



HETCH HETCHY
WATER SYSTEM
IMPROVEMENT
PROGRAM

CITY AND COUNTY OF SAN FRANCISCO
PUBLIC UTILITIES COMMISSION
SAN FRANCISCO WATER DEPARTMENT



CONTRACT NO. WD-2651
HABITAT RESERVE PROGRAM
ADOBE GULCH GRASSLANDS
VOLUME 1 OF 1
OCTOBER 2010

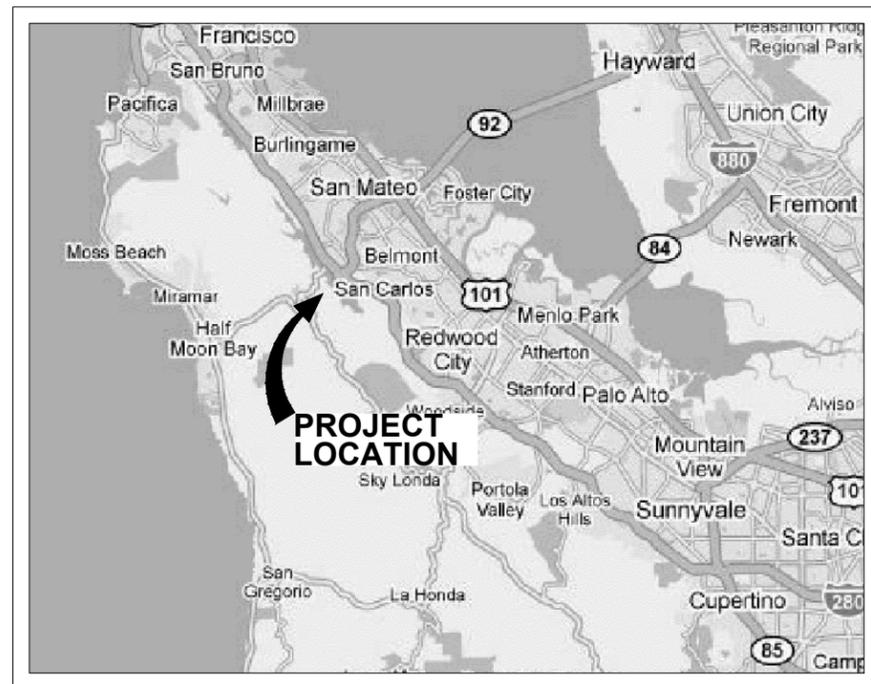
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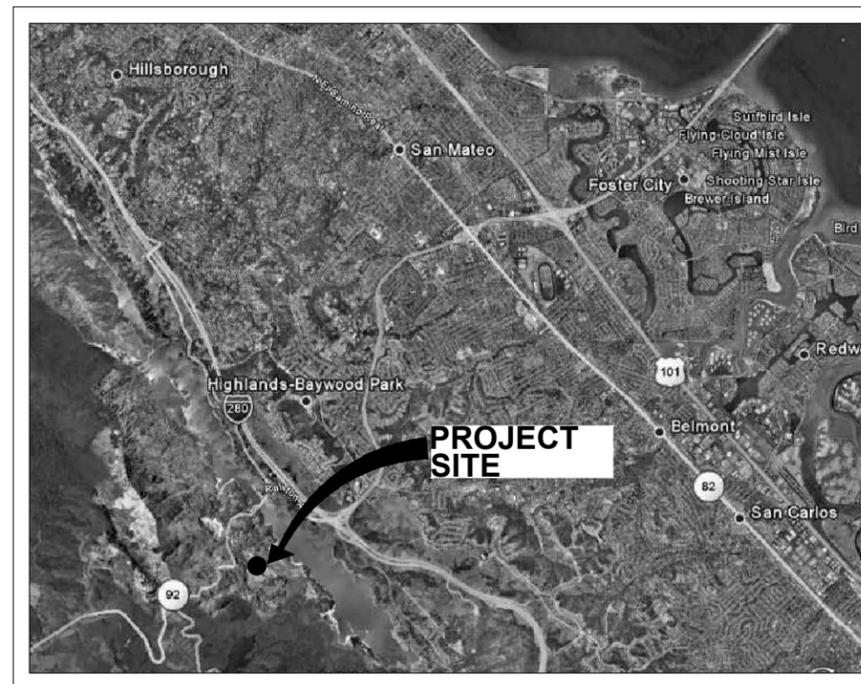
AT THE TIME OF THE BID OPENING, THE CONTRACTOR SHALL POSSESS A
VALID CALIFORNIA CLASS A, GENERAL ENGINEERING CONTRACTOR'S LICENSE.

**CITY AND COUNTY OF SAN FRANCISCO
PUBLIC UTILITIES COMMISSION
HABITAT RESERVE PROGRAM
ADOBE GULCH GRASSLANDS
CONTRACT NO. CS-883.D**



VICINITY MAP

NO SCALE



LOCATION MAP

NO SCALE

SHEET NUMBER	DRAWING NUMBER	DESCRIPTION OF DRAWING
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2	G-1	TITLE SHEET, LOCATIONS AND VICINITY MAPS, DRAWING INDEX
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CONTRACT NO. WD-2651

CITY AND COUNTY OF SAN FRANCISCO
PUBLIC UTILITIES COMMISSION
INFRASTRUCTURE DIVISION
ENGINEERING MANAGEMENT BUREAU

ADOBE GULCH GRASSLAND

**TITLE SHEET, LOCATIONS AND
VICINITY MAPS, DRAWING INDEX**

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CONSTRUCTION

OCTOBER 29,
2010

COORDINATE:
NAD83
ELEVATION
DATUM:
NAVD 1988

WINZLER & KELLY
417 Montgomery Street, Suite 700, San Francisco, CA 94104-1115
tel 415.283.4970 \$ fax 415.283.4980 \$ www.w-and-k.com

PROJECT ENGINEER	CQ	DRAWN	CQ
PROJECT MANAGER	MS	DESIGNED	CQ
APPROVAL	MS	CHECKED	ABW
NO.	DATE	DESCRIPTION	BY
REVISIONS			

CHECKED / APPROVED	DRAWN	SCALE AS SHOWN
SECTION MANAGER	DESIGNED	DATE
APPROVED	APPROVED	
MANAGER, ENGINEERING MANAGEMENT BUREAU	MANAGER, NATURAL RESOURCES DIVISION	
SHEET	PLAN NO.	DRAWING NO.
2 of 18		G-1

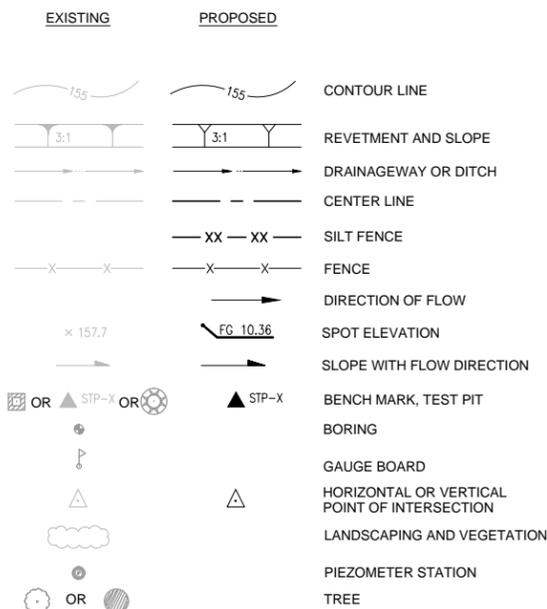
ABBREVIATIONS

APPROX & @	APPROXIMATE AND AT
BC BM BRG	BEGIN CURVE BENCH MARK BEARING
CL, COORD CP CY	CENTERLINE COORDINATE CONTROL POINT CUBIC YARD
DET DIA DIM DWG	DETAIL DIAMETER DIMENSION DRAWING
E (E) OR EXIST EA EC ECB EG EL OR ELEV EQ EQUIP ETC EXIST	EAST EXISTING EACH END CURVE EROSION CONTROL BLANKET EXAMPLE ELEVATION EQUAL EQUIPMENT ETCETERA EXISTING
FG FT	FINISHED GRADE FOOT OR FEET
HORIZ HP HT	HORIZONTAL HIGH POINT HEIGHT
IE IN INV	FOR EXAMPLE INCH OR INLET INVERT
LF LT	LINEAR FEET LEFT
MAX MIN	MAXIMUM MINIMUM
(N) N N/A NTS #	NEW NORTH NOT APPLICABLE NOT TO SCALE NUMBER
OC	ON CENTER
PC PI POC PROJ PT	POINT OF CURVATURE POINT OF INTERSECTION POINT OF CURVE PROJECT POINT OF TANGENCY
QTY	QUANTITY
R, RAD REF REQ RSP	RADIUS REFERENCE REQUIRED REVIEMENT SLOPE PROTECTION
S SD SECT SHT SIM SPEC SQ STA STD	SOUTH STORM DRAIN SECTION SHEET SIMILAR SPECIFICATIONS SQUARE STATION STANDARD
T T/ TOPO TYP	TOP TOP OF TOPOGRAPHIC TYPICAL
VAR VERT	VARIES OR VARIABLE VERTICAL
W W/ W/O	WEST WITH WITHOUT

