

LAS VIRGENES CREEK RESTORATION PROJECT - PHASE II

CITY OF CALABASAS, CA



AREA MAP

NOT TO SCALE



VICINITY MAP

NOT TO SCALE

DRAWING INDEX

1. TITLE SHEET & DRAWING INDEX
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9. VEGETATION MANAGEMENT TABLES
10. TRAIL AND SITE IMPROVEMENTS OVERVIEW
- 11-15. TRAIL AND SITE IMPROVEMENTS PLAN SHEETS
17. TRAIL HEAD PLAN SHEET
18. OVERLOOK AREA 1 PLAN SHEET
19. OVERLOOK AREA 2 PLAN SHEET
20. FISH PASSAGE PLAN SHEET
- 21-25. CONSTRUCTION DETAILS

DETAIL DRAWING DESIGNATION



GENERAL NOTES

1. **DESIGN INTENT:** THESE PLANS AND SPECIFICATIONS REPRESENT THE DESIGN INTENT OF QUESTA ENGINEERING CORPORATION (THE ENGINEER), AS APPROVED BY THE OWNER, CITY OF CALABASAS. THE CONTRACTOR IS RESPONSIBLE FOR ALL ITEMS SHOWN ON THESE PLANS AND SPECIFICATIONS AND SHALL BE RESPONSIBLE FOR ANY DEVIATIONS FROM THESE PLANS AND ASSOCIATED RISK AND EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING A COPY OF THE APPROVED PLANS AND SPECIFICATIONS AND ANY ADDENDA AT THE JOB SITE AT ALL TIMES. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY CITY OF PASADENA OF ANY UNFORESEEN CIRCUMSTANCES OR CONDITIONS THAT WOULD ALTER THESE PLANS AND SPECIFICATIONS FOR APPROVAL OF MODIFICATIONS TO THE INTENDED DESIGN.
2. **BASE MAP:** THE PROPOSED IMPROVEMENTS SHOWN ON THESE DRAWINGS ARE SUPERIMPOSED ON A BASIC MAP. THIS BASE MAP IS COMPILED FROM AERIAL AND GROUND SURVEYS, AND OTHER DATA AS MADE AVAILABLE TO THE ENGINEER, WHO SHALL NOT BE HELD LIABLE FOR CHANGES, INACCURACIES, OMISSIONS OR OTHER ERRORS ON THESE DOCUMENTS. THE COMPOSITE BASE MAP IS PROVIDED AS AN AID ONLY AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THESE DOCUMENTS AND INCORPORATING/INTEGRATING ALL CONSTRUCTION AS REQUIRED TO ACCOMMODATE THE SAME. NONE OF THE INCLUDED DRAWINGS DEPICT A BOUNDARY SURVEY ALTHOUGH A PARTIAL ALTA SURVEY WAS PERFORMED ALONG A PORTION OF THE UP ROW. BOUNDARY LINES SHOWN ARE APPROXIMATE AND FOR INFORMATIONAL PURPOSES ONLY.
3. **DISCREPANCIES:** IN THE EVENT THAT SUBGRADE OBSTRUCTIONS ARE ENCOUNTERED OR DISCREPANCIES ARE FOUND BETWEEN THE DRAWINGS AND FIELD CONDITIONS, NOTIFY ENGINEER OR CITY OF CALABASAS FOR DIRECTIONS. DO NOT PROCEED WITH THE WORK WITHOUT DIRECTION FROM THE ENGINEER.
4. **PRECONSTRUCTION MEETING:** A PRECONSTRUCTION MEETING ATTENDED BY THE CONTRACTOR, CITY OF CALABASAS REPRESENTATIVE, AND OTHERS AS APPROPRIATE, WILL BE HELD WITHIN FIFTEEN (15) DAYS OF AWARD OF CONTRACT TO DISCUSS THE WORK. SUBMIT ALL REQUIRED DOCUMENTS, REQUESTS, AND PROPOSALS AT THIS MEETING FOR DISCUSSION.
5. **UTILITIES:** CONTRACTOR SHALL NOTIFY ALL PUBLIC AND PRIVATE UTILITY COMPANIES IN THE PROJECT AREA A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO COMMENCEMENT OF WORK. CONTRACTOR MUST INVESTIGATE AND VERIFY THE LOCATION OF ANY EXISTING UTILITIES WITHIN THE PROJECT AREA. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO IDENTIFY, LOCATE, AND PROTECT ALL UNDERGROUND UTILITIES. ANY UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE CONSIDERED TENTATIVE AND APPROXIMATIONS AND THEREFORE, NO WARRANTY EXPRESSED OR IMPLIED IS MADE AS TO THE COMPLETENESS OR CORRECTNESS OF THEIR LOCATION. THE UTILITY COMPANIES ARE THOUGHT TO BE MEMBERS OF THE UNDERGROUND SERVICE ALERT (USA) ON-CALL PROGRAM. THE CONTRACTOR SHALL NOTIFY USA 72-HOURS IN ADVANCE OF PERFORMING EXCAVATION WORK AT 811 FROM 7:00 AM TO 5:00 PM, MONDAY THROUGH FRIDAY. EXISTING PUBLIC UTILITIES SHALL BE KEPT IN SERVICE AT ALL TIMES. UTILITIES THAT INTERFERE WITH THE WORK TO BE PERFORMED SHALL BE PROTECTED AS REQUIRED BY
6. **RESOURCE PROTECTION:** THE CONTRACTOR IS ADVISED OF THE PRESENCE OF SENSITIVE RESOURCES LOCATED NEAR PROJECT WORK AREAS. THE TRAIL ALIGNMENT, FENCING, STAGING AREAS AND ALL OTHER PROJECT FACILITIES HAVE BEEN CAREFULLY LOCATED TO MINIMIZE DISTURBANCE OF SENSITIVE RESOURCES. THE LIMITS OF WORK ARE SHOWN ON THE DRAWINGS. ALL CONTRACTOR ACTIVITIES, INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION ACTIVITIES, VEHICLE MAINTENANCE, AND MATERIALS AND EQUIPMENT STORAGE AND STAGING, MUST BE STRICTLY CONFINED TO THE WORK AREAS SHOWN ON THE DRAWINGS. THE LIMITS OF WORK WILL BE CAREFULLY LOCATED IN THE FIELD BY THE CONTRACTOR AND ENGINEER OF RECORD, AND ALL WORK LIMIT AREAS WILL BE PROTECTED BY STRAW WATTLES, CONSTRUCTION BARRIER FENCING, OR SILT FENCING AS SHOWN ON THE DRAWINGS.
7. **BIOLOGICAL AND CULTURAL RESOURCE MONITOR:** CITY OF CALABASAS WILL PROVIDE A QUALIFIED BIOLOGICAL/ARCHAEOLOGICAL MONITOR THAT WILL INITIALLY REVIEW SITE CONSTRUCTION PROTOCOLS WITH ALL CONSTRUCTION CONTRACTOR EMPLOYEES AT A PRE-CONSTRUCTION MEETING THAT WILL BE SPECIFICALLY HELD ON RESOURCE PROTECTION. EACH EMPLOYEE ASSIGNED TO THIS PROJECT MUST PARTICIPATE IN THIS PRE-CONSTRUCTION MEETING AND DISCUSSION OF ADJACENT SENSITIVE RESOURCES, AND SIGN A STATEMENT INDICATING THAT THEY HAVE READ AND UNDERSTOOD THE PROTOCOLS AND AGREE TO ADHERE TO THEM. SIGNIFICANT BREACHES OF PROTOCOL AND FAILURE TO ADEQUATELY PROVIDE THE DEGREE OF RESOURCE PROTECTION REQUIRED BY THIS PROJECT WILL RESULT IN THE ISSUANCE OF A STOP WORK ORDER BY THE ENGINEER OR BY THE MONITOR. CITY OF CALABASAS PROVIDED MONITOR WILL CAREFULLY INSPECT ALL WORK AREAS FOR THE PRESENCE OF WILDLIFE OR CULTURAL RESOURCES PRIOR TO INSTALLATION OF PROTECTIVE BARRIER FENCING AND FIELD FENCING, AND PRIOR TO INITIATION OF CONSTRUCTION EACH DAY. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY PENALTIES AND ALL REPAIRS AND MITIGATIONS IMPOSED DUE TO BREACH OF PROTOCOL AND UNAUTHORIZED INTRUSION INTO SENSITIVE RESOURCE AREAS.
8. **CONTRACTOR RESPONSIBILITY:** BY ENTERING INTO THIS CONTRACT WITH CITY OF AGOURA HILLS, THE CONTRACTOR AGREES TO HAVING EXAMINED THE SITE, COMPARING THE SITE CONDITIONS WITH THE DRAWINGS AND SPECIFICATIONS, AND HAS CAREFULLY EXAMINED ALL OF THE CONTRACT DOCUMENTS AND IS SATISFIED AS TO THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED. NO ALLOWANCE SHALL BE MADE SUBSEQUENTLY ON BEHALF OF THE CONTRACTOR DUE TO FAILURE TO BE ACQUAINTED WITH THE CONDITIONS OF THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH SUBCONTRACTORS AS REQUIRED TO ACCOMPLISH ALL CONSTRUCTION OPERATIONS. CONTRACTOR SHALL PROTECT ALL EXISTING ON-SITE AND OFF-SITE IMPROVEMENTS AGAINST DAMAGE RESULTING FROM OPERATIONS. RESPONSIBILITY EXTENDS TO THE CONTRACTOR'S WORKERS, SUBCONTRACTORS AND OTHERS PROVIDING SERVICES. CONTRACTOR SHALL REPAIR AND/OR REPLACE DAMAGE AT THEIR OWN EXPENSE AND TO THE SATISFACTION OF THE ENGINEER AND CITY OF CALABASAS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY, AND HOLD CITY OF CALABASAS AND THE
9. **JOB SITE CONDITIONS:** CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY, TRAFFIC CONTROL, ACCESS TO AND FROM ADJACENT DRIVEWAYS AND STREETS, AND ANY LAKE CLOSURES. TRASH GENERATED BY THIS WORK (CONSTRUCTION DEBRIS, PAPER, BOTTLES, CIGARETTES, ETC.) SHALL BE REMOVED ON A DAILY BASIS. CONTRACTOR SHALL CONTROL DUST AT ALL TIMES WITH WATER.
10. **SAFETY AND TRAFFIC CONTROL:** ALL WORK SHALL BE IN COMPLIANCE WITH APPLICABLE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS AS SET FORTH BY THE FEDERAL DEPARTMENT OF LABOR AND/OR THE STATE OF CALIFORNIA AND CITY OF RICHMOND. ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE CALTRANS MANUAL OF TRAFFIC CONTROLS FOR CONSTRUCTION AND MAINTENANCE OF WORK ZONES. ALL SIGNS SHALL BE APPROPRIATELY CONSTRUCTED WITH REFLECTIVE MATERIAL ON A BACKING OF METAL OR FABRIC (NO WOOD OR PLASTIC ALLOWED) AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION TO PROVIDE PROPER VISIBILITY. PER SECTION 12 OF THE CALTRANS SPECIAL PROVISIONS THE CONTRACTOR SHALL MAINTAIN REASONABLE ACCESS TO ALL ROADWAYS DURING CONSTRUCTION.
11. **SPECIFICATIONS:** REFER TO THE SPECIFICATIONS THAT ARE A PART OF THESE CONTRACT DOCUMENTS. COMPLY WITH ALL REGULATIONS AND CODES GOVERNING WORK PERFORMED UNDER THIS CONTRACT. REFER TO CALTRANS STANDARD PLANS AND SPECIFICATIONS AS REQUIRED.
12. **MISCELLANEOUS:** WRITTEN DIMENSIONS ALWAYS TAKE PRECEDENCE OVER SCALDED DIMENSIONS IF THERE IS A CONFLICT. THE CONTRACTOR SHALL CONTACT CITY OF CALABASAS TO OBTAIN ADDITIONAL CLARIFICATION. NO DEVIATION OR SUBSTITUTION SHALL BE ALLOWED WITHOUT OBTAINING PRIOR WRITTEN APPROVAL FROM CITY OF AGOURA HILLS AND THE ENGINEER.
13. **GEOTECHNICAL REPORT:** QUESTA ENGINEERING CORPORATION, 1220 BRICKYARD COVE ROAD, POINT RICHMOND, CA 94807, (510) 235-6114



REVISIONS

DATE

APPROVED

design:

operations:



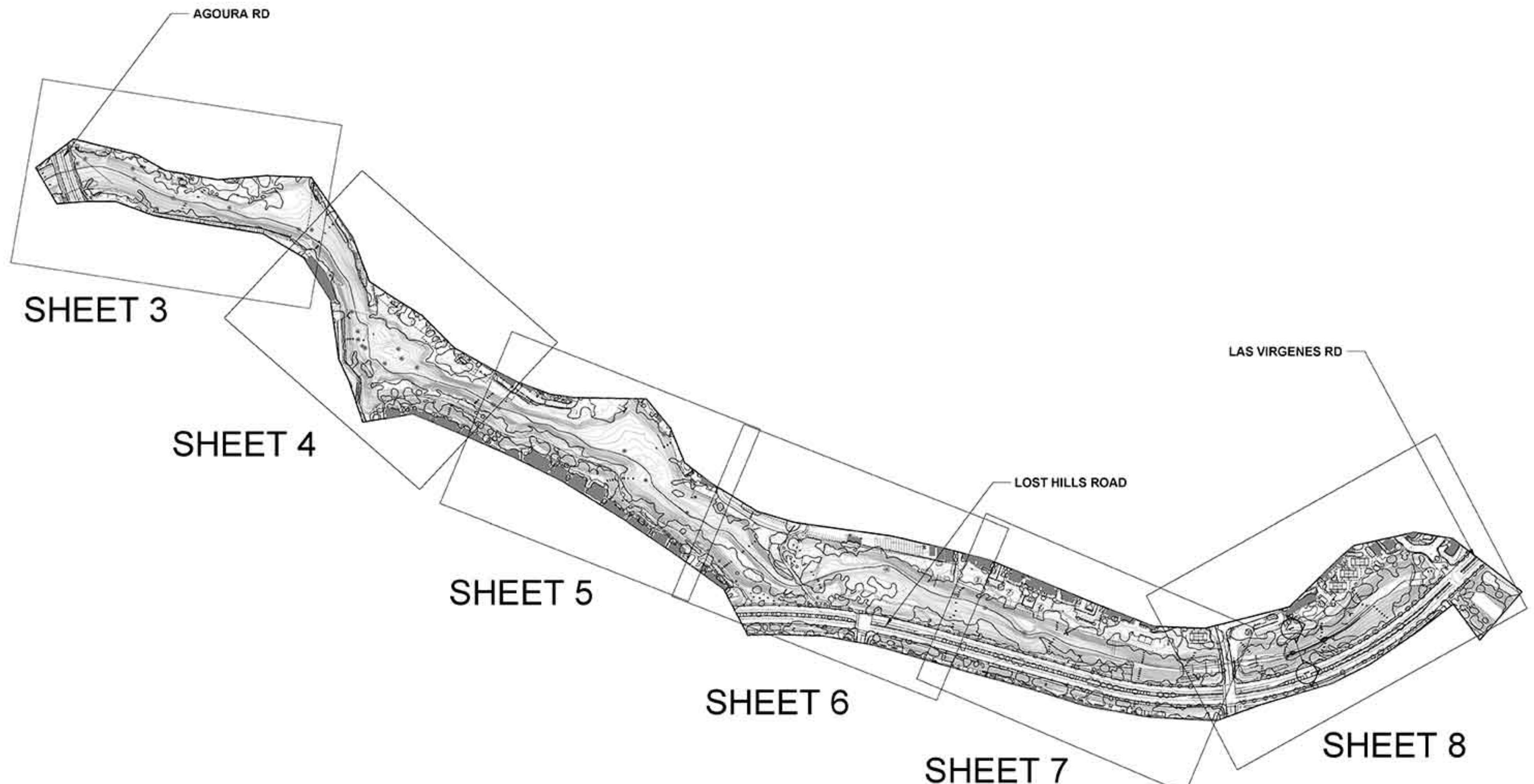
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TITLE SHEET AND SHEET INDEX
LAS VIRGENES CREEK BANK STABILIZATION, STREAM RESTORATION AND FISH BARRIER ENHANCEMENT
CALABASAS, CA

SHEET NO.

