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GENERAL NOTES

- ALL CONSTRUCTION SHALL CONFORM TO THE SPECIAL PROVISIONS, THESE PLANS, AND THE CITY OF SACRAMENTO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (DATED JUNE 1984). WHERE SPECIFICALLY NOTED ON THESE PLANS, CONSTRUCTION SHALL CONFORM TO THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS (DATED JULY 2002), REFERENCED HEREIN AS "CALTRANS STANDARD PLANS". WHERE SPECIFICALLY NOTED ON THESE PLANS, CONSTRUCTION SHALL CONFORM TO THE COUNTY OF SACRAMENTO STANDARD CONSTRUCTION SPECIFICATIONS AND DRAWINGS (DATED MARCH 2004), REFERENCED HEREIN AS "COUNTY STANDARD DRAWINGS".
- LOCATIONS OF UNDERGROUND UTILITIES HAVE NOT BEEN IDENTIFIED AND ARE NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (USA) A MINIMUM OF TWO WORKING DAYS PRIOR TO BEGINNING WORK. IF UTILITY CONFLICTS ARE IDENTIFIED, THE CONTRACTOR SHALL HALT ALL WORK IN THE AREA AFFECTED BY THE UTILITY CONFLICT AND SHALL IMMEDIATELY NOTIFY THE ENGINEER.
- THIS PROJECT IS SUBJECT TO REQUIREMENTS OF PERMITS ISSUED BY VARIOUS REGULATORY AGENCIES. THE CONTRACTOR IS RESPONSIBLE TO UNDERSTAND AND PERFORM ALL WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE PERMITS.
- WHEN CONDITIONS IN THE FIELD DO NOT CONFORM WITH INFORMATION IN THESE PLANS AND/OR WHEN UNUSUAL CIRCUMSTANCES ARISE DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE ENGINEER. IF THE ENGINEER IS NOT AT THE PROJECT SITE, THE CONTRACTOR SHALL CONTACT BILL BUSATH AT (916) 808-1434.
- IN THE EVENT THAT ANY ARCHEOLOGICAL ARTIFACTS, EXOTIC ROCK (NON-NATIVE), UNUSUAL AMOUNTS OF SHELL, OR BONES ARE UNCOVERED DURING CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL STOP ALL WORK IMMEDIATELY IN THE AREA AND CONTACT THE ENGINEER. WORK IN THE AREA SHALL NOT RESUME UNTIL APPROVED BY THE ENGINEER.

LEGEND

	PROPOSED	EXISTING
MAINTENANCE HOLE		
TREES TO BE PRESERVED		
TREES TO BE REMOVED		
STORM DRAIN & CULVERT PIPE		
GROUND CONTOURS—MINOR		
GROUND CONTOURS—MAJOR		
PROPOSED CONTOURS—MINOR		
PROPOSED CONTOURS—MAJOR		
SLOPE LINES		
BASELINE		
CONTROL POINTS		
CLEARING AND GRUBBING AREA		
PRESERVATION FENCING		
CREEK CENTERLINE		
DETAIL OR SECTION CALLOUT		
PROPOSED SPOT ELEVATION	+ 68.00	
PROPOSED TOP OF WALL/ FINISHED GRADE ELEVATIONS	TON=68.5 FG=68.00	

CITY OF SACRAMENTO

CONSTRUCTION PLANS FOR

DEL PASO REGIONAL PARK

DETENTION AND FILTRATION

WETLAND PROJECT

FEBRUARY 2007

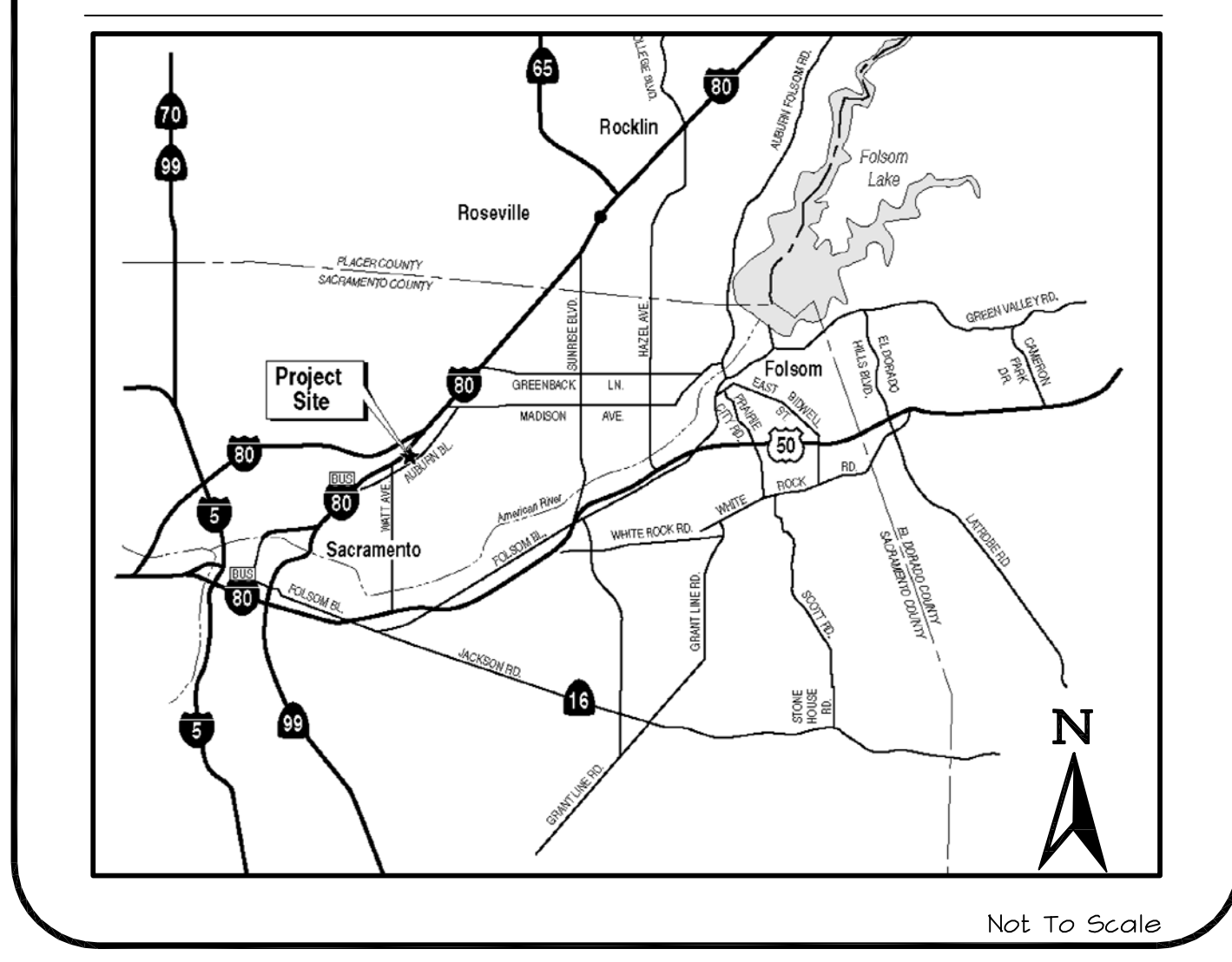
CITY REPRESENTATIVE

MARK ELLIOTT, P.E.
ASSOCIATE CIVIL ENGINEER
CITY OF SACRAMENTO
DEPARTMENT OF UTILITIES
1395 35TH AVENUE
SACRAMENTO, CA 95821
TELEPHONE: (916) 808-8894

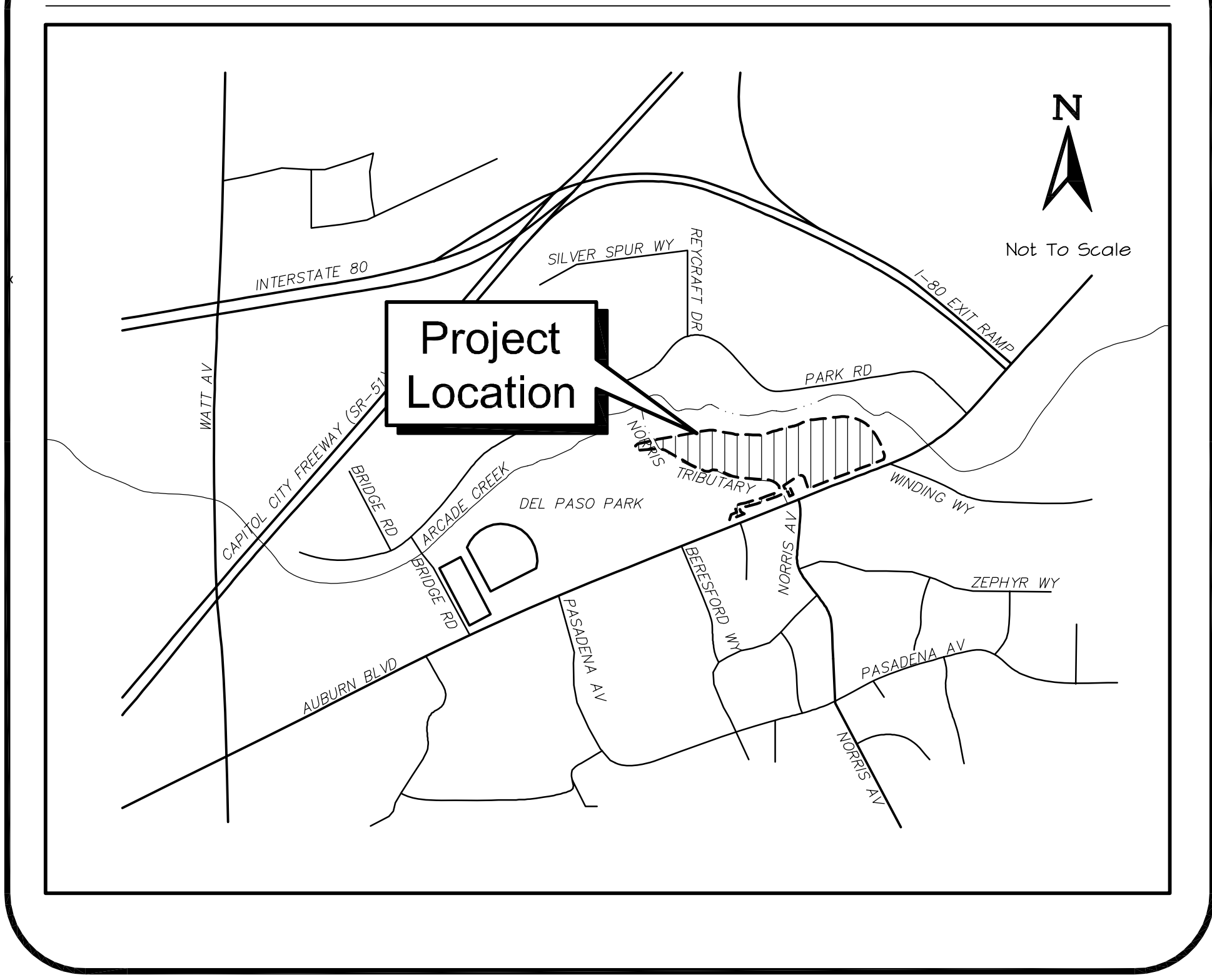
APPROVED BY:

MARK ELLIOTT, ASSOCIATE CIVIL ENGINEER (date)

VICINITY MAP



LOCATION MAP



CHRISTOPHER C. ELLIOTT
CALIFORNIA LICENSED
LANDSCAPE ARCHITECT NO. 4247
Jones & Stokes (date)



MARTIN K. FISHER
CALIFORNIA REGISTERED
PROFESSIONAL ENGINEER NO. C58936
Jones & Stokes (date)

REVISIONS			
NO.	DESCRIPTION	DATE	BY

BENCHMARK ELEV. _____
DESCRIPTION:
**SEE SITE IMPROVEMENT PLAN
SHEET FOR PROJECT CONTROL**

SCALE:
N.T.S.
1" = _____
ON ORIGINAL SCALE

CITY OF SACRAMENTO
DEPARTMENT OF UTILITIES

DESIGNED BY: MF/CE/KT
DRAWN BY: TS/MF/KT

REVIEWED BY: KR/CE/KL
PLOT DATE: 02/09/07

Jones & Stokes
2608 V Street, Sacramento, CA 95818

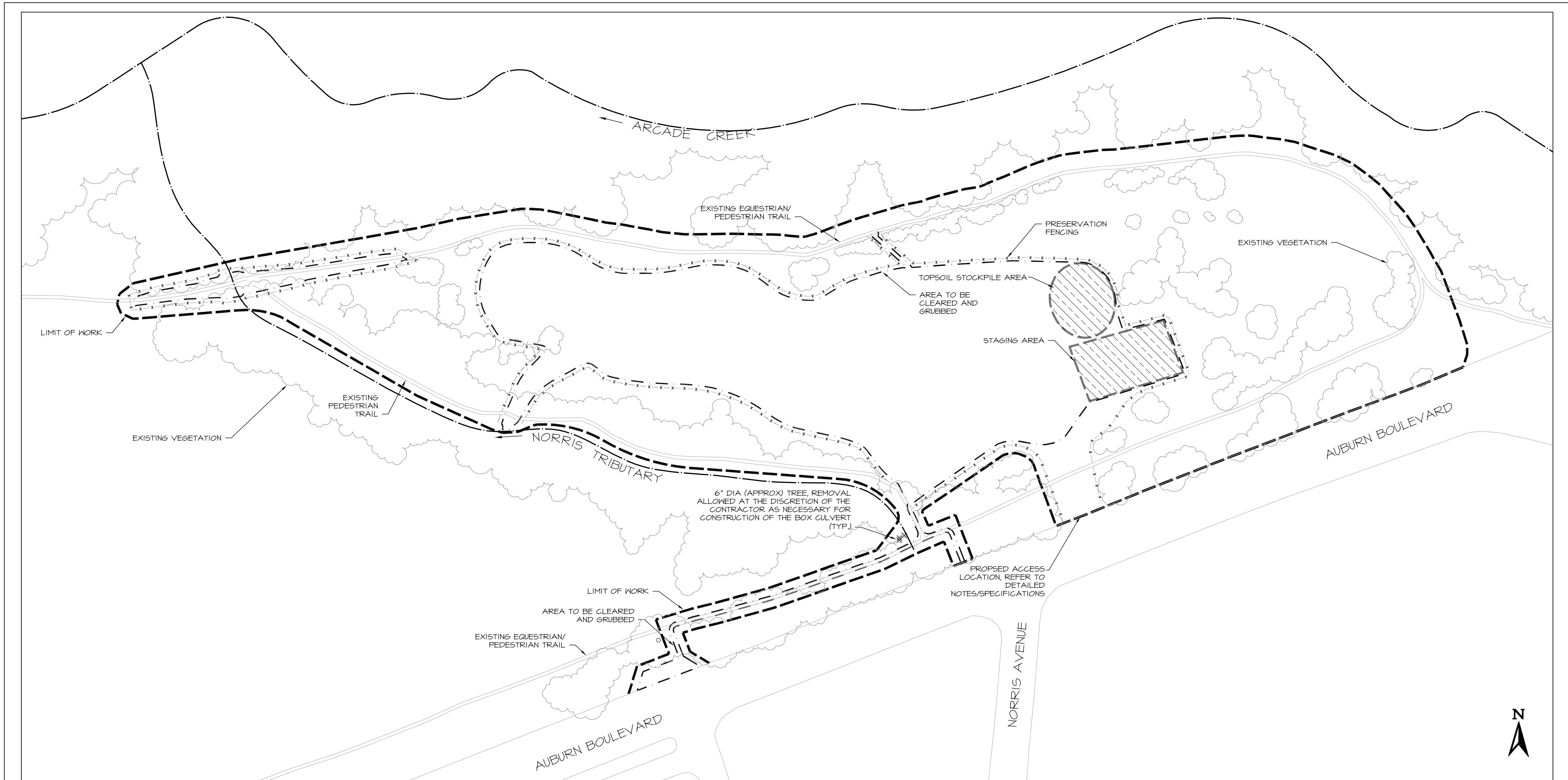
nhc
northwest hydraulic consultants, inc
3950 industrial boulevard, suite 100c
west sacramento, california 95691
office: (916) 371-7400 fax: (916) 371-7475

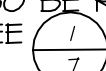
DEL PASO REGIONAL PARK
DETENTION AND FILTRATION WETLAND PROJECT

COVER

SHEET
1
OF
10

DEL PASO REGIONAL PARK DETENTION AND FILTRATION WETLAND PROJECT



- NOTES:**
- ADDITIONAL DEMOLITION ITEMS ARE INCLUDED ELSEWHERE IN THE PROJECT PLANS AND DETAILS.
 - PRESERVATION FENCING FOR INDIVIDUAL TREES IN THE FLOW DIVERSION STRUCTURE AREA AND OUTLET SWALE AREA SHALL ALSO BE REQUIRED AND SHALL BE STAKED BY THE CONTRACTOR FOR APPROVAL BY THE ENGINEER, SEE  AND SHEET 4.