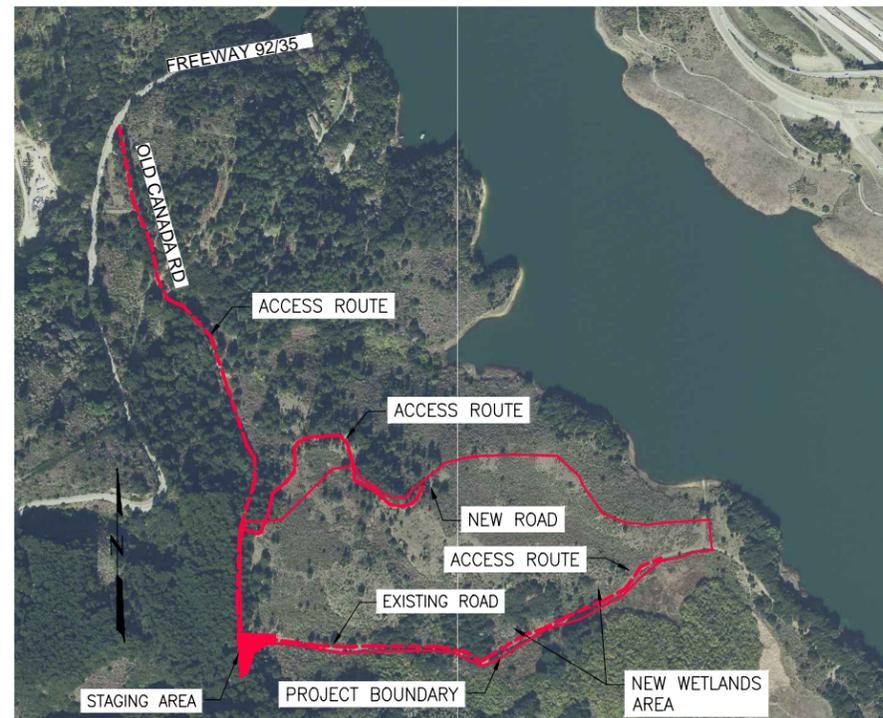
GENERAL NOTES

- SPECIAL CIRCUMSTANCES: NO SHUTDOWN OF THE PROJECT SITE IS ANTICIPATED. HOWEVER, UNFORESEEABLE FIRE, GEO-HAZARD CONDITIONS, HEAVY RAINS, DISCOVERY OF NEW CULTURAL RESOURCE SITES OR OBJECTS, OR PRESENCE OF SPECIAL STATUS SPECIES NOT PREVIOUSLY DOCUMENTED COULD PROMPT SFPUC TO SUSPEND CONSTRUCTION ACTIVITIES FOR SAFETY REASONS AT NO COST TO THE SFPUC, OR THEIR REPRESENTATIVES
- HOURS OF WORK: THE CONTRACTOR SHALL CONDUCT ALL WORK BETWEEN THE HOURS OF 8:00 AM AND 6:00 PM, MONDAY THROUGH FRIDAY, UNLESS AUTHORIZED BY SFPUC. CONTRACTOR AND CREW SHALL NOT ENTER THE SITE PRIOR TO 6:30 AM OR LEAVE THE SITE AFTER 6:30 PM, MONDAY THROUGH FRIDAY. NO EQUIPMENT ENGINES OR OTHER NOISE GENERATING ACTIVITIES SHALL BE STARTED PRIOR TO 7:45 AM OR CONTINUE PAST 6:15 PM, MONDAY THROUGH FRIDAY. WEEKEND AND HOLIDAY WORK WILL ONLY BE CONDUCTED AFTER PRIOR AUTHORIZATION FROM THE SFPUC.
- DAILY COMMUNICATIONS: CONTRACTOR SHALL MAINTAIN FREQUENT COMMUNICATIONS WITH THE SFPUC TO DISCUSS DETAILS OF IMPLEMENTATION, ORDER OF WORK, METHODS OF MINIMIZING ENVIRONMENTAL IMPACTS AND OTHER RELEVANT COMPONENTS OF CONSTRUCTION.
- COMPLIANCE WITH REGULATORY PERMITS: THE CONTRACTOR SHALL COMPLETELY REVIEW, BE FAMILIAR WITH AND ADHERE TO THE TERMS OF ALL PERMITS AND AGENCY APPROVALS FOR THIS PROJECT. THE SFPUC WILL BE RESPONSIBLE FOR SECURING AND PROVIDING TO THE CONTRACTOR COPIES OF PERMITS, CERTIFICATIONS, OR AUTHORIZATIONS FROM THE FOLLOWING AGENCIES INCLUDING, BUT NOT LIMITED TO: U.S. ARMY CORPS OF ENGINEERS, THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SECTION 401, THE U.S. FISH AND WILDLIFE SERVICE, THE NATIONAL MARINE FISHERIES SERVICE AND CALIFORNIA DEPARTMENT OF FISH AND GAME. COPIES OF ALL PERMITS ARE AVAILABLE FROM THE SFPUC AND WILL REMAIN AT THE PROJECT SITE THROUGHOUT THE DURATION OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR WORKING WITH THE SFPUC ON SECURING THE NECESSARY NPDES PERMIT AND PREPARATION AND SUBMISSION OF A STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
- COMPLIANCE WITH COUNTY PERMITS: CONTRACTOR IS RESPONSIBLE FOR ASSISTING WITH ACQUISITION OF AND COMPLIANCE WITH ANY RELEVANT COUNTY OR STATE PERMITS NEEDED FOR THE PROPOSED CONSTRUCTION ACTIVITIES, INCLUDING, BUT NOT LIMITED TO, TRAFFIC AND ENCROACHMENT PERMITS RELATED TO THE DELIVERY AND HAULING OF CONSTRUCTION EQUIPMENT AND MATERIALS, AND TRAFFIC CONTROL MEASURES (TRAFFIC SAFETY PLAN). THE CONTRACTOR MUST FOLLOW ALL PERTINENT CALTRANS REQUIREMENTS FOR HAULING LARGE VEHICLES OR EQUIPMENT TO THE PROJECT SITE. TO DETERMINE REQUIREMENTS FOR THE SPECIFIC VEHICLES TO BE USED, SEE THE WEB SITE AT WWW.DOT.CA.GOV/HQ/TRAFFOPS/PERMITS
- AIR QUALITY AND CONSTRUCTION NOISE RESTRICTIONS: THE CONTRACTOR SHALL IMPLEMENT MEASURES TO REDUCE CONSTRUCTION NOISE INCLUDING: ENSURING THAT ALL CONSTRUCTION EQUIPMENT HAS SOUND-CONTROL DEVICES AT LEAST AS EFFECTIVE AS THOSE ORIGINALLY SUPPLIED BY THE MANUFACTURER AND THAT NO EQUIPMENT WITH AN UNMUFFLED EXHAUST IS OPERATED; LIMITING CONSTRUCTION ACTIVITIES TO SPECIFIED TIMES; AND PROHIBITING UNNECESSARY WARMING UP, IDLING, OR ENGINE REVVING OF GAS OR DIESEL POWERED EQUIPMENT OR VEHICLES.
- AIR QUALITY AND DUST CONTROL RESTRICTIONS: TRUCKS USED FOR HAULING ARE REQUIRED TO BE COVERED OR TO HAVE AT LEAST 2- FEET OF FREEBOARD. STOCKPILES AND EARTHWORK AREAS THAT ARE INACTIVE FOR MORE THAN TEN (10) DAYS OR THAT ARE DEEMED BY THE SFPUC OR ENVIRONMENTAL MONITOR TO BE CAUSING A DUST PROBLEM SHALL BE WATERED OR STABILIZED WITH AN APPROVED STABILIZING AGENT OR, IN THE CASE OF STOCKPILES, ENCLOSED OR COVERED. TRUCKS LEAVING THE PROJECT SITES SHALL HAVE TIRES WASHED OR AN EQUIVALENT APPROVED BY THE SFPUC OR ENVIRONMENTAL MONITOR TO PREVENT/MINIMIZE SEDIMENT FROM BEING TRACKED ONTO PUBLIC ROADWAYS. TRAFFIC SPEEDS ON UNPAVED ROADS WILL BE LIMITED TO 10 MPH.
- CLEANING OF TRASH AND DEBRIS: THE SITE WILL BE KEPT FREE OF TRASH AT ALL TIMES. ALL ITEMS USED FOR CONSTRUCTION PURPOSES WILL BE REMOVED FROM THE SITE AT THE COMPLETION OF CONSTRUCTION.
- ON-SITE TRAFFIC AND CONSTRUCTION ACCESS RESTRICTIONS: ANY ROUTES SHOWN ON PLANS THAT OCCUR OFF OF ESTABLISHED ROADS WILL BE MARKED BY THE CONTRACTOR WITH LATHE AND CLEARLY VISIBLE FLAGGING ALONG BOTH SIDES OF 20' WIDE ACCESS EASEMENTS. CONSTRUCTION EQUIPMENT IS NOT TO DEVIATE FROM THIS ROUTE WITHOUT APPROVAL OF THE SFPUC AND THE ENVIRONMENTAL MONITOR. SHOULD THE ROAD BECOME MUDDY OR CONDITIONS DETERIORATE, THE CONTRACTOR IS RESPONSIBLE FOR PLACING MATTING OR FABRIC MATERIAL TO IMPROVE ROAD CONDITIONS WITHOUT WIDENING THE ACCESS EASEMENT: ALL MATERIALS PLACED MUST BE REMOVED AT THE COMPLETION OF THE PROJECT. IN ADDITION, THE CONTRACTOR IS NOT ALLOWED TO WIDEN EXISTING ROADS WITHOUT APPROVAL OF THE SFPUC
- CONSTRUCTION EQUIPMENT MAY NOT WORK IN AREAS DESIGNATED AS WETLAND, RIPARIAN, OR CREEK PROTECTION ZONES OR WITHIN OR DIRECTLY ADJACENT TO INDIVIDUAL TREES AND SHRUBS OR STANDS OF TREES OR SHRUBS OR VEGETATION DESIGNATED FOR SALVAGE BY THE SFPUC UNLESS SPECIFICALLY AUTHORIZED. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING PROTECTIVE FENCING TO ENSURE PROTECTION OF THESE RESOURCES AS DESIGNATED ON PLANS.
- THE CONTRACTOR SHOULD PLAN TO REMEDIATE CONSTRUCTION ACCESS EASEMENTS AT THE CONCLUSION OF USE THROUGH BLADING, RIPPING, OR OTHERWISE REMOVING RUTS AND COMPACTION. THE SFPUC RESERVE THE RIGHT TO REQUIRE THE CONTRACTOR TO REPAIR DAMAGE IN CONSTRUCTION ACCESS EASEMENTS. ALL LATHE SHOULD BE REMOVED BY THE CONTRACTOR AT THE END OF CONSTRUCTION.
- TBD "DETAILED BIOLOGICAL MONITORING"
- CONTAMINATION PREVENTION RESTRICTIONS: THE CONTRACTOR SHALL TAKE PREVENTATIVE MEASURES TO AVOID ANY SPILLS OR LEAKS ON THE SITE FROM PETROLEUM PRODUCTS. THE CONTRACTOR SHALL PREPARE A SPILL PREVENTION AND RESPONSE PLAN THAT WILL BE APPROVED BY THE SFPUC AND ENVIRONMENTAL MONITOR, AS WELL AS LEAD AGENCIES. THIS MUST BE IMPLEMENTED AND ADHERED TO BY THE CONTRACTOR. AT A MINIMUM, THIS PLAN SHALL REQUIRE THAT STAGING, STORAGE, AND REFUELING AREAS AND ANY EQUIPMENT REPAIR OR SIMILAR ACTIVITY TAKE PLACE WHEN EQUIPMENT IS AT LEAST 100- FEET FROM ANY ACTIVE CREEK CHANNEL, DITCH, POND, OR FENCED SENSITIVE AREA. REFUELING SHALL ONLY OCCUR IN AREAS APPROVED BY THE SFPUC OR ENVIRONMENTAL MONITOR. STAGING AND STORAGE AREAS SHALL OCCUR ONLY IN DESIGNATED AREAS: ANY STAGING OR STORAGE IN WETLANDS OR OTHER SENSITIVE HABITATS WILL REQUIRE PRIOR APPROVAL FROM THE COR OR ENVIRONMENTAL MONITOR. PROTECTIVE TARPS SHALL BE USED DURING REFUELING OR EQUIPMENT REPAIR. THE CONTRACTOR SHALL INSPECT AND FULLY CLEAN UP ANY SUCH LEAKS OR SPILLS THAT OCCUR ON THE SITE. CONTRACTOR SHALL NOT STORE ANY HAZARDOUS MATERIALS.
- BIOLOGICAL RESTRICTIONS - WETLANDS, CREEKS, AND RIPARIAN AREAS: DUE TO THE SENSITIVE NATURE OF THE SITE, THE CONTRACTOR SHALL NOT ENTER INTO THESE AREAS FOR ANY REASON WITHOUT PRIOR AUTHORIZATION FROM THE SFPUC OR ENVIRONMENTAL MONITOR.
- BIOLOGICAL RESTRICTIONS - WILDLIFE: PRIOR TO START OF CONSTRUCTION, THE ENVIRONMENTAL MONITOR OR REPRESENTATIVES WILL GIVE CONTRACTOR'S STAFF A PRESENTATION REGARDING SPECIAL STATUS SPECIES AND RESTRICTIONS REQUIRED IN TERMS OF CLEARANCE SURVEYS AND CONSTRUCTION MONITORING.
- PROPOSED MODIFICATIONS TO PLANS OR SPECIFICATIONS: ANY DEVIATIONS FROM PLANS AND SPECIFICATIONS NEED TO BE COMPLETED AND/OR APPROVED BY DESIGN ENGINEER AND SFPUC PRIOR TO IMPLEMENTATION

LEGEND



ACCESS ROAD & STAGING AREA



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417 Montgomery Street, Suite 700, San Francisco, CA 94104-1115 tel 415.283.4970 \$ fax 415.283.4980 \$ www.w-and-k.com			
PROJECT ENGINEER	CQ	DRAWN	CQ
PROJECT MANAGER	MS	DESIGNED	CQ
APPROVAL	MS	CHECKED	ABW
NO. DATE DESCRIPTION BY APPR'D			
REVISIONS			

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ABBREVIATIONS, LEGEND, GENERAL NOTES, ACCESS ROAD		
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MANAGER, ENGINEERING MANAGEMENT BUREAU	MANAGER, NATURAL RESOURCES DIVISION	
SHEET	PLAN NO.	REVISION NO.
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SHEET C-3
EXISTING CONDITION & DEMOLITION PLAN
SHEET C-9
MAINTENANCE RD
GRADING PLAN & PROFILE

SHEET C-3
EXISTING CONDITION & DEMOLITION PLAN
SHEET C-10
MAINTENANCE RD GRADING PLAN & PROFILE

SHEET C-5
WETLAND GRADING PLAN (EAST)

SHEET C-8
CREEK GRADING PLAN AND PROFILE

SHEET C-2
EXISTING CONDITION & DEMOLITION PLAN

SHEET C-2
EXISTING CONDITION & DEMOLITION PLAN

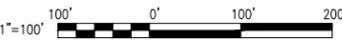
SHEET C-7
CREEK GRADING PLAN AND PROFILE

SHEET C-4
OAK RIPARIAN GRADING PLAN

SHEET C-5
WETLAND GRADING PLAN (WEST)

SHEET C-4
OAK RIPARIAN GRADING PLAN

KEY MAP
1" = 100'



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PROJECT MANAGER	DESIGNED			
APPROVAL	CHECKED			
NO.	DATE	DESCRIPTION	BY	APPR'D
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ENGINEERING MANAGEMENT BUREAU

ADOBE GULCH GRASSLAND

KEY MAP

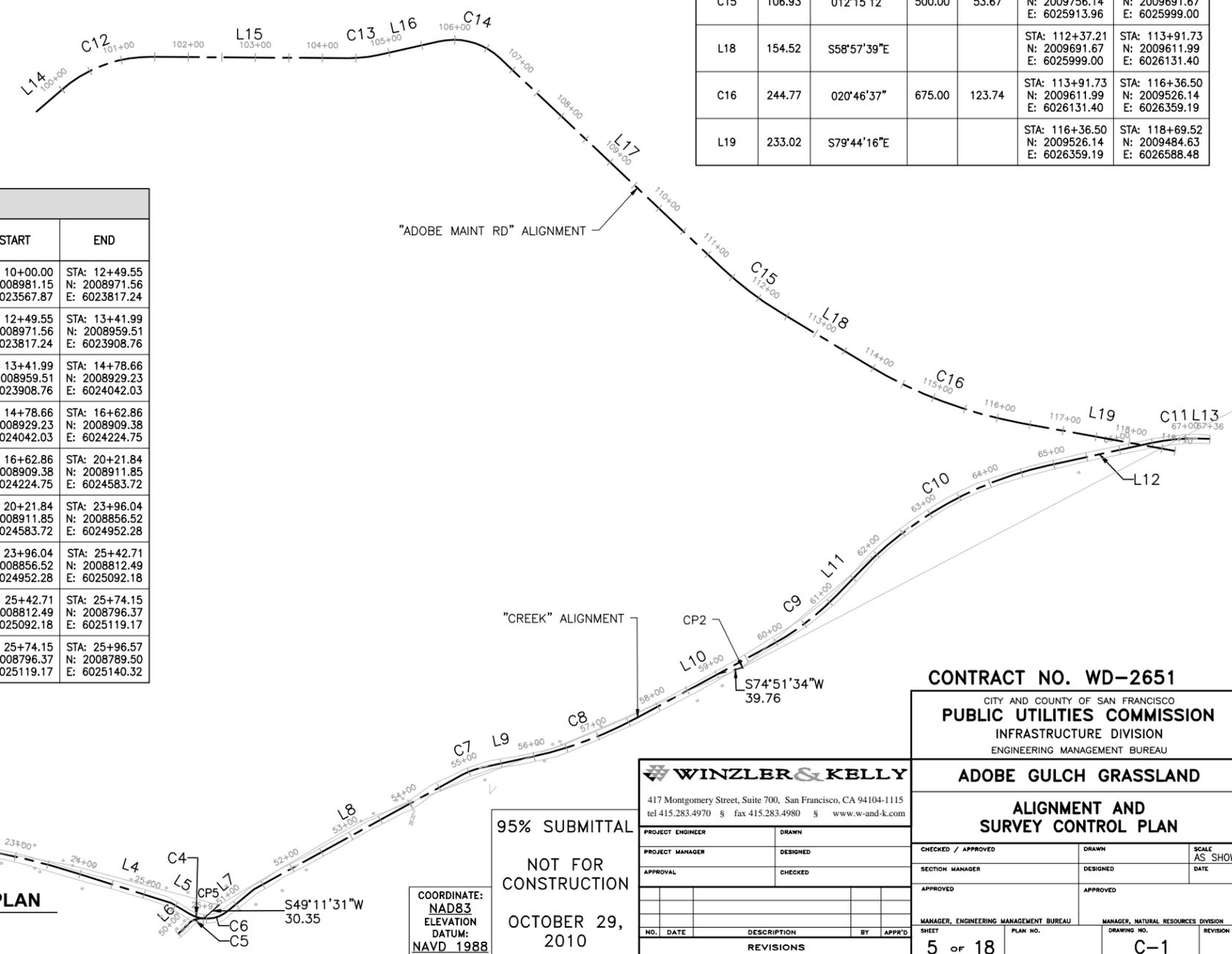
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SECTION MANAGER	DESIGNED	DATE
APPROVED	APPROVED	
MANAGER, ENGINEERING MANAGEMENT BUREAU	MANAGER, NATURAL RESOURCES DIVISION	
SHEET	PLAN NO.	DRAWING NO.
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CREEK						
SEGMENT	LENGTH (FT)	BEARING/Delta (DEG MIN SEC)	RADIUS (FT)	TANGENT (FT)	START	END
L6	19.16	N44°23'33"E			STA: 50+00.00 N: 2008766.92 E: 6025102.78	STA: 50+19.16 N: 2008780.61 E: 6025116.18
C5	26.58	050°45'47"	30.00	14.23	STA: 50+19.16 N: 2008780.61 E: 6025116.18	STA: 50+45.74 N: 2008789.50 E: 6025140.32
C6	39.06	044°45'51"	50.00	20.59	STA: 50+45.74 N: 2008789.50 E: 6025140.32	STA: 50+84.80 N: 2008800.78 E: 6025176.69
L7	50.22	N50°23'28"E			STA: 50+84.80 N: 2008800.78 E: 6025176.69	STA: 51+35.02 N: 2008832.79 E: 6025215.37
L8	354.78	N61°16'22"E			STA: 51+35.02 N: 2008832.79 E: 6025215.37	STA: 54+89.80 N: 2009003.31 E: 6025262.49
C7	28.86	016°32'00"	100.00	14.53	STA: 54+89.80 N: 2009003.31 E: 6025526.49	STA: 55+18.66 N: 2009013.37 E: 6025553.43
L9	76.86	N77°48'22"E			STA: 55+18.66 N: 2009013.37 E: 6025553.43	STA: 55+95.52 N: 2009029.60 E: 6025628.56
C8	169.75	016°12'35"	600.00	85.44	STA: 55+95.52 N: 2009029.60 E: 6025628.56	STA: 57+65.27 N: 2009088.29 E: 6025787.24
L10	227.45	N61°35'47"E			STA: 57+65.27 N: 2009088.29 E: 6025787.24	STA: 59+92.72 N: 2009196.49 E: 6025987.31
C9	122.77	017°35'09"	400.00	61.87	STA: 59+92.72 N: 2009196.49 E: 6025987.31	STA: 61+15.49 N: 2009270.42 E: 6026084.72
L11	52.00	N44°00'38"E			STA: 61+15.49 N: 2009270.42 E: 6026084.72	STA: 61+67.49 N: 2009307.82 E: 6026120.85
C10	323.60	033°42'38"	550.00	166.63	STA: 61+67.49 N: 2009307.82 E: 6026120.85	STA: 64+91.09 N: 2009463.10 E: 6026399.44
L12	156.48	N77°43'16"E			STA: 64+91.09 N: 2009463.10 E: 6026399.44	STA: 66+47.57 N: 2009496.38 E: 6026552.34
C11	73.93	014°07'12"	300.00	37.15	STA: 66+47.57 N: 2009496.38 E: 6026552.34	STA: 67+21.50 N: 2009503.08 E: 6026625.78
L13	14.67	S88°09'32"E			STA: 67+21.50 N: 2009503.08 E: 6026625.78	STA: 67+36.17 N: 2009502.61 E: 6026640.44