1

CONTRACT NO.
OF : TBD



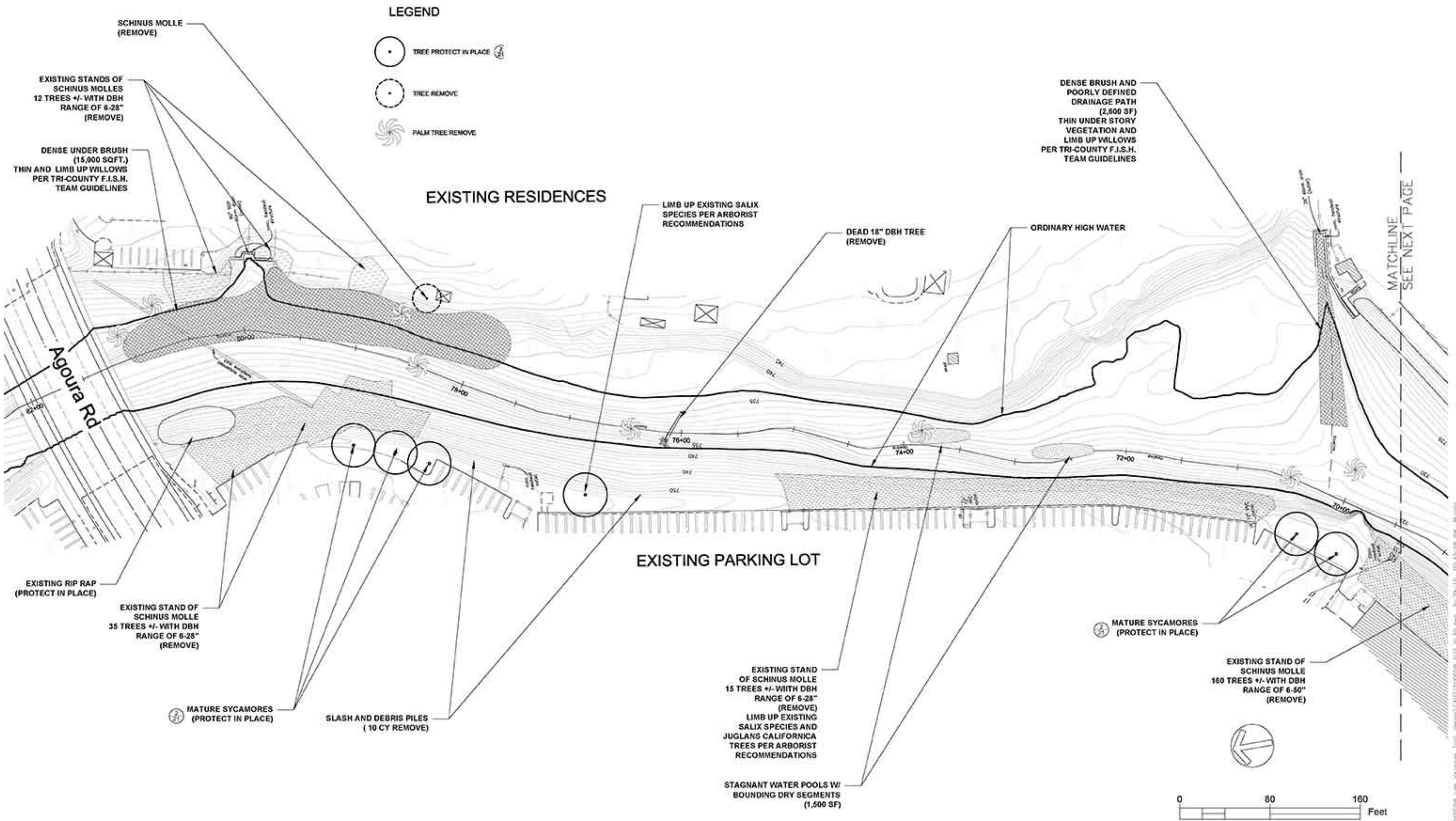
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date: 9-23-2015 PROJECT NO.1500058VEGETATION MANAGEMENT & DEMO OVERVIEW
LAS VIRGENES CREEK BANK STABILIZATION, STREAM RESTORATION AND FISH BARRIER ENHANCEMENT
CALABASAS, CASHEET NO. 2
OF : TBD
CONTRACT NO.

0 225 450 900 Feet



REVISIONS

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operations:



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VEG MANAGEMENT, DEBRIS REMOVAL AND DEMO
LAS VIRGENES CREEK BANK STABILIZATION, STREAM RESTORATION AND FISH BARRIER ENHANCEMENT
CALABASAS, CA

SHEET NO. 3
OF : TBD
CONTRACT NO.

LEGEND

- TREE PROTECT IN PLACE (2)
- TREE REMOVE
- PALM TREE REMOVE

MATCHLINE PREVIOUS PAGE
SEE MATCHLINE NEXT PAGE

EXISTING PARKING LOT

EMERGING TREE OF
HEAVEN STAND.
10 TREES +/- WITH DBH
RANGE OF 3-8".
(REMOVE)

MATURE SYCAMORES
(PROTECT IN PLACE)

EXISTING SCHINUS MOLLE
STAND. 160 TREES +/- WITH
DBH RANGE OF 6-50"
(REMOVE)

PINUS CANARIENSIS (REMOVE)

EXISTING PARTKING LOT

SCHINUS MOLLE
(REMOVE)

EXISTING
EUCALYPTUS
GLOBULUS GROVE.
50 TREES +/- WITH
DBH RANGE OF 8-50".
(REMOVE)

FALLEN 18" DIAMETER TREE
THROTTLING FLOW DOWN STREAM
(REMOVE)

CATTAILS OBSTRUCTING FLOW
REMOVE PER TRI-COUNTY F.I.S.H.
TEAM GUIDELINES

SCHINUS MOLLE
(REMOVE)

SCHINUS MOLLE
(REMOVE)
EUCALYPTUS GLOBULUS
(REMOVE)

EXISTING RESIDENCES

SCHINUS MOLLE STAND
6 TREES +/- WITH DBH
RANGING FROM 6-30"
(REMOVE)



0 80 160
Feet

REVISIONS

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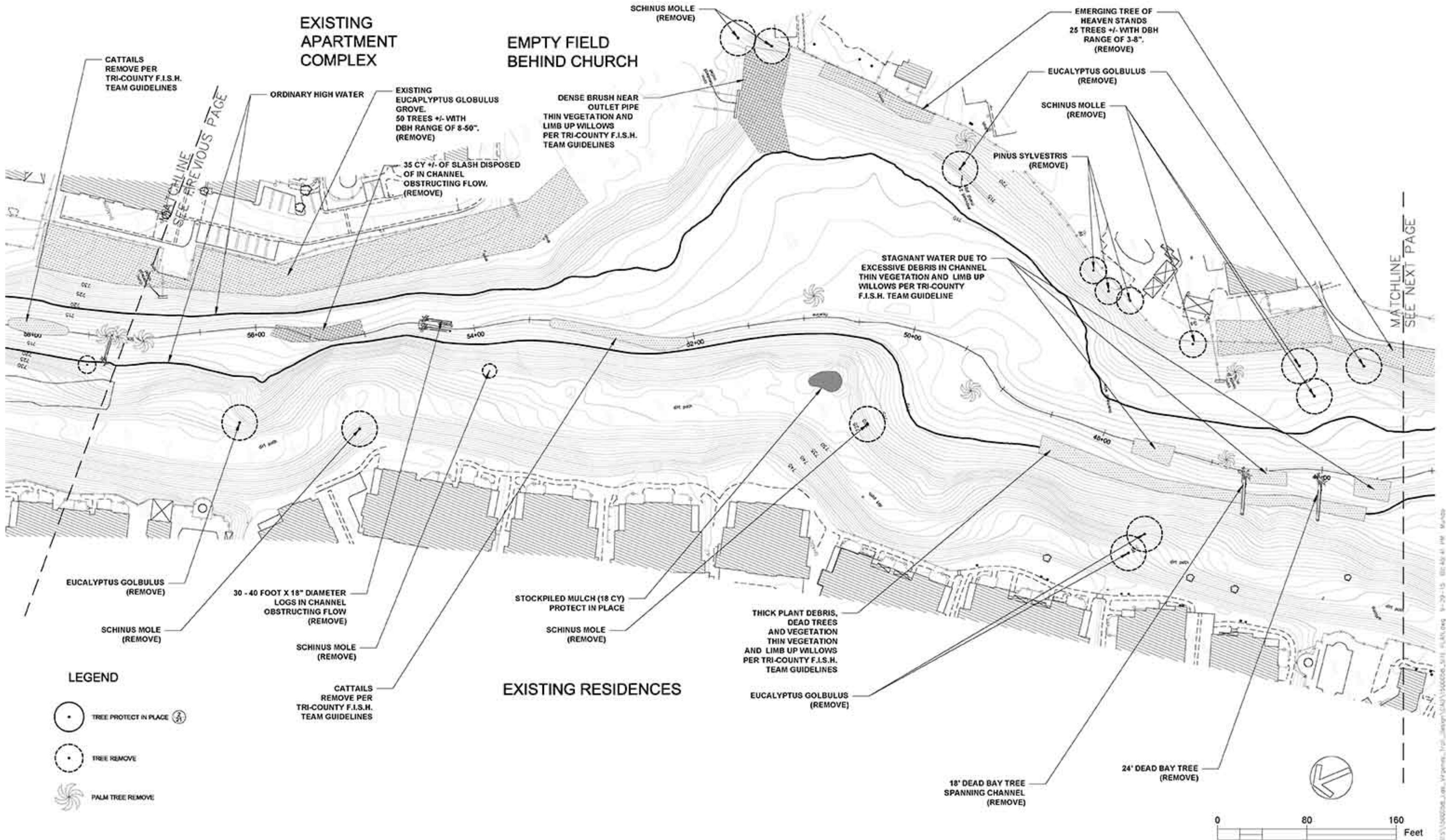


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VEG MANAGEMENT, DEBRIS REMOVAL AND DEMO
LAS VIRGENES CREEK BANK STABILIZATION, STREAM RESTORATION AND FISH BARRIER ENHANCEMENT
CALABASAS, CA

SHEET NO.
OF : TBD

CONTRACT NO.



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ENGINEERING CONS.

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VEG MANAGEMENT, DEBRIS REMOVAL AND DEMO
LAS VIRGENES CREEK BANK STABILIZATION, STREAM RESTORATION AND FISH BARRIER ENHANCEMENT
CALABASAS, CA

SHEET NO. 5
OF : TBD
CONTRACT NO.

LEGEND

- TREE PROTECT IN PLACE
- TREE REMOVE
- PALM TREE REMOVE

SCHOOL PLAY FIELDS

ORDINARY HIGH WATER

SCHOOL DISTRICT
MAINTENANCE YARDSCHINUS MOLLE
(REMOVE)1 TON CONCRETE CHUNKS
(5 CY REMOVE)EMERGING TREE OF
HEAVEN STAND,
15 TREES +/- W/
DBH RANGE OF 3 - 8"CONCRETE & ASPHALT
CHUNKS DUMPED IN GULLY
(20 CY REMOVE)MATCHLINE
SEE
NEXT PAGEMATCHLINE
SEE
PREVIOUS PAGESALIX SPECIES
(PROTECT IN PLACE)SCHINUS TEREBINTHIFOLIUS
(REMOVE)
KOELREUTRIA BIPINNATA
(REMOVE)EMERGING TREE OF HEAVEN
STAND, 13 TREES +/- W/
DBH RANGE OF 3 - 8"
(REMOVE)QUERCUS AGRIFOLIA
(PROTECT IN PLACE)EXISTING PLANTINGS
(PROTECT IN PLACE)QUERCUS AGRIFOLIA
(PROTECT IN PLACE)EXISTING OAK
GROVE PLANTING
(PROTECT IN PLACE)QUERCUS AGRIFOLIA
(PROTECT IN PLACE)EXISTING OAK
GROVE PLANTING
(PROTECT IN PLACE)BRANCHES AND
SLASH PILES
(REMOVE)

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VEG MANAGEMENT, DEBRIS REMOVAL AND DEMO
LAS VIRGENES CREEK BANK STABILIZATION, STREAM RESTORATION AND FISH BARRIER ENHANCEMENT
CALABASAS, CA

SHEET NO.
6
OF : TBD
CONTRACT NO.

36+00

34+00

32+00

30+00

28+00

26+00

24+00

22+00

20+00

18+00

16+00

14+00

12+00

10+00

8+00

6+00

4+00

2+00

0+00

0 80 160 Feet

Lost

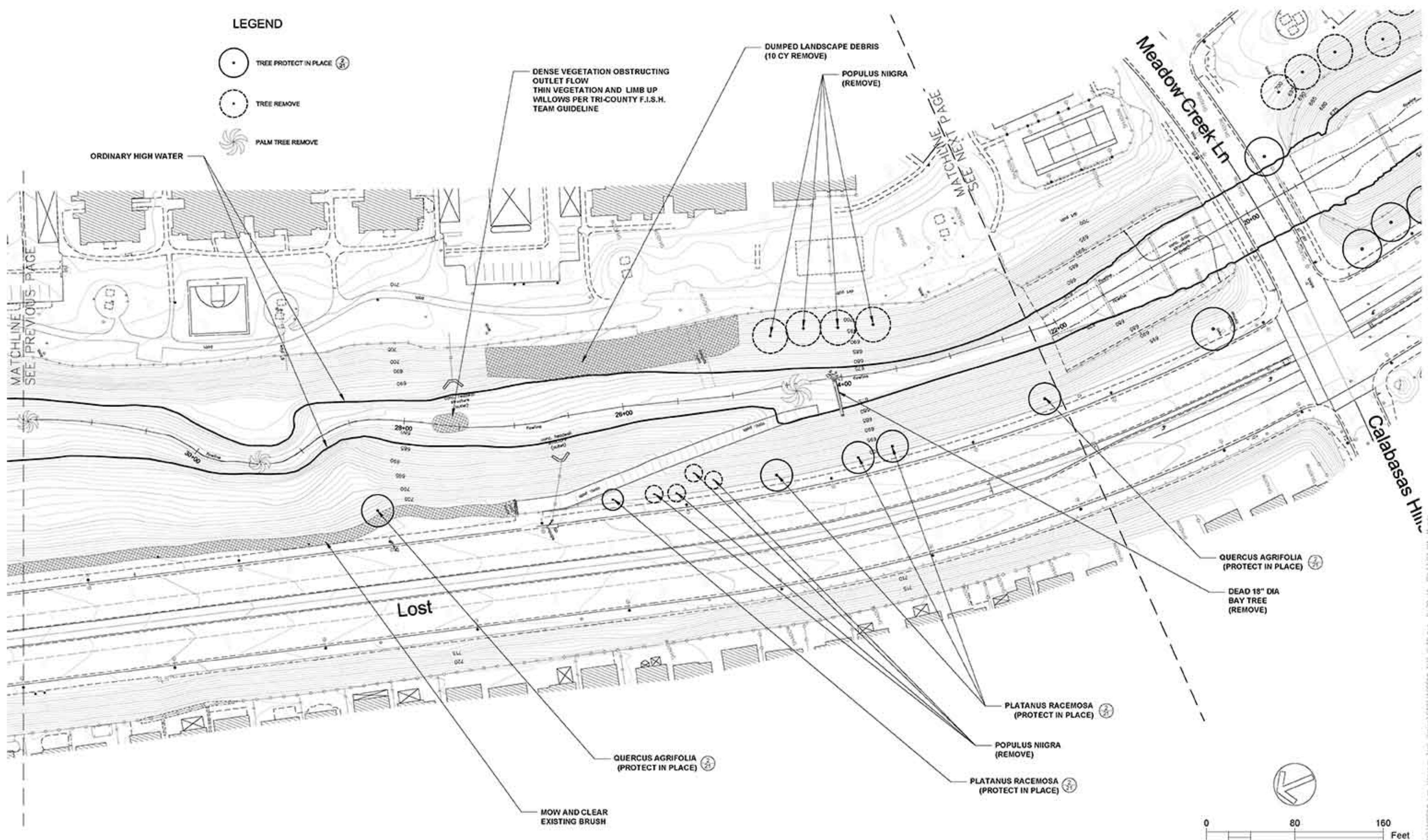
Cold Springs St.