REVISIONS			
NO.	DESCRIPTION	DATE	BY

BENCHMARK ELEV. _____
 DESCRIPTION:
 SEE SITE IMPROVEMENT PLAN
 SHEET FOR PROJECT CONTROL

SCALE:
1"=60'
 1"
 ON ORIGINAL SCALE

CITY OF SACRAMENTO
 DEPARTMENT OF UTILITIES

DESIGNED BY: MF/SC/CE/KT
 DRAWN BY: TS/MF/JS/KT

REVIEWED BY: KR/CE/KL
 PLOT DATE: 02/09/07

Jones & Stokes
 2600 V Street, Sacramento, CA 95818

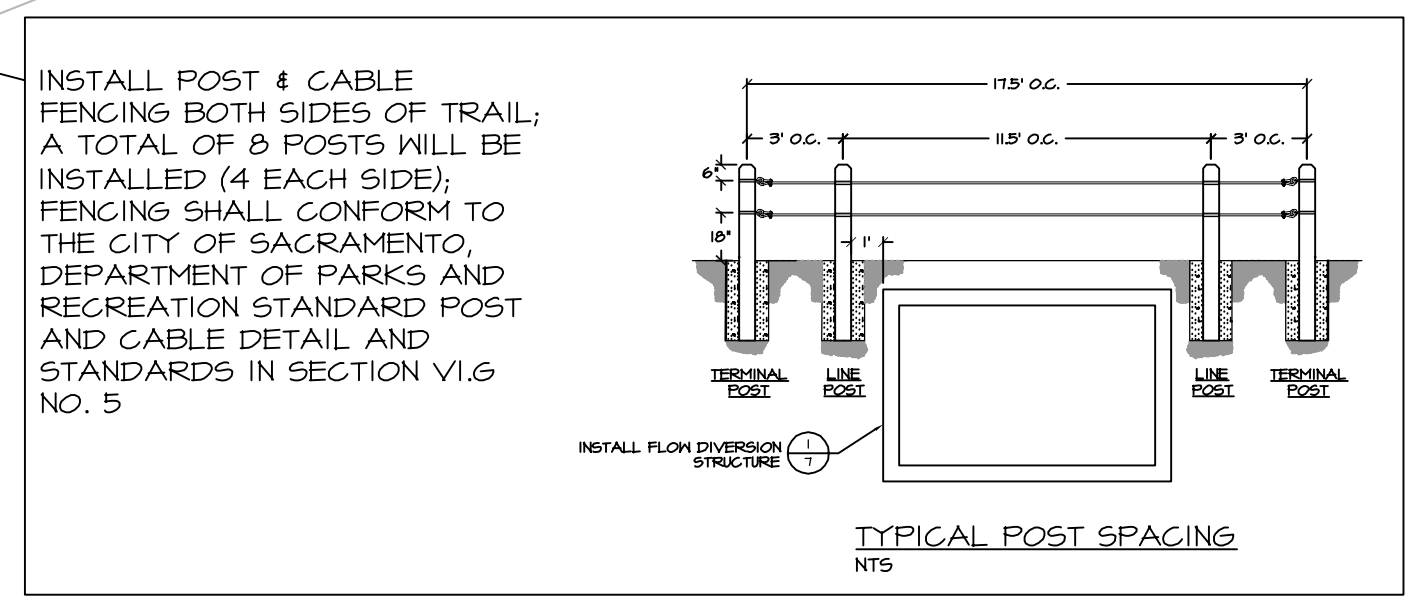
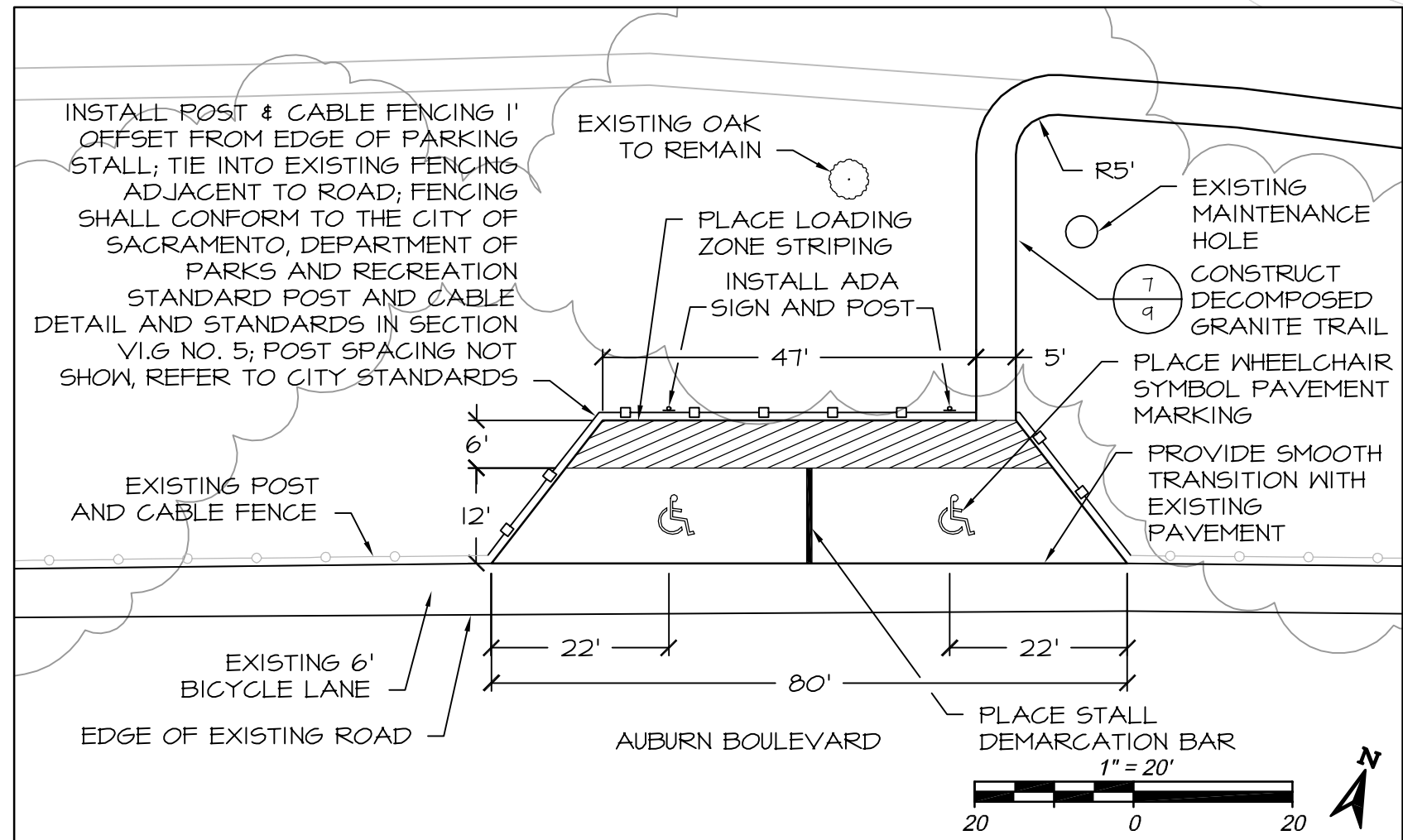
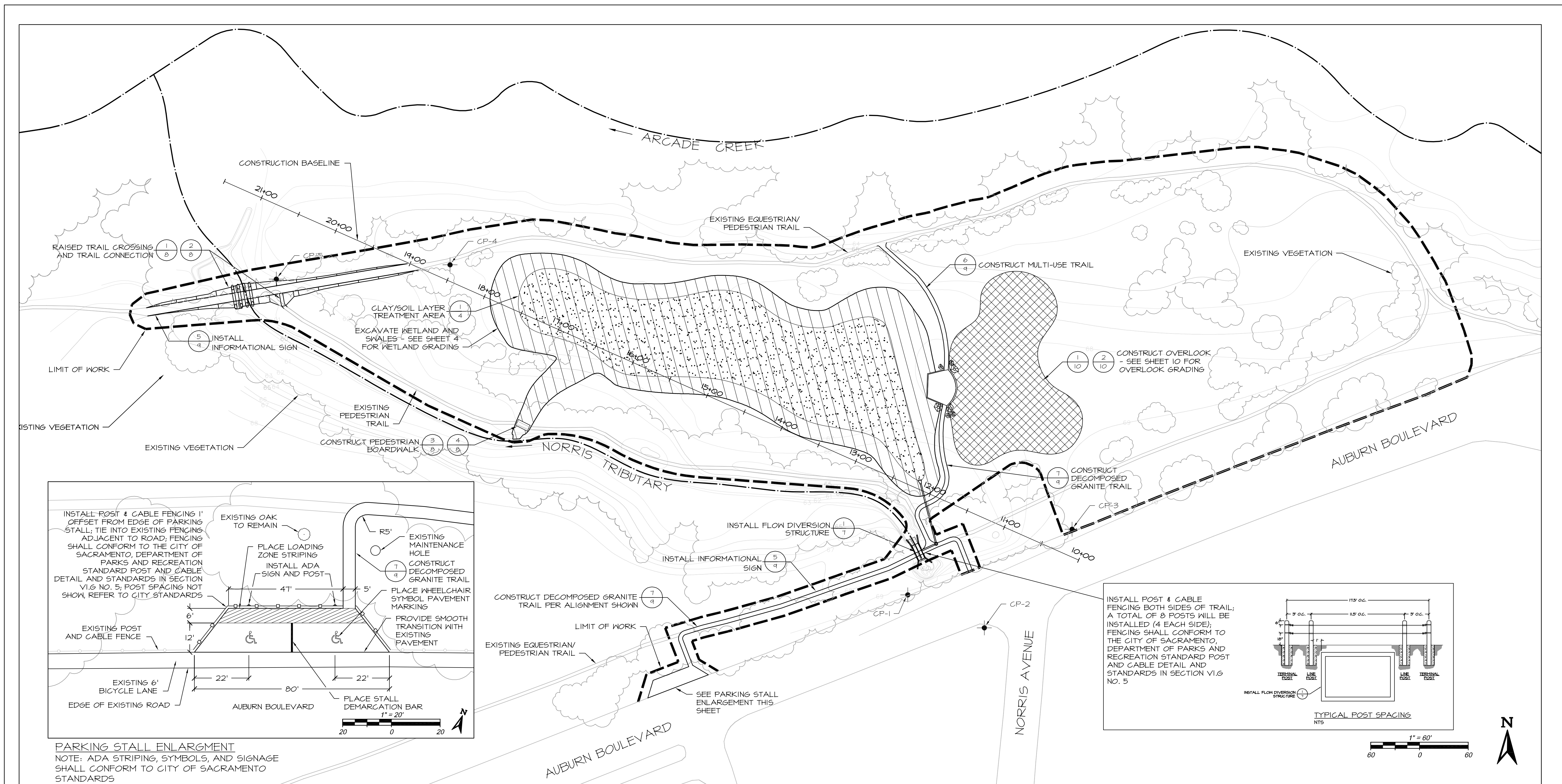
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**DEL PASO REGIONAL PARK
 DETENTION AND FILTRATION WETLAND PROJECT**

SITE PREPARATION PLAN

SHEET
2
 OF
10

DEL PASO REGIONAL PARK DETENTION AND FILTRATION WETLAND PROJECT

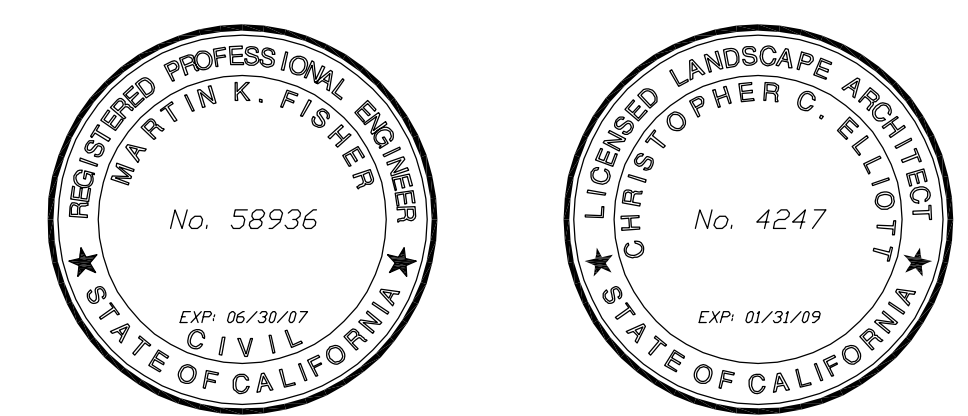


PROJECT CONTROL

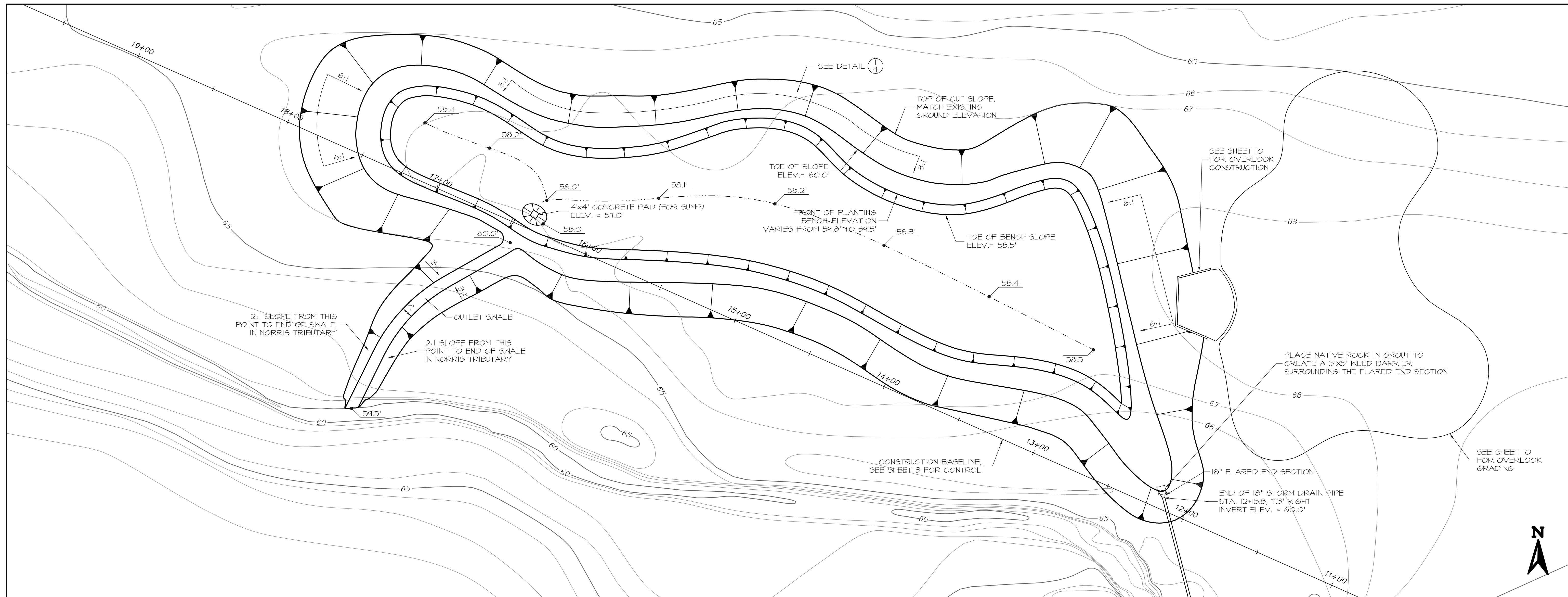
LOCATION	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP-1	1946128.7	6741562.3	69.5	PK NAIL w/ SHINER IN SHOULDER PAVEMENT
CP-2	1946088.0	6741656.5	69.0	CHISELED 'X' IN CURB
CP-3	1946204.4	6741764.4	69.7	PK NAIL w/ SHINER IN SHOULDER PAVEMENT
CP-4	1946594.9	6740998.9	65.8	REBAR IN GROUND w/ TAGS MARKED '23'
CP-5	1946511.3	6741195.1	62.7	REBAR IN GROUND w/ TAGS MARKED '22'
10+00	1946112.9	6741112.4	-----	STATION ON CONSTRUCTION BASELINE
20+00	1946516.8	6740858.3	-----	STATION ON CONSTRUCTION BASELINE

NOTE:
1. NEW TRAIL ALIGNMENT SHALL BE FIELD STAKED BY THE CONTRACTOR FOR APPROVAL BY THE CITY ENGINEER.