CONTROL POINT DATA				
CONTROL POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP1	2009592.24	6026767.29	310.28	REBAR & CAP
CP2	2009162.77	6025944.13	303.26	HUB & TACK
CP3	2009047.92	6025674.28	310.10	HUB & TACK
CP4	2008934.37	6025375.41	315.99	NAIL-PK
CP5	2008809.33	6025163.28	326.25	HUB & TACK
CP6	2008868.05	6024945.47	345.96	NAIL-PK
CP7	2008919.28	6024654.10	355.10	HUB & TACK
CP8	2008898.27	6024329.79	361.45	HUB & TACK
CP9	2008992.35	6023679.99	385.04	HUB & TACK
CP10	2009362.61	6026136.33	298.48	HUB & TACK
CP11	2008803.32	6023658.35	385.04	NAIL-PENNY
CP12	2008621.66	6023814.87	379.20	NAIL-PENNY
CP13	2008506.26	6024096.89	372.56	NAIL-PENNY

ADOBE MAINT RD						
SEGMENT	LENGTH (FT)	BEARING/Delta (DEG MIN SEC)	RADIUS (FT)	TANGENT (FT)	START	END
L14	50.00	N49°13'36"E			STA: 99+50.00 N: 2009989.47 E: 6024891.37	STA: 100+00.00 N: 2010022.13 E: 6024929.24
C12	143.62	041°08'41"	200.00	75.07	STA: 100+00.00 N: 2010022.13 E: 6024929.24	STA: 101+43.62 N: 2010070.66 E: 6025061.15
L15	294.96	S89°37'42"E			STA: 101+43.62 N: 2010070.66 E: 6025061.15	STA: 104+38.59 N: 2010068.75 E: 6025356.11
C13	45.05	012°54'23"	200.00	22.62	STA: 104+38.59 N: 2010068.75 E: 6025356.11	STA: 104+83.64 N: 2010073.51 E: 6025400.81
L16	93.12	N77°27'55"E			STA: 104+83.64 N: 2010073.51 E: 6025400.81	STA: 105+76.76 N: 2010093.72 E: 6025491.71
C14	97.44	055°49'38"	100.00	52.98	STA: 105+76.76 N: 2010093.72 E: 6025491.71	STA: 106+74.19 N: 2010068.89 E: 6025581.98
L17	456.09	S46°42'28"E			STA: 106+74.19 N: 2010068.89 E: 6025581.98	STA: 111+30.28 N: 2009756.14 E: 6025999.00
C15	106.93	012°15'12"	500.00	53.67	STA: 111+30.28 N: 2009756.14 E: 6025999.00	STA: 112+37.21 N: 2009691.67 E: 6026131.40
L18	154.52	S58°57'39"E			STA: 112+37.21 N: 2009691.67 E: 6026131.40	STA: 113+91.73 N: 2009611.99 E: 6026359.19
C16	244.77	020°46'37"	675.00	123.74	STA: 113+91.73 N: 2009611.99 E: 6026359.19	STA: 116+36.50 N: 2009526.14 E: 6026588.48
L19	233.02	S79°44'16"E			STA: 116+36.50 N: 2009526.14 E: 6026588.48	STA: 118+69.52 N: 2009484.63 E: 6026588.48

BERM						
SEGMENT	LENGTH (FT)	BEARING/Delta (DEG MIN SEC)	RADIUS (FT)	TANGENT (FT)	START	END
L1	249.55	S87°47'46"E			STA: 10+00.00 N: 2008981.15 E: 6023567.87	STA: 12+49.55 N: 2008971.56 E: 6023817.24
C1	92.45	010°35'37"	500.00	46.36	STA: 12+49.55 N: 2008971.56 E: 6023817.24	STA: 13+41.99 N: 2008959.51 E: 6023908.76
L2	136.66	S77°12'09"E			STA: 13+41.99 N: 2008959.51 E: 6023908.76	STA: 14+78.66 N: 2008929.23 E: 6024042.03
C2	184.20	013°11'33"	800.00	92.51	STA: 14+78.66 N: 2008929.23 E: 6024042.03	STA: 16+62.86 N: 2008909.38 E: 6024224.75
L3	358.98	N89°36'18"E			STA: 16+62.86 N: 2008909.38 E: 6024224.75	STA: 20+21.84 N: 2008911.85 E: 6024583.72
C3	374.20	017°52'00"	1200.00	188.63	STA: 20+21.84 N: 2008911.85 E: 6024583.72	STA: 23+96.04 N: 2008856.52 E: 6024952.28
L4	146.67	S72°31'42"E			STA: 23+96.04 N: 2008856.52 E: 6024952.28	STA: 25+42.71 N: 2008812.49 E: 6025092.18
L5	31.44	S59°09'23"E			STA: 25+42.71 N: 2008812.49 E: 6025092.18	STA: 25+74.15 N: 2008796.37 E: 6025119.17
C4	22.42	025°41'18"	50.00	11.40	STA: 25+74.15 N: 2008796.37 E: 6025119.17	STA: 25+96.57 N: 2008789.50 E: 6025140.32



GENERAL NOTES:

1. THE SURVEY ON THIS DRAWING WAS PREPARED BY SFPUC/WST SURVEYORS UNDER THE DIRECT SUPERVISION OF R. EDWARD PETERSON, LS, CHIEF SURVEYOR. JOB # 10-0008. DATE OF SURVEY APRIL 27, 2010.
2. THE NORTH ORIENTATION OF THIS DRAWING IS BASED UPON A GRID DIRECTION.
3. THE ELEVATIONS AND CONTOURS SHOWN ON THIS DRAWING ARE BASED UPON NAVD 88 AS DERIVED FROM A REAL-TIME NETWORK GPS OBSERVATION ON POINTS CP1, CP2, CP8, & CP9.
4. THE COORDINATES OF THIS DRAWING ARE BASED UPON NAD83 (2007) LEICA RTK-MAX NORTHERN CALIFORNIA NETWORK. ALL COORDINATES ARE GROUND COORDINATES EXCEPT THAT POINT NO. 1 IS HELD WITH THE ORIGINAL GRID COORDINATES.
5. ALL DISTANCES WITHIN THIS DRAWING ARE BASED UPON THE US SURVEY FOOT AND DECIMALS THEREOF AND ARE GROUND DISTANCES.

ALIGNMENT AND SURVEY CONTROL PLAN

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OCTOBER 29, 2010

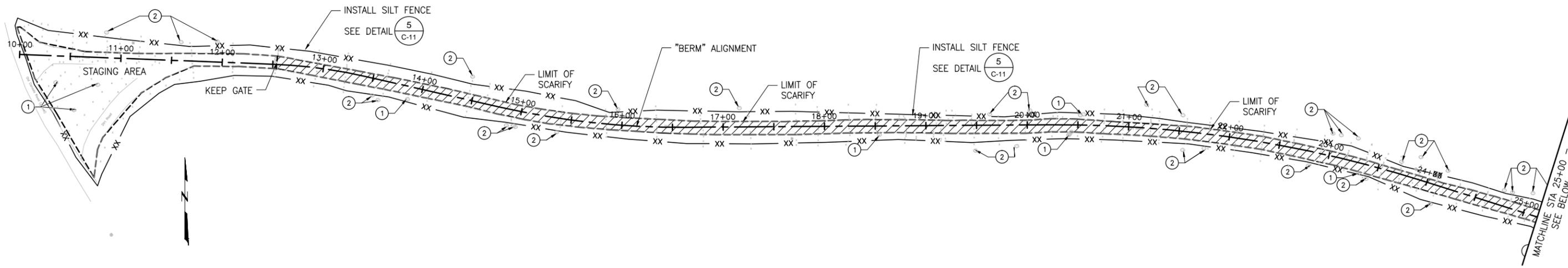
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PROJECT ENGINEER	DRAWN
PROJECT MANAGER	DESIGNED
APPROVAL	CHECKED
NO.	DATE
DESCRIPTION	BY
APPROD	
REVISIONS	

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PUBLIC UTILITIES COMMISSION
INFRASTRUCTURE DIVISION
ENGINEERING MANAGEMENT BUREAU

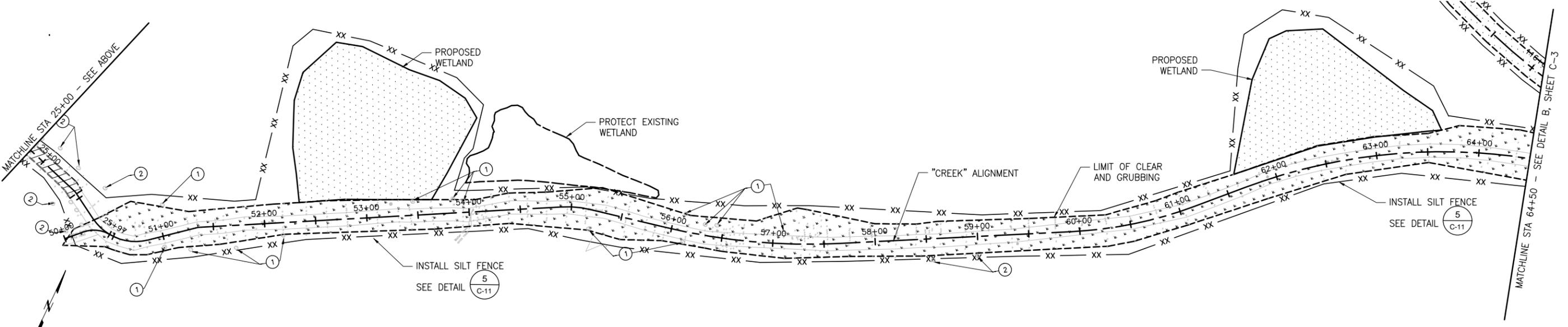
ADOBE GULCH GRASSLAND

ALIGNMENT AND SURVEY CONTROL PLAN

CHECKED / APPROVED	DRAWN	SCALE AS SHOWN
SECTION MANAGER	DESIGNED	DATE
APPROVED	APPROVED	
MANAGER, ENGINEERING MANAGEMENT BUREAU	MANAGER, NATURAL RESOURCES DIVISION	
SHEET	PLAN NO.	DRAWING NO.
5 of 18		C-1



A PLAN
1" = 50'



B PLAN
1" = 50'

ESTIMATED QUANTITIES	
ITEM	ESTIMATED QUANTITY
TREE REMOVAL	150
SCRUB CLEARING - UNDERSTORY HAND CLEAR	27 AC
SCRUB CLEARING - MECHANICAL	31 AC
ROAD SCARIFY	1 AC
TOPSOIL STRIPPING & STOCKPILING*	1,100 CY
TREES TO PROTECT	20
SILT FENCE	30,000 LF

*QUANTITY BASED ON IN-SITU SOIL VOLUME

- NOTES:**
- WORK AREA TO BE FENCED OFF TO RESTRICT THE ACCESS OF HEAVY EQUIPMENT FROM PROTECTED AREAS DURING GRADING. FENCED AREA TO BE APPROVED BY SFPUC STAFF BEFORE COMMENCEMENT OF GRADING.
 - CONTRACTOR SHALL ENSURE ALL PROTECTED TREES AND TREES TO BE REMOVED ARE IDENTIFIED BY THE CITY REPRESENTATIVE BEFORE COMMENCEMENT OF GRADING.
 - STOCKPILE AREA SHALL BE IN STAGING AREA.
 - ONLY AREAS TO BE GRADED SHOWN ON THIS SHEET. SEE SHEET L-1 FOR ALL VEGETATED CLEARING AREAS.

- KEYNOTES**
- PROTECT EXISTING TREE, TYP 12 C-12
 - TREE TO BE OUTSIDE OF FENCED IN AREA. NO FURTHER PROTECTION NEEDED.