Hills

SCHINUS MOLLE
(REMOVE)QUERCUS AGRIFOLIA
(PROTECT IN PLACE)EXISTING PLANTINGS
(PROTECT IN PLACE)QUERCUS AGRIFOLIA
(PROTECT IN PLACE)MOW AND CLEAR
EXISTING BRUSHEXISTING SLASH ND
VEGETATION DEBRIS
(30 CY REMOVE)

LEGEND

- TREE PROTECT IN PLACE
- TREE REMOVE
- ❖ PALM TREE REMOVE



REVISIONS

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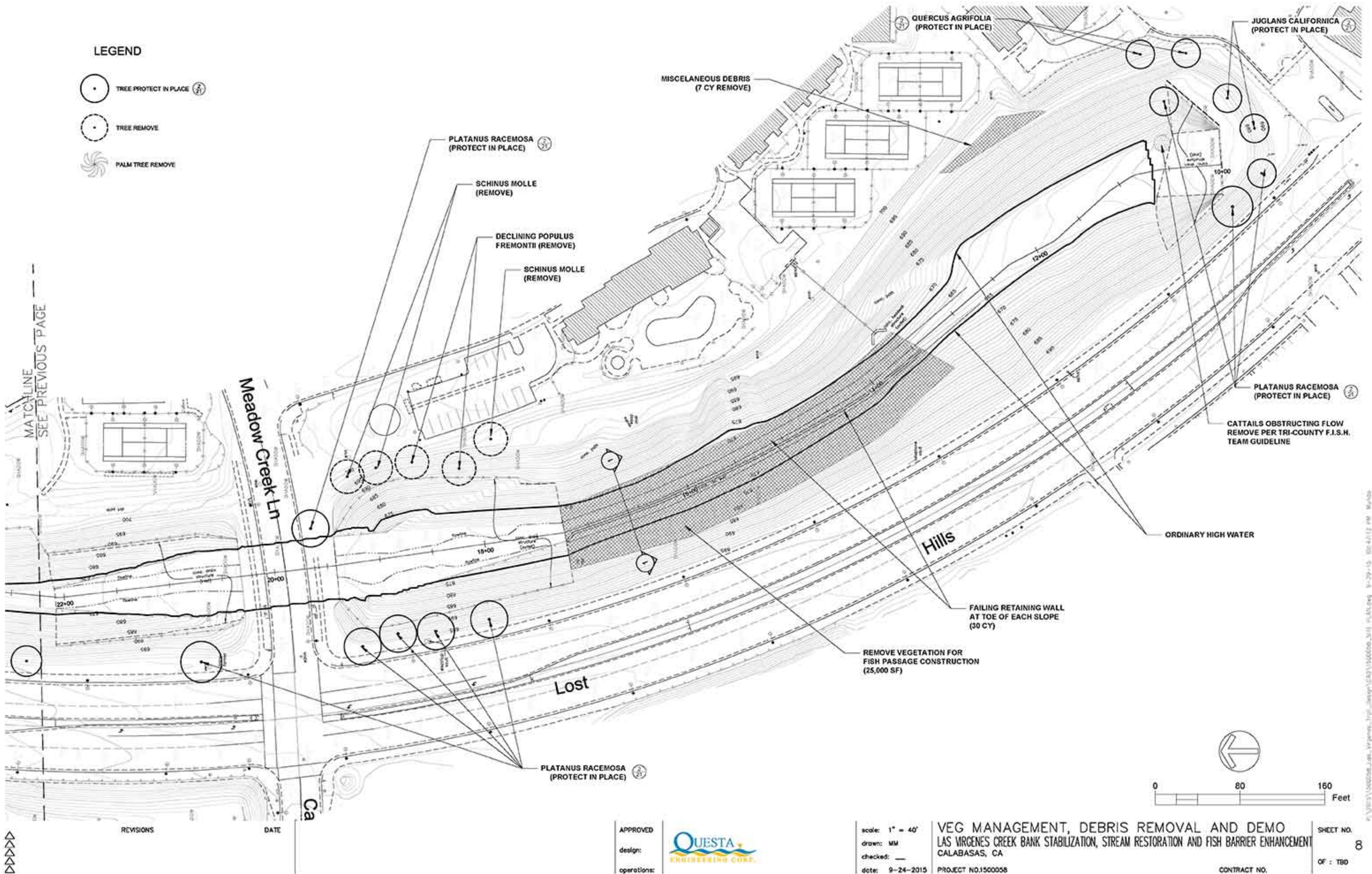
VEG MANAGEMENT, DEBRIS REMOVAL AND DEMO
LAS VIRGENES CREEK BANK STABILIZATION, STREAM RESTORATION AND FISH BARRIER ENHANCEMENT
CALABASAS, CA

SHEET NO.

7

CONTRACT NO.

OF : TBD



Las Virgenes Invasive and Non Native Tree Removal						
East Bank						
Common Name	Scientific Name	Total in 2 Year Flood Plain	Total in 10 Year Flood Plain	Total in Upland Area	DBH Range	Removal Priority
Pepper Tree	Schinus molle			15		
Brazilian Pepper Tree	Schinus terebinthifolius			40	1- 6"	High
Blue Gum	Eucalyptus globulus		3	47		High
Lombardy Poplar	Populus nigra			4	18-20"	Medium
Chinese Flame Tree	Koelreutria bipinnata			1	12"	Medium
Canary Island Palm	Phoenix canariensis	1			26"	High
Cordyline	Cordyline australis		4		2"	Medium
Scots Pine	Pinus sylvestris			3		Low
Mexican Fan Palm	Washingtonia fimbriata	15	2	3	3"- 36"	High
Sub-Totals		16	9	113		
West Bank						
Common Name	Scientific Name	Total in 2 Year Flood Plain	Total in 10 Year Flood Plain	Total in Upland Area	DBH Range	Removal Priority
Canary Island Pine	Pinus canariensis			1	24"	Medium
Pepper Tree	Schinus molle		2	210		High
Brazilian Pepper Tree	Schinus terebinthifolius	1			26"	High
Blue Gum	Eucalyptus globulus			4	12-36"	High
Common Fig	Ficus carica			3	8-15"	High
Lombardy Poplar	Populus nigra			4	10-14"	Medium
Canary Island Palm	Phoenix canariensis	1				High
Cordyline	Cordyline australis		1		4"	Medium
Mexican Fan Palm	Washingtonia fimbriata	15	2	1	3"- 36"	High
Sub-Totals		17	8	220		
Total Trees Removed						
333						

* Diamater at Breast Height (DBH)

Trees to be Planted					
Common Name	Scientific Name	Size	24" Box	15 gal	Deepot
					Live Stakes
Sycamore	Platanus racemosa		150	100	
Cottonwood	Populus fremontii				50
Live Oak	Quercus agrifolia		50	75	50
Box Elder	Acer negundo				50
Red Willow	Salix laevigata				400
California Walnut	Juglans California				50
Sub-Totals			200	175	200
Total Trees To Be Planted					400
					975

DISTRUBED AREA HYDROSEEDING			
COMMON NAME	SCIENTIFIC NAME	FUNCTION	LBS/ACRE
Yarrow	Achillea millefolium	PERENNIAL	5
Creeping Wild Rye	Elymus triticoides	PERENNIAL	15
California Brome	Bromus carinatus	COVER/PERENNIAL	15
Narrow Leaf Milkweed	Asclepias fascicularis	COVER/PERENNIAL	10
MULCH	N/A	EROSION CONTROLL	2000
FERTILIZER	N/A	PLANT ESTABLISHMENT	200
TACKIFIER3	N/A	EROSION CONTROLL	200



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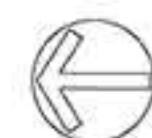
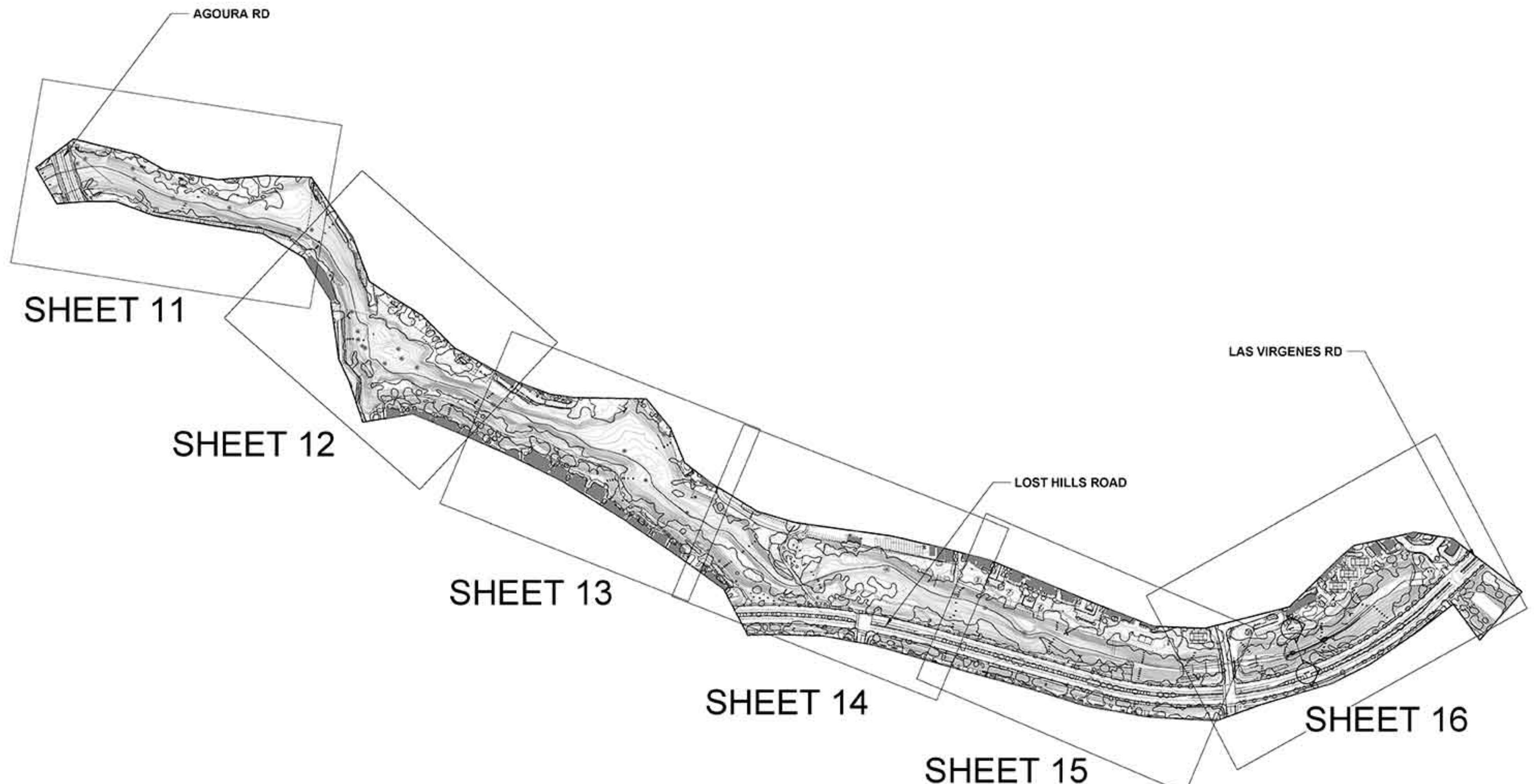
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VEGETATION MANAGEMENT TABLES
LAS VIRGENES CREEK BANK STABILIZATION, STREAM RESTORATION AND FISH BARRIER ENHANCEMENT

SHEET NO. 9 OF : TBD
CONTRACT NO.



0 225 450 900
Feet



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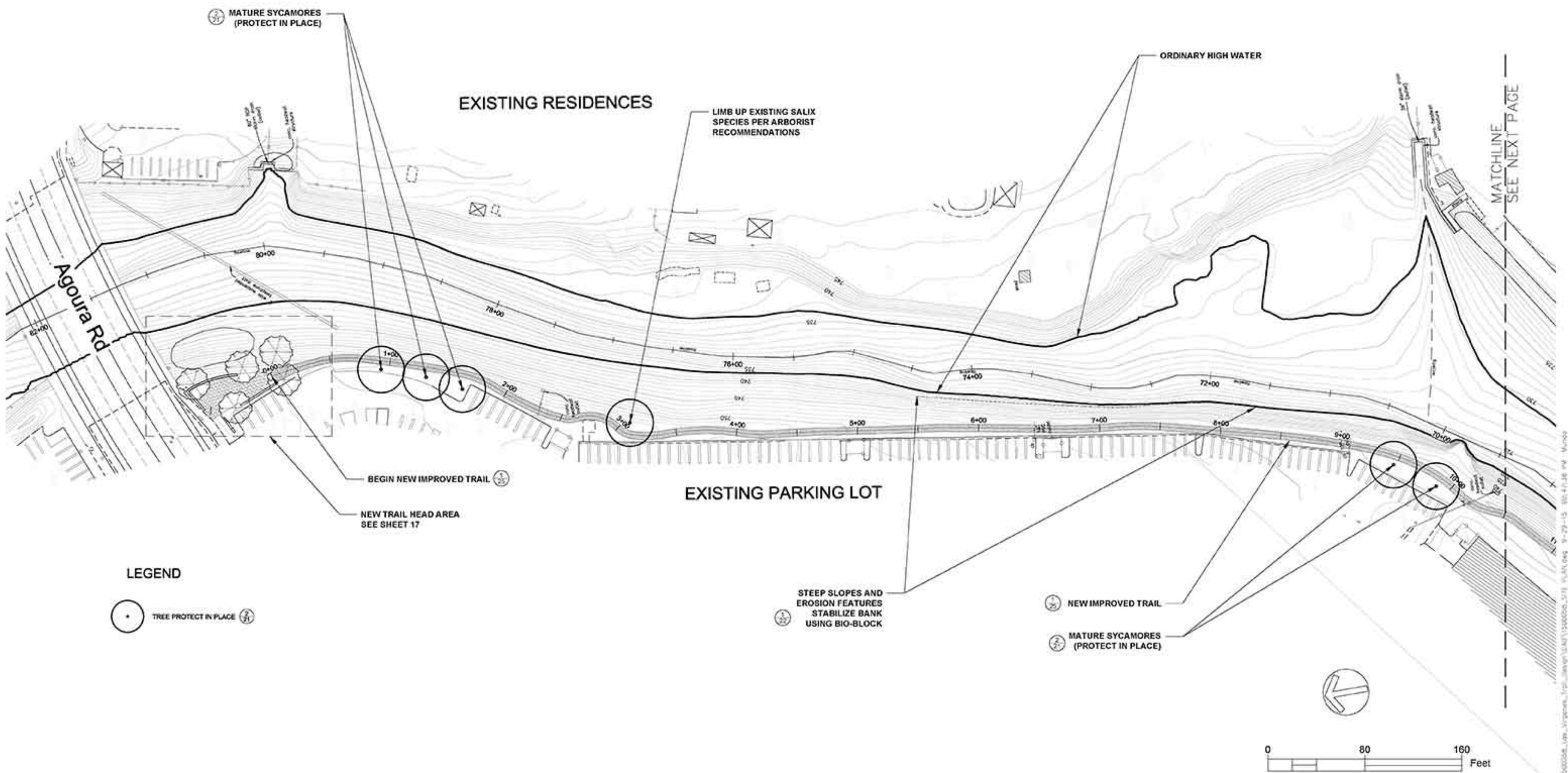
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TRAIL AND SITE IMPROVEMENTS OVERVIEW
LAS VIRGENES CREEK BANK STABILIZATION, STREAM RESTORATION AND FISH BARRIER ENHANCEMENT
CALABASAS, CA
PROJECT NO.1500058

SHEET NO.

10

CONTRACT NO.
OF : TBD



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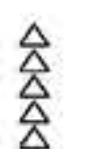
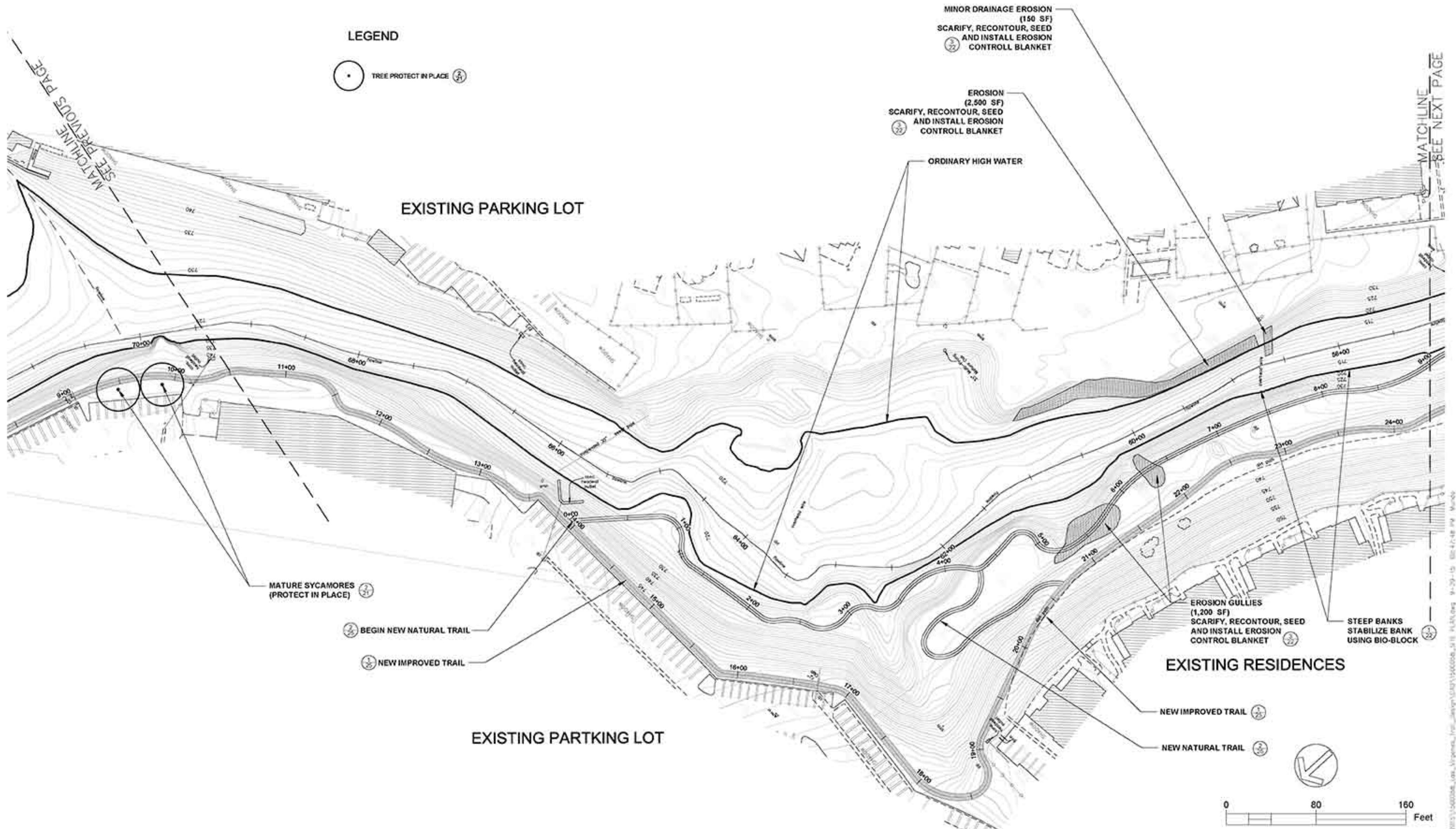
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SITE PLAN
LAS VIRGENES CREEK BANK STABILIZATION, STREAM RESTORATION AND FISH BARRIER ENHANCEMENT
CALABASAS, CA

SHEET NO. 11
OF : TBD
CONTRACT NO.



