the start date for monitoring.

Mitigation Measure 4.3.7: Within three months following the completion of mitigation monitoring, two copies of a written draft report summarizing the monitoring shall be prepared by the monitoring biologist and submitted to the MMC for approval. The draft monitoring report shall describe the results including any remedial measures that were required. Within 90 days of receiving comments from the MMC on the draft monitoring report, the biologist shall submit one copy of the final monitoring report to the MMC.

Mitigation Measure 4.3.8: Within six months of the end of an annual storm water facility maintenance program, the monitoring biologist shall complete an annual report which shall be distributed to the following agencies: the City of San Diego DSD, CDFG, RWQCB, USFWS, and Corps. At a minimum, the report shall contain the following information:

- Tabular summary of the biological resources impacted during maintenance and the mitigation;
- Master table containing the following information for each individual storm water facility or segment which is regularly maintained;
- Date and type of most recent maintenance;
- Description of mitigation which has occurred; and
- Description of the status of mitigation which has been implemented for past maintenance activities.

Mitigation Measure 4.3.9: Wetland impacts resulting from maintenance shall be mitigated in one of the following three ways: (1) habitat creation, restoration, and/or enhancement concurrent with maintenance, (2) habitat creation, restoration, and/or enhancement prior to maintenance, or (3) mitigation credits. The amount of mitigation When mitigation is proposed to be accomplished through concurrent creation, restoration or enhancement, the amount of planting shall be in accordance with ratios in Table 4.3-10 unless different mitigation ratios are required by state or federal agencies with jurisdiction over the impacted wetlands. In this event, the mitigation ratios required by these agencies will supersede, and not be in addition to, the ratios defined in Table 4.3-10. When previously created, restored or enhanced wetland habitat is proposed to be used for mitigation, the ratio shall be 1:1, provided the habitat has been determined to be successfully established by the ADD Environmental Designee in consultation with the Resource Agencies prior to commencing the maintenance activity. Mitigation credits may be used at a ratio of 1:1, provided the mitigation credits are from a mitigation bank which has been approved by the Resource Agencies. No maintenance shall commence until the ADD Environmental Designee has

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Mitigation Measure 4.3.14: Whenever off-site mitigation would result in a physical disturbance to the proposed mitigation area, the City will conduct an environmental review of the proposed mitigation plan in accordance with CEQA. If the off-site mitigation would have a significant impact on biological resources associated with the mitigation site, mitigation measures will be identified and implemented in accordance with the MMRP resulting from that CEQA analysis.

Mitigation Measure 4.3.15: Impacts to listed or endemic sensitive plant species shall be offset through implementation of one or a combination of the following actions:

- Impacted plants would be salvaged and relocated;
- Seeds from impacted plants would be collected for use at an off-site location;
- Off-site habitat that supports the species impacted shall be enhanced and/or supplemented with seed collected on site; and/or
- Comparable habitat at an off-site location shall be preserved.

Mitigation which involves relocation, enhancement or transplanting sensitive plants shall include the following:

- Conceptual planting plan including grading and, if appropriate, temporary irrigation;
- Planting specifications;
- Monitoring Program including success criteria; and
- Long-term maintenance and preservation plan.

Mitigation Measure 4.3.16: Maintenance activities shall not occur within the following areas:

- 300 feet from any nesting site of Cooper's hawk (*Accipiter cooperii*);
- 1,500 feet from known locations of the southern pond turtle (*Clemmys marmorata pallida*);
- 900 feet from any nesting sites of northern harriers (*Circus cyaneus*);
- 4,000 feet from any nesting sites of golden eagles (*Aquila chrysaetos*); or
- 300 feet from any occupied burrow or burrowing owls (*Athene cunicularia*).

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determined that mitigation proposed for a specific maintenance activity meets one of these three two options.

Table 4.3-10 WETLAND MITIGATION RATIOS	
WETLAND TYPE	MITIGATION RATIO ¹
Southern riparian forest	3:1
Southern sycamore riparian woodland	3:1
Riparian woodland	3:1
Coastal saltmarsh	4:1
Coastal brackish marsh	4:1
Southern willow scrub	2:1
Mule fat scrub	2:1
Riparian scrub ²	2:1
Freshwater marsh ²	4:1
Cismontane alkali marsh	4:1
Disturbed wetland	4:1
Streambed/natural flood channel	NA2:1

¹ Mitigation ratio within the Coastal Zone will be 3:1
² Mitigation ratio within the Coastal Zone will be 4:1
³ Mitigation done in advance or through purchase of mitigation credits would be at a 1:1 ratio.

Mitigation locations for wetland impacts shall be selected using the following order of preference, based on the best mitigation value to be achieved.

1. Within impacted watershed, within City limits.
2. Within impacted watershed, outside City limits on City-owned or other publicly-owned land.
3. Outside impacted watershed, within City limits.
4. Outside impacted watershed, outside City limits on City-owned or other publically-owned land.

In order to mitigate for impacts in an area outside the limits of the watershed within which the impacts occur, the SWD must demonstrate to the satisfaction of the ADD Environmental Designee in consultation with the Resource Agencies that no suitable location exists within the impacted watershed.

Mitigation Measure 4.3.10: Whenever maintenance will impact wetland vegetation, a wetland mitigation plan shall be prepared in accordance with the Conceptual Wetland Restoration Plan contained in Appendix H of the Biological Technical Report, included as Appendix D.3 of the PEIR.

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- B, unless other specific arrangements have been made.
- B. If night and/or weekend work becomes necessary during the course of maintenance
1. The Maintenance Manager shall notify the RE, or BI, as appropriate, a minimum of 24 hours before the work is to begin.
2. The RE, or BI, as appropriate, shall notify MMC immediately.
- C. All other procedures described above shall apply, as appropriate.