REVISIONS NO. DESCRIPTION DATE BY				BENCHMARK ELEV. _____ DESCRIPTION: _____ SEE THIS SHEET FOR PROJECT CONTROL		SCALE: 1"=60' 1" ON ORIGINAL SCALE		CITY OF SACRAMENTO DEPARTMENT OF UTILITIES DESIGNED BY: MF/SC/CE/KT DRAWN BY: TS/MF/JS/KT		Jones & Stokes 2600 V Street, Sacramento, CA 95818 northwest hydraulic consultants, inc. 3950 Industrial Boulevard, Suite 1000 West Sacramento, California 95691 office: (916) 371-7400 fax: (916) 371-7475		DEL PASO REGIONAL PARK DETENTION AND FILTRATION WETLAND PROJECT SITE IMPROVEMENTS PLAN		SHEET 3 OF 10
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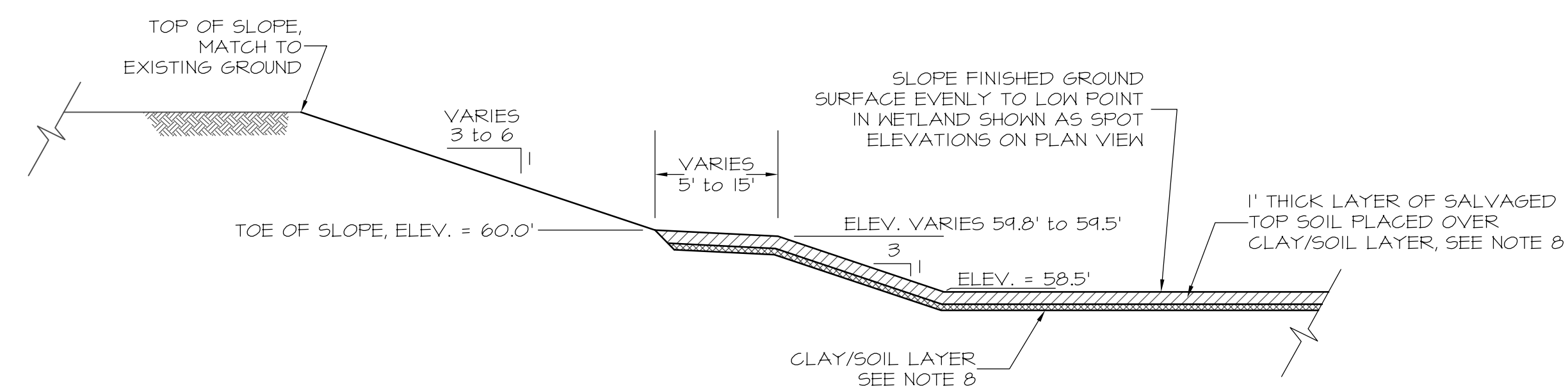


DEL PASO REGIONAL PARK DETENTION AND FILTRATION WETLAND PROJECT



NOTES:

1. ALL EARTHWORK SHALL CONFORM TO THE SPECIAL PROVISIONS AND THE STANDARD SPECIFICATIONS.
2. ELEVATION CONTOURS SHOWN ON THIS SHEET WERE DEVELOPED FROM A TOPOGRAPHIC SURVEY USING TRADITIONAL GROUND SURVEY METHODS AND EQUIPMENT. THE CONTOURS SHOWN ACCURATELY REPRESENT THE GENERAL GROUND SURFACE BUT THE DATA DOES NOT MEET NATIONAL MAP ACCURACY STANDARDS AS DEFINED BY THE USGS. IN LOCALIZED AREAS THE ACTUAL GROUND ELEVATION MAY VARY SLIGHTLY FROM THE ELEVATION INDICATED BY THE CONTOURS HERE.
3. TO CREATE A NATURAL-LOOKING FEATURE, SLOPE GRADES ARE VARIABLE IN MANY LOCATIONS. THE CONTRACTOR IS ENCOURAGED TO VARY THE SLOPE GRADES WITHIN THE DEFINED LIMITS, USING GRADUAL AND SMOOTH TRANSITIONS BETWEEN DIFFERENT GRADES. AT THE LOCATIONS WHERE SPECIFIC SLOPE GRADES ARE SHOWN ON THIS PLAN AND ON THE TYPICAL DETAIL ON THIS SHEET, THE AVERAGE GRADE FROM THE TOP OF THE SLOPE TO THE TOE SHALL MATCH THE SPECIFIED SLOPE GRADE, WITH SOME MINOR VARIATIONS ALLOWED BETWEEN THE TOP AND TOE OF SLOPE. FINISHED ELEVATIONS SHALL BE $\pm 0.05'$ AT LISTED SPOT ELEVATIONS.
4. WHEN THE WETLAND IS COMPLETED THERE SHALL BE A MINIMUM OF 50,000 SQUARE FEET (1.148 ACRES) AT OR BELOW ELEVATION 60.0'. ELEVATION 60.0' FEET IS SHOWN ON THE GRADING PLAN HERE AS THE TOE OF THE MAIN SIDE SLOPE AND IS ALSO THE BACK OF THE PLANTING BENCH. THE WETLAND LAYOUT SHOWN IN THE GRADING PLAN HERE HAS AN AREA OF 51,000 SQUARE FEET BELOW ELEVATION 60.0', HOWEVER SOME VARIATION TO THIS AREA IS EXPECTED DURING CONSTRUCTION DUE TO THE ALLOWANCE OF VARIATION IN SLOPE GRADES.
5. THE HORIZONTAL LOCATION OF THE TOP OF THE SLOPE FOR THE WETLAND SHALL BE $\pm 2'$ FROM THE LOCATION SHOWN HERE, EXCEPT AT THE OVERLOOK AREA ON THE SOUTHEAST SIDE AND ALONG THE OUTLET SWALE WHERE THE HORIZONTAL LOCATION OF THE TOP OF THE SLOPE FOR THE WETLAND SHALL BE $\pm 0.5'$ FROM THE LOCATION SHOWN HERE.
6. THE CONTRACTOR SHALL STAKE THE LOCATION OF THE TOP OF THE WETLAND SLOPE WITH STAKES AT A MAXIMUM SPACING OF 25'. THE ENGINEER SHALL APPROVE THE STAKED LIMITS OF EXCAVATION PRIOR TO BEGINNING EXCAVATION OF THE WETLAND.
7. THE TOP 1' OF SOIL FROM THE EXISTING GROUND SURFACE IN THE WETLAND EXCAVATION AREA SHALL BE EXCAVATED AND STOCKPILED FOR LATER PLACEMENT ON THE BOTTOM OF THE WETLAND AND BENCH. SEE (1).
8. AS SHOWN IN THE SECTION DETAIL ON THIS SHEET AND AS DESCRIBED IN THE SPECIAL PROVISIONS, THE WETLAND SURFACE BELOW ELEVATION 60.0' SHALL BE EXCAVATED 1.0' LOWER THAN THE ELEVATION SHOWN AS THE FINISHED ELEVATION ON THE GRADING PLAN ON THIS SHEET. THE CLAY/SOIL LAYER SHALL BE CONSTRUCTED AT THE LOWERED ELEVATION AS DESCRIBED IN THE SPECIAL PROVISIONS. THEN THE WETLAND SURFACE SHALL BE BROUGHT TO FINISHED GRADE BY FILLING WITH SOIL SALVAGED FROM THE TOP 1' OF THE ORIGINAL GROUND SURFACE.



1 WETLAND GRADING - TYPICAL SECTION
4 SCALE: 1"=10'



REVISIONS			
NO.	DESCRIPTION	DATE	BY

BENCHMARK ELEV. _____
DESCRIPTION: SEE SITE IMPROVEMENT PLAN SHEET FOR PROJECT CONTROL

SCALE: 1"=30'
ON ORIGINAL SCALE

CITY OF SACRAMENTO
DEPARTMENT OF UTILITIES

DESIGNED BY: MF
DRAWN BY: TS/MF

REVIEWED BY: KR
PLOT DATE: 02/09/07

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2608 Y Street, Sacramento, CA 95818

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3950 industrial boulevard, suite 100c
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DEL PASO REGIONAL PARK
DETENTION AND FILTRATION WETLAND PROJECT

WETLAND GRADING PLAN

SHEET 4 OF 10

DEL PASO REGIONAL PARK DETENTION AND FILTRATION WETLAND PROJECT

PLANTING ZONES

SYMBOL	ZONE	PLANT ZONE ELEVATION	LEVEL OF INUNDATION
	LOWER SEASONAL WETLAND	58.5' - 60.5'	0' - 2' - EXTENDED SEASONAL INUNDATION
	UPPER SEASONAL WETLAND	60.5' - 62.5'	2' - 4' - TEMPORARY PERIODIC INUNDATION DURING HIGH FLOW EVENTS
	UPPER BANK	62.5' - TOP OF BANK	POTENTIAL TEMPORARY PERIODIC INUNDATION AT LOWER ELEVATION DURING HIGH FLOW EVENTS
	UPLAND	VARIES	N/A

PLANTING LIST

SYMBOL	ZONE	DETAIL REFERENCE	ABBREVIATION	SPECIES NAME		PLANT TYPE*	AVERAGE ZONE PLANT SPACING	CONTAINER PLANTS	
				SCIENTIFIC	COMMON			SIZE	QUANTITY
	LOWER SEASONAL WETLAND	1/4	EL MA	ELEOCHARIS MACROSTACHYA	SPIKERUSH	H	4' O.C.	TREE BAND	1240
			JU BA	JUNCUS BALTICUS	BALTIC RUSH	H	4' O.C.	TREE BAND	1240
			JU EF	JUNCUS EFFUSUS	BOG RUSH	H	4' O.C.	TREE BAND	530
			JU XI	JUNCUS XIPHIODES	IRIS-LEAVED RUSH	H	4' O.C.	TREE BAND	530
	UPPER SEASONAL WETLAND	1/4	CA BA	CAREX BARBARAE	SANTA BARBARA SEDGE	H	2' O.C.	TREE BAND	653
			EL MA	ELEOCHARIS MACROSTACHYA	SPIKERUSH	H	4' O.C.	TREE BAND	65
			JU BA	JUNCUS BALTICUS	BALTIC RUSH	H	4' O.C.	TREE BAND	65
			JU EF	JUNCUS EFFUSUS	BOG RUSH	H	4' O.C.	TREE BAND	65
			JU XI	JUNCUS XIPHIODES	IRIS-LEAVED RUSH	H	4' O.C.	TREE BAND	65
	UPPER BANK	2/4	LE TR	LEYMUS TRITICOIDES	CREEPING WILDRYE	H	4' O.C.	TREE BAND	390
			AR DO	ARTEMISIA DOUGLASIANA	MUGWORT	S	3' O.C.	TREE BAND	484
			BR CA	BROMUS CARINATUS	CALIFORNIA BROME	H	3' O.C.	TREE BAND	484
			EU OC	EUTHAMIA OCCIDENTALIS	WESTERN GOLDENROD	H	4' O.C.	TREE BAND	272
	UPLAND	3/4	LE TR	LEYMUS TRITICOIDES	CREEPING WILDRYE	H	4' O.C.	TREE BAND	272
			RO CA	ROSA CALIFORNICA	CALIFORNIA WILD ROSE	S	4' O.C.	TREEPOT 4	272
			AR DO	ARTEMISIA DOUGLASIANA	MUGWORT	S	3' O.C. IN CLUSTERS OF 5	TREE BAND	97
			QU LO	QUERCUS LOBATA	VALLEY OAK	T	30' O.C.	TREEPOT 4	19

*PLANT TYPE:
TREE=T
SHRUB=S
HERBACEOUS=H

COVER CROP SEED MIXES

SYMBOL	MIX	SPECIES NAME		POUNDS PER ACRE (PURE LIVE SEED)
		SCIENTIFIC	COMMON	
	GENERAL COVER CROP	BROMUS CARINATUS	CALIFORNIA BROME	8
		ESCHSCHOLZIA CALIFORNICA	CALIFORNIA POPPY	1
		FESTUCA CALIFORNICA	CALIFORNIA FESCUE	5
		LUPINUS BICOLOR	MINIATURE LUPINE	2
		NASSELLA PULCHRA	PURPLE NEEDLEGRASS	9
		TRITICUM x ELYMUS	REGREEN	20
		TOTAL		45
	AMPHITHEATER COVER CROP	BROMUS CARINATUS	CALIFORNIA BROME	3
		ESCHSCHOLZIA CALIFORNICA	CALIFORNIA POPPY	1
		FESTUCA RUBRA	RED FESCUE	15
		LUPINUS BICOLOR	MINIATURE LUPINE	2
		NASSELLA PULCHRA	PURPLE NEEDLEGRASS	2
		TRITICUM x ELYMUS	REGREEN	20
		TOTAL		43
	UPLAND COVER CROP	BROMUS CARINATUS	CALIFORNIA BROME	8
		ESCHSCHOLZIA CALIFORNICA	CALIFORNIA POPPY	1
		FESTUCA RUBRA	RED FESCUE	5
		LUPINUS BICOLOR	MINIATURE LUPINE	2
		NASSELLA PULCHRA	PURPLE NEEDLEGRASS	9
		TRITICUM x ELYMUS	REGREEN	20
		TOTAL		45



NO.	REVISIONS	DESCRIPTION	DATE	BY

BENCHMARK ELEV. _____
DESCRIPTION:
SEE SITE IMPROVEMENT PLAN SHEET FOR PROJECT CONTROL

SCALE:
N.T.S.
1" = _____
ON ORIGINAL SCALE

CITY OF SACRAMENTO
DEPARTMENT OF UTILITIES

DESIGNED BY: SC/CE/KL/HO
DRAWN BY: JS/KT

REVIEWED BY: CE/KL
PLOT DATE: 02/09/07

Jones & Stokes
2600 V Street, Sacramento, CA 95818

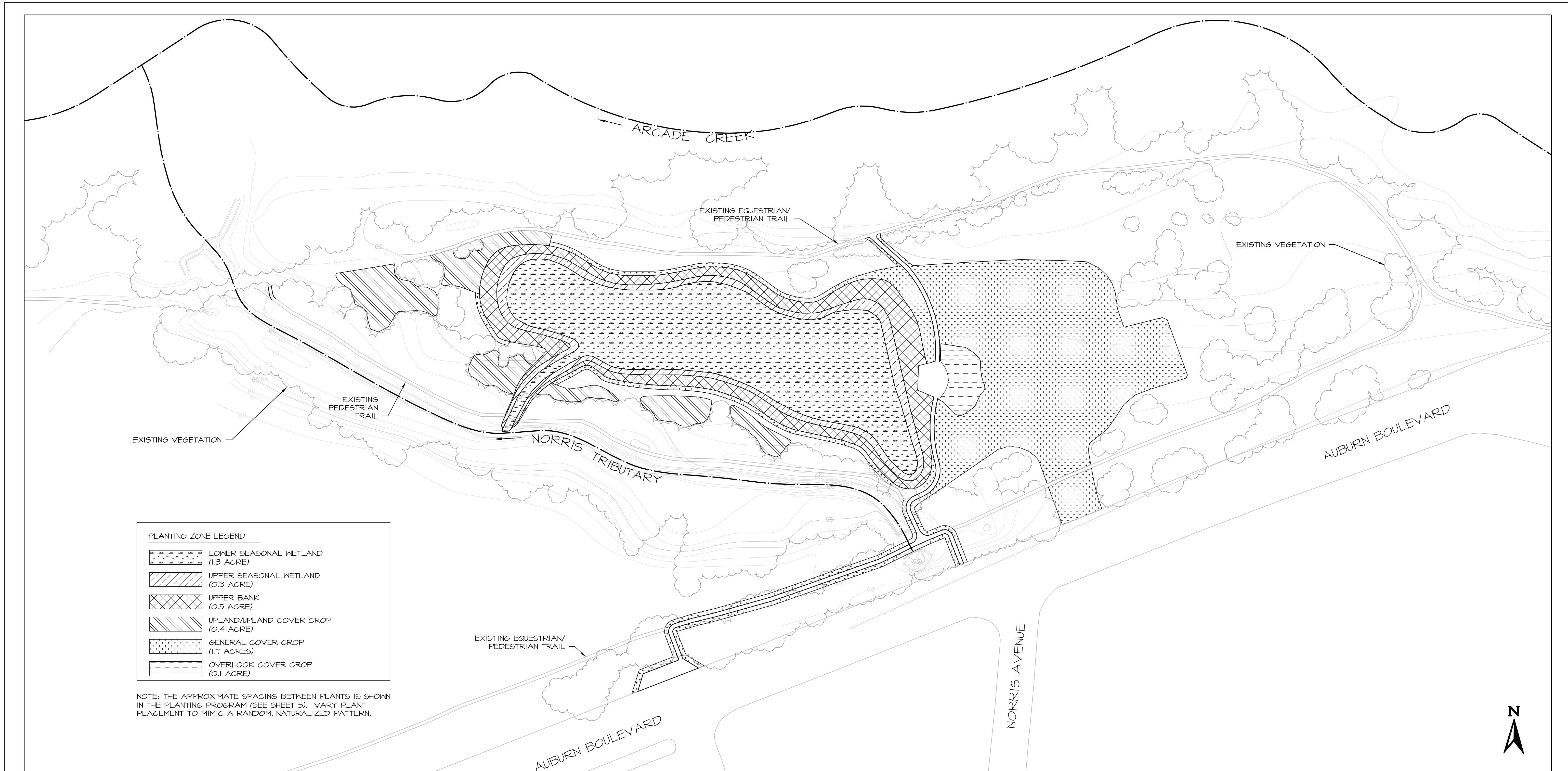
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northwest hydraulic consultants, inc.
3500 Industrial Boulevard, Suite 1000
West Sacramento, California 95691
office: (916) 371-7400 fax: (916) 371-7475