REVISIONS

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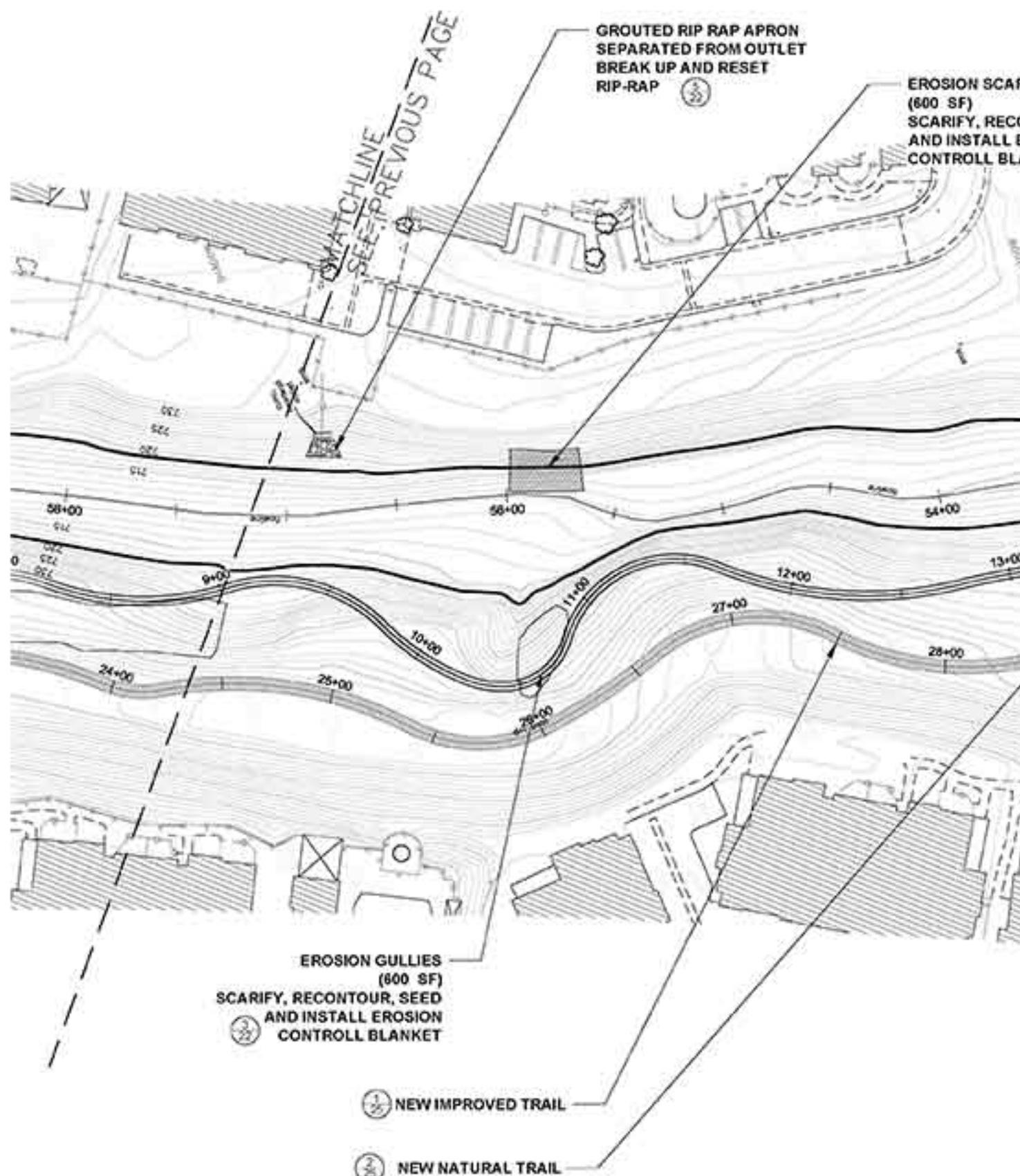
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SITE PLAN
LAS VIRGENES CREEK BANK STABILIZATION, STREAM RESTORATION AND FISH BARRIER ENHANCEMENT
CALABASAS, CA

SHEET NO. 12
OF : TBD
CONTRACT NO.

EXISTING
APARTMENT
COMPLEX

EMPTY FIELD
BEHIND CHURCH



EXISTING RESIDENCES

LEGEND



TREE PROTECT IN PLACE



REVISIONS

DATE

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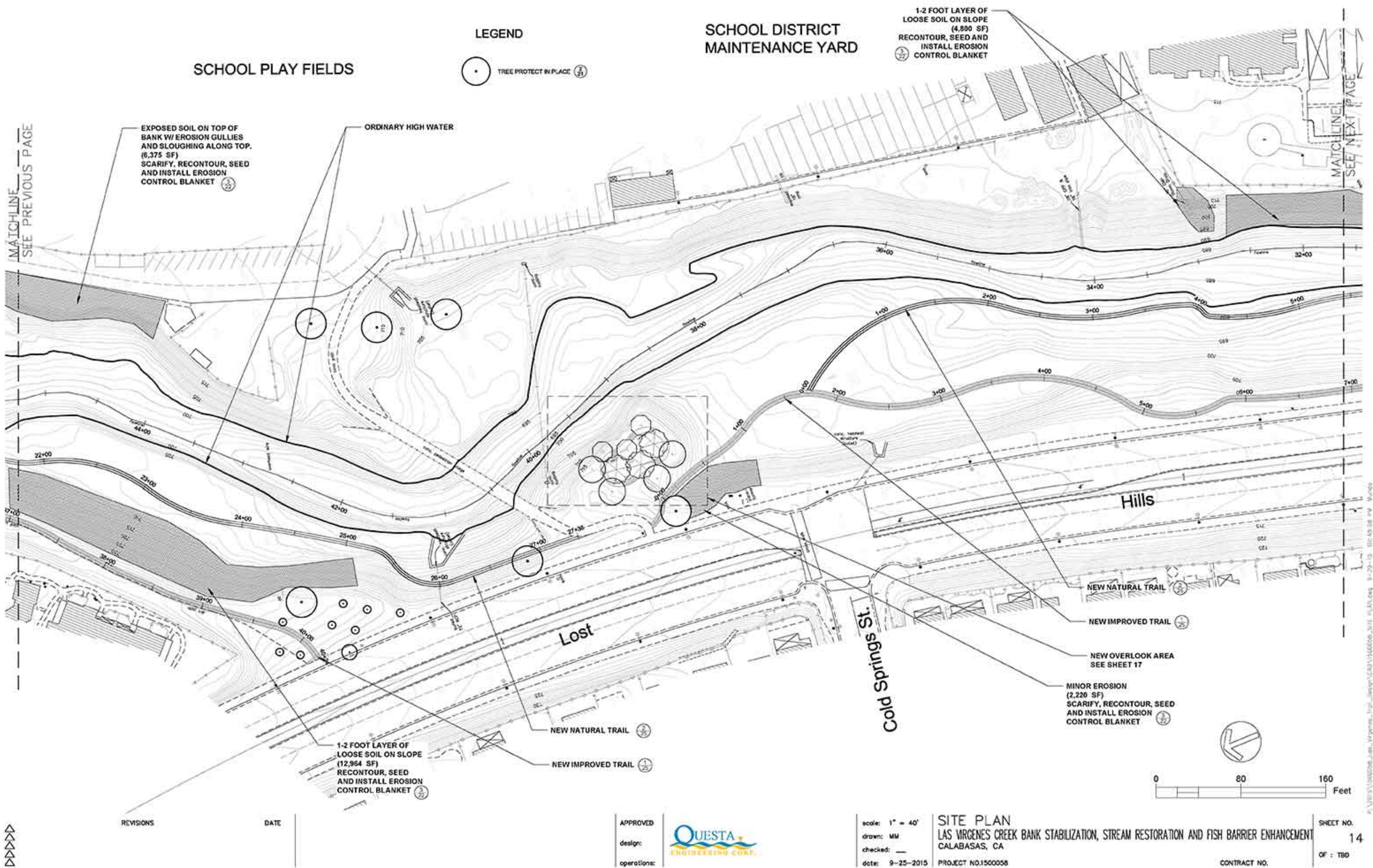


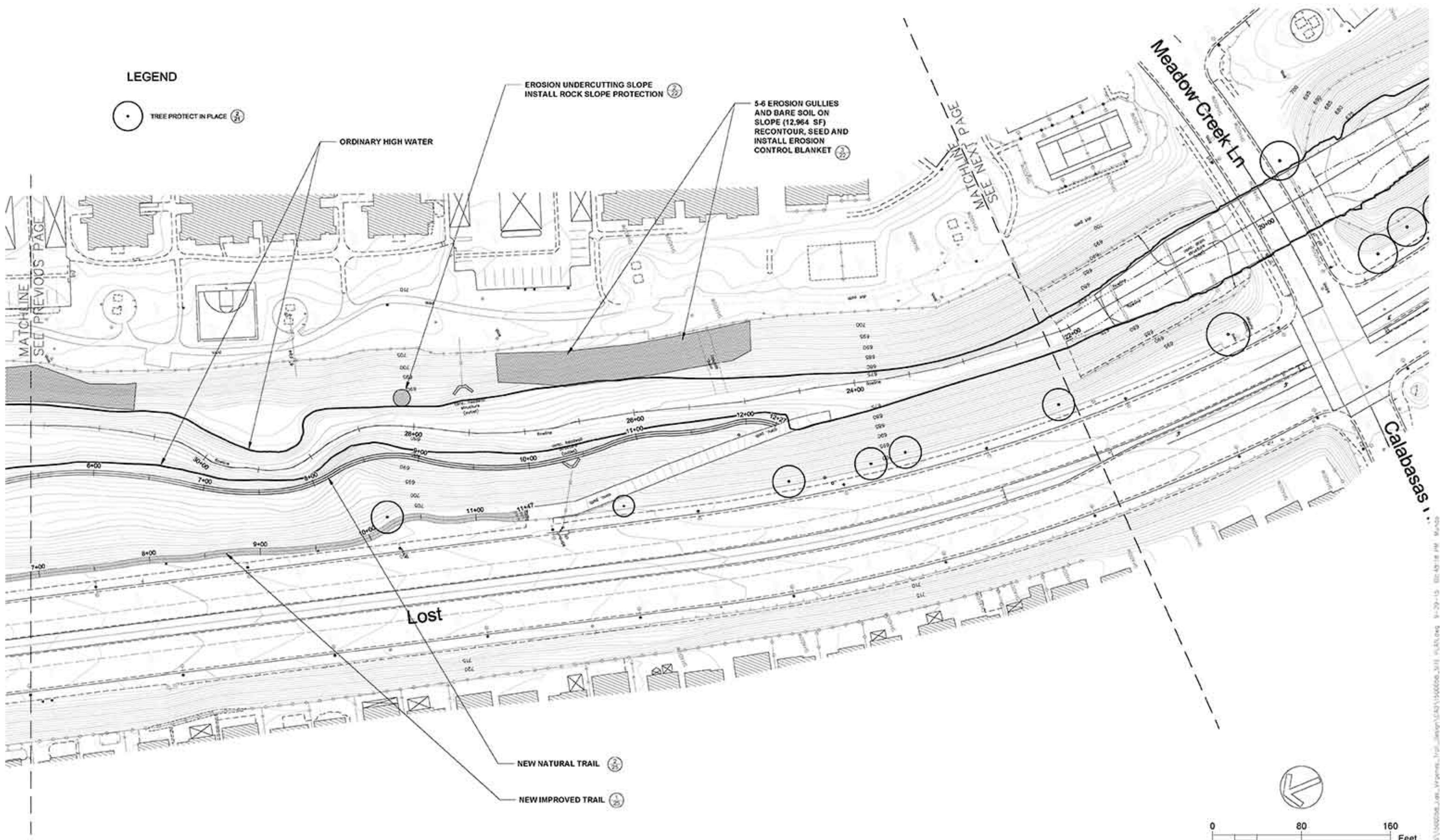
3/4 TO 1-TON ROCK
STABILIZED DRAINAGE
(PROTECT IN PLACE)

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SITE PLAN
LAS VIRGENES CREEK BANK STABILIZATION, STREAM RESTORATION AND FISH BARRIER ENHANCEMENT
CALABASAS, CA

SHEET NO. 13
OF : TBD
CONTRACT NO.





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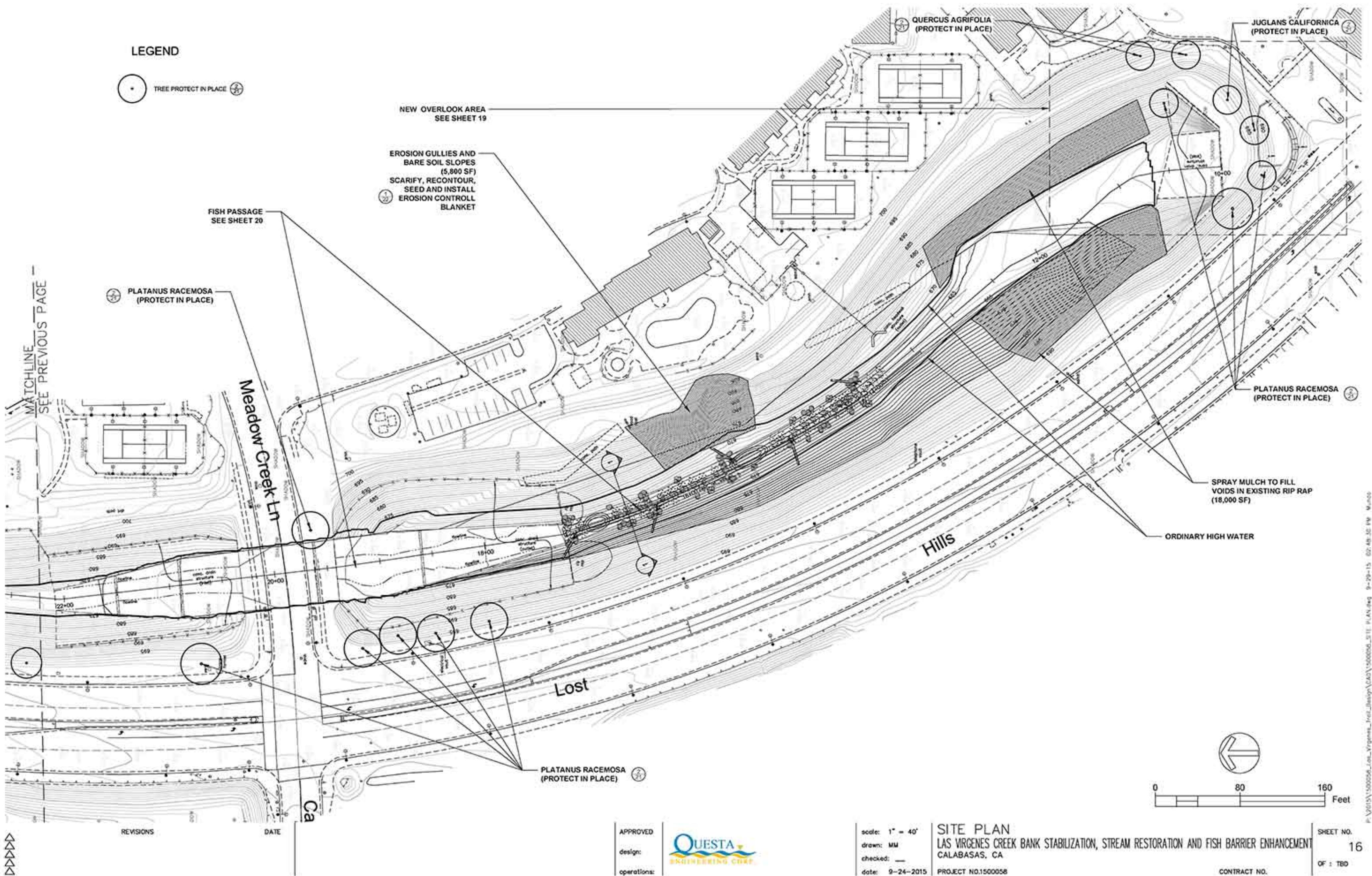
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SITE PLAN
LAS VIRGENES CREEK BANK STABILIZATION, STREAM RESTORATION AND FISH BARRIER ENHANCEMENT
CALABASAS, CA

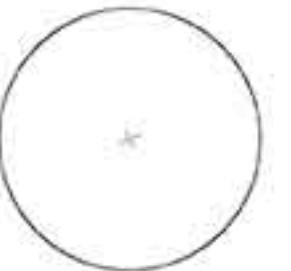
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CONTRACT NO.