- LEGEND**
- SCARIFY TOP 6" OF EXISTING ROAD.
 - CLEAR AND GRUB EXISTING ROAD. EXCAVATE TOP 6" OF TOPSOIL AND STOCKPILE IN STAGING AREA
 - CLEAR VEGETATION IN PROPOSED WETLAND AREAS



COORDINATE:
NAD83
ELEVATION
DATUM:
NAVD 1988

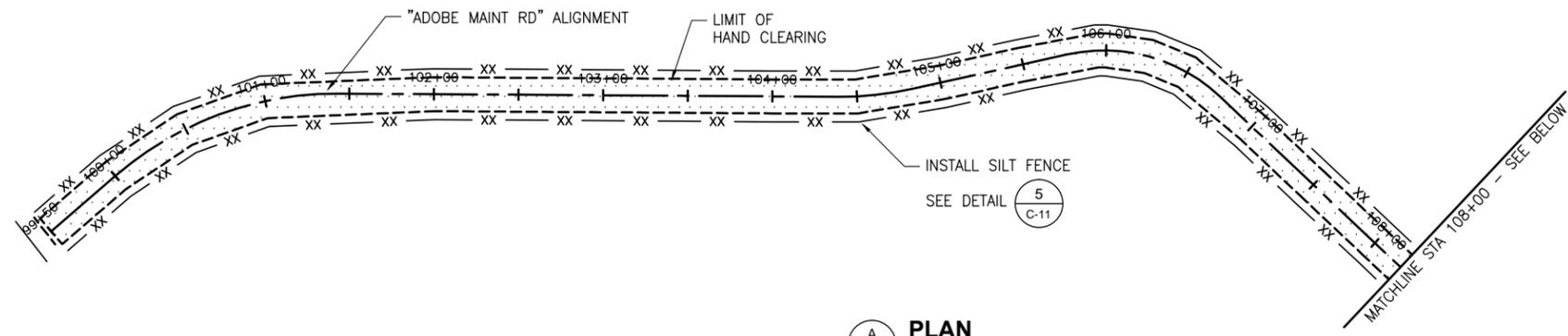
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PROJECT MANAGER	MS	DESIGNED	CQ
APPROVAL	MS	CHECKED	ABW
REVISIONS			
NO.	DATE	DESCRIPTION	BY

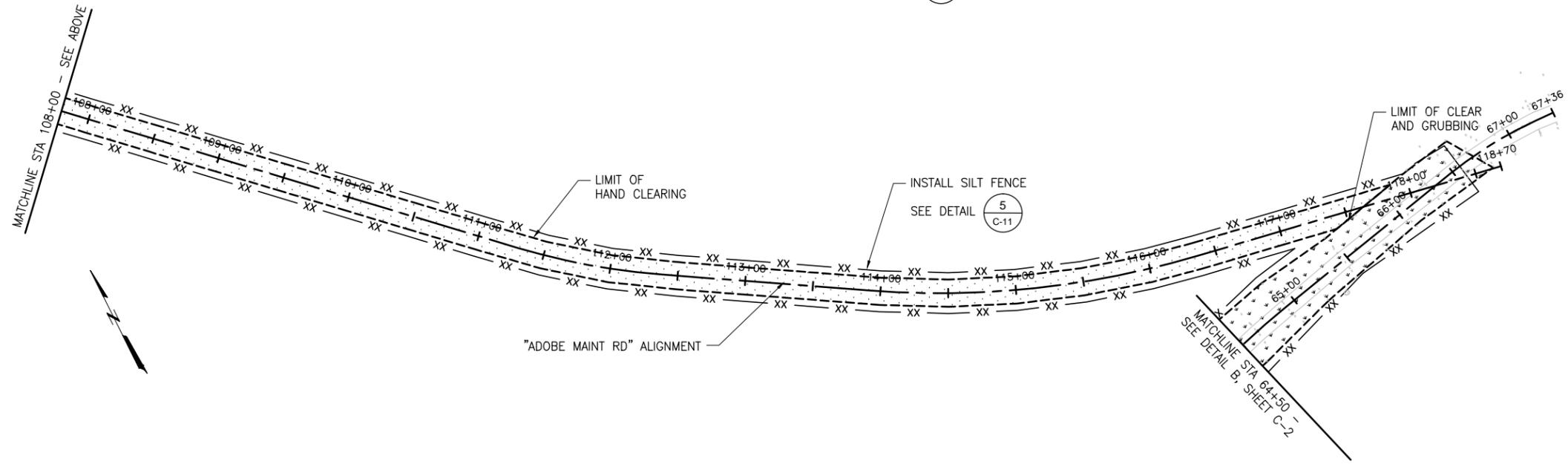
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ENGINEERING MANAGEMENT BUREAU

ADOBE GULCH GRASSLAND
EXISTING CONDITION AND DEMOLITION PLAN OF EXISTING ROAD

CHECKED / APPROVED	DRAWN	SCALE AS SHOWN
SECTION MANAGER	DESIGNED	DATE
APPROVED	APPROVED	
MANAGER, ENGINEERING MANAGEMENT BUREAU	MANAGER, NATURAL RESOURCES DIVISION	
SHEET	PLAN NO.	DRAWING NO.
6 of 18		C-2



A PLAN
1" = 50'



B PLAN
1" = 50'

NOTES:

1. WORK AREA TO BE FENCED OFF BY SILT FENCING TO RESTRICT THE ACCESS OF HEAVY EQUIPMENT FROM PROTECTED AREAS DURING GRADING. FENCED AREA TO BE APPROVED BY THE CITY REPRESENTATIVE BEFORE COMMENCEMENT OF GRADING.
2. CONTRACTOR SHALL ENSURE ALL PROTECTED TREES AND TREES TO BE REMOVED ARE IDENTIFIED BY THE CITY REPRESENTATIVE BEFORE COMMENCEMENT OF GRADING.
3. STOCKPILE AREA SHALL BE IN STAGING AREA.
4. CLEARING AND SILT FENCE AREAS ARE FOR REFERENCE ONLY. AREAS SHALL BE DELINEATED AND APPROVED BY THE CITY REPRESENTATIVE.
5. ONLY AREAS TO BE GRADED SHOWN ON THIS SHEET. SEE SHEET L-1 FOR ALL VEGETATED CLEARING AREAS.

LEGEND

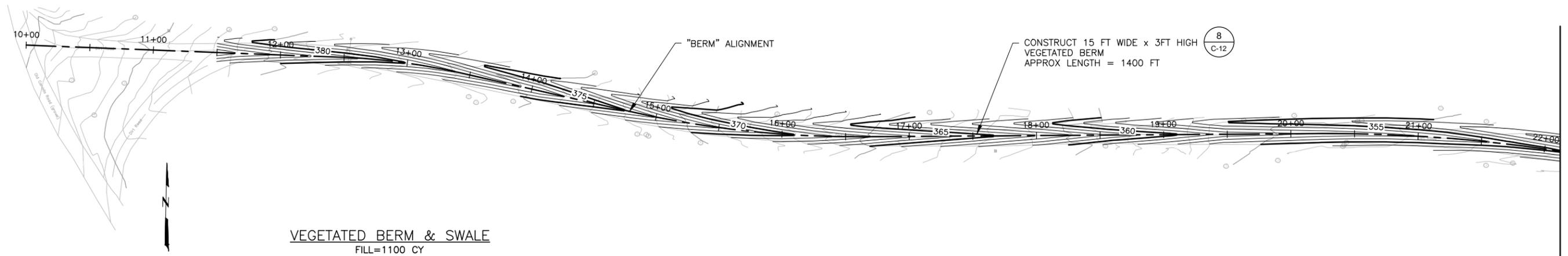


COORDINATE:
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ELEVATION
DATUM:
NAVD 1988

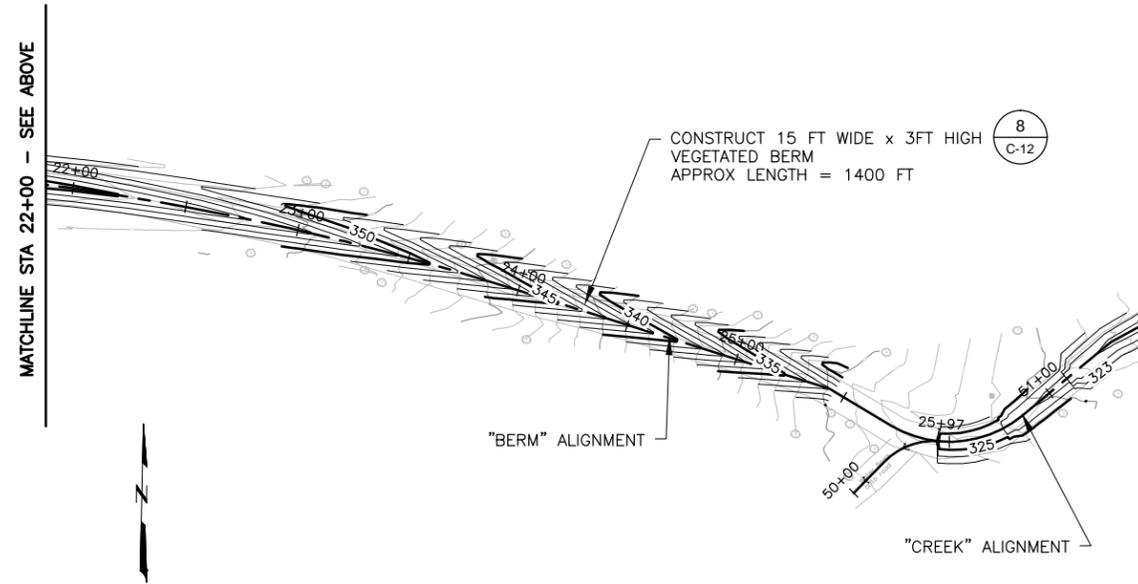
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PROJECT MANAGER	MS	DESIGNED	CQ
APPROVAL	MS	CHECKED	ABW
NO.		DATE	
DESCRIPTION		BY	
APPROV'D		DATE	
REVISIONS			

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CITY AND COUNTY OF SAN FRANCISCO PUBLIC UTILITIES COMMISSION INFRASTRUCTURE DIVISION ENGINEERING MANAGEMENT BUREAU		
ADOBE GULCH GRASSLAND		
EXISTING CONDITION AND DEMOLITION PLAN OF NEW ACCESS ROAD		
CHECKED / APPROVED	DRAWN	SCALE AS SHOWN
SECTION MANAGER	DESIGNED	DATE
APPROVED	APPROVED	
MANAGER, ENGINEERING MANAGEMENT BUREAU	MANAGER, NATURAL RESOURCES DIVISION	
SHEET	PLAN NO.	DRAWING NO.
7 of 18		C-3



MATCHLINE STA 22+00 - SEE BELOW



ESTIMATED QUANTITIES - SHEETS C-4 THRU C-10

ITEM	ESTIMATED QUANTITY
TOTAL GRADING CUT*	8,400 CY
TOTAL GRADING FILL	1,400
LARGE WOODY DEBRIS	4
FINISH GRADING	140,000 SQFT
RIP RAP	100 CY

*QUANTITY BASED ON IN-SITU SOIL VOLUME

A OAK RIPARIAN - GRADING PLAN
C-4 SCALE: 1"=40'H



COORDINATE:
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ELEVATION
DATUM:
NAVD 1988

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PROJECT MANAGER	MS	DESIGNED	CQ
APPROVAL	MS	CHECKED	ABW

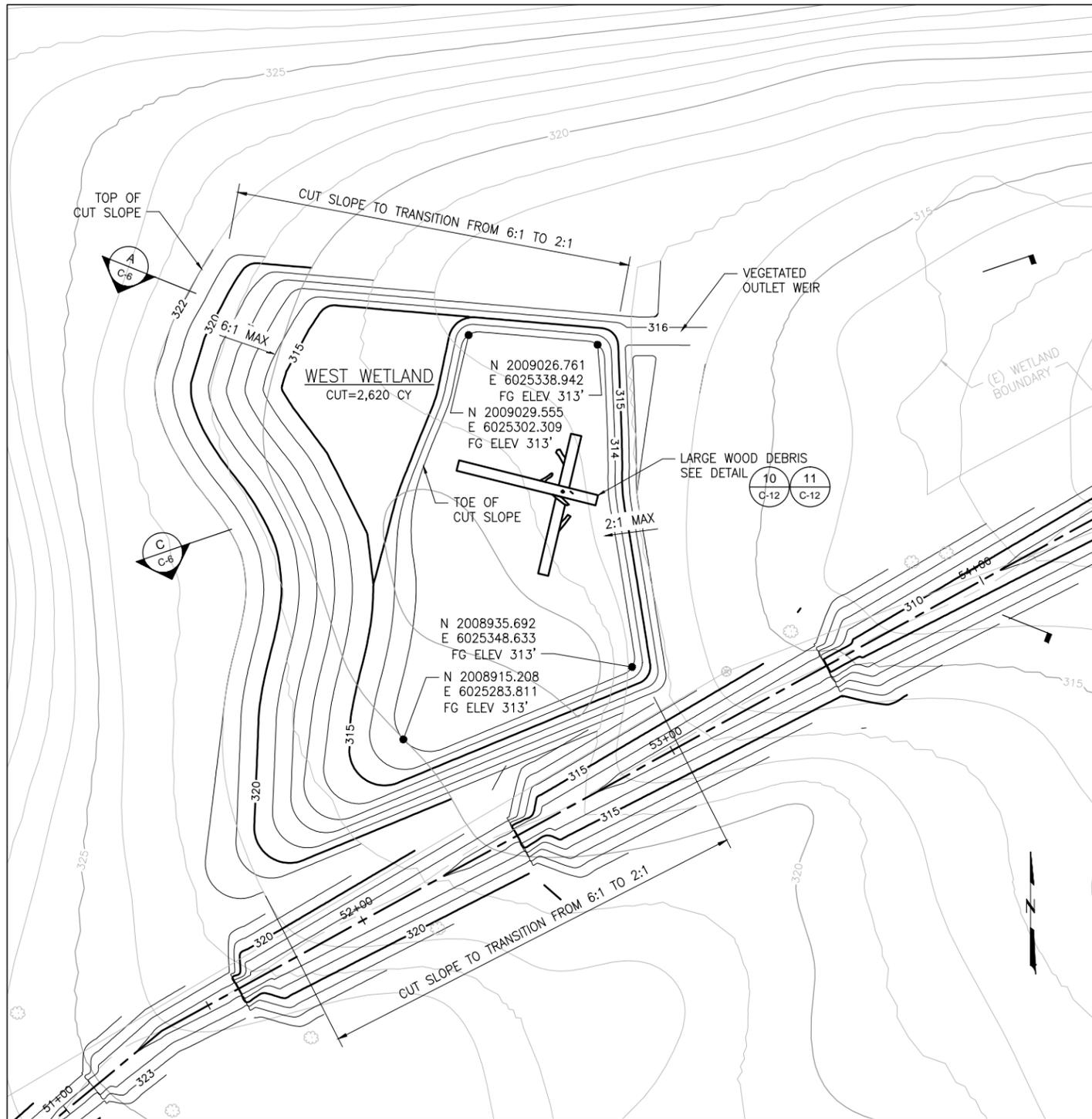
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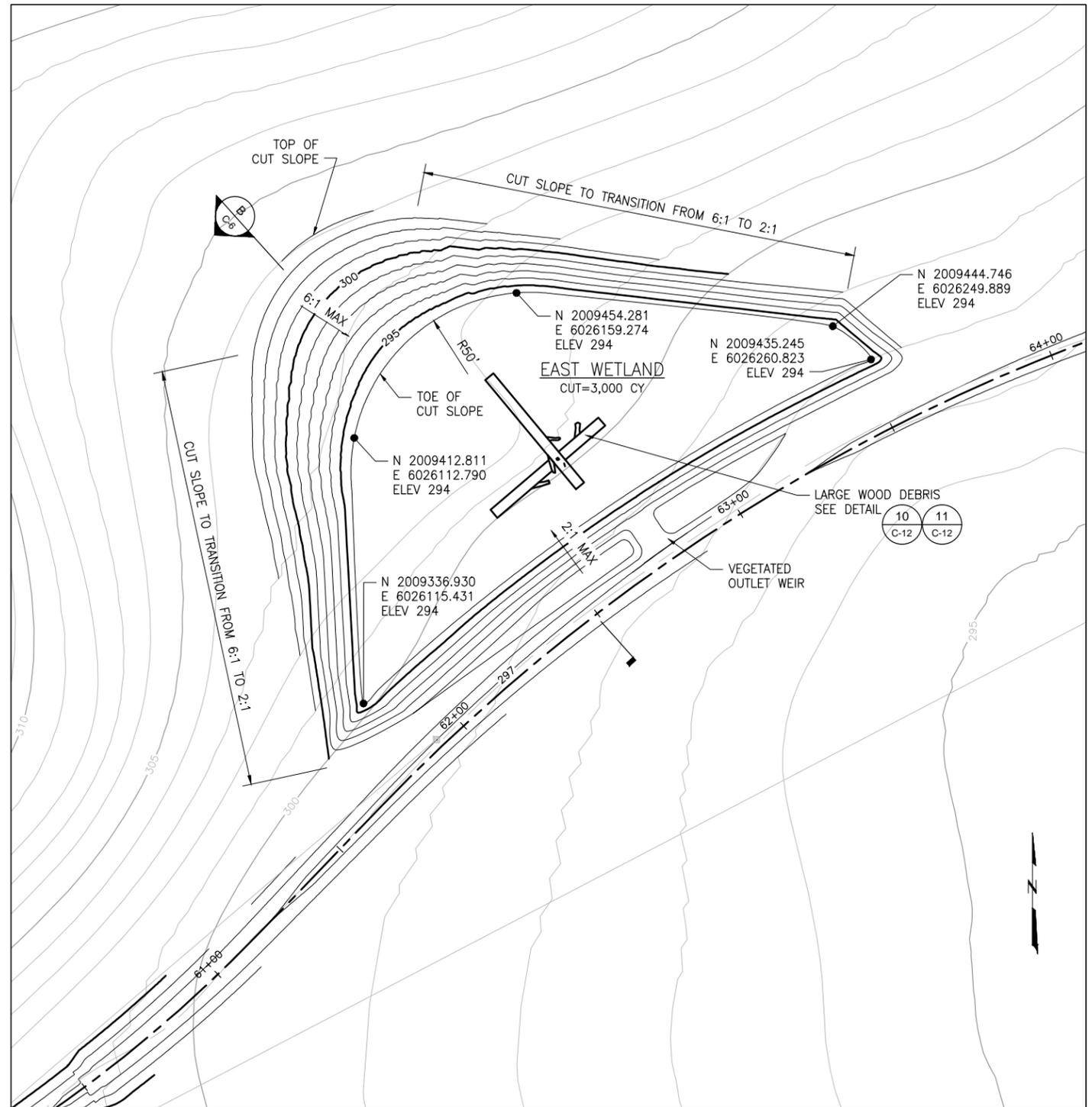
ADOBE GULCH GRASSLAND