DEL PASO REGIONAL PARK
DETENTION AND FILTRATION WETLAND PROJECT

PLANTING PROGRAM

SHEET
5
OF
10

DEL PASO REGIONAL PARK DETENTION AND FILTRATION WETLAND PROJECT



PLANTING ZONE LEGEND

	LOWER SEASONAL WETLAND (1.3 ACRE)
	UPPER SEASONAL WETLAND (0.3 ACRE)
	UPPER BANK (0.5 ACRE)
	UPLAND/UPLAND COVER CROP (0.4 ACRE)
	GENERAL COVER CROP (1.7 ACRES)
	OVERLOOK COVER CROP (0.1 ACRE)

NOTE: THE APPROXIMATE SPACING BETWEEN PLANTS IS SHOWN IN THE PLANTING PROGRAM (SEE SHEET 5). VARY PLANT PLACEMENT TO MIMIC A RANDOM, NATURALIZED PATTERN.



REVISIONS			
NO.	DESCRIPTION	DATE	BY

BENCHMARK ELEV. _____
 DESCRIPTION:
 SEE SITE IMPROVEMENT PLAN
 SHEET FOR PROJECT CONTROL

SCALE:
1"=60'
 1"
 ON ORIGINAL SCALE

CITY OF SACRAMENTO
 DEPARTMENT OF UTILITIES

DESIGNED BY: CE/KL/HO
 DRAWN BY: KT

REVIEWED BY: CE/KL
 PLOT DATE: 02/09/07

Jones & Stokes
 2000 V Street, Sacramento, CA 95818

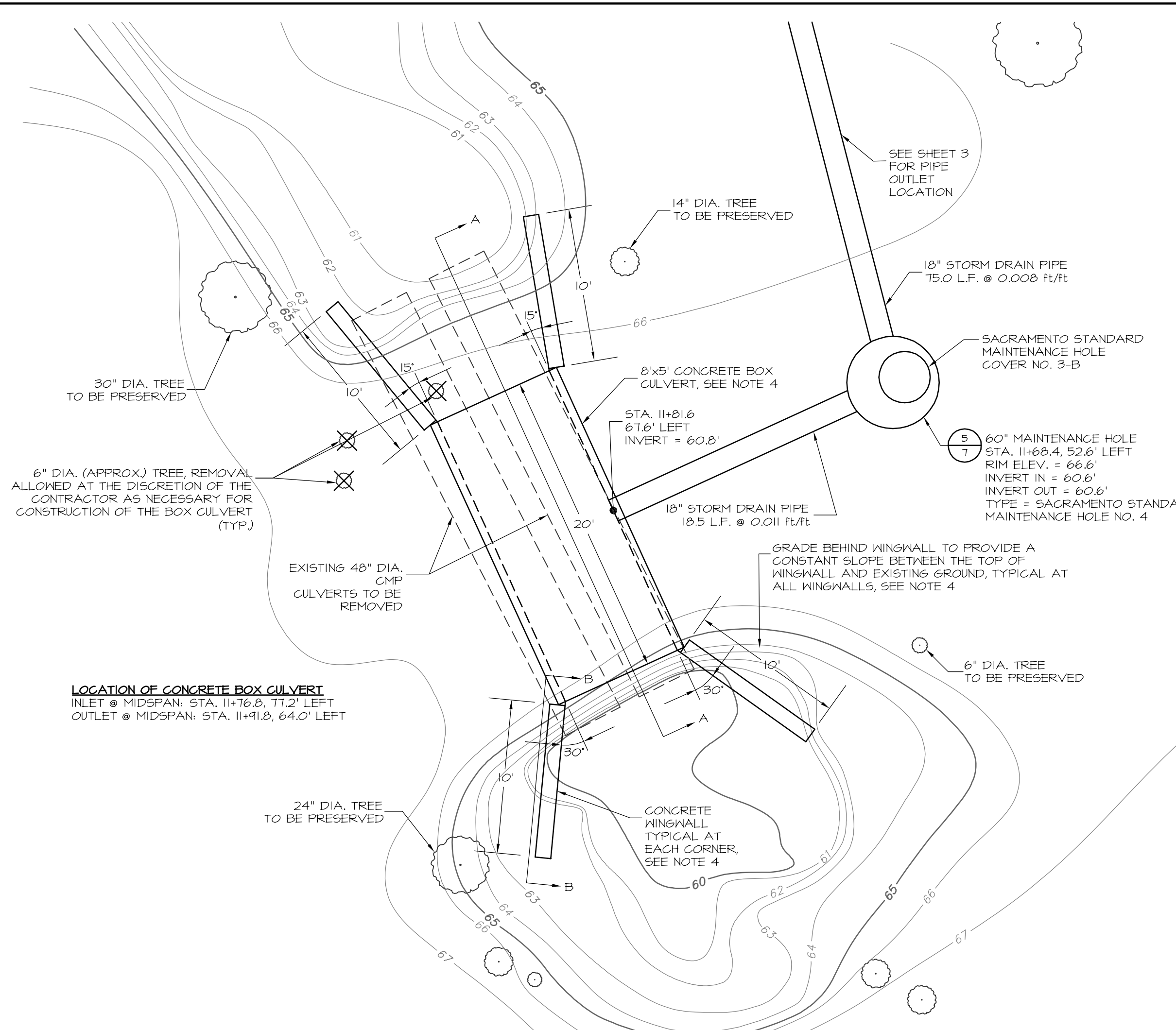
nhc
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 West Sacramento, California 95691
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**DEL PASO REGIONAL PARK
 DETENTION AND FILTRATION WETLAND PROJECT**

PLANTING PLAN

SHEET
6
 OF
10

DEL PASO REGIONAL PARK DETENTION AND FILTRATION WETLAND PROJECT

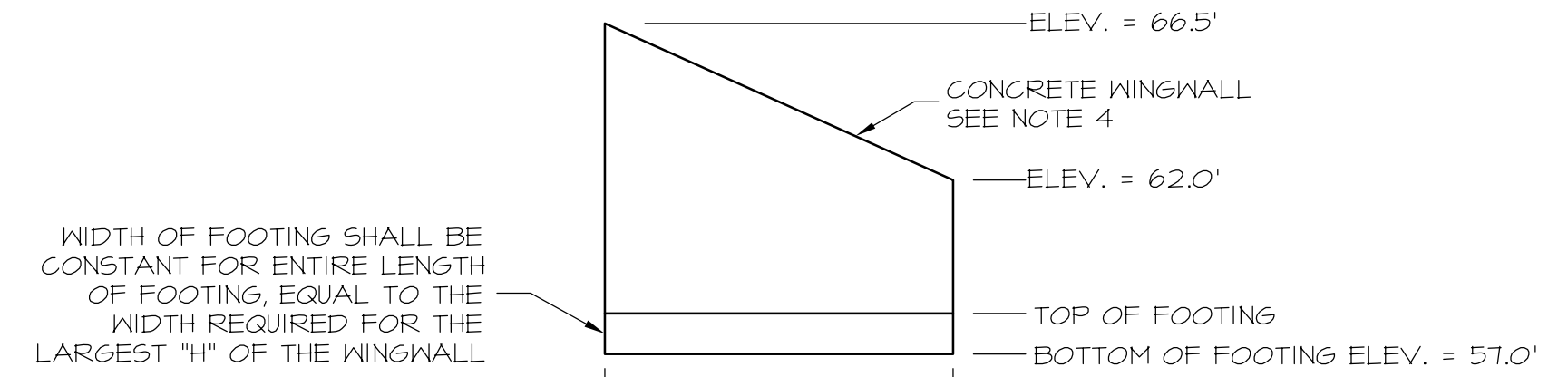


LOCATION OF CONCRETE BOX CULVERT
 INLET @ MIDSPAN STA. 11+16.8, 11.2' LEFT
 OUTLET @ MIDSPAN STA. 11+41.8, 64.0' LEFT

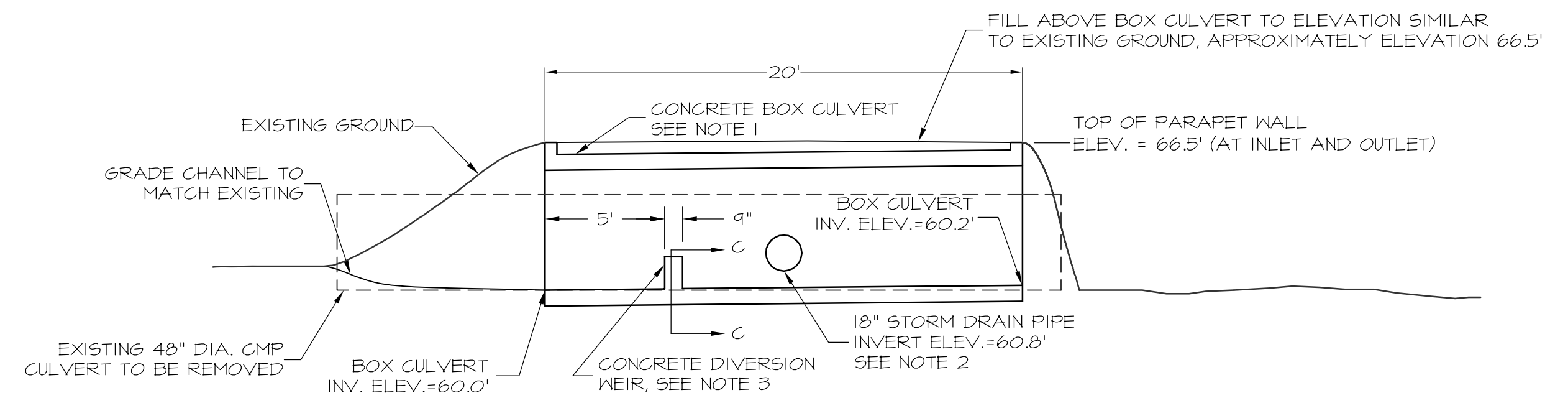
NOTES:
 1. FOR CLARIFICATION PURPOSES BOTH TREES TO BE REMOVED AND PRESERVED THAT OCCUR WITHIN THE PROJECT ACTIVITY ARE NOTED IN THE DETAIL.

1 FLOW DIVERSION STRUCTURE
 SCALE: 1"=5'

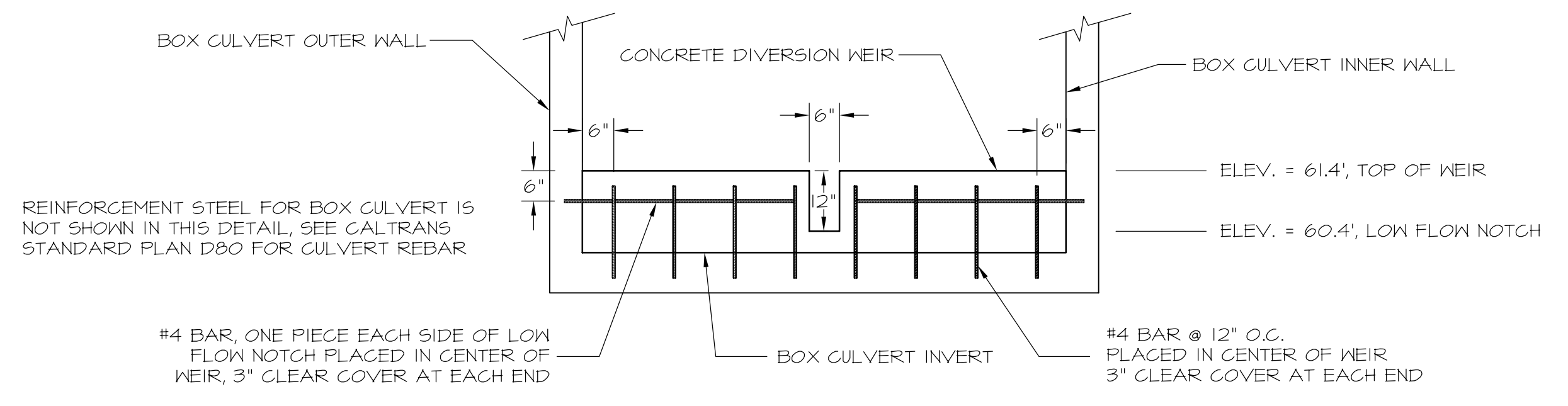
- NOTES:**
1. THE CONCRETE BOX CULVERT SHALL CONFORM TO CALTRANS STANDARD PLANS D80 AND D82. THE CULVERT INVERT SHALL BE A "FLAT INVERT" AS SHOWN ON CALTRANS STANDARD PLAN D80A. THE PARAPET WALL AT EACH END OF THE CULVERT SHALL BE CONSTRUCTED TO THE ELEVATION SHOWN ON THESE PLANS, NOT THE DIMENSION SHOWN ON STANDARD PLAN D82.
 2. THE 18" STORM DRAIN PIPE SHALL BE PLACED AT THE MIDWAY POINT OF THE CONCRETE BOX CULVERT AT THE ELEVATION SHOWN IN DETAIL (4). THE BOX CULVERT WALL SHALL BE MODIFIED TO ACCOMMODATE THE PIPE AS SHOWN (4) IN THE "UTILITY OPENING" DETAIL ON CALTRANS STANDARD PLAN D82.
 3. THE DIVERSION WEIR IS NOT INCLUDED IN THE CALTRANS STANDARD PLAN FOR CONCRETE BOX CULVERTS, IT IS A SPECIAL ITEM TO THIS STRUCTURE. THE DIVERSION WEIR SHALL BE CONSTRUCTED AS AN INTEGRAL PART OF THE CONCRETE BOX CULVERT, USING THE SAME STRENGTH CONCRETE AND THE SAME GRADE OF REINFORCEMENT STEEL AS USED IN THE CONCRETE BOX CULVERT. PLACE 1/2" EXPANSION JOINT FILLER AT JUNCTION OF BOX AND WALL PER THE DETAIL ON STANDARD PLAN D84.
 4. THE CONCRETE WINGWALLS SHALL CONFORM TO CALTRANS STANDARD PLAN D84. ALL WINGWALLS ARE TYPE "A" AS SHOWN ON CALTRANS STANDARD PLAN D84. PLACE 1/2" EXPANSION JOINT FILLER AT JUNCTION OF BOX AND WALL PER THE DETAIL ON STANDARD PLAN D84. THE DIMENSIONS AND ELEVATIONS SHOWN ON DETAIL (4) ARE APPLICABLE TO ALL FOUR WINGWALLS, ROTATED AS NECESSARY TO PLACE THE HIGHEST END OF THE WINGWALL ADJACENT TO THE CULVERT END. AFTER CONSTRUCTING THE WINGWALLS, GRADE THE CHANNEL TO MATCH THE END OF THE WALLS AND GRADE BEHIND THE WINGWALLS AS NECESSARY TO PROVIDE AN EVEN SLOPE BETWEEN THE TOP OF THE WINGWALL AND THE ADJACENT NATIVE GROUND THAT SLOPES DOWNWARD TOWARDS THE WINGWALL. ALL FILL BEHIND THE WINGWALLS SHALL BE OBTAINED FROM SOIL EXCAVATED AS PART OF THE CONSTRUCTION OF THIS OVERALL PROJECT, AND SHALL BE COMPACTED TO 90% RELATIVE COMPACTION.
 5. THE CONTRACTOR MAY SUBSTITUTE THE CAST IN PLACE BOX CULVERT AND/OR CAST IN PLACE WINGWALLS WITH PRECAST CONCRETE ITEMS. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL FOR ANY PRECAST CONCRETE SUBSTITUTIONS. ALL PRECAST CONCRETE ITEMS PROPOSED AS SUBSTITUTIONS SHALL BE DESIGNED BY A PROFESSIONAL CIVIL ENGINEER LICENSED IN THE STATE OF CALIFORNIA. PRECAST CONCRETE BOX CULVERTS SHALL BE DESIGNED FOR HS-25 LOADING.