LEGEND



PLATANUS RACEMOSA



QUERCUS ACRIFOLIA



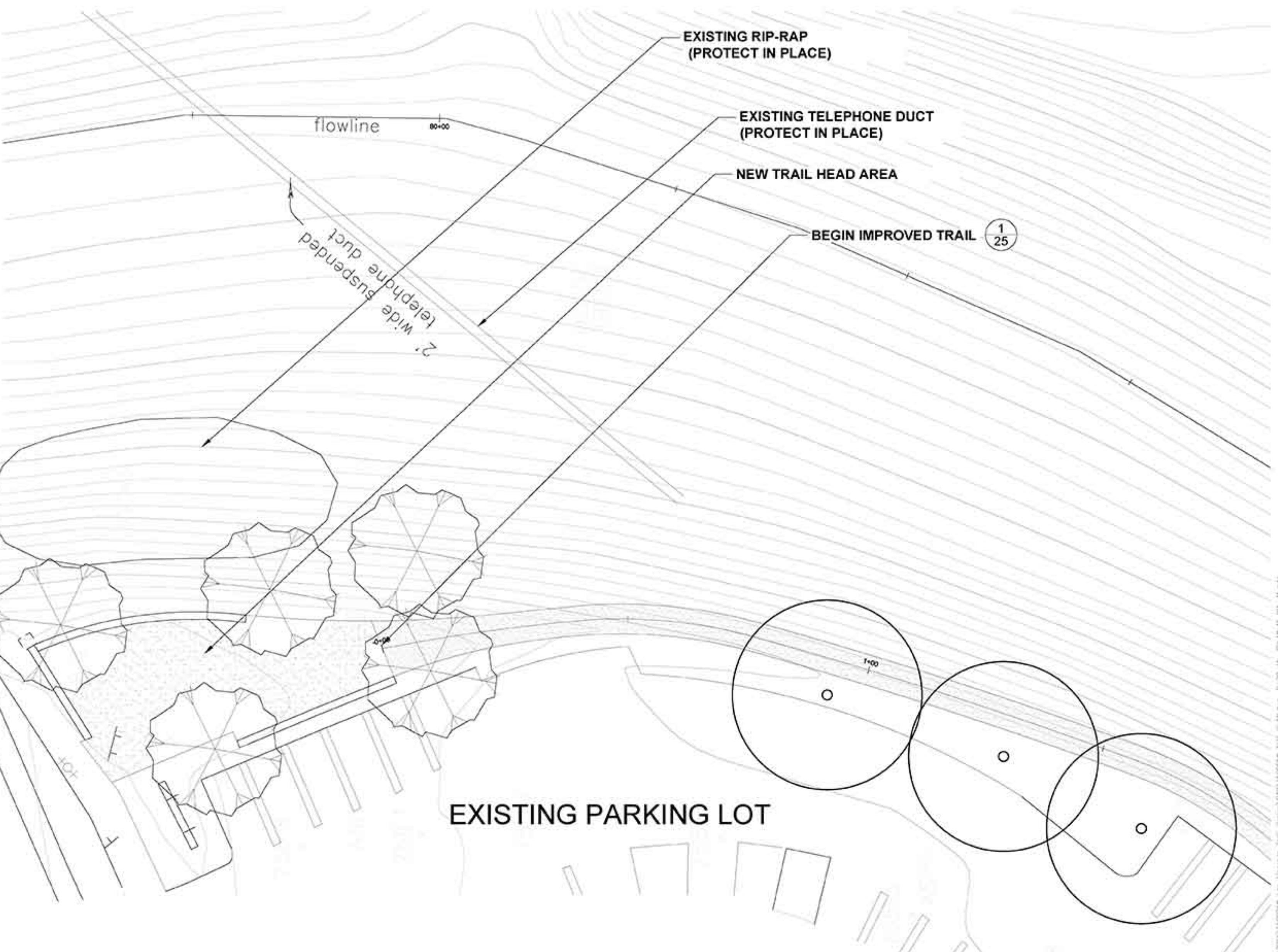
JUGLANS CALIFORNICA

AGOURA ROAD

REVISIONS

0 20 40 Feet

DATE



APPROVED
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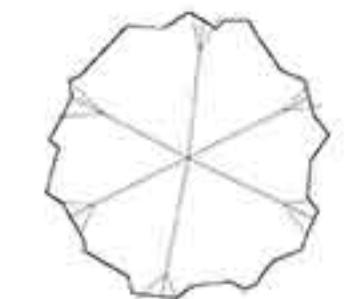


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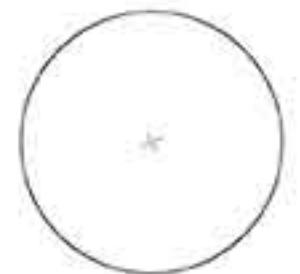
AGOURA RD. TRAILHEAD
LAS VIRGENES CREEK BANK STABILIZATION, STREAM RESTORATION AND FISH BARRIER ENHANCEMENT
CALABASAS, CA

SHEET NO. 17
OF : TBD
CONTRACT NO.

LEGEND



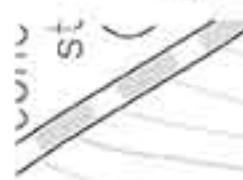
PLATANUS RACEMOSA



QUERCUS ACRIFOLIA



JUGLANS CALIFORNICA



LOST HILLS ROAD

0 20 40
Feet



REVISIONS

DATE

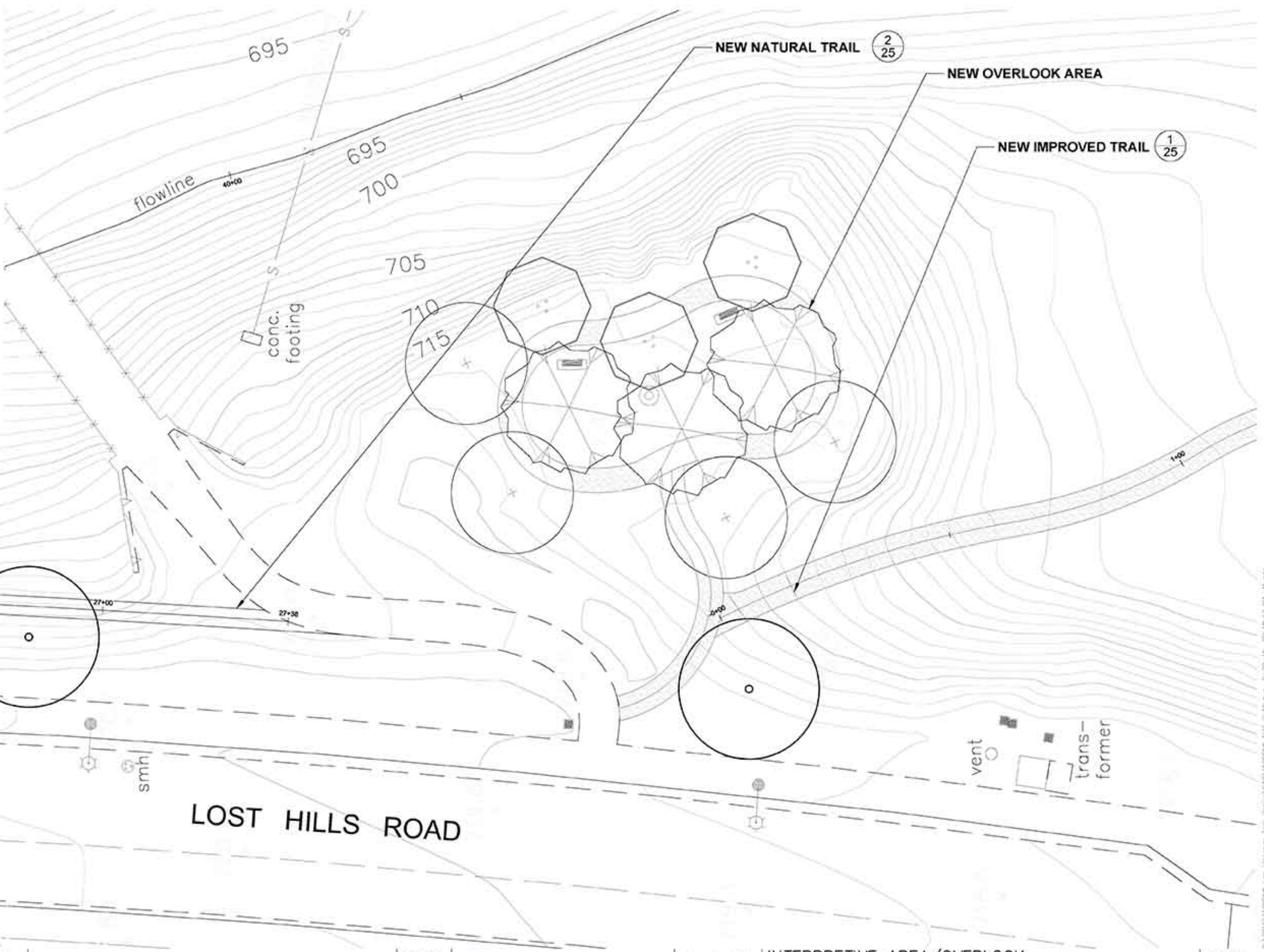
APPROVED
design:
operations:



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drawn: MM
checked: _____
date: 9-25-2014

INTERPRETIVE AREA/OVERLOOK
LAS VIRGENES CREEK BANK STABILIZATION, STREAM RESTORATION AND FISH BARRIER ENHANCEMENT
CALABASAS, CA
PROJECT NO.1500058

SHEET NO. 18
OF : TBD
CONTRACT NO.





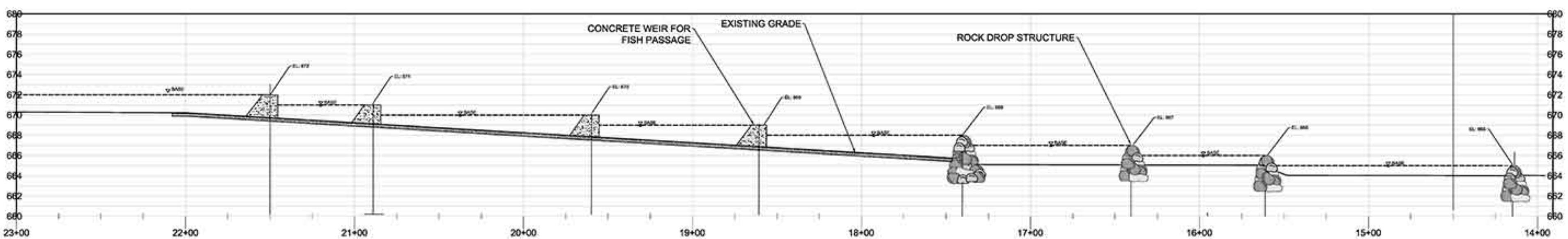
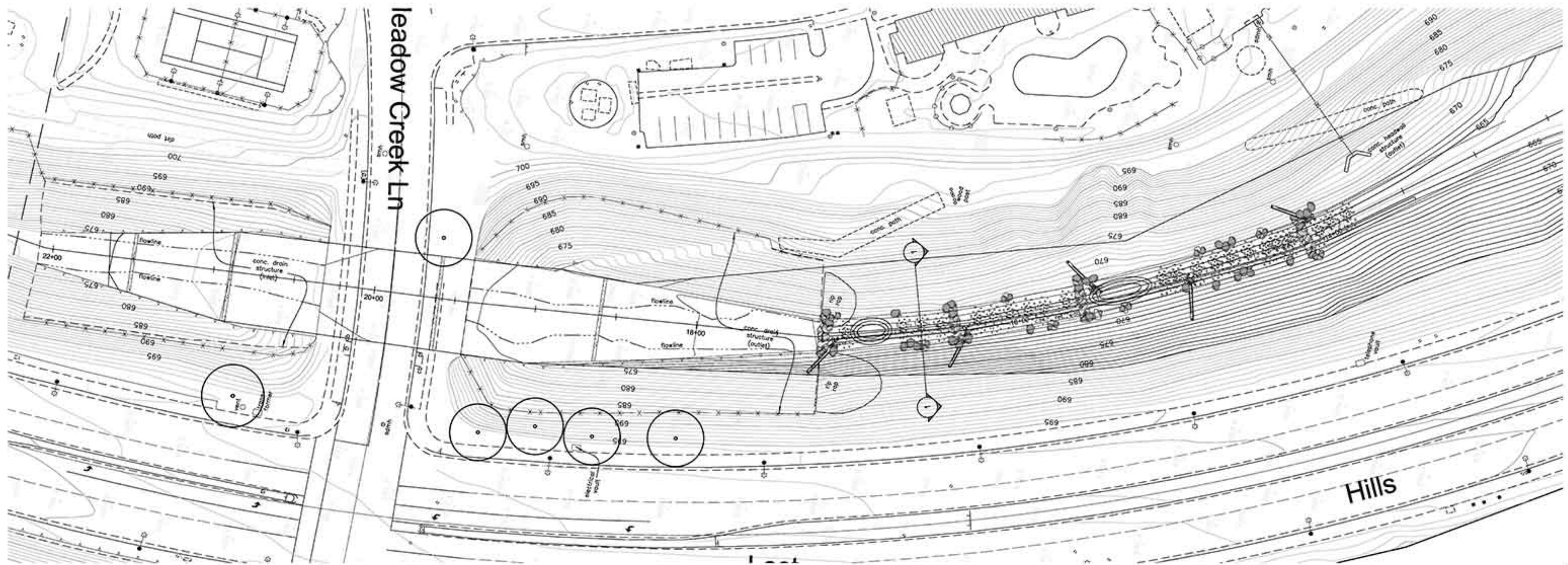
REVISIONS
DATE

APPROVED
design:
operations:
QUESTA
ENGINEERING CORP.

scale: 1" = 10'
drawn: MM
checked: _____
date: 9-25-2015 PROJECT NO.1500058

OVERLOOK AREA
LAS VIRGENES CREEK BANK STABILIZATION, STREAM RESTORATION AND FISH BARRIER ENHANCEMENT
CALABASAS, CA

SHEET NO. 19
OF : TBD
CONTRACT NO.