OAK RIPARIAN GRADING PLAN

CHECKED / APPROVED	DRAWN	SCALE AS SHOWN
SECTION MANAGER	DESIGNED	DATE
APPROVED	APPROVED	
MANAGER, ENGINEERING MANAGEMENT BUREAU	MANAGER, NATURAL RESOURCES DIVISION	
SHEET	PLAN NO.	DRAWING NO.
8 of 18		C-4



A WEST WETLAND - GRADING PLAN
1" = 20'



B EAST WETLAND - GRADING PLAN
1" = 20'

CONTRACT NO. WD-2651

CITY AND COUNTY OF SAN FRANCISCO
PUBLIC UTILITIES COMMISSION
INFRASTRUCTURE DIVISION
ENGINEERING MANAGEMENT BUREAU

ADOBE GULCH GRASSLAND

WETLAND GRADING PLAN

NOTES:

- CUT VOLUME QUANTITIES BASED ON IN-SITU SOIL VOLUMES.

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DATUM:
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PROJECT ENGINEER	CQ	DRAWN	KVS
PROJECT MANAGER	MS	DESIGNED	CQ
APPROVAL	MS	CHECKED	ABW

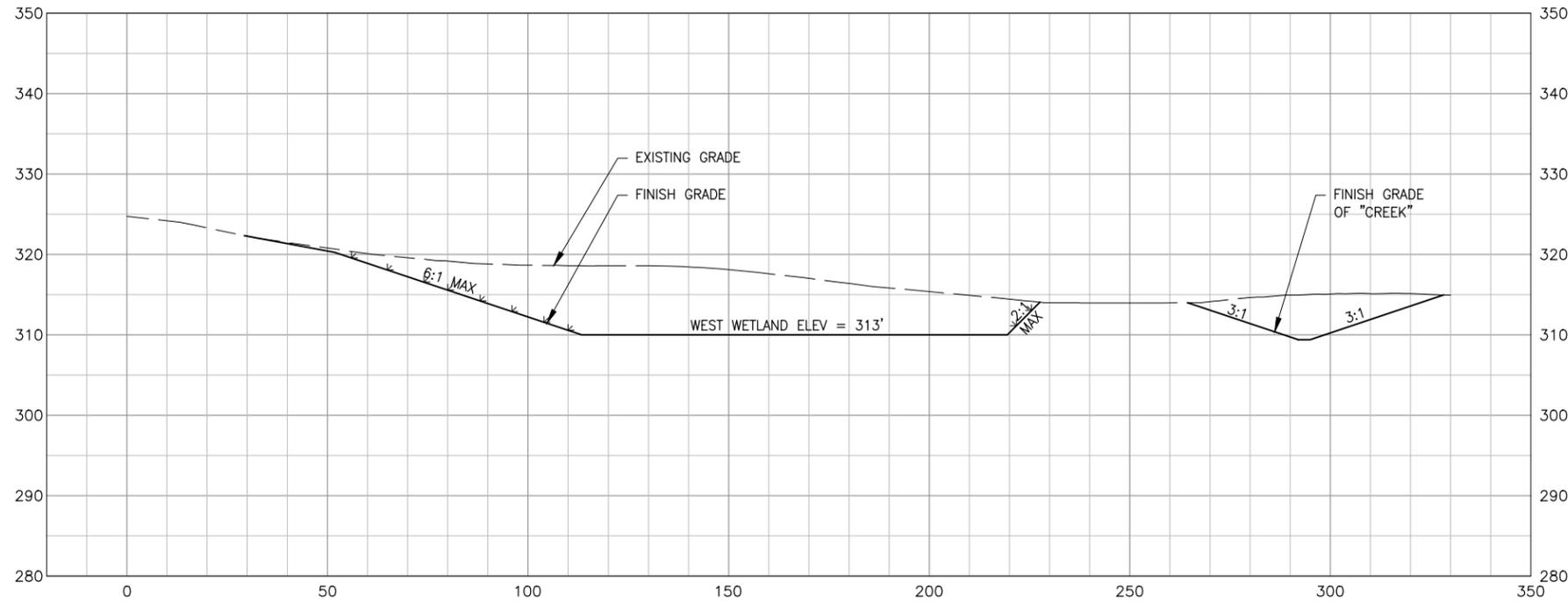
NO.	DATE	DESCRIPTION	BY	APPR'D
REVISIONS				

CHECKED / APPROVED	DRAWN	SCALE AS SHOWN
SECTION MANAGER	DESIGNED	DATE
APPROVED	APPROVED	

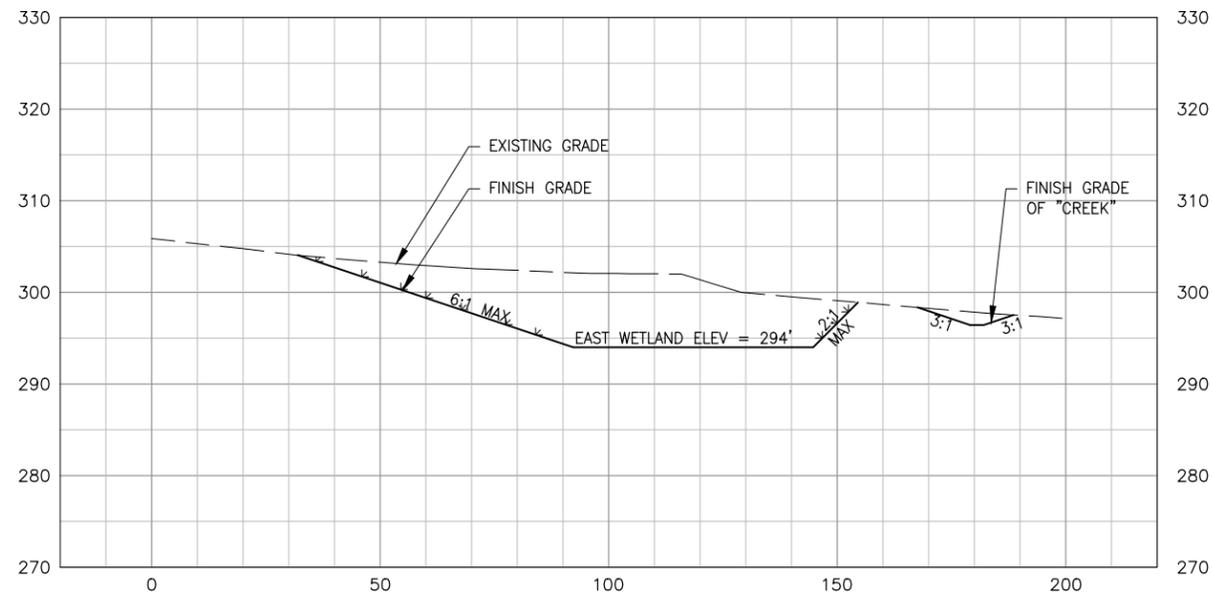
MANAGER, ENGINEERING MANAGEMENT BUREAU	MANAGER, NATURAL RESOURCES DIVISION
SHEET	DRAWING NO.
9 of 18	C-5

NOTES:

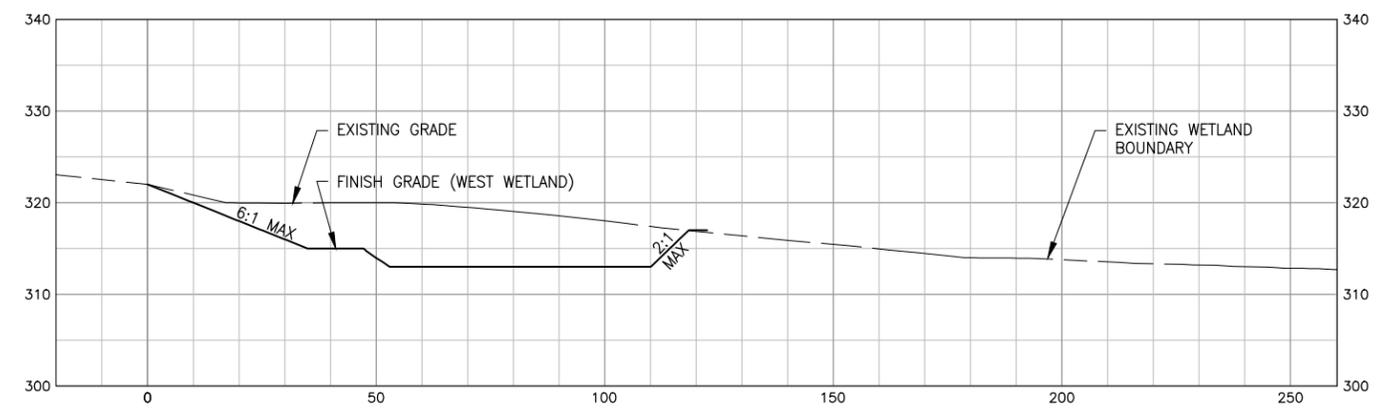
1. BOTTOM OF WETLAND ELEVATIONS ARE APPROXIMATE. CONTRACTOR SHALL CREATE MICRO-TOPOGRAPHY WITHIN +/- 1 FT OF WETLAND BOTTOM WITH FINAL APPROVAL FROM THE CITY REPRESENTATIVE.



A WEST WETLAND - SECTION
 C-6 SCALE: 1"=20'H 1"=10'V



B EAST WETLAND - SECTION
 C-6 SCALE: 1"=20'H 1"=10'V



C WEST WETLAND & EXISTING WETLAND - SECTION
 C-6 SCALE: 1"=20'H 1"=10'V

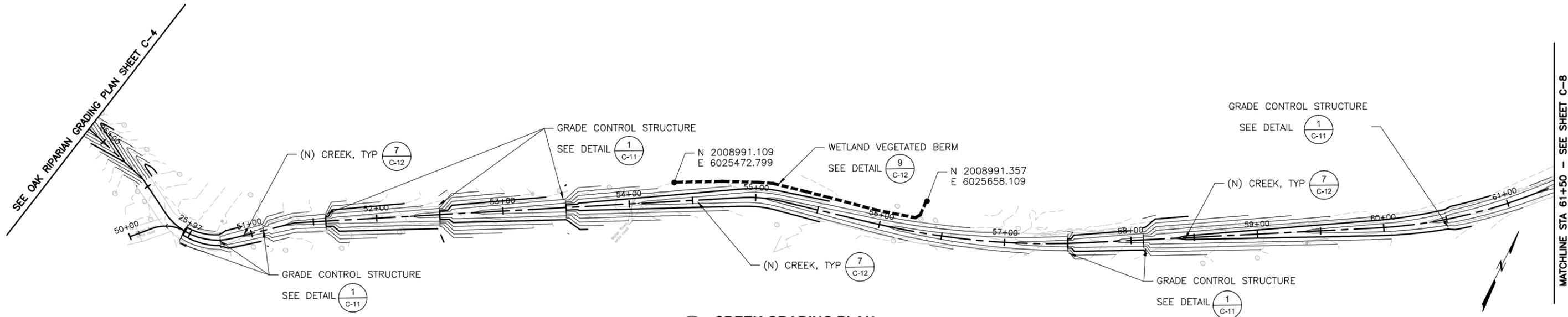


COORDINATE:
 NAD83
 ELEVATION
 DATUM:
 NAVD 1988

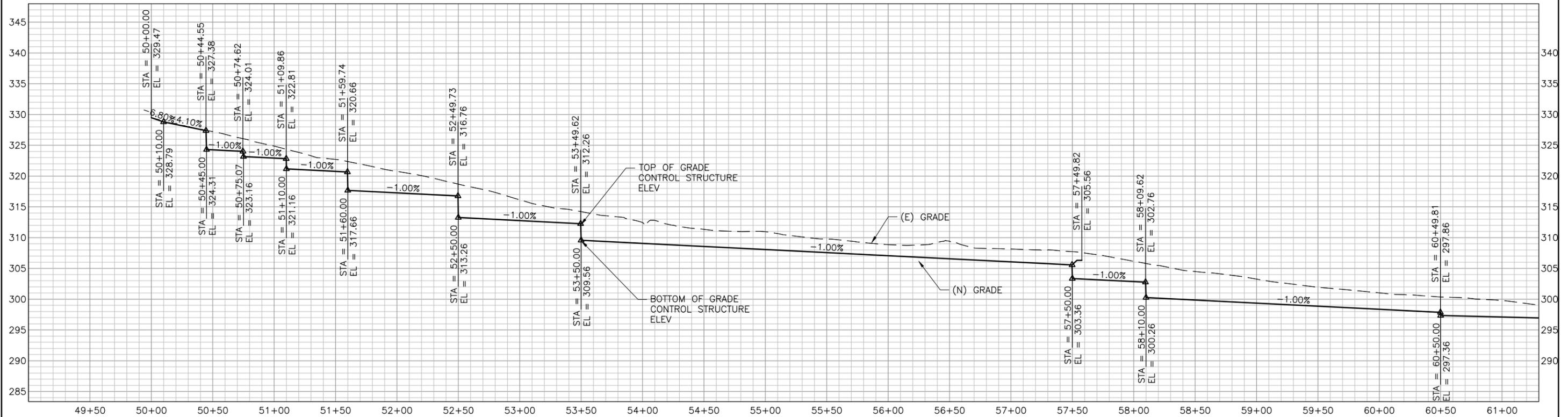
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PROJECT MANAGER	MS	DESIGNED	CQ
APPROVAL	MS	CHECKED	ABW
REVISIONS			
NO.	DATE	DESCRIPTION	BY

CONTRACT NO. WD-2651		
CITY AND COUNTY OF SAN FRANCISCO PUBLIC UTILITIES COMMISSION INFRASTRUCTURE DIVISION ENGINEERING MANAGEMENT BUREAU		
ADOBE GULCH GRASSLAND		
WETLAND SECTIONS		
CHECKED / APPROVED	DRAWN	SCALE AS SHOWN
SECTION MANAGER	DESIGNED	DATE
APPROVED	APPROVED	
MANAGER, ENGINEERING MANAGEMENT BUREAU	MANAGER, NATURAL RESOURCES DIVISION	
SHEET	PLAN NO.	DRAWING NO.
10 of 18		C-6



A CREEK GRADING PLAN
1"=40'



B CREEK PROFILE
SCALE: 1"=40'H 1"=8'V

NOTES:

1. THE SLOPES BETWEEN DROP STRUCTURES REPRESENTS THE AVERAGE SLOPES. LOCALIZED SLOPES BETWEEN DROP STRUCTURES SHOULD VARY BETWEEN 0.5% AND 2.0% TO CREATE A MORE NATURAL LOOK.
2. TOP AND BOTTOM ELEVATIONS OF THE GRADE CONTROL STRUCTURE SHALL BE CONSISTENT WITH WHAT IS SHOWN ON THE PLANS.
3. FINAL START AND STOP POINT OF WETLAND VEGETATED BERM TO BE APPROVED BY CITY REPRESENTATIVE.