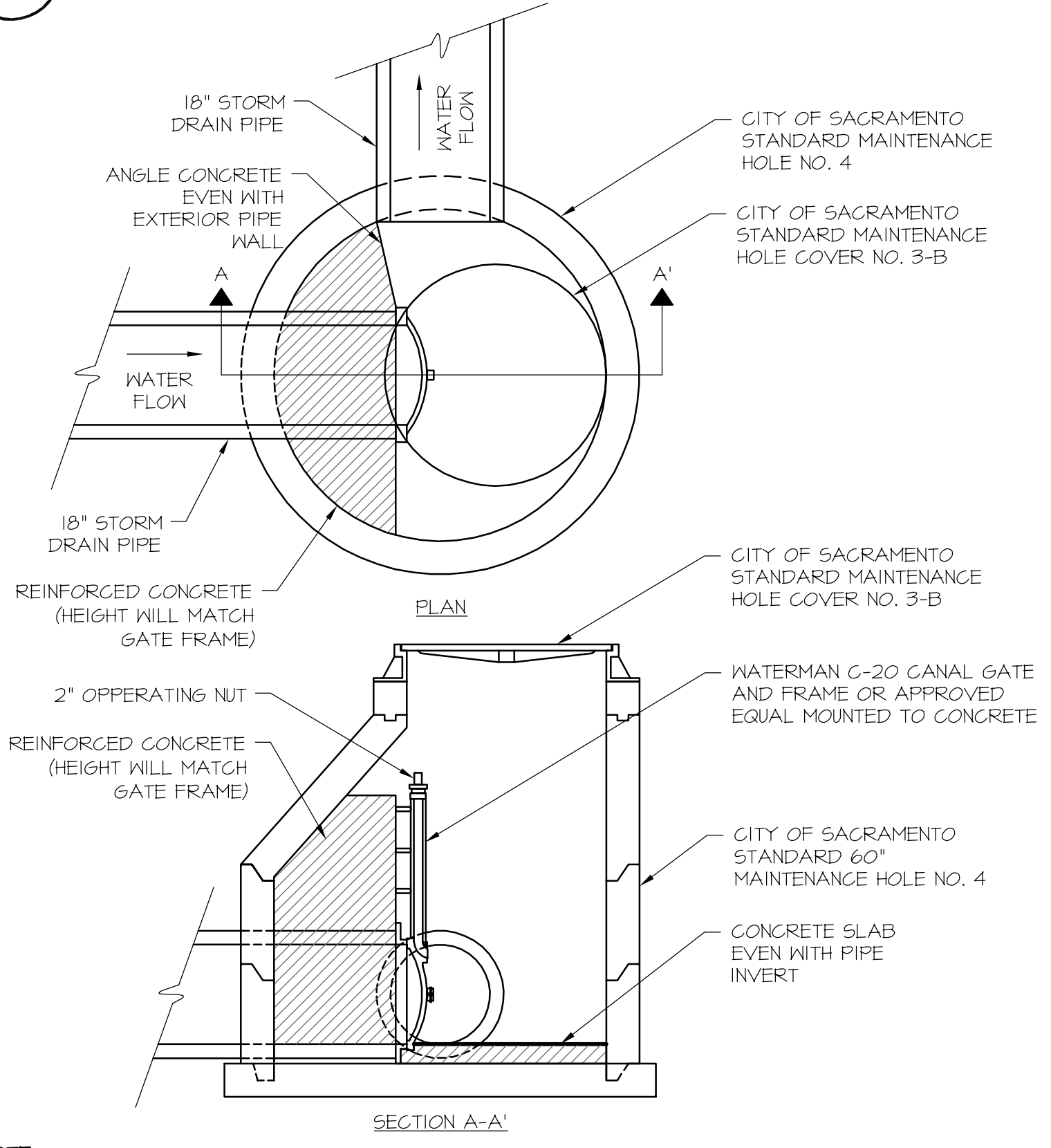
4 SECTION B-B CONCRETE WINGWALL PROFILE
 SCALE: 1"=5'



2 SECTION A-A CONCRETE BOX CULVERT PROFILE
 SCALE: 1"=5'



3 SECTION C-C DIVERSION WEIR SECTION
 SCALE: 1"=2'



NOTE:
 1. THE CONTRACTOR IS RESPONSIBLE FOR DESIGNING THE REINFORCED CONCRETE THAT THE GATE IS ATTACHED TO. THE REINFORCED CONCRETE MOUNTING SURFACE SHALL PROVIDE SUFFICIENT STRENGTH TO SUPPORT THE GATE WHEN CLOSED WITH 5 FEET OF HYDROSTATIC HEAD BEHIND THE GATE. THE REINFORCED CONCRETE MOUNTING SURFACE SHALL ALLOW ACCESS TO THE GATE CONTROL FROM THE MH OPENING, SHALL ALLOW THE GATE TO FULLY OPEN AND CLOSE, AND SHALL NOT BLOCK ANY PORTION OF THE MH OUTLET PIPE. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR MH, CANAL GATE, AND REINFORCED CONCRETE MOUNTING SURFACE FOR APPROVAL BY THE ENGINEER.

5 MAINTENANCE HOLE WITH CANAL GATE
 SCALE: 1"=2'

NO.	DESCRIPTION	DATE	BY

BENCHMARK ELEV. _____
SCALE: AS NOTED
 1" ON ORIGINAL SCALE

CITY OF SACRAMENTO
 DEPARTMENT OF UTILITIES

DESIGNED BY: MF
 DRAWN BY: TS/MF

REVIEWED BY: KR
 PLOT DATE: 02/09/07

Jones & Stokes
 2630 V Street, Sacramento, CA 95818

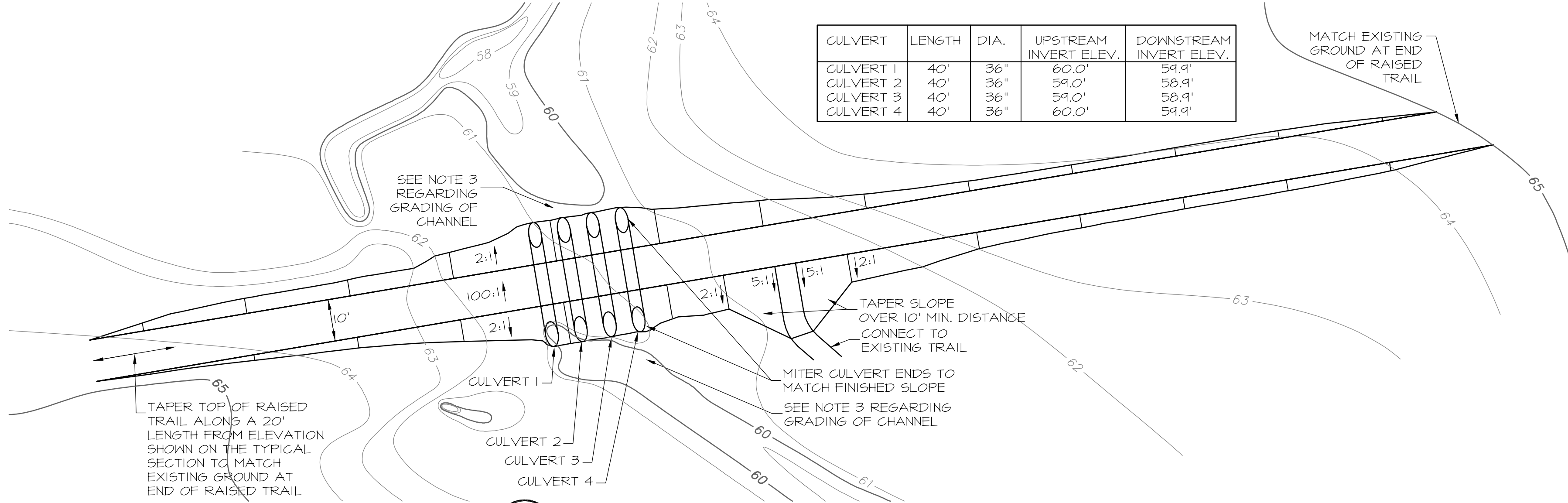
nhc
 northwest hydraulic consultants, inc.
 3950 industrial boulevard, suite 100c
 west sacramento, california 95691
 office: (916) 371-7420 fax: (916) 371-7475