REVISIONS

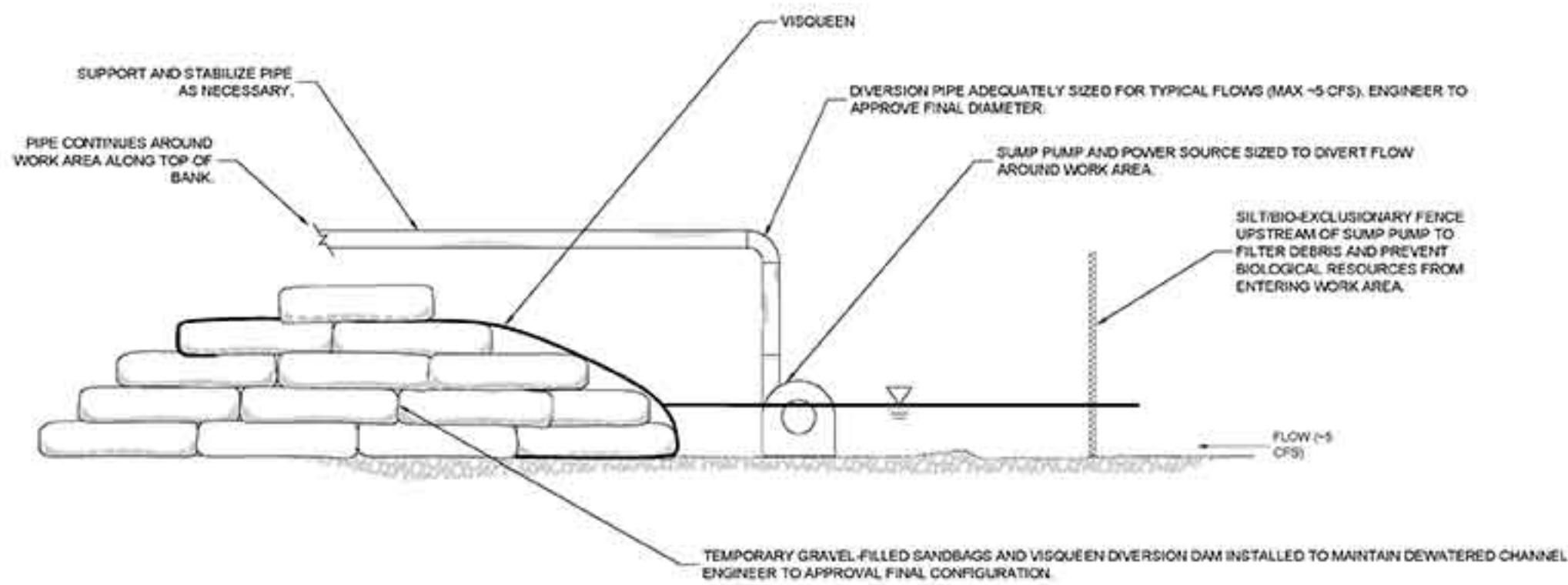
DATE

APPROVED
design:
operations

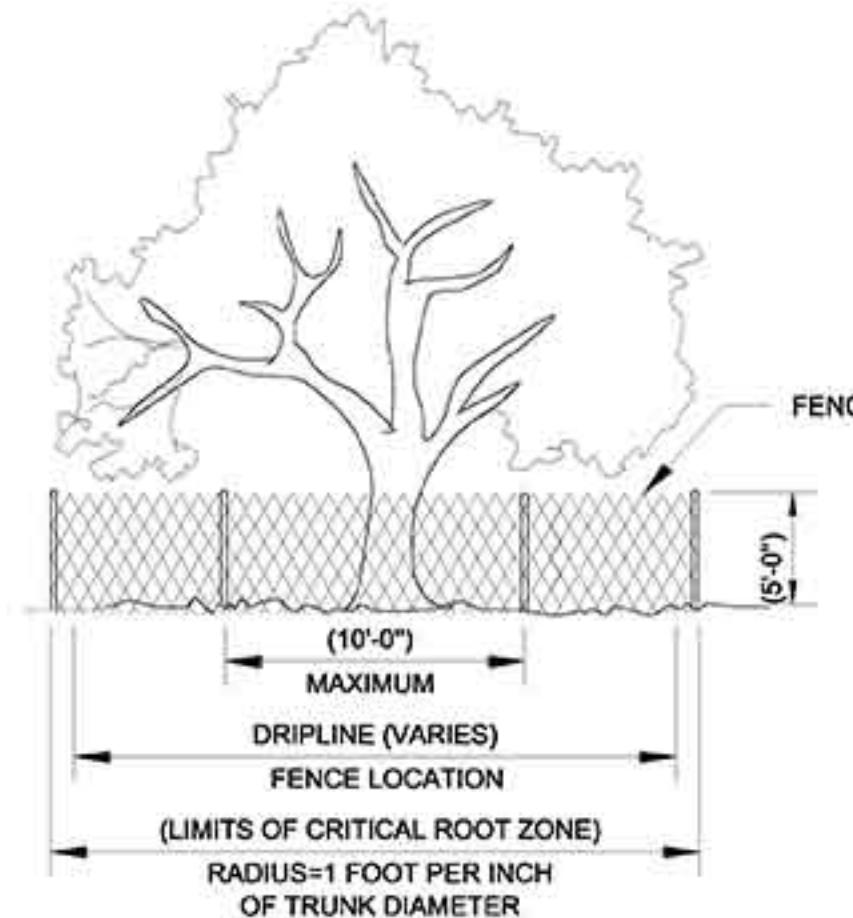


FISH PASS
LAS VIRGENES CREEK
CALABASAS, CA

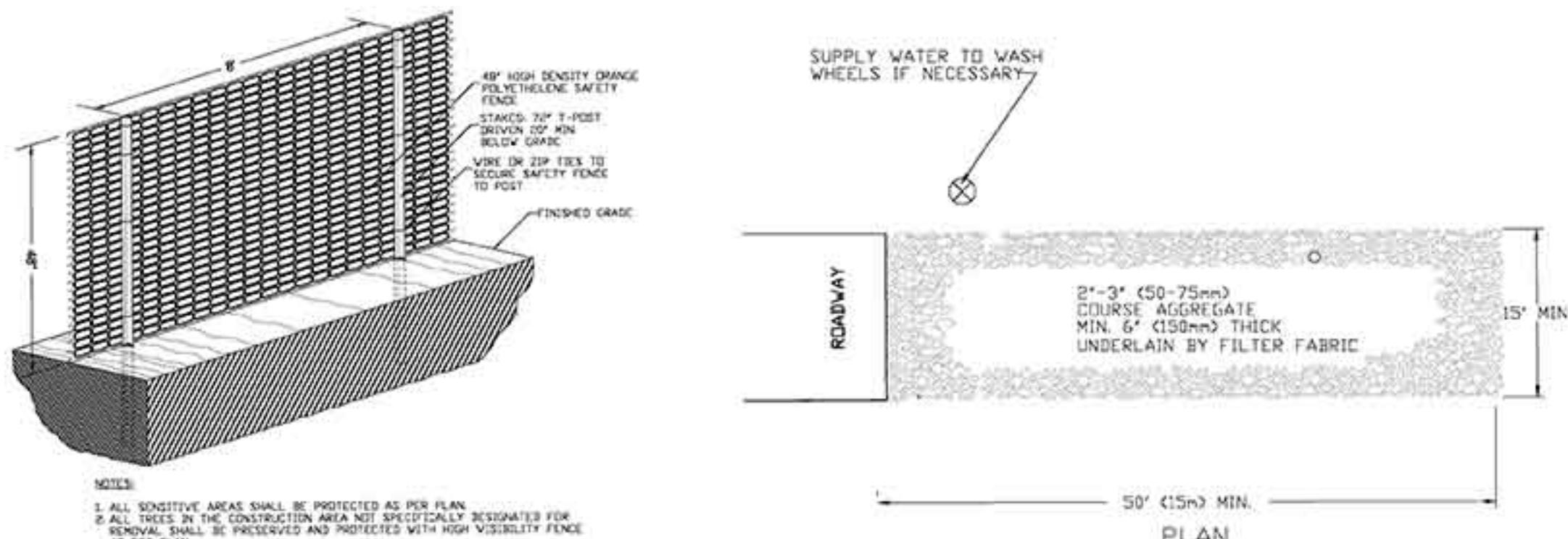
SHEET NO.
20
OF : TBD



1 TEMPORARY PLASTIC AND SANDBAG COFFER DAM
NTS

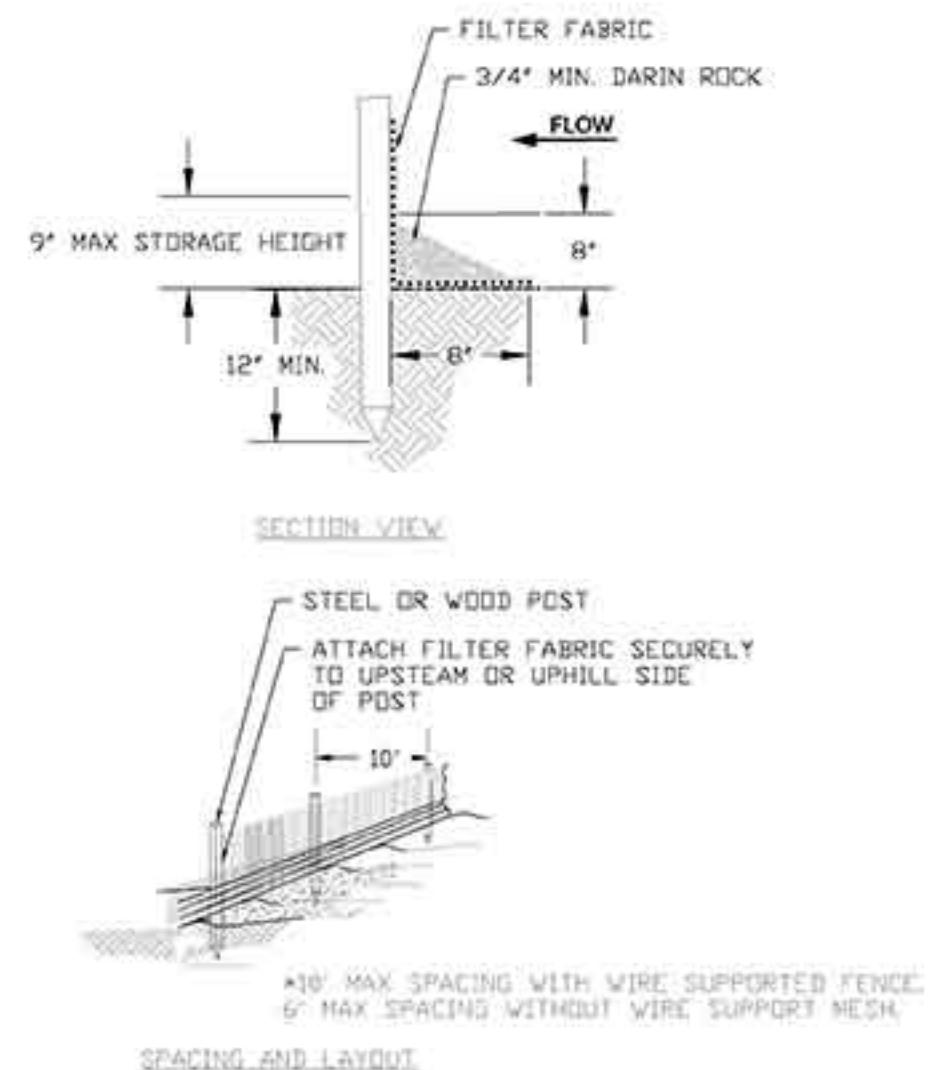


2 TREE PROTECTION
NTS



3 CONSTRUCTION BARRIER FENCE
NTS

4 TEMPORARY GRAVEL CONSTRUCTION ENTRANCE
NTS



5 SILTBIO-EXCLUSION FENCING
NTS



REVISIONS

DATE

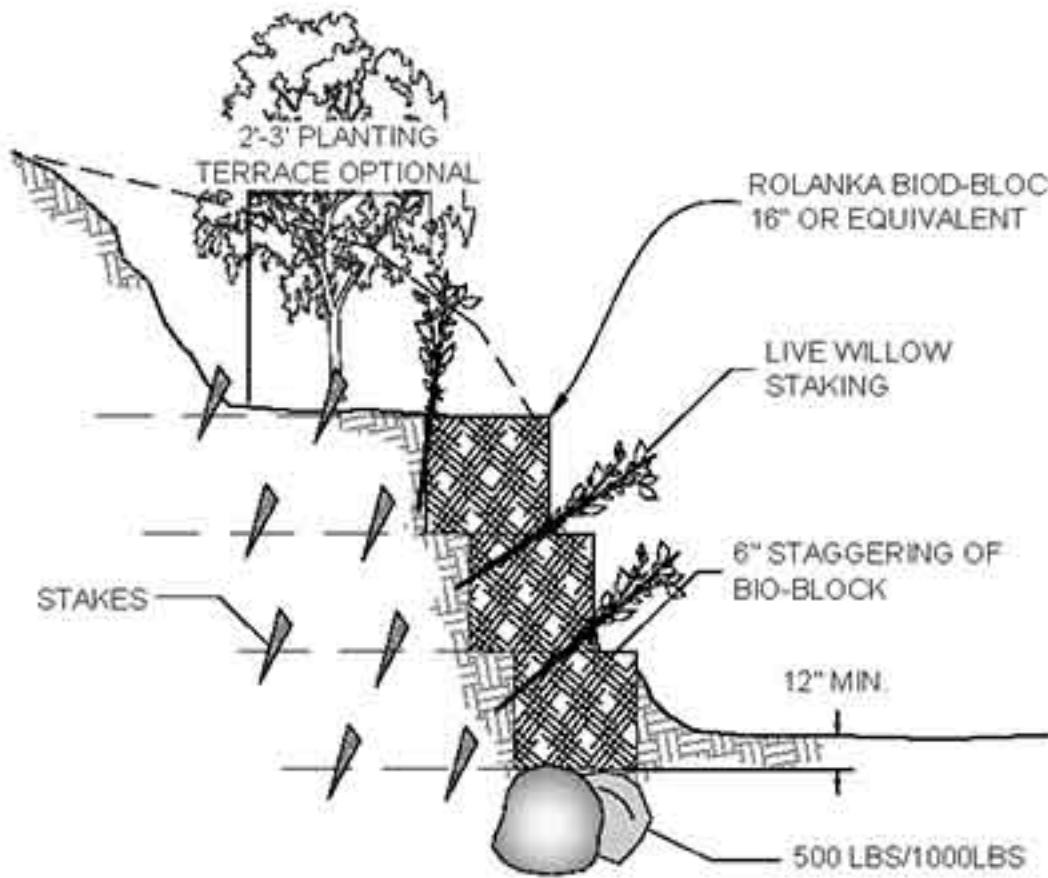
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design:
operations:



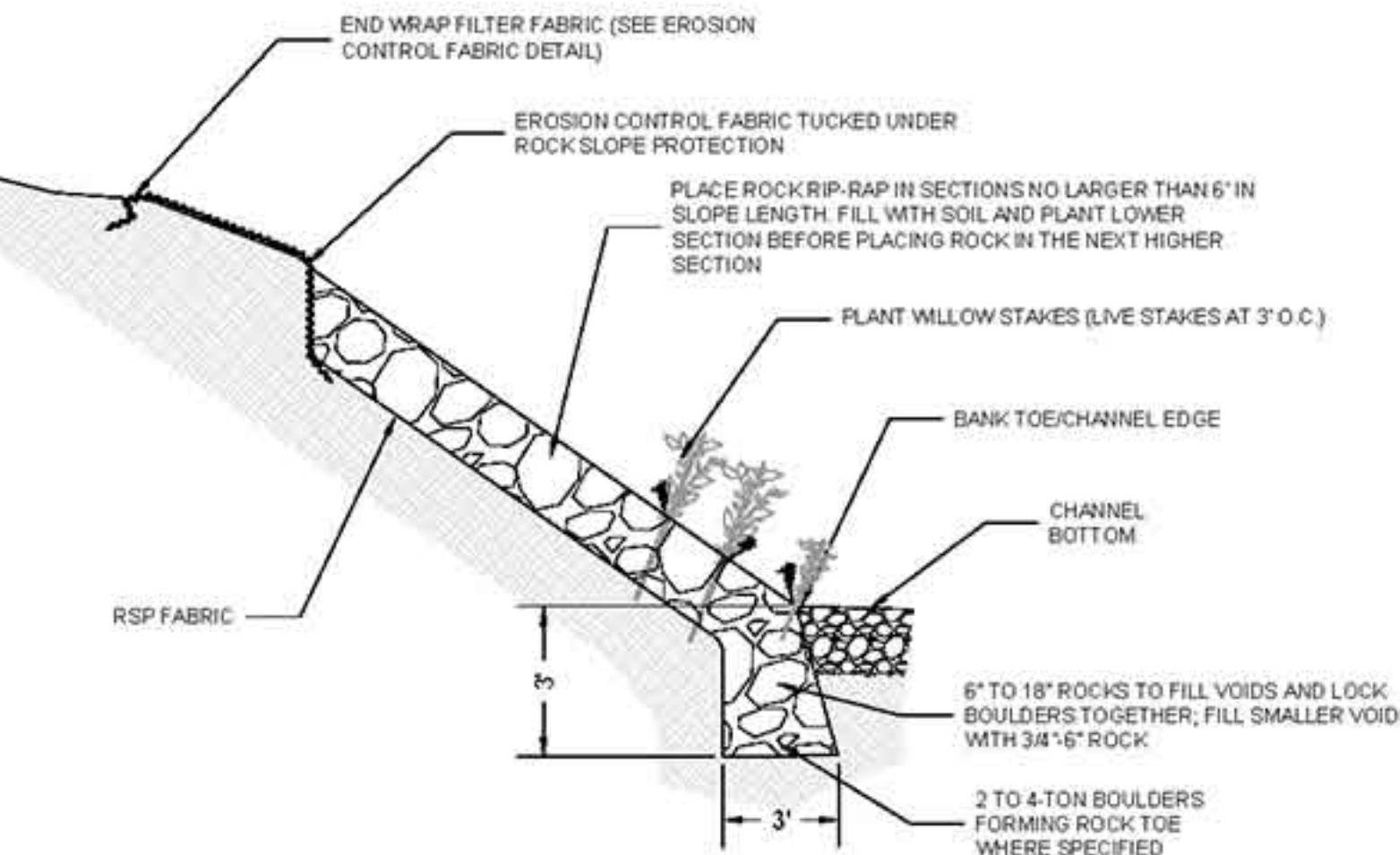
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date: 9-24-15

LAS VIRGENES CREEK FISH BARRIER ENHANCEMENT
SITE PROTECTION DETAILS
CALABASAS, CA
PROJECT NO.1500058

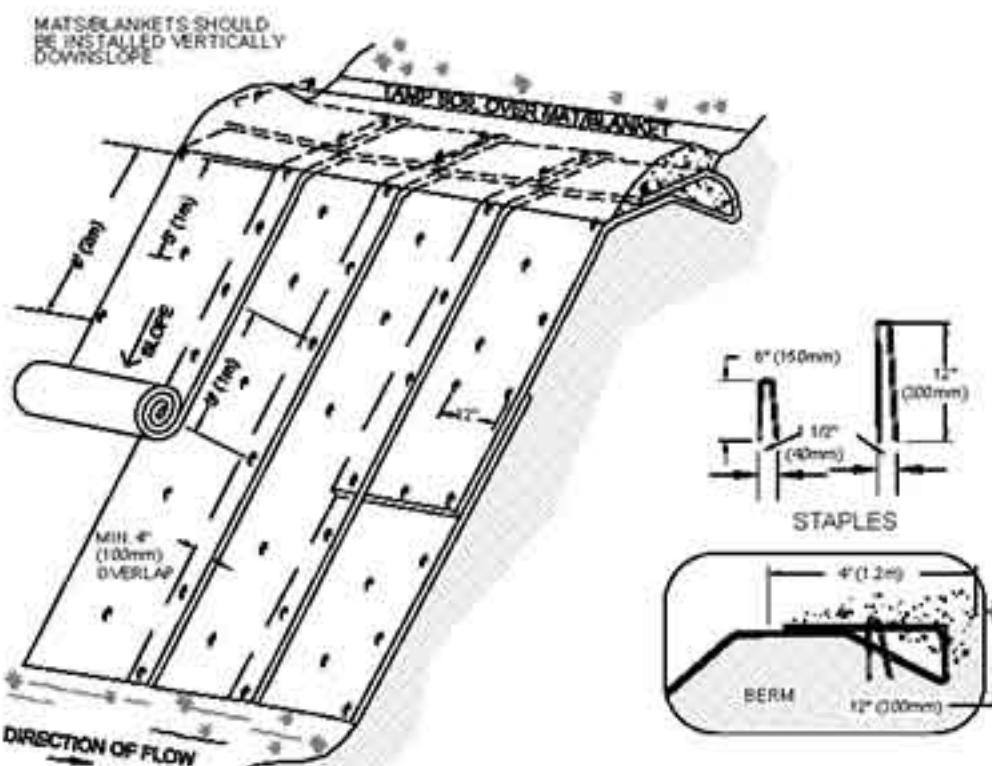
SHEET NO.
21
OF : TBD
CONTRACT NO.