CONTRACT NO. WD-2651

CITY AND COUNTY OF SAN FRANCISCO
PUBLIC UTILITIES COMMISSION
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ENGINEERING MANAGEMENT BUREAU

ADOBE GULCH GRASSLAND

**CREEK GRADING
PLAN & PROFILE**

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PROJECT MANAGER	MS	DESIGNED	CQ
APPROVAL	MS	CHECKED	ABW
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REVISIONS			

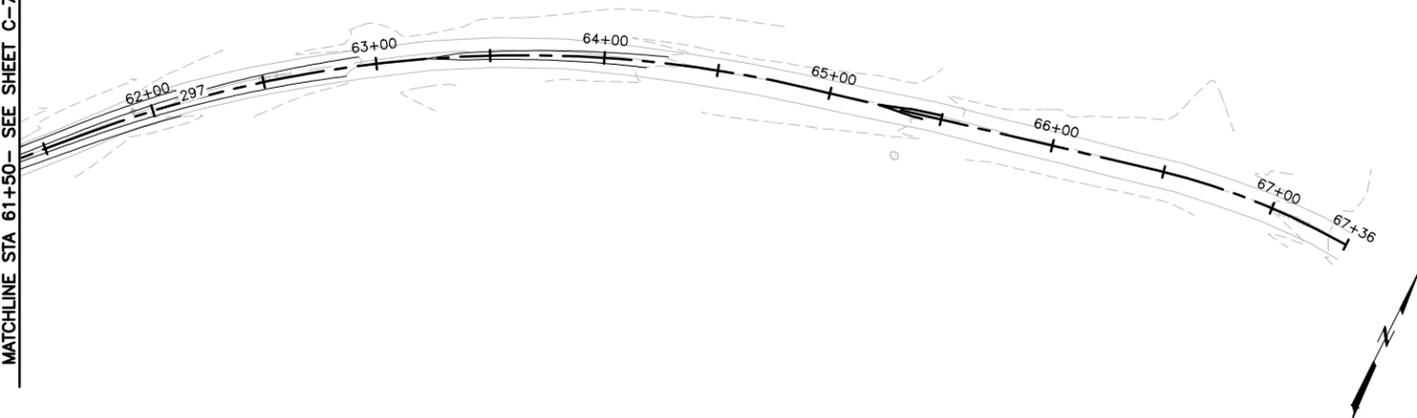
CHECKED / APPROVED	DRAWN	SCALE AS SHOWN
SECTION MANAGER	DESIGNED	DATE
APPROVED	APPROVED	
MANAGER, ENGINEERING MANAGEMENT BUREAU	MANAGER, NATURAL RESOURCES DIVISION	
SHEET	PLAN NO.	DRAWING NO.
11 of 18		C-7

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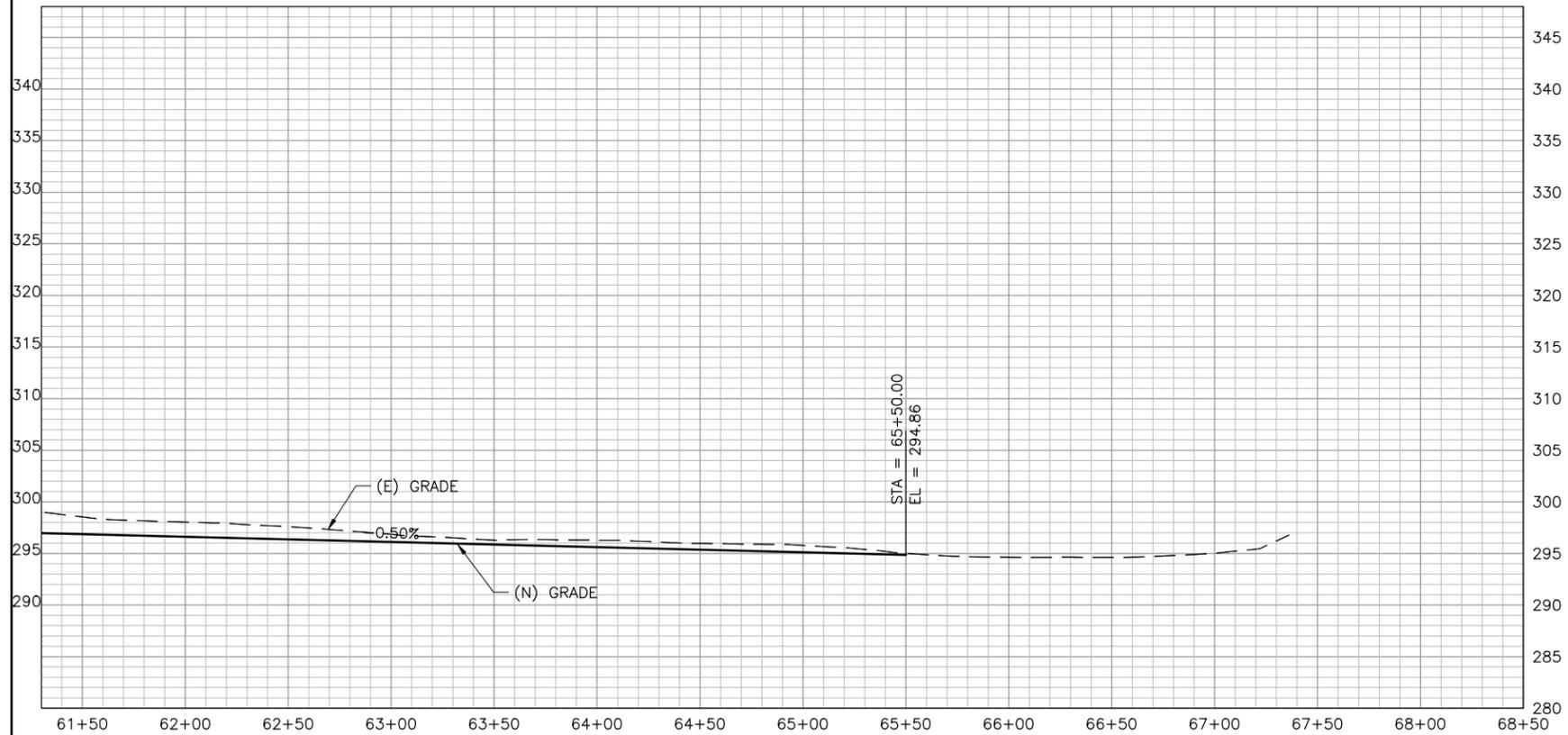
COORDINATE:
NAD83
ELEVATION
DATUM:
NAVD 1988



MATCHLINE STA 61+50 - SEE SHEET C-7



A
C-8
CREEK GRADING PLAN
1"=40'



B
C-8
CREEK PROFILE
SCALE: 1"=40'H 1"=8'V

NOTES:

1. THE SLOPES BETWEEN DROP STRUCTURES REPRESENTS THE AVERAGE SLOPES. LOCALIZED SLOPES BETWEEN DROP STRUCTURES MAY VARY BETWEEN 0.5% AND 2.0% TO GIVE A MORE NATURAL LOOK.
2. TOP AND BOTTOM ELEVATIONS OF THE GRADE CONTROL STRUCTURE SHALL BE CONSISTENT WITH WHAT IS SHOWN ON THE PLANS.

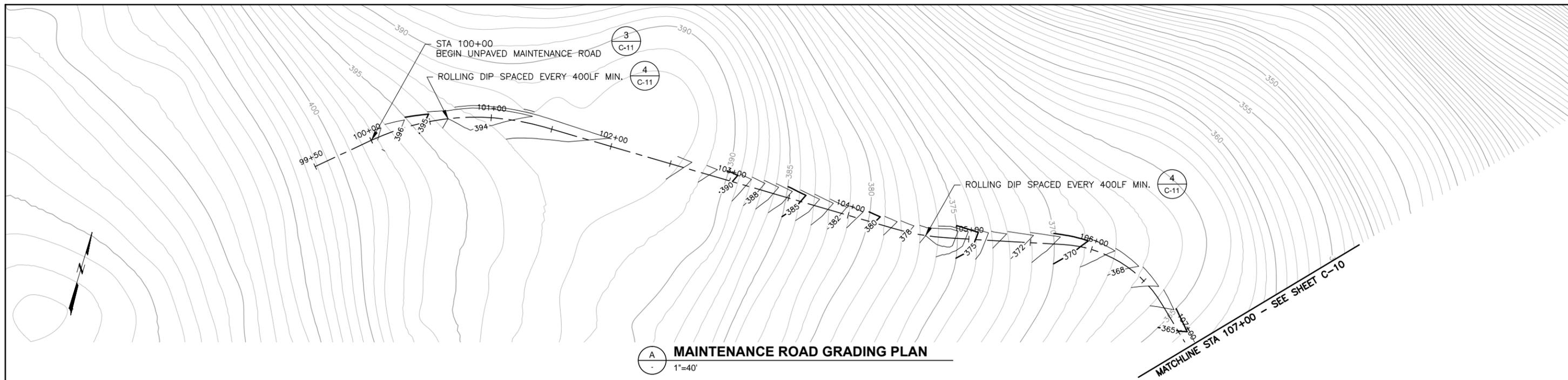


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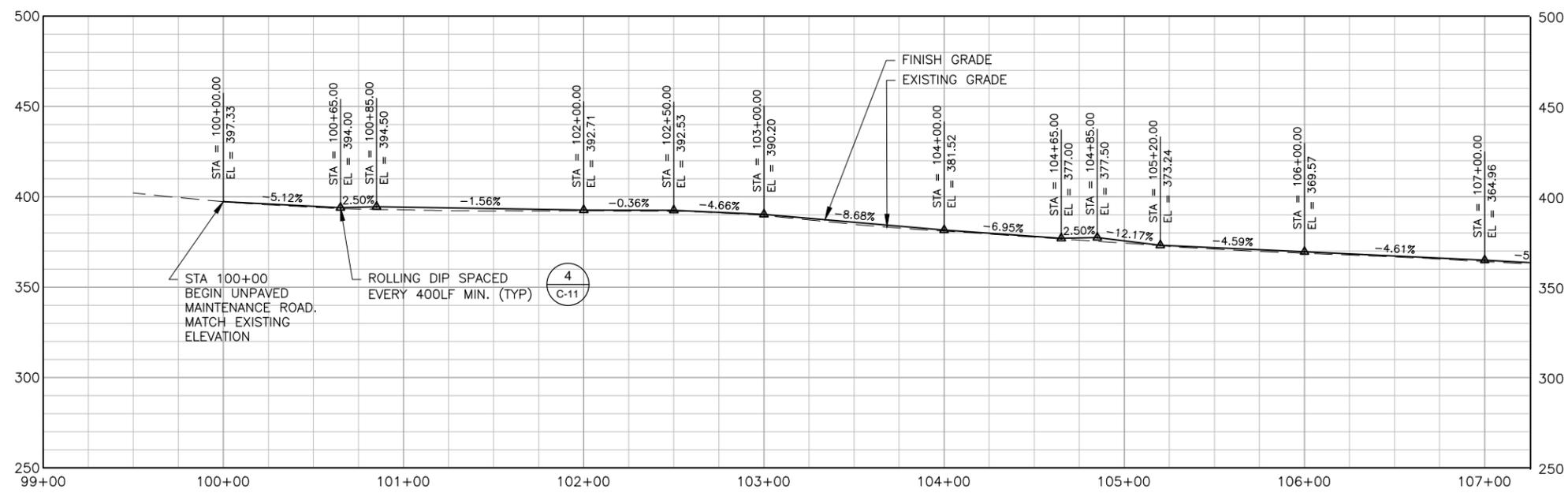
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CITY AND COUNTY OF SAN FRANCISCO PUBLIC UTILITIES COMMISSION INFRASTRUCTURE DIVISION ENGINEERING MANAGEMENT BUREAU		
ADOBE GULCH GRASSLAND		
CREEK GRADING PLAN & PROFILE		
CHECKED / APPROVED	DRAWN	SCALE AS SHOWN
SECTION MANAGER	DESIGNED	DATE
APPROVED	APPROVED	
MANAGER, ENGINEERING MANAGEMENT BUREAU	MANAGER, NATURAL RESOURCES DIVISION	
SHEET	PLAN NO.	DRAWING NO. REVISION NO.
12 of 18		C-8



A MAINTENANCE ROAD GRADING PLAN
1"=40'



B MAINTENANCE ROAD PROFILE
SCALE: 1"=40'H 1"=8'V

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CITY AND COUNTY OF SAN FRANCISCO
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INFRASTRUCTURE DIVISION
ENGINEERING MANAGEMENT BUREAU