4.7.1.5 Post Maintenance

- A. Preparation and Submittal of Draft Monitoring Report
1. The PI shall submit two copies of the Draft Monitoring Report (even if negative), prepared in accordance with the Paleontological Guidelines which describes the results, analysis, and conclusions of all phases of the Paleontological Monitoring Program (with appropriate graphics) to MMC via the RE for review and approval within 90 days following the completion of monitoring.
- a. For significant paleontological resources encountered during monitoring, the Paleontological Recovery Program or Pipeline Trenching Discovery Process shall be included in the Draft Monitoring Report.
- b. Recording Sites with the San Diego Natural History Museum
- The PI shall be responsible for recording (on the appropriate forms) any significant or potentially significant fossil resources encountered during the Paleontological Monitoring Program in accordance with the City's Paleontological Guidelines, and submittal of such forms to the San Diego Natural History Museum with the Final Monitoring Report.
2. MMC shall return the Draft Monitoring Report to the PI via the RE for revision or, for preparation of the Final Report.
3. The PI shall submit revised Draft Monitoring Report to MMC via the RE for approval.
4. MMC shall provide written verification to the PI of the approved report.
5. MMC shall notify the RE or BI, as appropriate, of receipt of all Draft Monitoring Report submittals and approvals.
- B. Handling of Fossil Remains
1. The PI shall be responsible for ensuring that all fossil remains collected are cleaned and catalogued.
- C. Curation of artifacts: Deed of Gift and Acceptance Verification
1. The PI shall be responsible for ensuring that all fossil remains associated with the monitoring for this project are permanently curated with an appropriate institution.
2. The PI shall submit the Deed of Gift and catalogue record(s) to the RE or BI, as appropriate for donor signature with a copy submitted to MMC.
3. The RE or BI, as appropriate shall obtain signature on the Deed of Gift and shall

- return to PI with copy submitted to MMC.
4. The PI shall include the Acceptance Verification from the curation institution in the Final Monitoring Report submitted to the RE or BI and MMC.
- D. Final Monitoring Report(s)
1. The PI shall submit two copies of the Final Monitoring Report to MMC (even if negative), within 90 days after notification from MMC of the approved report.
2. The RE shall, in no case, issue the Notice of Completion until receiving a copy of the approved Final Monitoring Report from MMC which includes the Acceptance Verification from the curation institution.

WATER QUALITY

Potential impacts to water quality would be reduced to below a level of significance through implementation of the following mitigation measures.

Mitigation Measure 4.8.1: Prior to commencement of any activity within a specific annual maintenance program, a qualified water quality specialist shall prepare an IWQA for each area proposed to be maintained. The IWQA shall be prepared in accordance with the specifications included in the Master Program. If the IWQA indicates that maintenance would impact a water pollutant where the existing level for that pollutant exceeds or is within 25 percent of the standard established by the San Diego Basin Plan, mitigation measures identified in Table 4.8-8 shall be incorporated into the IMP to reduce the impact to within the established standard for that pollutant.

Table 4.8-8 MITIGATION MEASURES FOR REDUCED POLLUTANT REMOVAL CAPACITY							
Mitigation Measure	Pollutant Type						TDS/ Chloride Sulfates
	Bacteria	Metals	Nutrients	Pesticides	Sediment	Trash	
Remove kelp on beaches					●		●
Sweep streets	●	●	●	●	●	●	●
Retrofit residential landscaping to reduce runoff	●	●	●		●		
Install artificial turf	●	●	●	●	●		●
Install inlet devices on storm drains		●	●		●		
Replace impermeable surfaces with permeable surfaces		●	●		●		●

Table 4.8-8 (cont.) MITIGATION MEASURES FOR REDUCED POLLUTANT REMOVAL CAPACITY							
Mitigation Measure	Pollutant Type						TDS/ Chloride Sulfates
	Bacteria	Metals	Nutrients	Pesticides	Sediment	Trash	
Install modular storm water filtration systems		●	●	●	●		●
Install storm water retention basins		●	●	●	●		●
Install catch basin media filters		●	●		●		●
Create vegetated swales	●	●	●	●	●		●
Restore wetlands	●	●	●	●	●		●
Install check dams		●			●		●

Mitigation Measure 4.8.2: No maintenance activities within a proposed annual maintenance program shall be initiated before the City's ADD Environmental Designee and state and federal agencies with jurisdiction over maintenance activities have approved the IMPs and IWQAs including proposed mitigation and BMPs for each of the proposed activities. In their review, the ADD Environmental Designee and agencies shall also confirm that the appropriate maintenance protocols have been incorporated into each IMP.

Mitigation Measure 4.8.3: Prior to commencing any activity where the IWQA indicates significant water quality impacts may occur, a pre-maintenance meeting shall be held on site with following in attendance: City's SWD, MM, MMC, and MC. A qualified water quality specialist shall also be present. At this meeting, the water quality specialist shall identify and discuss mitigation measures, protocols and BMPs identified in the IWQA that must be carried out during maintenance. After the meeting, the water quality specialist shall provide DSD with a letter indicating that the applicable mitigation measures, protocols and BMPs identified in the IWQA have been appropriately implemented.

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CONTRACTOR MUST NOTIFY THE BELOW LISTED AGENCY AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION :	FOR CITY ENGINEER _____ DATE _____	
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UNDERGROUND SERVICE ALERT (USA) 1-800-422-4133	CONTRACTOR _____ DATE STARTED _____ INSPECTOR _____ DATE COMPLETED _____	