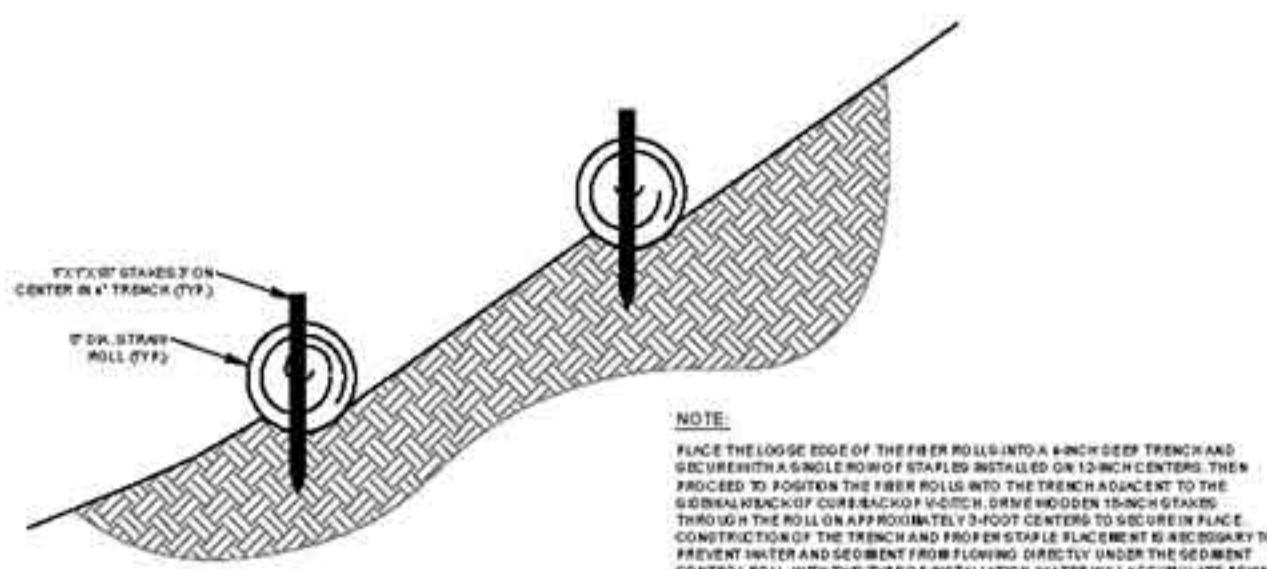
1 BANK STABILIZATION COIR BIO-BLOCK
NTS



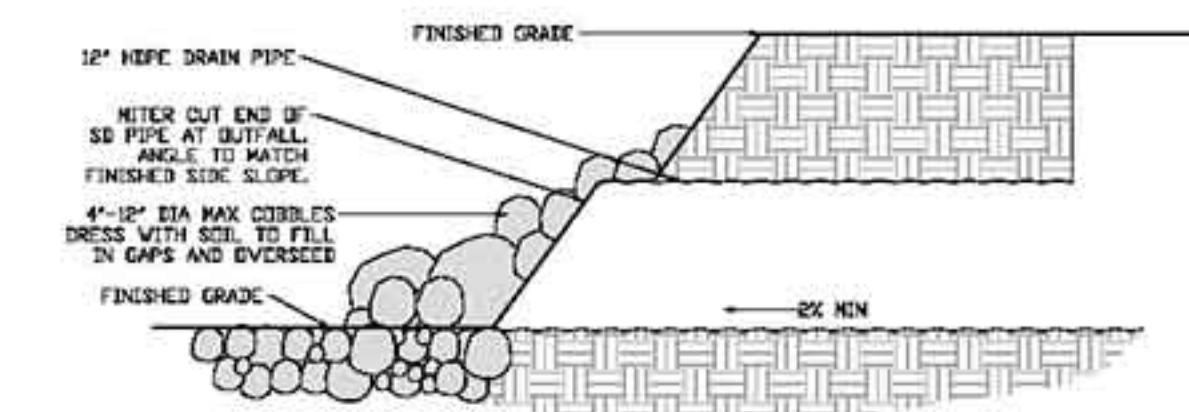
2 PLANTED ROCK REVETMENT
NTS



3 EROSION CONTROL FABRIC
NTS



4 WATTLES
NTS



5 OUTFALL PROTECTION
NTS

REVISIONS

DATE

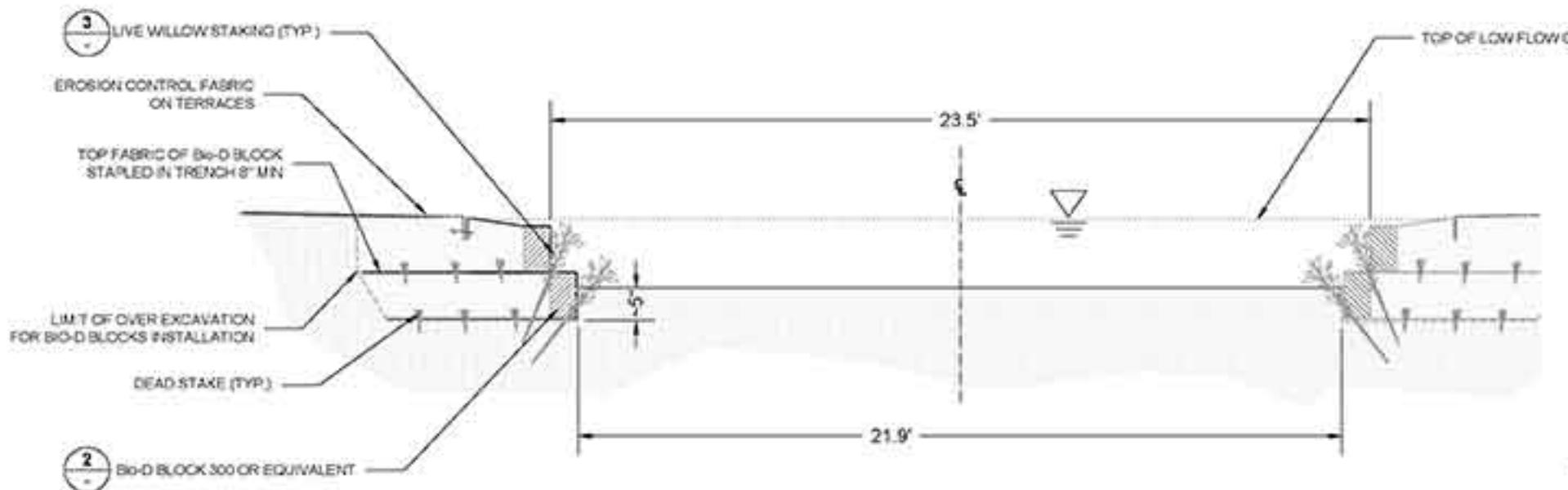
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design:
operations:



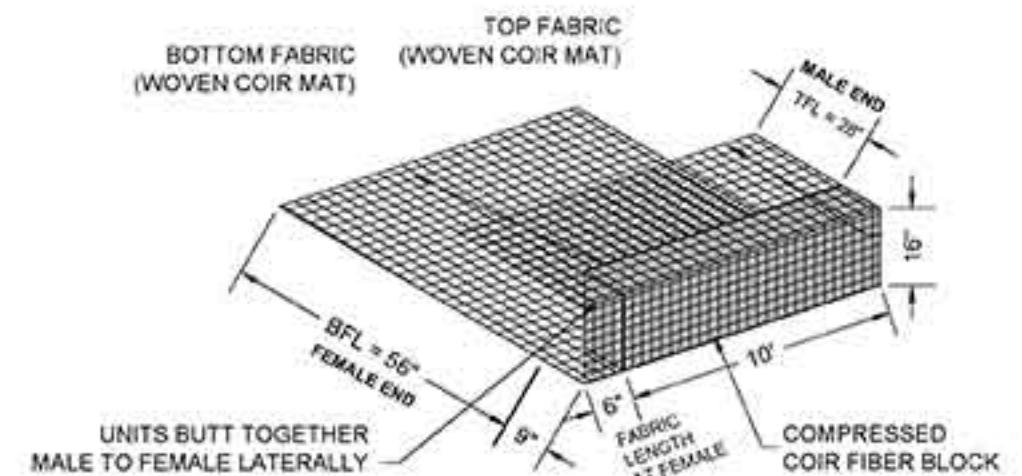
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checked: --
date: 9-24-15

LAS VIRGENES CREEK FISH BARRIER ENHANCEMENT
EROSION CONTROL DETAILS
CALABASAS, CA
PROJECT NO.1500058

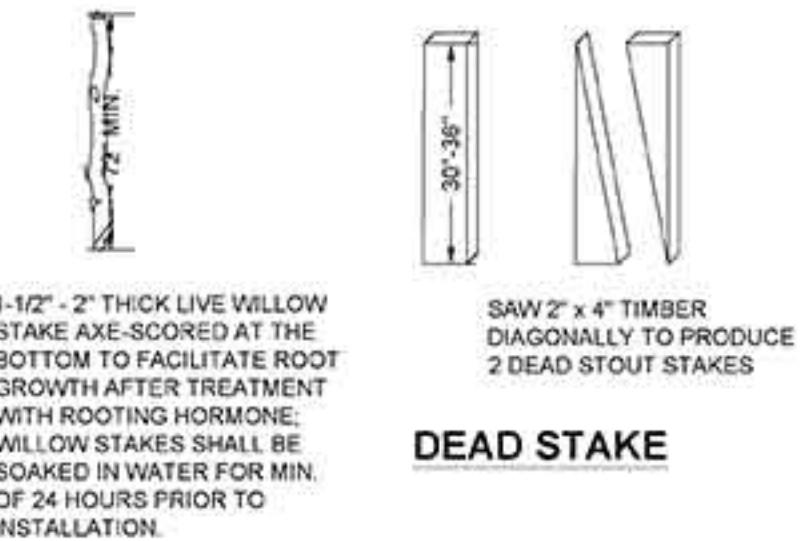
SHEET NO. 22
OF : TSD
CONTRACT NO.



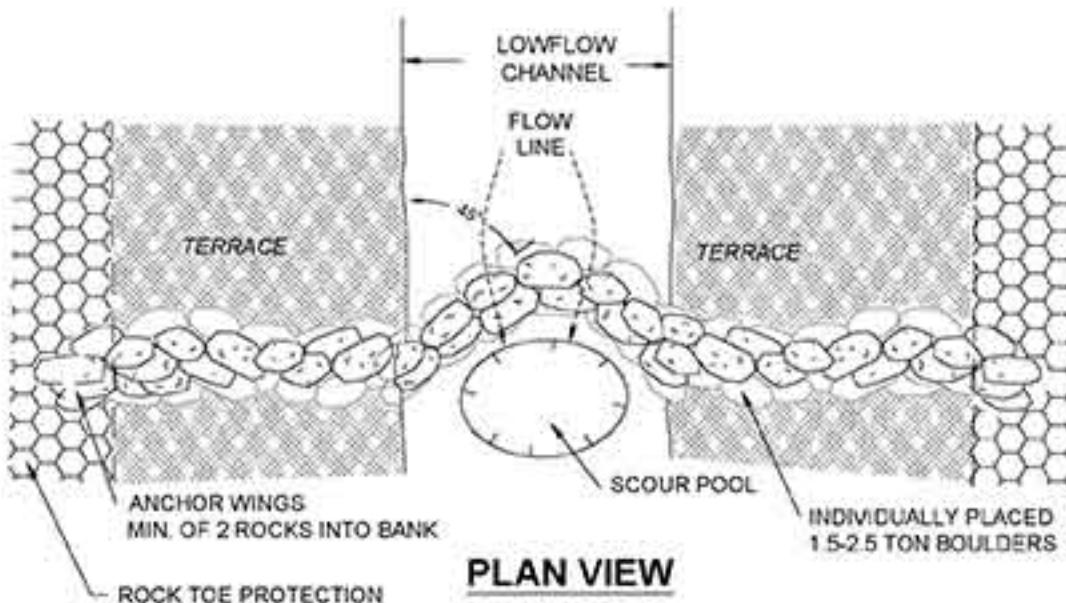
1 TYPICAL LOWFLOW CHANNEL CONSTRUCTION
NTS