ADOBE GULCH GRASSLAND
MAINTENANCE ROAD GRADING PLAN & PROFILE

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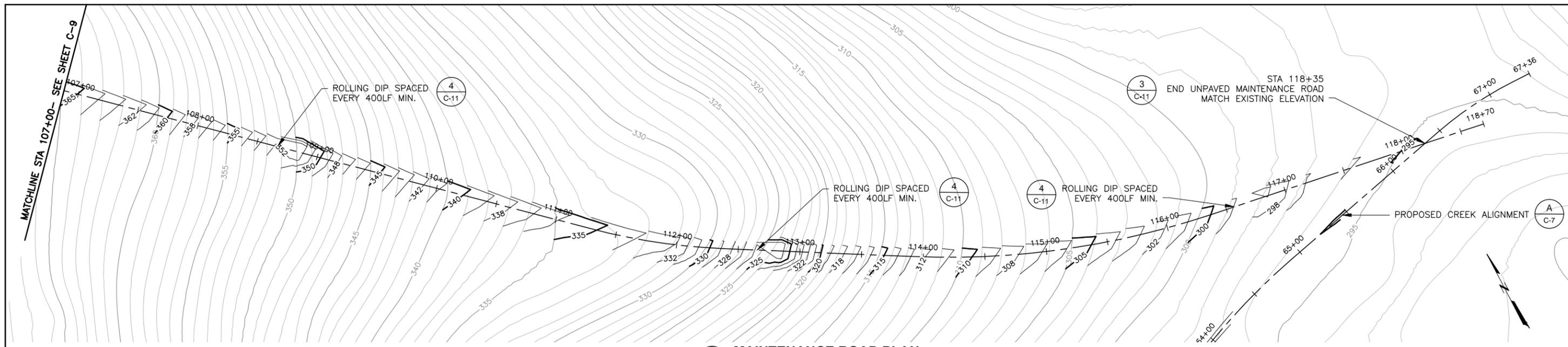
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PROJECT MANAGER	MS	DESIGNED	CQ
APPROVAL	MS	CHECKED	ABW
NO.	DATE	DESCRIPTION	BY
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SECTION MANAGER	DESIGNED	DATE
APPROVED	APPROVED	
MANAGER, ENGINEERING MANAGEMENT BUREAU	MANAGER, NATURAL RESOURCES DIVISION	
SHEET	PLAN NO.	DRAWING NO.
13 of 18		C-9

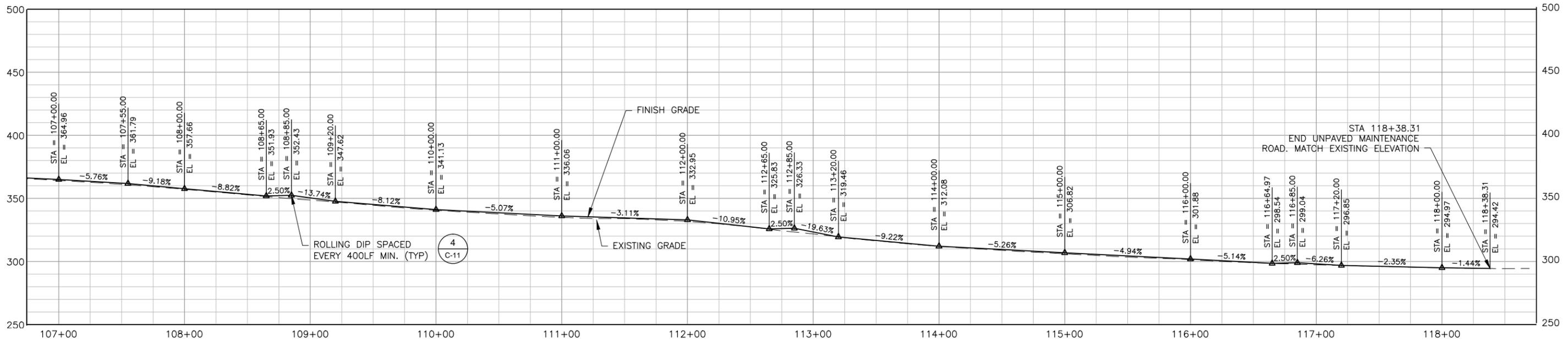
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NAD83
ELEVATION DATUM:
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A MAINTENANCE ROAD PLAN
1"=40'



B MAINTENANCE ROAD PROFILE
SCALE: 1"=40'H 1"=8'V

CONTRACT NO. WD-2651

CITY AND COUNTY OF SAN FRANCISCO
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ADOBE GULCH GRASSLAND
MAINTENANCE ROAD GRADING
PLAN & PROFILE

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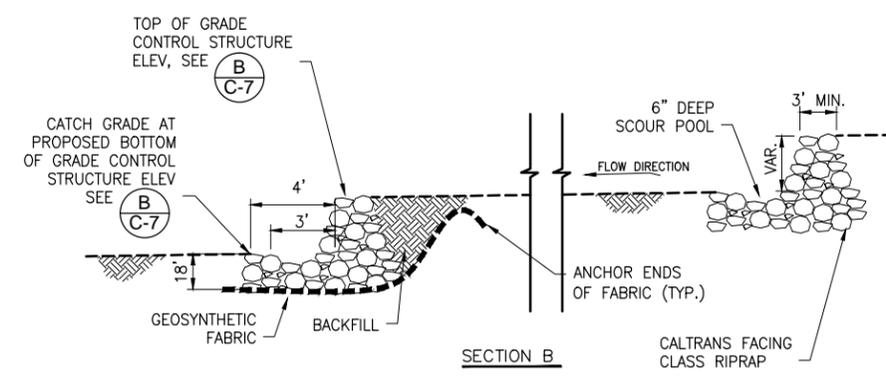
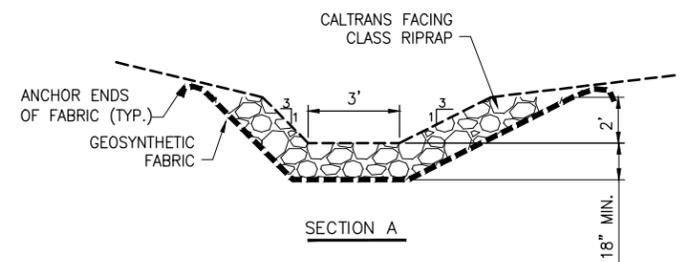
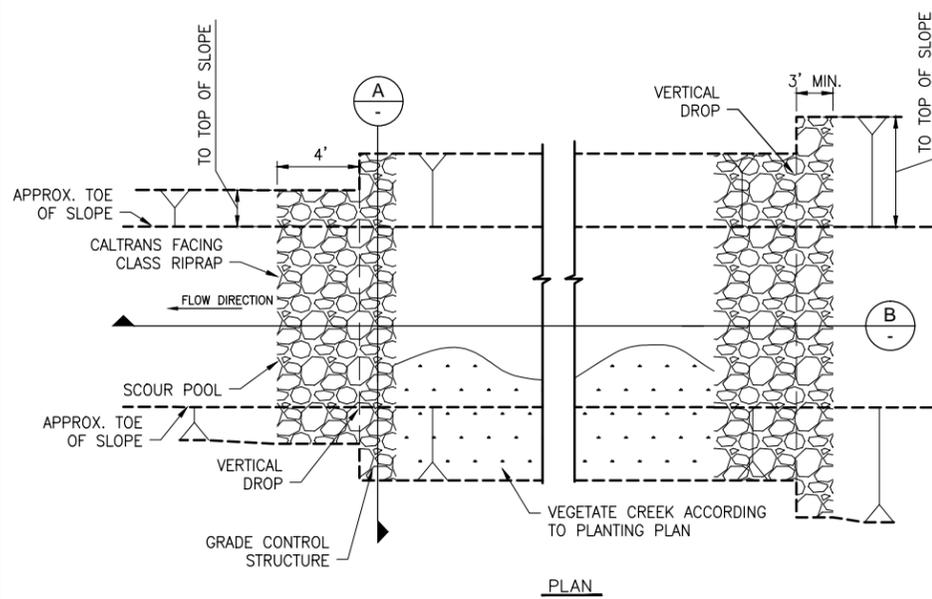
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PROJECT MANAGER	MS	DESIGNED	CQ
APPROVAL	MS	CHECKED	ABW
NO. DATE DESCRIPTION BY APPR'D			
REVISIONS			

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SECTION MANAGER	DESIGNED	DATE
APPROVED	APPROVED	
MANAGER, ENGINEERING MANAGEMENT BUREAU	MANAGER, NATURAL RESOURCES DIVISION	
SHEET 14 OF 18	PLAN NO.	DRAWING NO. C-10

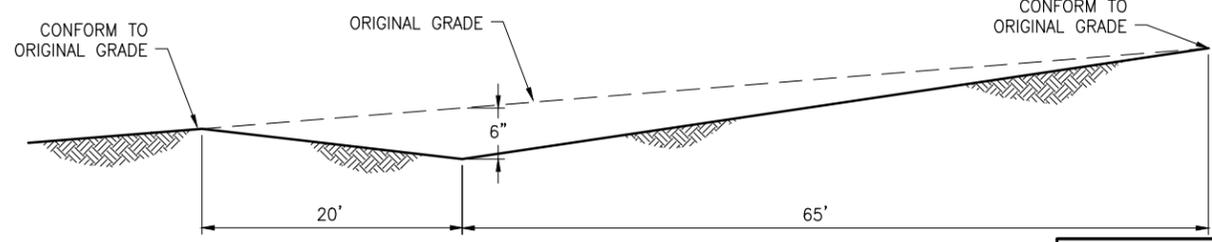
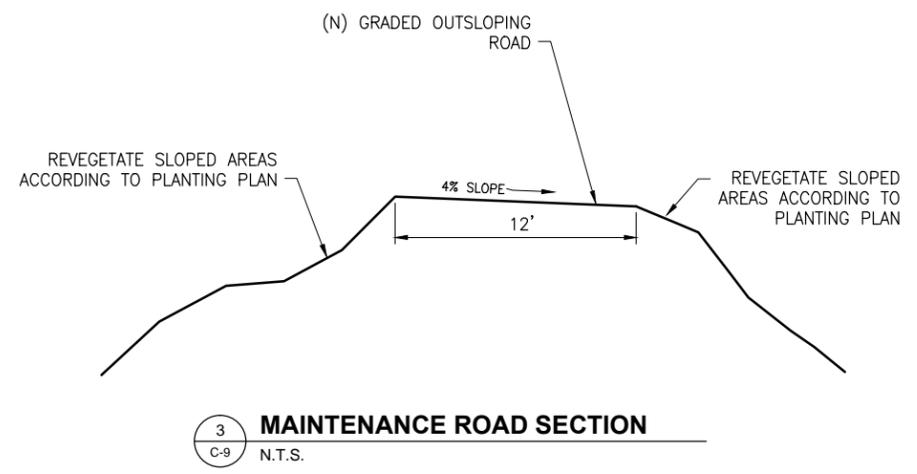
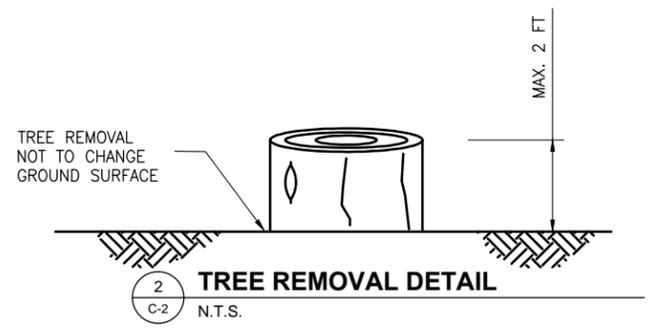
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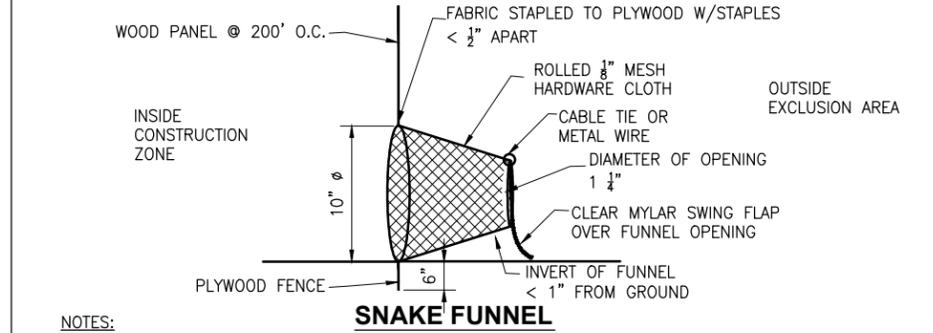
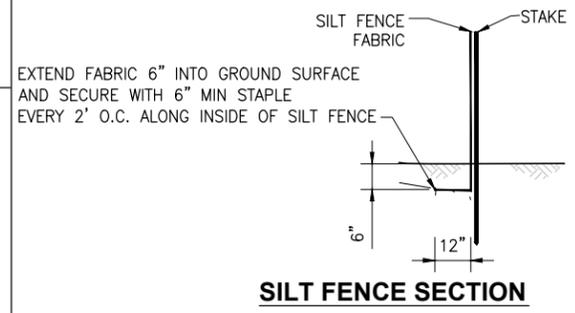
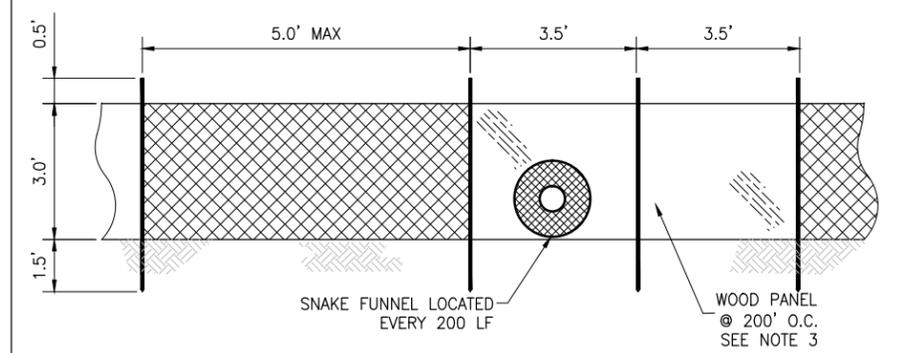




1 GRADE CONTROL STRUCTURE
C-7 N.T.S.



NOTES:
1. SPACING BETWEEN ROLLING DIPS = 400'



- NOTES:
- AT JOINTS, OVERLAP STAKES AND FOLD FENCE FABRIC AROUND EACH STAKE ONE FULL TURN, REFER TO TEMPORARY SILT FENCE POST AT JOINT DETAIL.
 - FOR END STAKE CONDITION FOLD FENCE FABRIC AROUND TWO STAKES ONE FULL TURN AND SECURE WITH FOUR STAPLES, REFER TO TEMPORARY SILT FENCE END POST DETAIL.
 - SNAKE FUNNEL SHALL WITH WOOD PANEL FENCE SHALL BE EVERY 200' O.C. THE WOOD PANEL IS MADE OF 4'X8' HARDWOOD OR PLYWOOD (EXTERIOR GRADE). THE SURFACE SHALL BE FREE OF KNOTS, CRACKS AND HOLES.
- 5 SILT FENCE/EXCLUSION FENCE INSTALLATION DETAIL**
C-2 N.T.S.