DEL PASO REGIONAL PARK
DETENTION AND FILTRATION WETLAND PROJECT
 DETAILS - FLOW DIVERSION STRUCTURES

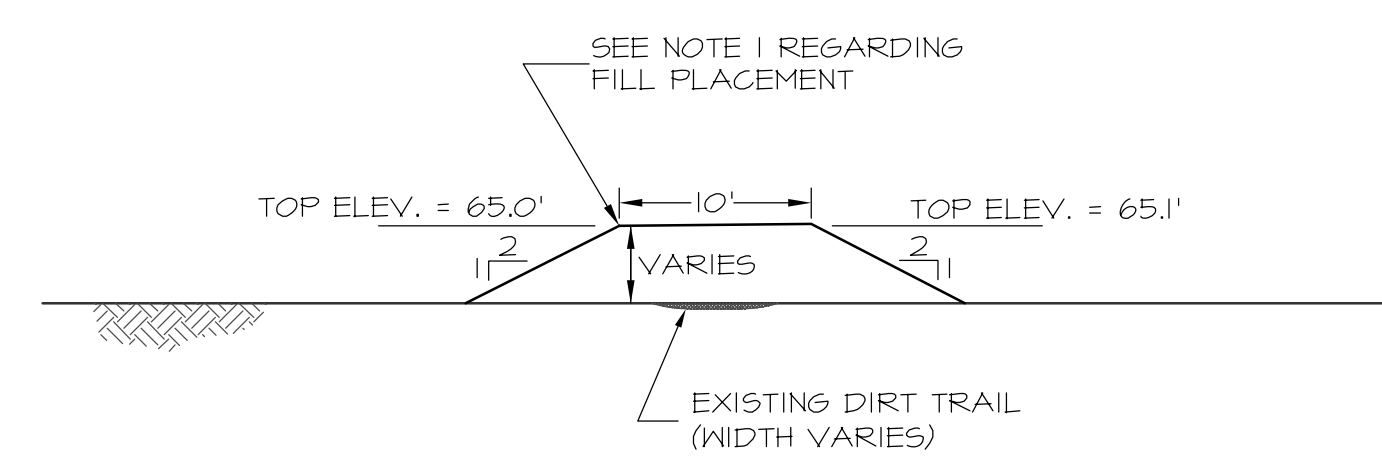


SHEET 7 OF 10

DEL PASO REGIONAL PARK DETENTION AND FILTRATION WETLAND PROJECT

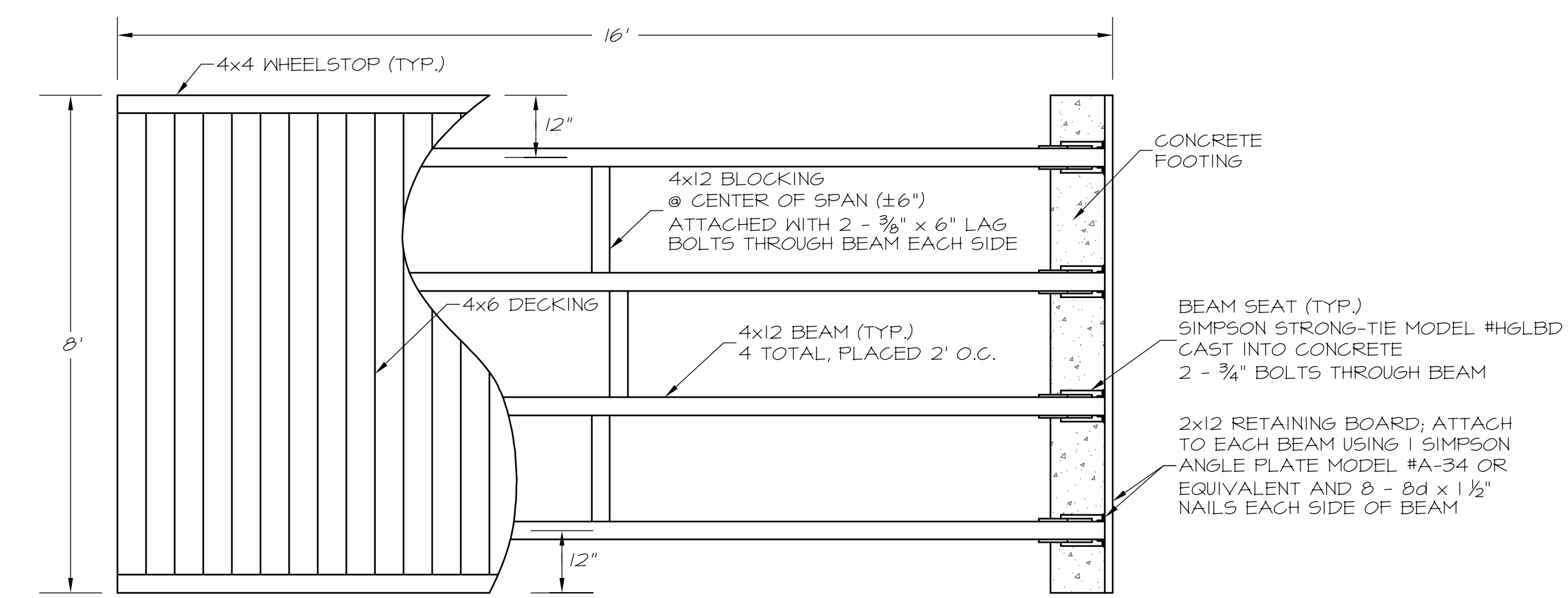


1 RAISED TRAIL CROSSING AND TRAIL CONNECTION
SCALE: 1"=20'

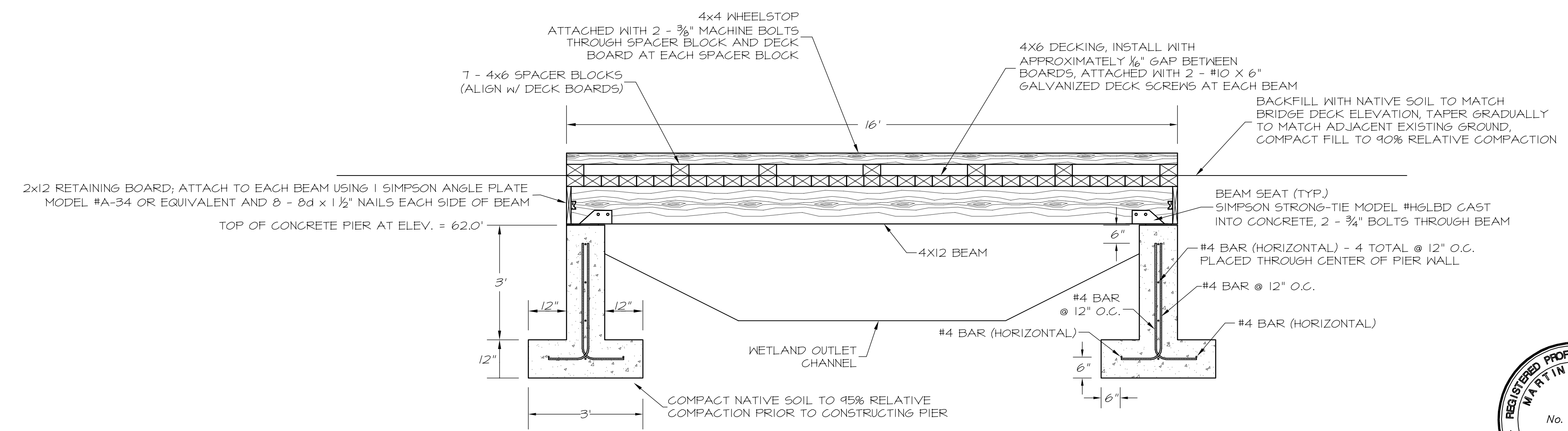


2 RAISED TRAIL - TYPICAL SECTION
SCALE: 1"=10'

- NOTES:**
- FILL MATERIAL FOR THE RAISED TRAIL SHALL BE OBTAINED FROM SOIL EXCAVATED AS PART OF THE WETLAND CONSTRUCTION. PRIOR TO PLACING FILL, THE ENTIRE AREA COVERED BY THE RAISED TRAIL SHALL BE CLEARED AND GRUBBED AND THE SURFACE OF THE EXISTING SOIL SHALL BE SCARIFIED. THE RAISED TRAIL SHALL BE GENERALLY CENTERED OVER THE EXISTING DIRT TRAIL. THE FILL MATERIAL SHALL BE COMPACTED TO 90% RELATIVE COMPACTION.
 - THE CONTRACTOR WILL STAKE THE ALIGNMENTS OF THE CULVERTS IN THE FIELD. THE LOCATIONS OF THE ENDS OF THE CULVERTS WILL DEPEND ON WHERE THE FILL FOR THE RAISED TRAIL CATCHES THE EXISTING GROUND. AFTER PLACEMENT OF THE FILL FOR THE RAISED TRAIL IS COMPLETED, THE CULVERT ENDS SHALL BE CUT TO MATCH THE SLOPE OF THE FILL.
 - AFTER CONSTRUCTION OF THE RAISED TRAIL, INCLUDING INSTALLATION OF THE CULVERTS, GRADE THE CHANNEL FOR APPROXIMATELY 10 FEET FROM THE END OF THE CULVERT, ON BOTH THE UPSTREAM AND DOWNSTREAM SIDE, TO PROVIDE A SMOOTH TRANSITION FROM THE CHANNEL INTO THE CULVERT AND FROM THE CULVERT TO THE DOWNSTREAM CHANNEL.
 - THE CONTRACTOR WILL STAKE THE LOCATION FOR THE FOOT BRIDGE IN THE FIELD AFTER CONSTRUCTION OF THE WETLAND OUTLET SWALE IS SUBSTANTIALLY COMPLETED. THE FOOT BRIDGE WILL BE CENTERED OVER THE OUTLET SWALE, NEAR THE LOCATION SHOWN ON SHEET 3, WHERE THE EXISTING GROUND ELEVATION IS APPROXIMATELY 63'.
 - ALL WOOD FOR THE FOOT BRIDGE SHALL BE PRESSURE-TREATED DOUGLAS FIR-LARCH, GRADE NO. 1 OR BETTER. CONCRETE FOR FOOT BRIDGE PIERS SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3,000 PSI.



3 FOOT BRIDGE - PLAN VIEW
SCALE: 1"=2'



4 FOOT BRIDGE - PROFILE
SCALE: 1"=2'



REVISIONS				BENCHMARK ELEV. _____
NO.	DESCRIPTION	DATE	BY	DESCRIPTION:
				SEE SITE IMPROVEMENT PLAN SHEET FOR PROJECT CONTROL

SCALE: AS NOTED
1" ON ORIGINAL SCALE

CITY OF SACRAMENTO
DEPARTMENT OF UTILITIES

DESIGNED BY: MF
DRAWN BY: TS/MF

REVIEWED BY: KR
PLOT DATE: 02/09/07

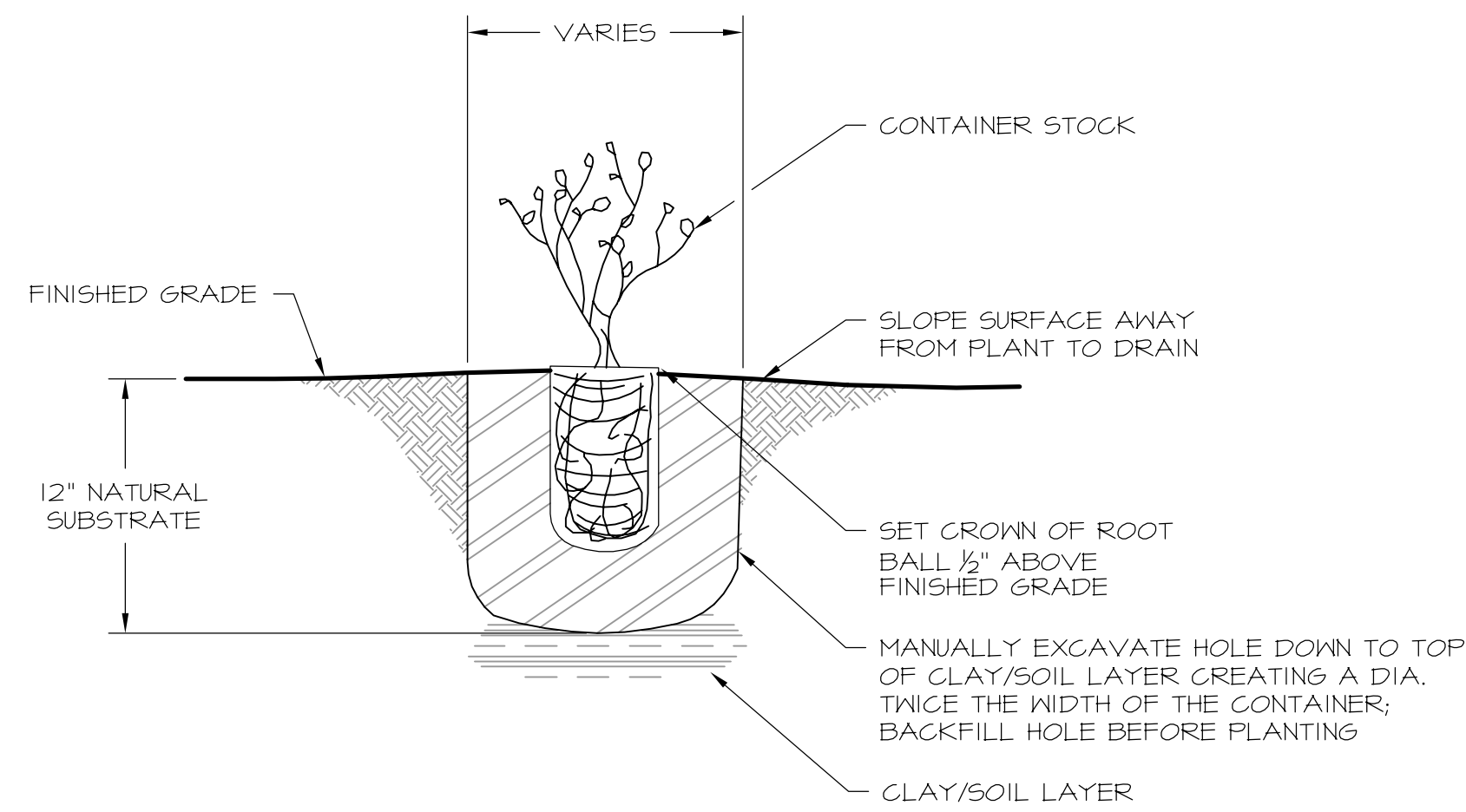
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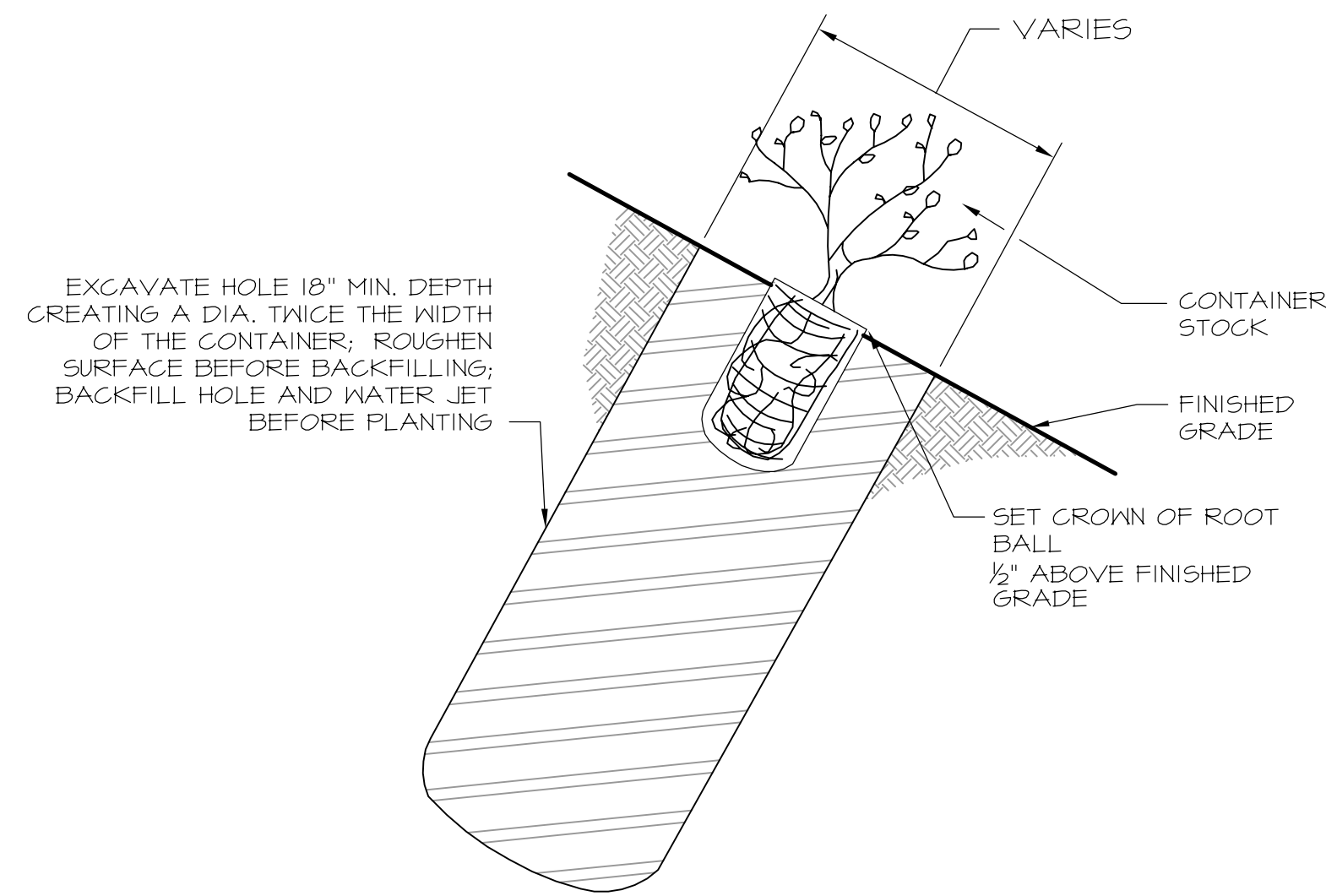
DEL PASO REGIONAL PARK
DETENTION AND FILTRATION WETLAND PROJECT

DETAILS - TRAIL CROSSING STRUCTURES

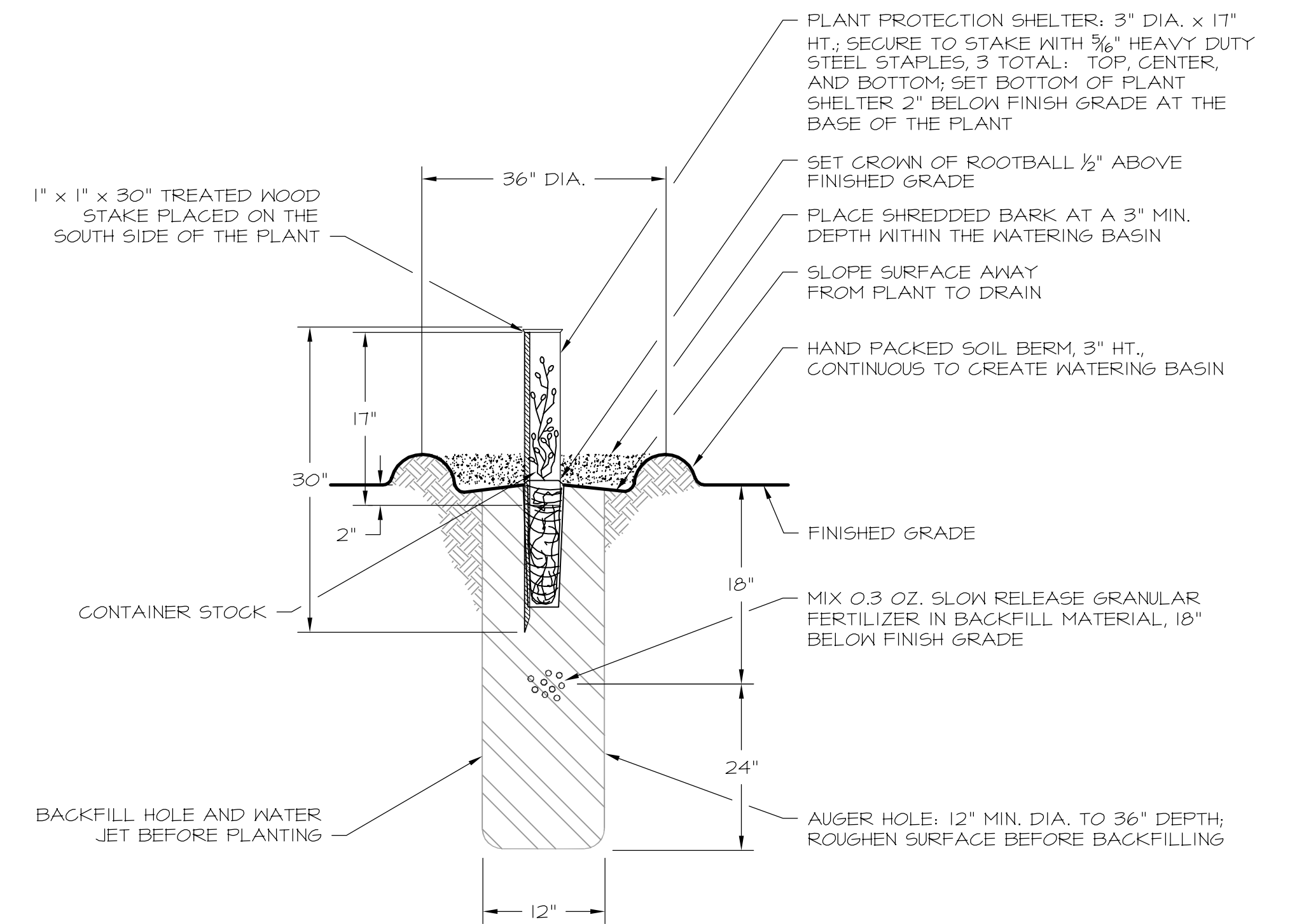
DEL PASO REGIONAL PARK DETENTION AND FILTRATION WETLAND PROJECT



1 CONTAINER PLANTING-
CREATED WETLAND BOTTOM AND BENCH
Not To Scale

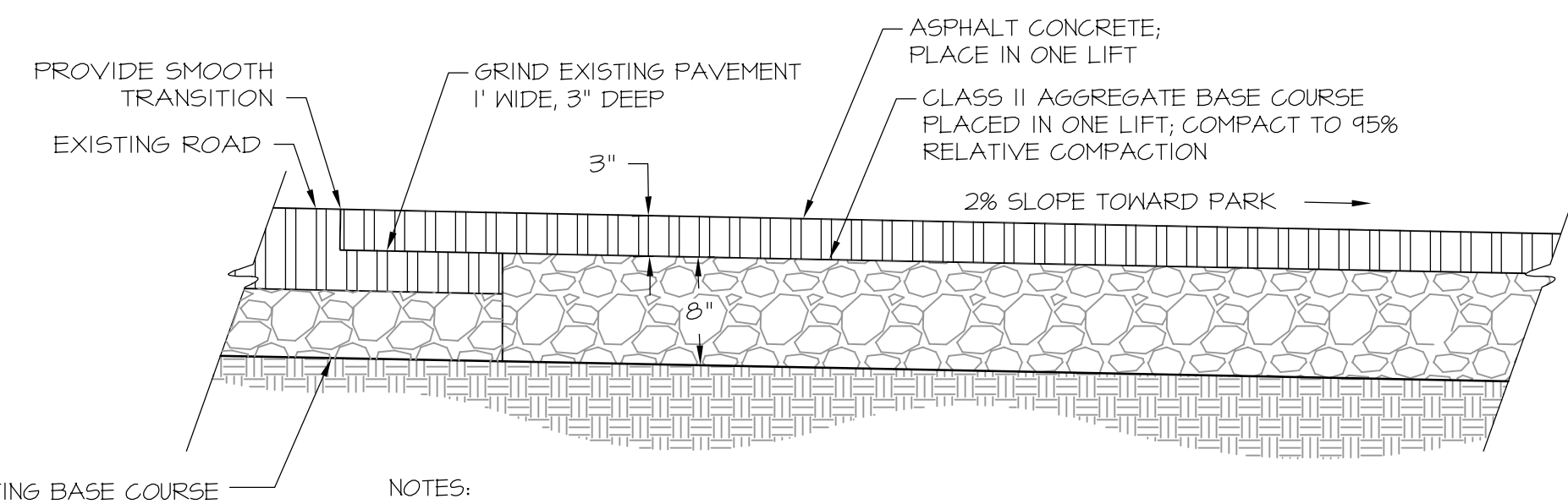
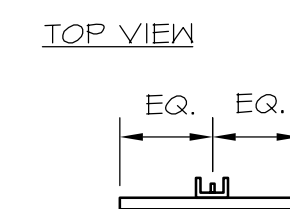