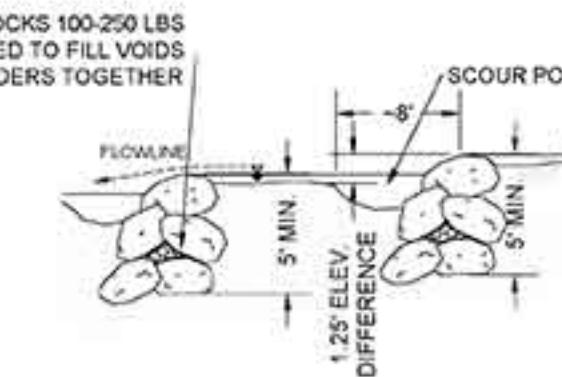
2 Bio-D BLOCK 300
NOT TO SCALE



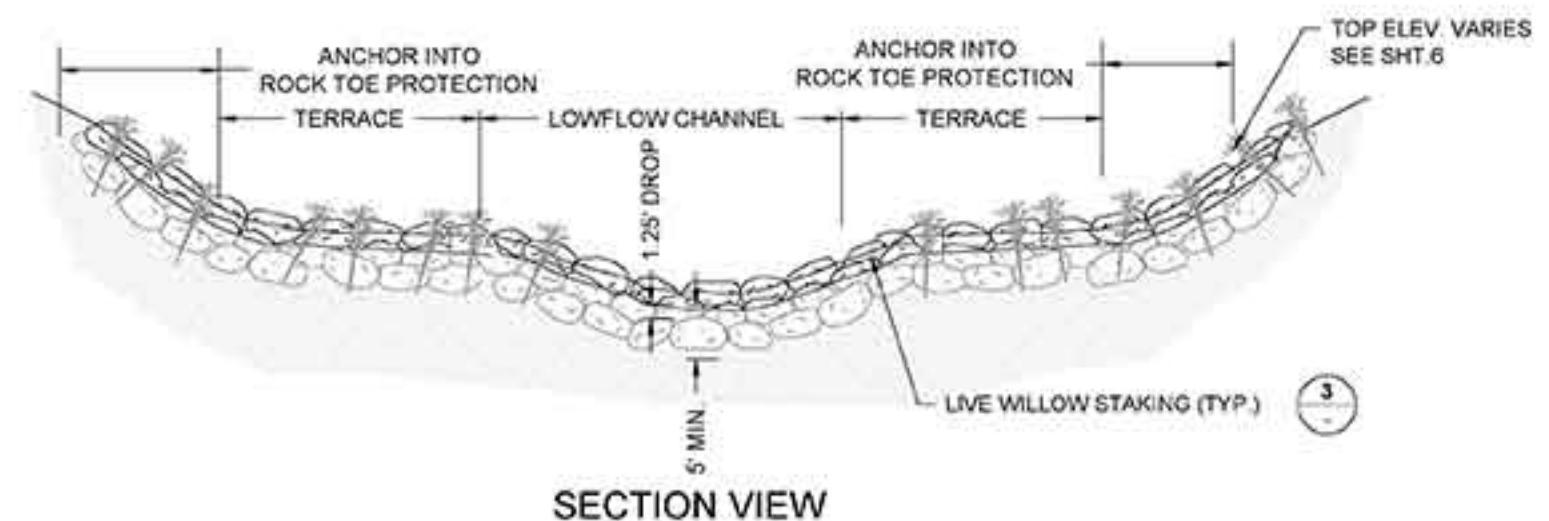
DEAD STAKE



PLAN VIEW

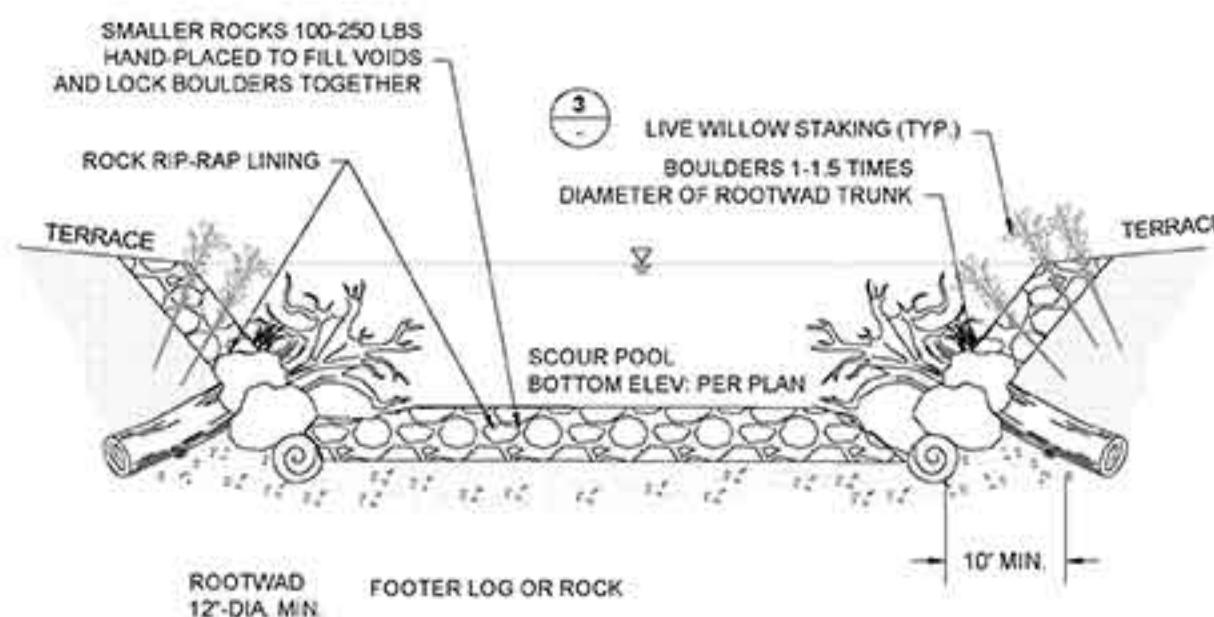


SIDE VIEW

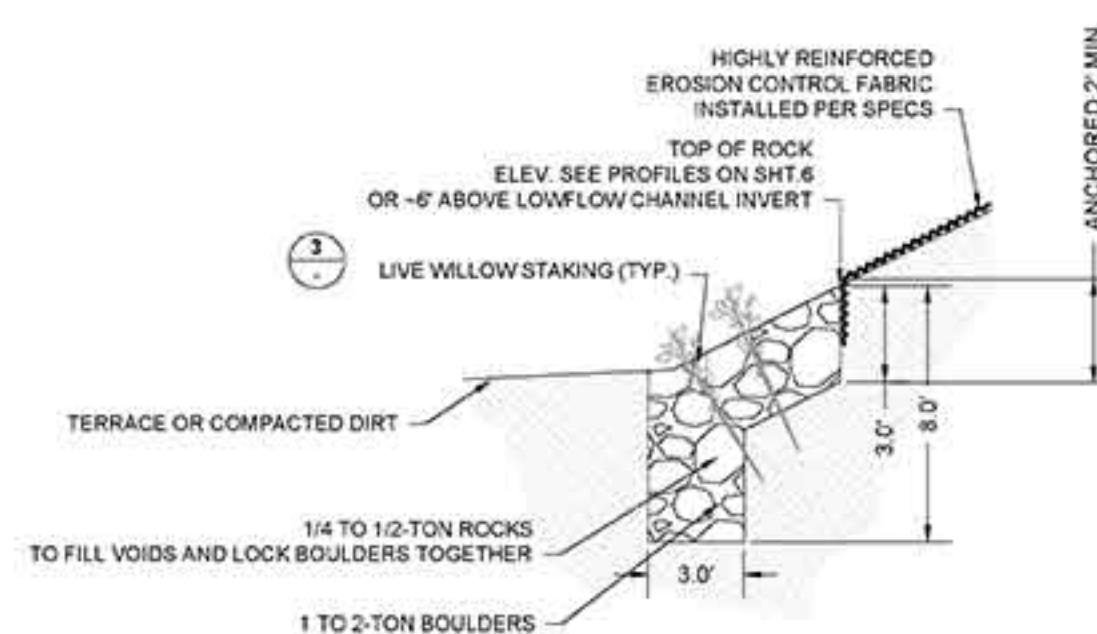


SECTION VIEW

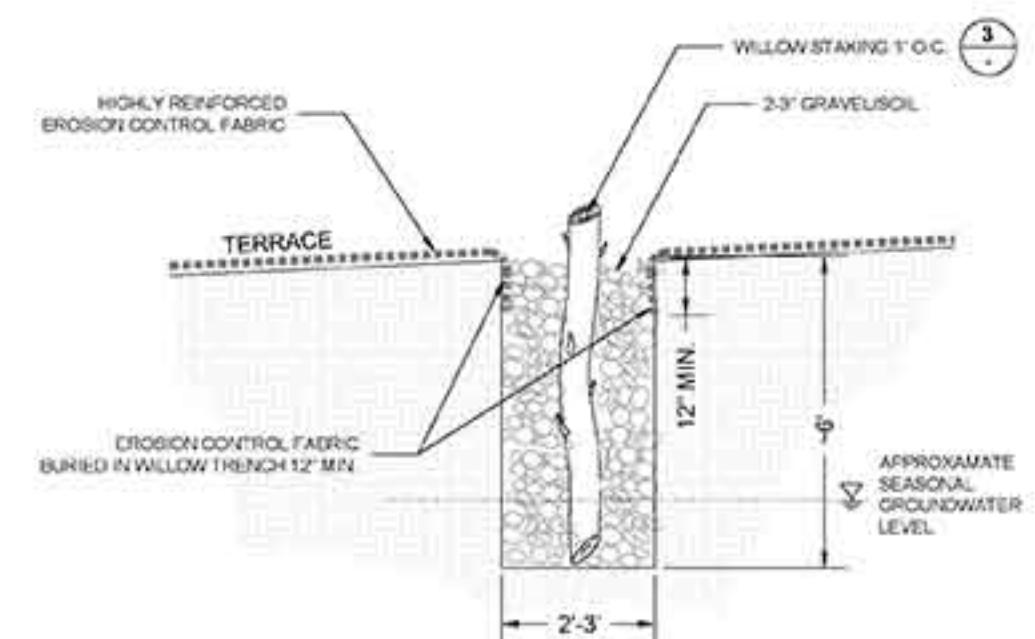
5 ROCK DROP STRUCTURE
NOT TO SCALE



4 ROOTWAD INSTALLATION AND SCOUR POOL
NOT TO SCALE



6 ROCK TOE PROTECTION
NTS



7 WILLOW TRENCH AND EROSION CONTROL FABRIC
NTS

REVIEWS
DATE

REVISIONS

DATE

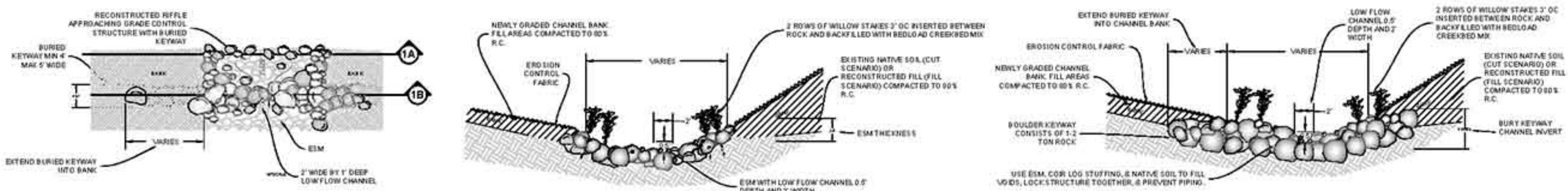
APPROVED
design:
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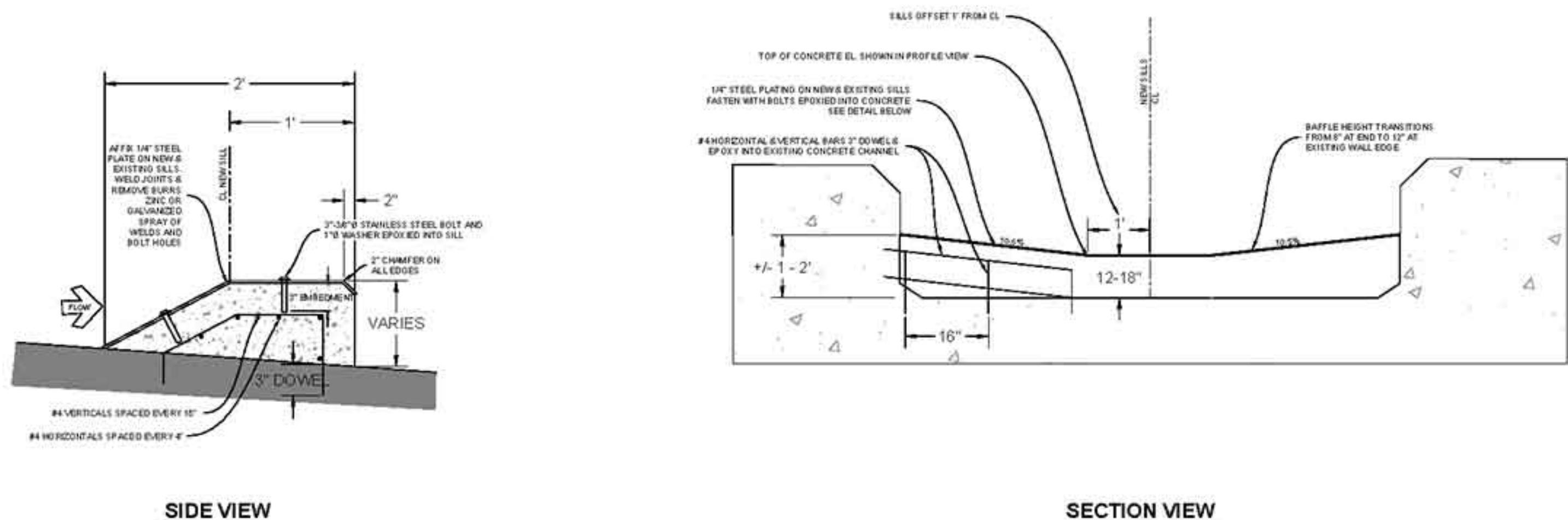
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date: 9-24-15

LAS VIRGENES CREEK FISH BARRIER ENHANCEMENT
BANK STABILIZATION DETAILS
CALABASAS, CA
PROJECT NO.1500058

SHEET NO.
23
OF : TBD
CONTRACT NO.



1 CONSTRUCTED RIFFLE AND GRADE CONTROL BAFFLE PLAN AND SECTIONS
NTS



2 CONCRETE FISH PASSAGE WEIR
NTS

REVISIONS

DATE

APPROVED
design:
operations:



code: 1" = 40"
drawn: OR
checked: ___
date: 9-24-15

LAS VIRGENES CREEK FISH BARRIER ENHANCEMENT
WEIR AND RIFFLE DETAILS
CALABASAS, CA
PROJECT NO.1500058

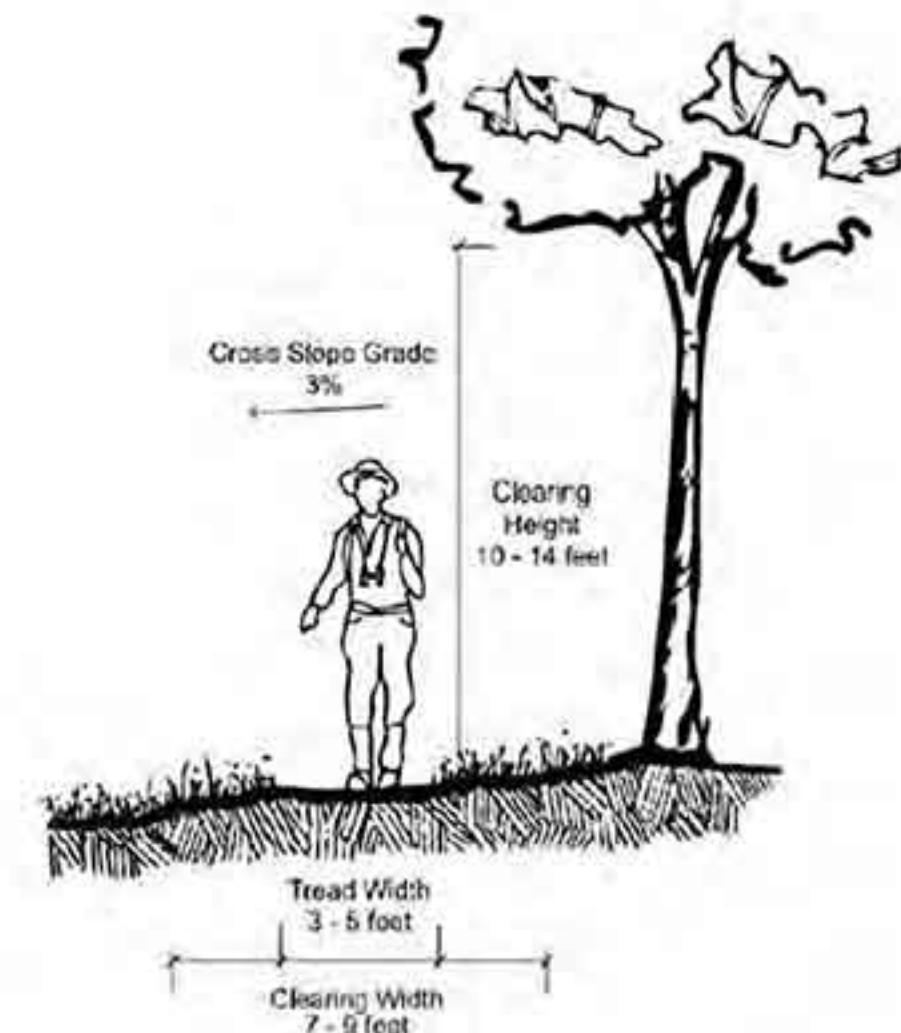
SHEET NO. 24
OF : TBD
CONTRACT NO.



IMPROVED TRAIL

Preferred Standards:

Tread Width	6 -10 feet
Clearing Width	10 -12 feet
Tread Surface	Crushed rock, decomposed granite or asphalt
Percent Grade	Grades should not exceed 10 percent <u>Desired Grade:</u> 0 to 5 percent <u>Maximum Grade:</u> 0 to 10 percent (sustained, 15 percent (shorter than 50 yards) <u>Cross Slope Grade:</u> 2 percent (maximum)
Clearing Height	10 – 14 feet to allow for equestrian use



NATURAL (OPEN SPACE) TRAIL

Preferred Standards:

Tread Width	3 – 5 feet
Clearing Width	7 – 9 feet
Tread Surface	Natural/native soil
Percent Grade	Grades should not exceed 10 percent <u>Desired Grade:</u> 0 to 5 percent <u>Maximum Grade:</u> 5 to 10 percent (sustained 15 percent (shorter than 50 yards) <u>Cross Slope Grade:</u> 3 percent (maximum) 10 – 14 feet to allow for equestrian use
Clearing Height	

1 IMPROVED TRAIL

1
NT

2 NATURAL TRAIL

2

REVISIONS

DATE

APPROVED
design:
operations:



scale: 1" = 40'
drawn: OR
checked: --
date: 9-24-15

LAS VIRGENES CREEK FISH BARRIER ENHANCEMENT
TRAIL DETAILS
CALABASAS, CA

SHEET NO.
25
OF : TBD