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ADOBE GULCH GRASSLAND

CONSTRUCTION DETAILS

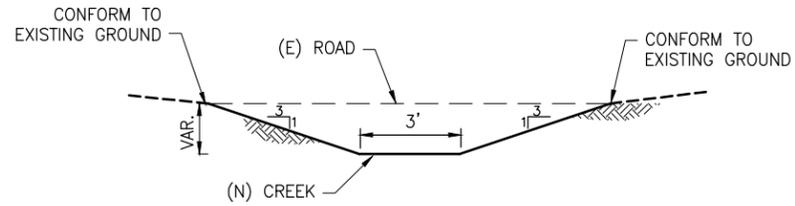
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SECTION MANAGER	DESIGNED	DATE
APPROVED	APPROVED	
MANAGER, ENGINEERING MANAGEMENT BUREAU	MANAGER, NATURAL RESOURCES DIVISION	
SHEET 15 OF 18	PLAN NO.	DRAWING NO. C-11
REVISIONS		REVISION NO.

95% SUBMITTAL
NOT FOR CONSTRUCTION
OCTOBER 29, 2010

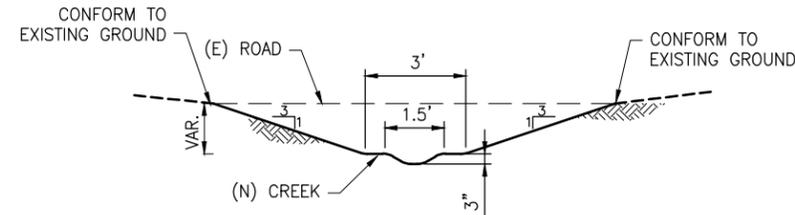
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417 Montgomery Street, Suite 700, San Francisco, CA 94104-1115
tel 415.283.4970 \$ fax 415.283.4980 \$ www.w-and-k.com

PROJECT ENGINEER	CQ	DRAWN	CQ
PROJECT MANAGER	MS	DESIGNED	CQ
APPROVAL	MS	CHECKED	ABW

COORDINATE: NAD83
ELEVATION DATUM: NAVD 1988



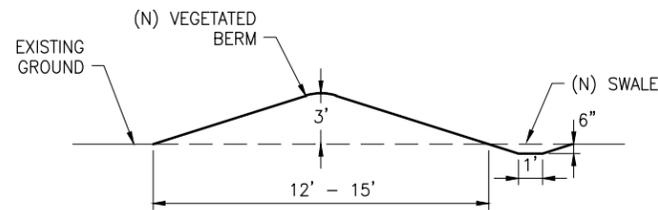
6 CREEK SECTION TYP.
C-7 N.T.S.



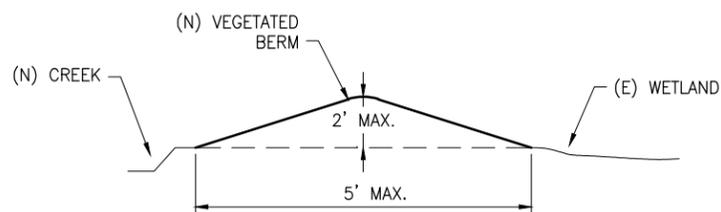
NOTES:

1. MAXIMUM SIDE SLOPE OF LOW FLOW CHANNEL SHALL BE 2:1 (HORIZ:VERT).
2. LOW FLOW CHANNEL AND BENCHES SHALL BE VEGETATED ACCORDING TO PLANTING PLAN.

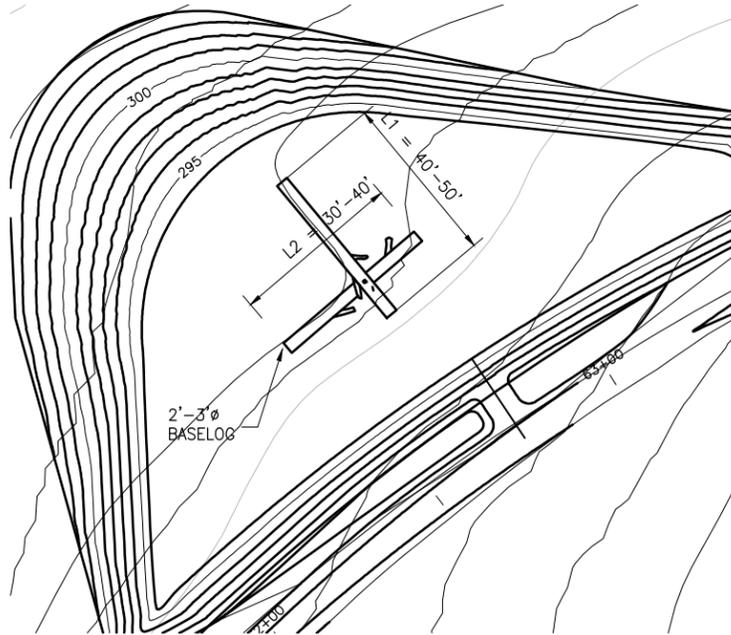
7 CREEK SECTION WITH LOW FLOW CHANNEL TYP.
C-7 N.T.S.



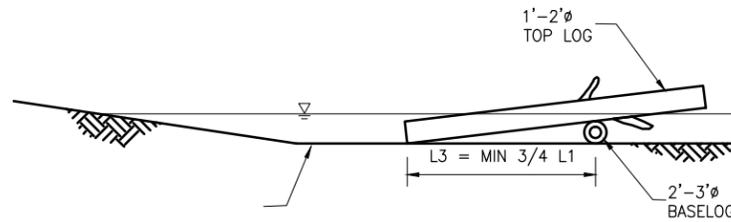
8 VEGETATED BERM TYP.
C-4 N.T.S.



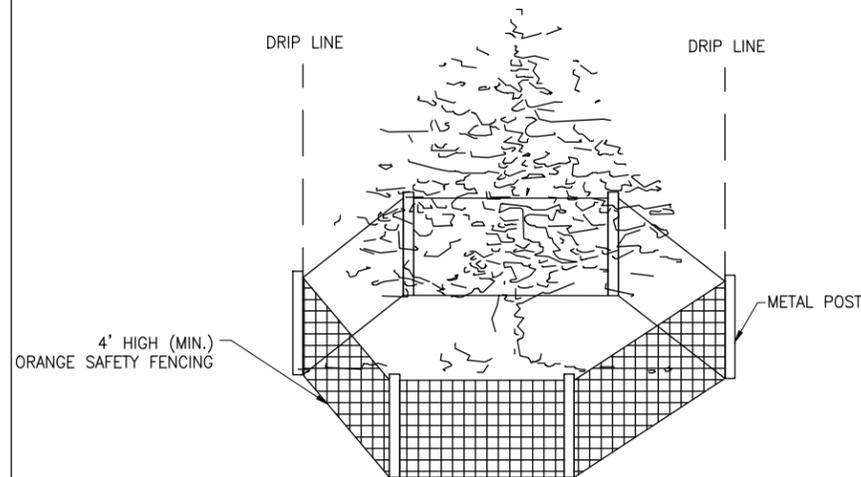
9 WETLAND VEGETATED BERM TYP.
C-7 N.T.S.



10 LARGE WOODY DEBRIS PLAN
C-5 N.T.S.



11 LARGE WOODY DEBRIS PROFILE
C-5 N.T.S.



12 TEMPORARY VEGETATION PROTECTION FENCING
C-2 N.T.S.

COORDINATE:
NAD83
ELEVATION
DATUM:
NAVD 1988

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2010

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PROJECT MANAGER	MS	DESIGNED	CQ
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NO.		DATE	
DESCRIPTION		BY	
APPROV'D		DATE	
REVISIONS			

CONTRACT NO. WD-2651

CITY AND COUNTY OF SAN FRANCISCO
PUBLIC UTILITIES COMMISSION
INFRASTRUCTURE DIVISION
ENGINEERING MANAGEMENT BUREAU

ADOBE GULCH GRASSLAND

CONSTRUCTION DETAILS

CHECKED / APPROVED	DRAWN	SCALE AS SHOWN
SECTION MANAGER	DESIGNED	DATE
APPROVED	APPROVED	
MANAGER, ENGINEERING MANAGEMENT BUREAU	MANAGER, NATURAL RESOURCES DIVISION	
SHEET	PLAN NO.	DRAWING NO.
16 of 18		C-12



CLEARING DATA		
NUMBER	CLEARING METHOD	ACRES
①	CYPRESS/PINE – LOGGING	2.21
②	SCRUB – MECHANICAL CLEARING	5.0
③	SCRUB – MECHANICAL CLEARING	3.08
④	OAK UNDER STORY – HAND CLEARING ONLY	0.3
⑤	GRASSLAND/SCRUB – HAND CLEARING ONLY	7.39
⑥	SCRUB – MECHANICAL CLEARING	1.49
⑦	SCRUB – MECHANICAL CLEARING	4.94
⑧	OAK UNDER STORY – HAND CLEARING ONLY	1.25
⑨	GRASSLAND/SCRUB – HAND CLEARING ONLY	6.31
⑩	OAK UNDER STORY – HAND CLEARING ONLY	5.46
⑪	GRASSLAND/SCRUB – HAND CLEARING ONLY	0.14
⑫	SCRUB – MECHANICAL CLEARING	15.73
⑬	SCRUB – MECHANICAL CLEARING	0.75
⑭	GRASSLAND/SCRUB – HAND CLEARING ONLY	0.17
⑮	GRASSLAND/SCRUB – HAND CLEARING ONLY	0.69
⑯	GRASSLAND/SCRUB – HAND CLEARING ONLY	0.79
⑰	WETLAND – HAND CLEARING ONLY	0.23
⑱	GRASSLAND/SCRUB – HAND CLEARING ONLY	0.68
⑲	GRASSLAND SCRUB – HAND CLEARING ONLY	0.78
⑳	GRASSLAND/SCRUB – HAND CLEARING ONLY	2.25
㉑	SCRUB – MECHANICAL CLEARING	0.49
㉒	GRASSLAND/SCRUB – HAND CLEARING ONLY	0.3
TOTAL:		60.43

A
L-1
CLEARING PLAN

NOTES:

1. TREES TO REMAIN SHALL BE MARKED BY A BIOLOGIST AND PROTECTED.
2. WETLANDS SHALL BE PROTECTED USING LOW GROUND PRESSURE EQUIPMENT (10 PSI) AND MATS IF IT IS NECESSARY TO DRIVE NEAR OR ON THE WETLAND.
3. THE SCRUB-MECHANICAL CLEARING AREAS SHALL HAVE AN EXCLUSION/SILT FENCE ALONG THE PERIMETER WITH ONE-WAY SNAKE FUNNEL TRAPS LOCATED PER BIOLOGIST RECOMMENDATIONS.

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CONTRACT NO. WD-2651
CITY AND COUNTY OF SAN FRANCISCO
PUBLIC UTILITIES COMMISSION
INFRASTRUCTURE DIVISION
ENGINEERING MANAGEMENT BUREAU

ADOBE GULCH GRASSLAND
VEGETATION REMOVAL PLAN

CHECKED / APPROVED	DRAWN	SCALE AS SHOWN
SECTION MANAGER	DESIGNED	DATE
APPROVED	APPROVED	
MANAGER, ENGINEERING MANAGEMENT BUREAU	MANAGER, NATURAL RESOURCES DIVISION	
SHEET	PLAN NO.	DRAWING NO.
17 of 18		L-1



ESTIMATED QUANTITIES		
SCIENTIFIC NAME	COMMON NAME	ESTIMATED QUANTITY
SALIX LASIOLEPIS	ARROYO WILLOW	280
JUNCUS EFFUSUS	COMMON RUSH	175
JUNCUS PATENS	SPREADING RUSH	475
CAREX BARBARAE	SANTA BARBARA SEDGE	200
ELEOCHARIS MACROSTACHYS	COMMON SPIKERUSH	250
CORYLUS CORNUTA	HAZELNUT	30
RUBUS PARVIFLORUS	THIMBLEBERRY	30
CANADENSIS	COMMON ELDERBERRY	30
ARBUTUS MENZEISII	PACIFIC MADRONE	105
HETEROMELES ARBUTIFOLIA	TOYON	105
RHAMNUS CALIFORNICA	CALIFORNIA COFFEEBERRY	105
QUERCUS AGRIFOLIA	COAST LIVE OAK	938
IRIS DOUGLASIANA	DOUGLAS IRIS	2 LBS
NASSELLA LEPIDA	FOOTHILL NEEDLEGRASS	63 LBS
DANTHONIA CALIFORNICA	CALIFORNIA OATGRASS	145 LBS
HORDEUM VULGARE	COMMON BARLEY	176 LBS
CASTILLEJA DENSIFLORA	PURPLE OWL'S CLOVER	40 LBS
CASTILLEJA EXSERTA	EXSERTED PAINTBRUSH	40 LBS
ESCHSCHOLZIA CALIFORNICA	CALIFORNIA POPPY	10 LBS
LASTHENIA CALIFORNICA	CALIFORNIA GOLDFIELDS	40 LBS
LAYIA PLATYGLOSSA	TIDY-TIPS	40 LBS
PLANTAGO ERECTA	CALIFORNIA PLANTAIN	23 LBS
BROMUS CARINATUS	CALIFORNIA BROME	257 LBS
ELYMUS GLAUCUS	BLUE WILD RYE	108 LBS
FESTUCA RUBRA	RED FESCUE	26 LBS
LUBINUS BICOLOR	BICOLOR LUPINE	57 LBS
NASELLA PULCHRA	PURPLE NEEDLEGRASS	74 LBS
VULPIA MICROSTACHYS	THREE WEEK FESCUE	91 LBS
LOMATIUM DASYCARPUM	HAIRY-FRUITED LOMATIUM	500
ERIOGONUM LATIFOLIUM	COAST BUCKWHEAT	500
LUPINUS ALBIFRONS	SILVERLEAF LUPINE	300

PLANTING ZONE	HABITAT	SIZE
A	OAK WOODLAND ESTABLISHMENT	2.2 AC
B	OAK WOODLAND ENHANCEMENT	7.0 AC
C	OAK RIPARIAN ESTABLISHMENT	1,150 LF
D	WILLOW RIPARIAN RE-ESTABLISHMENT	1,135 LF
E	GRASSLAND ENHANCEMENT	18.2 AC
F	GRASSLAND RE-ESTABLISHMENT	31.5 AC
G	WETLAND ENHANCEMENT	0.2 AC
H	WETLAND ESTABLISHMENT	0.6 AC

A
L-1 **PLANTING PLAN**

NOTES:

- TREES TO REMAIN SHALL BE MARKED BY A BIOLOGIST AND PROTECTED.
- PLANTING ZONE PLANT/SEED SPECIES ARE DESCRIBED IN THE SPECIFICATIONS AND IN THE ADOBE GULCH GRASSLAND MITIGATION AND MONITORING PLAN.
- RESTORE STAGING AREA TO ZONE 2 PLANTING.

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ADOBE GULCH GRASSLAND

PLANTING ZONES

CHECKED / APPROVED	DRAWN	SCALE AS SHOWN
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APPROVED	APPROVED	
MANAGER, ENGINEERING MANAGEMENT BUREAU	MANAGER, NATURAL RESOURCES DIVISION	
SHEET	PLAN NO.	DRAWING NO.
18 of 18		L-2