2 CONTAINER PLANTING-
CREATED WETLAND SIDE SLOPES
Not To Scale



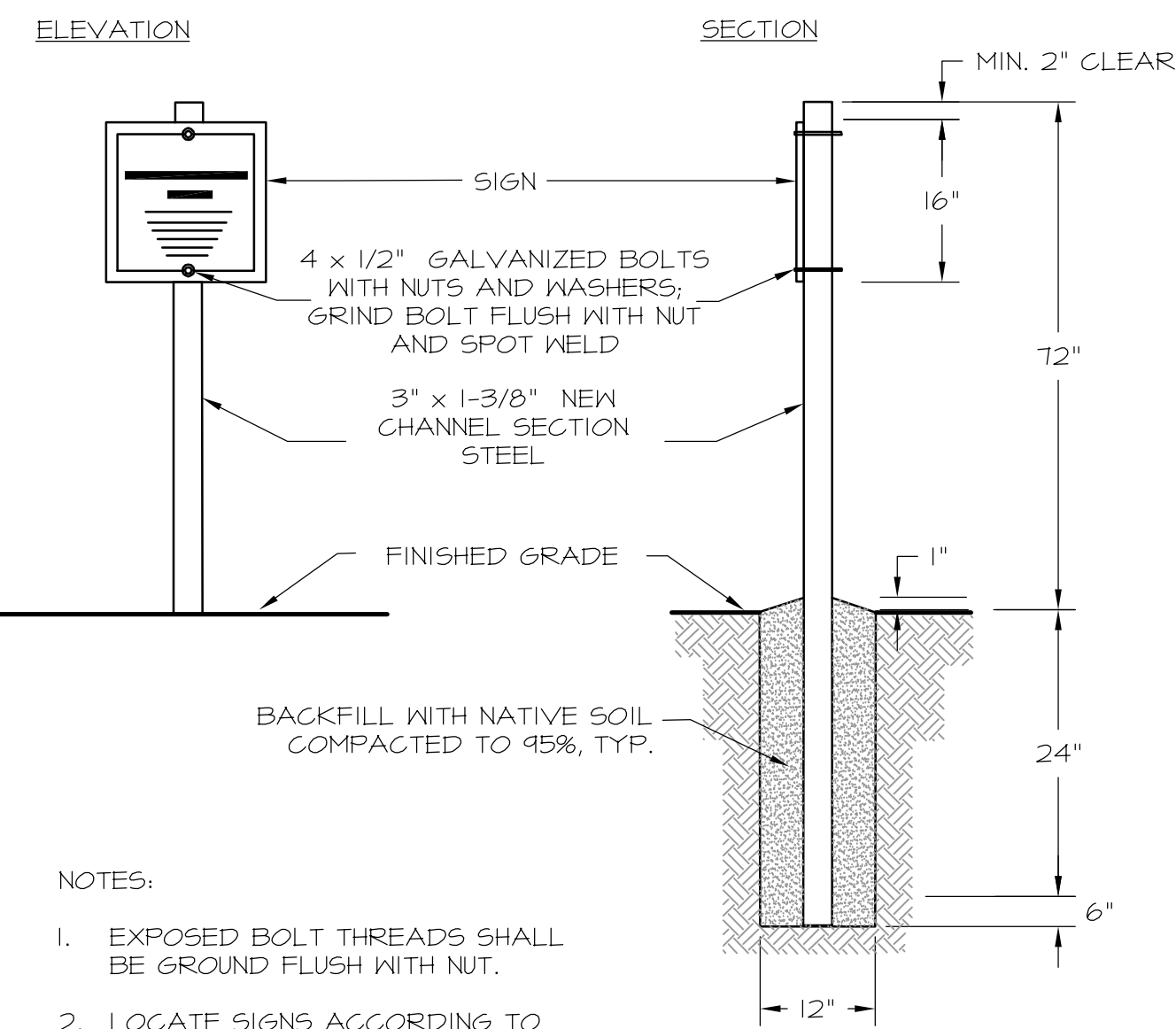
NOTE:
1. CLEAR "WEED FREE" ZONE BY REMOVING WEEDS FROM A 12" DIA. CIRCLE AROUND THE PLANTING SITE.

3 CONTAINER PLANTING-UPLAND
Not To Scale



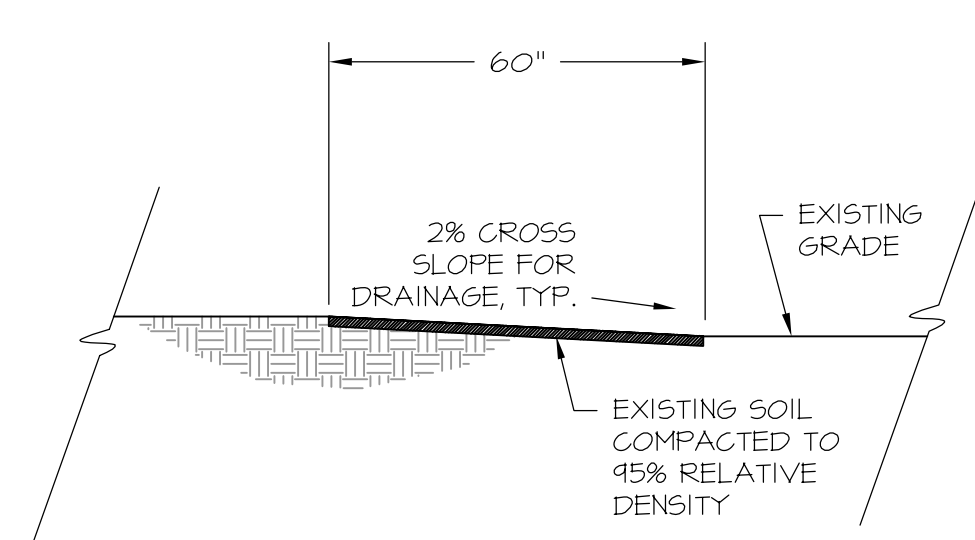
NOTES:
1. LOCATE PARKING LOT ACCORDING TO PROJECT PLANS.
2. PREPARE THE SUBGRADE FOR PAVING BY EXCAVATING A CONSTANT 2% CROSS SLOPE FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT.
3. COMPACT EXISTING SUBGRADE TO 95% RELATIVE COMPACTION TO A MINIMUM DEPTH OF 8" ACCORDING TO ASTM D-1557. FINISHED COMPACTED SUBGRADE SHALL MAINTAIN CONSTANT 2% CROSS SLOPE.

4 ASPHALT CONCRETE PAVING
Not To Scale



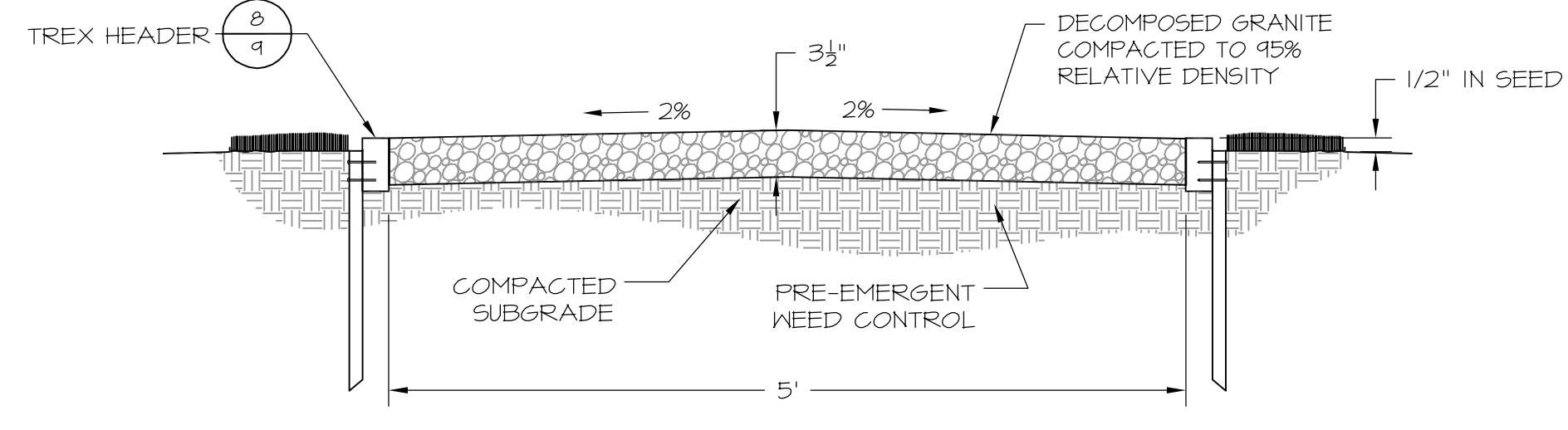
NOTES:
1. EXPOSED BOLT THREADS SHALL BE GROUND FLUSH WITH NUT.
2. LOCATE SIGNS ACCORDING TO PROJECT PLANS.
3. SIGN TEXT TO BE APPROVED BY THE CITY ENGINEER.

5 INFORMATIONAL SIGN
Not To Scale



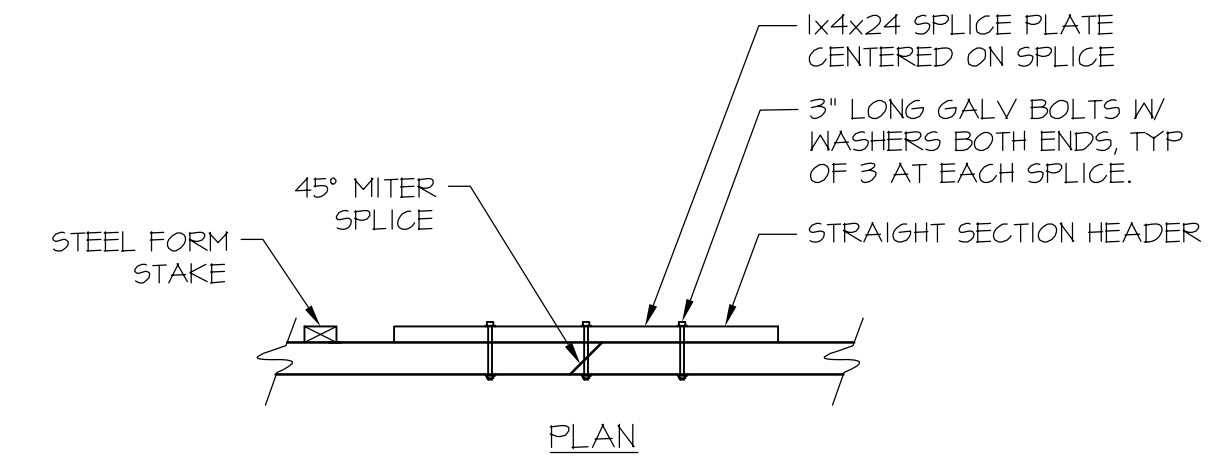
NOTE:
1. LOCATE TRAIL ACCORDING TO PROJECT PLANS.

6 MULTI-USE TRAIL
Not To Scale



NOTES:
1. LOCATE TRAIL ACCORDING TO PROJECT PLANS.
2. DECOMPOSED GRANITE TRAIL SHALL OTHERWISE CONFORM TO THE CITY OF SACRAMENTO, DEPARTMENT OF PARKS AND RECREATION STANDARDS IN SECTION V.I.F. NO. 17

7 DECOMPOSED GRANITE TRAIL
Not To Scale



NOTES:
1. LOCATE TRAIL ACCORDING TO PROJECT PLANS.

8 TREX HEADER
Not To Scale



NO.	DESCRIPTION	DATE	BY

SCALE:
N.T.S.
1" ON ORIGINAL SCALE

CITY OF SACRAMENTO
DEPARTMENT OF UTILITIES

DESIGNED BY: CE/KL/KT
DRAWN BY: JS/KT

REVIEWED BY: CE/KL
PLOT DATE: 02/09/07

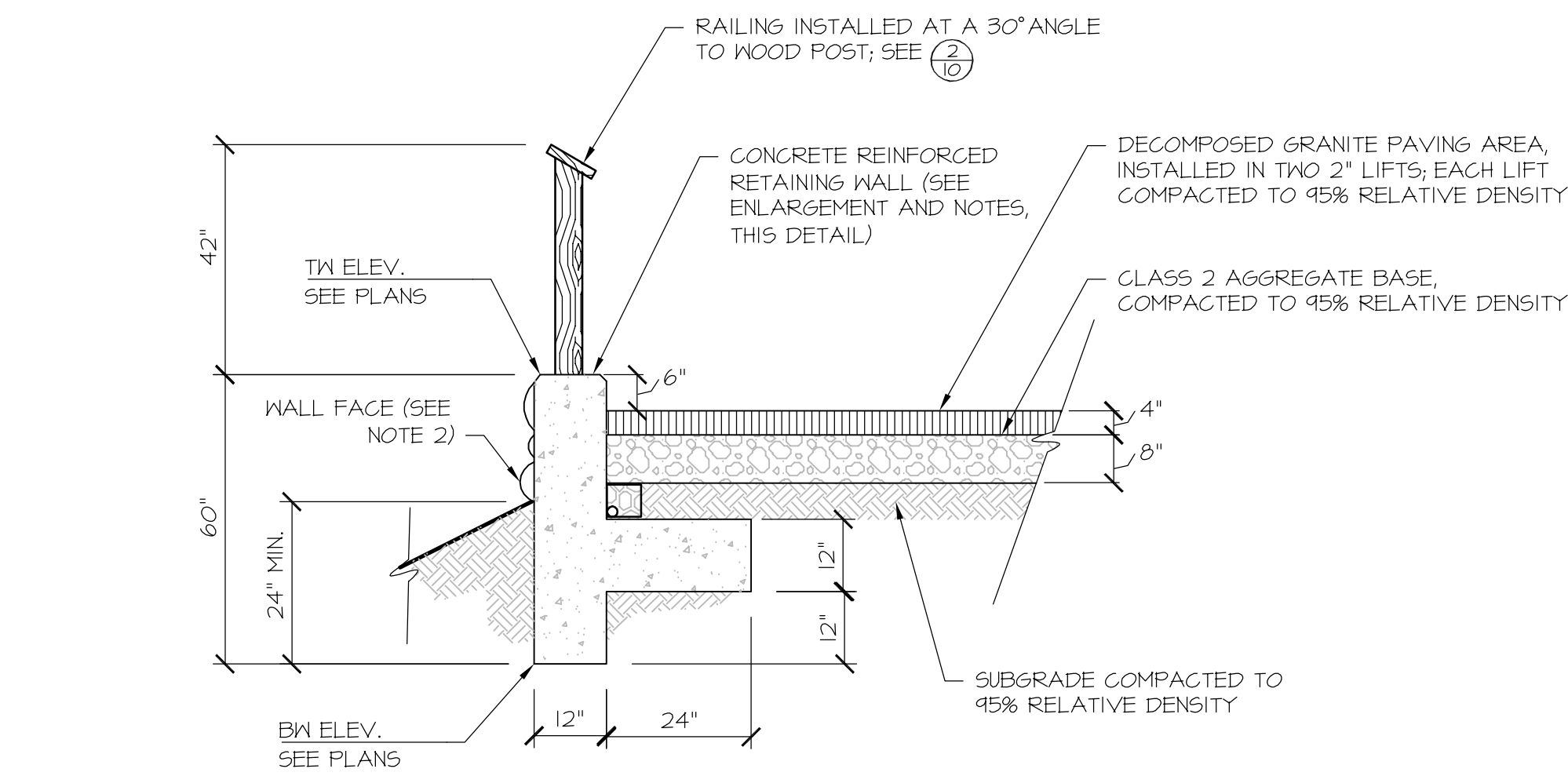
Jones & Stokes
2000 V Street, Sacramento, CA 95818

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3550 Industrial Boulevard, Suite 1000
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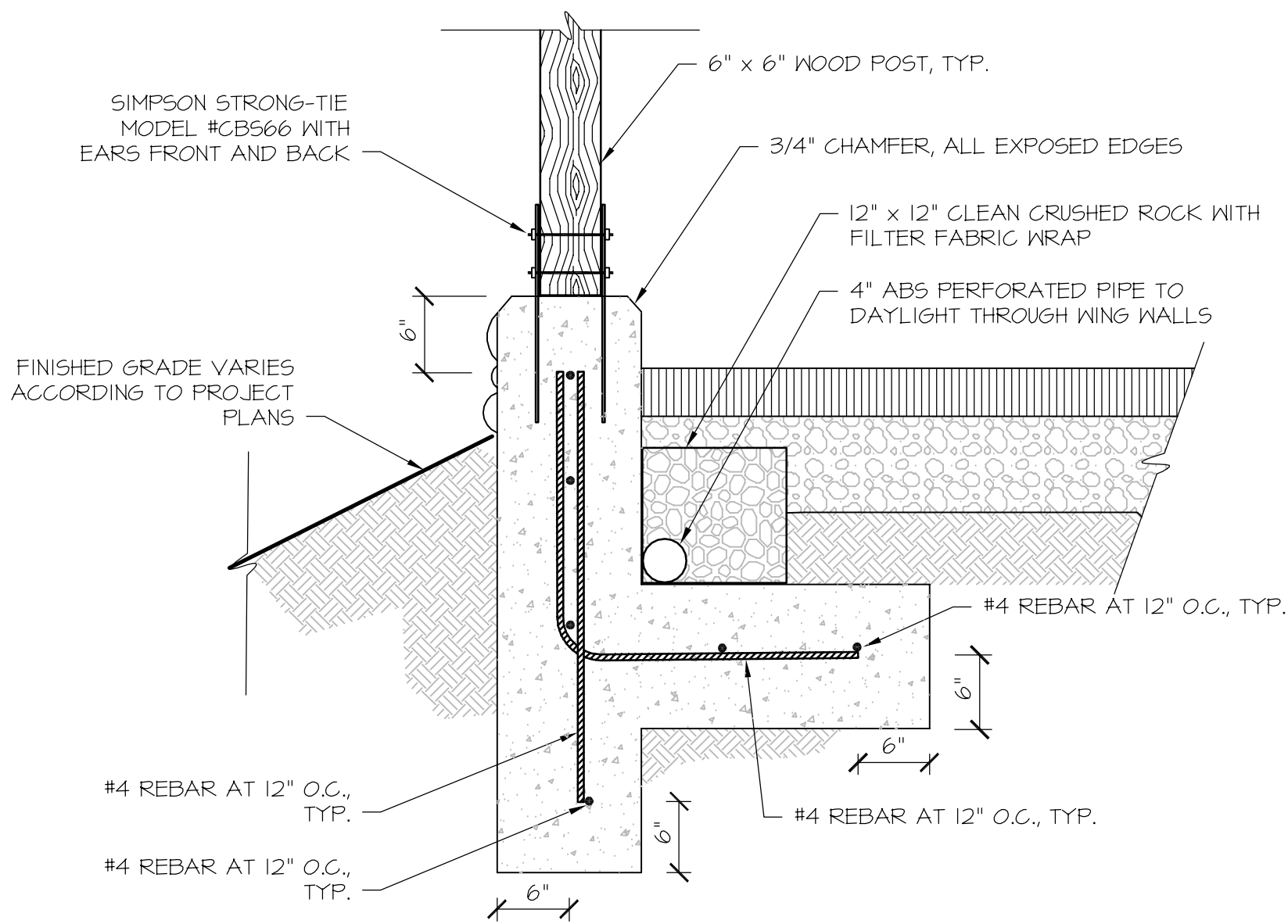
DEL PASO REGIONAL PARK
DETENTION AND FILTRATION WETLAND PROJECT

DETAILS - PLANTING AND MISCELLANEOUS

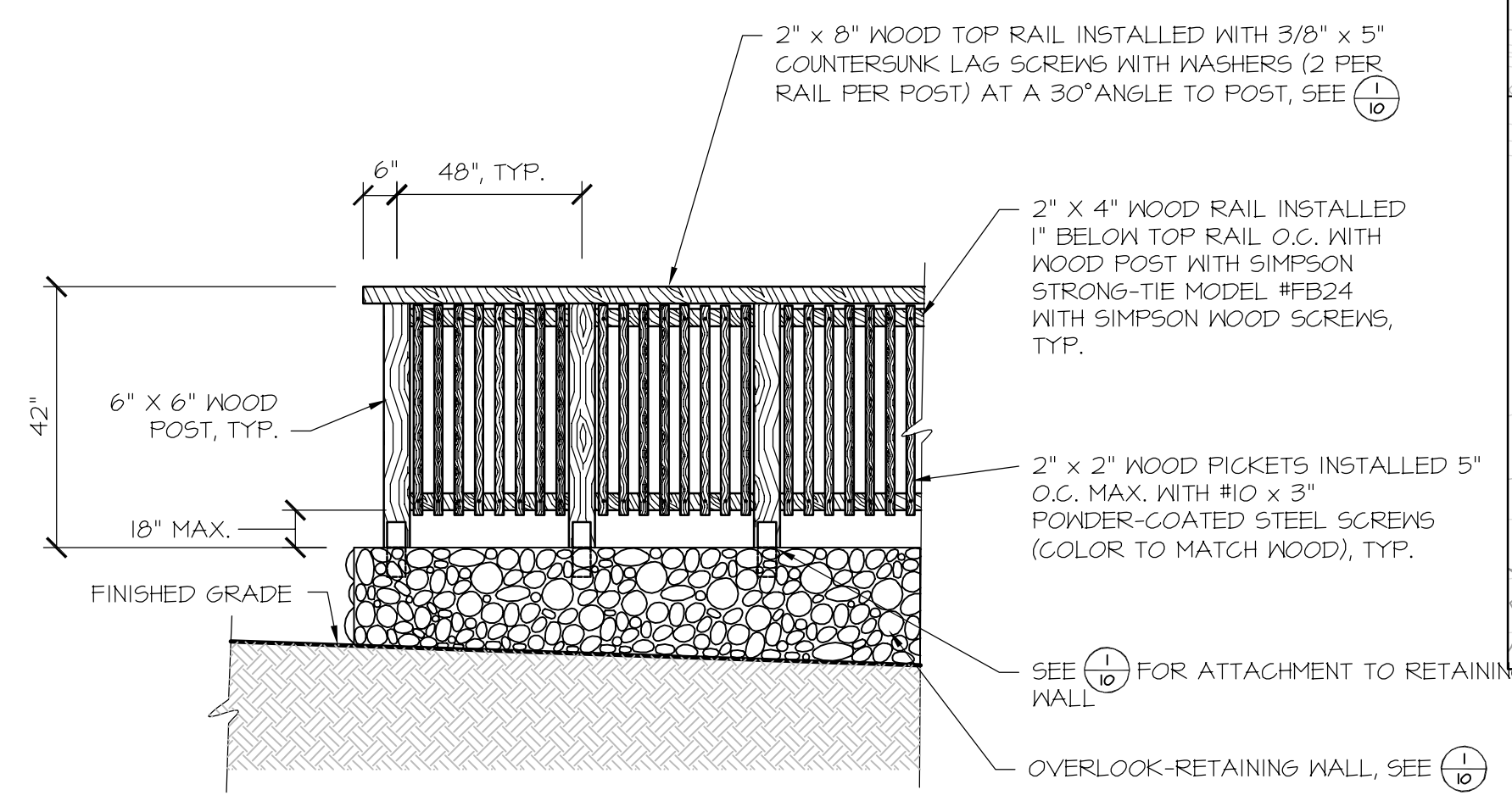
DEL PASO REGIONAL PARK DETENTION AND FILTRATION WETLAND PROJECT



SECTION



ENLARGEMENT



SECTION

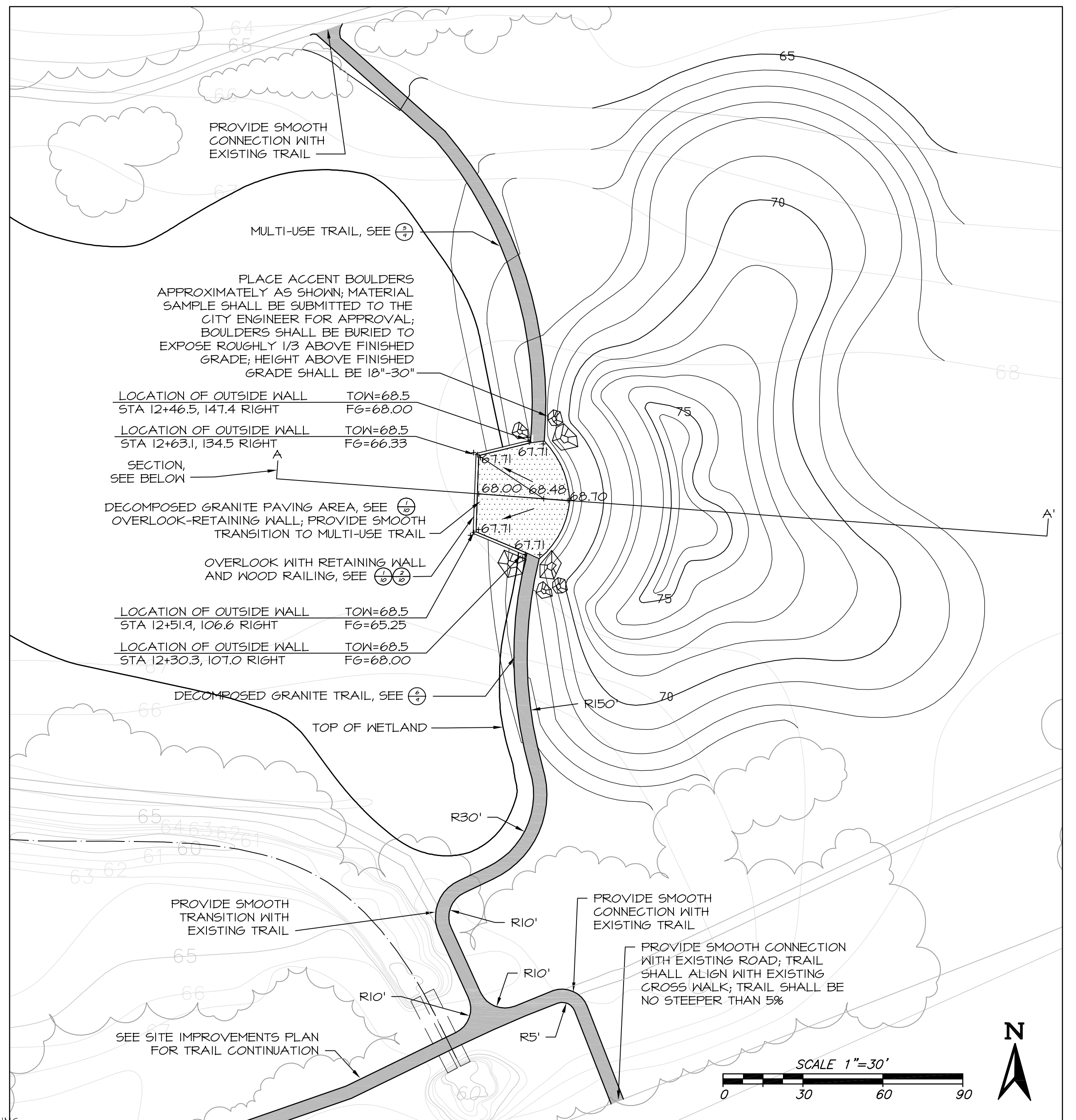
- NOTES:
1. ALL WOOD SHALL BE NEW CEDAR OR EQUIVALENT WEATHER-RESISTANT WOOD TO BE APPROVED BY THE ENGINEER.
 2. EXPOSED VERTICAL CONCRETE WALL SURFACES SHALL BE APPLIED WITH NATIVE ROCK GROUTED IN PLACE (FLUSH WITH CHAMFER) FOR AESTHETIC TREATMENT. CONTRACTOR SHALL SUBMIT MATERIAL SAMPLES TO THE ENGINEER.
 3. ALL POST FASTENERS SHALL BE GALVANIZED, SIZED ACCORDING TO SIMPSON FOR THE PRODUCT SPECIFIED. EXPOSED BOLT THREADS SHALL BE GROUND FLUSH WITH NUT.
 4. DECOMPOSED GRANITE SHALL BE TREATED WITH A STABILIZER TO BE RECOMMENDED BY THE CONTRACTOR FOR APPROVAL BY THE ENGINEER.

- NOTES:
1. ALL WOOD SHALL BE NEW CEDAR OR EQUIVALENT WEATHER-RESISTANT WOOD TO BE APPROVED BY THE ENGINEER.
 2. WOOD PICKETS SHALL BE INSTALLED ON WETLAND SIDE OF RAILING. PICKETS SHALL BE INSTALLED WITH 1/2" PROJECTING ABOVE AND BELOW MOUNTING RAILS.
 3. ALL FASTENERS SHALL BE AS SPECIFIED AND INSTALLED ACCORDING TO SIMPSON FOR THE PRODUCT SPECIFIED.

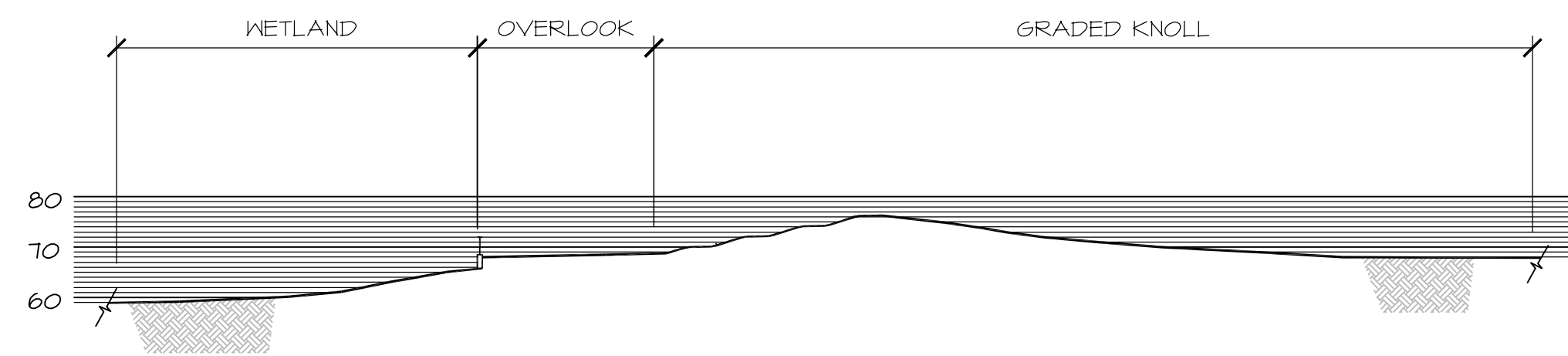
1 OVERLOOK-RETAINING WALL SECTION NOT TO SCALE

2 OVERLOOK-WOOD RAILING SECTION NOT TO SCALE

3 OVERLOOK AND GRADED KNOLL CROSS SECTION SCALE: 1"=30'



OVERLOOK AND AMPHITHEATER GRADING PLAN
NOTE: REFER TO SHEET 3 FOR PROJECT CONTROL BASELINE



NO.	DESCRIPTION	DATE	BY

BENCHMARK ELEV. _____
DESCRIPTION:
SEE SITE IMPROVEMENT PLAN SHEET FOR PROJECT CONTROL

SCALE:
VARIES
1" ON ORIGINAL SCALE

CITY OF SACRAMENTO
DEPARTMENT OF UTILITIES

DESIGNED BY: SC/CE/KL
DRAWN BY: JS/KT

REVIEWED BY: CE/KL
PLOT DATE: 02/09/07

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DEL PASO REGIONAL PARK
DETENTION AND FILTRATION WETLAND PROJECT
DETAILS - RECREATION FEATURES

SHEET
10
OF
10

DEL PASO REGIONAL PARK DETENTION AND FILTRATION WETLAND PROJECT