

Las Virgenes Creek Restoration Project-Phase II



CITY of CALABASAS

Community Workshop
August 6, 2015

Welcome

- **City of Calabasas**
 - City Manager, Tony Coroaalles
 - Alex Farasatti
- **Consultant Team:**
 - Jeff Peters, Questa
 - Rincon Consultants

The City of Calabasas received \$1.5M grant funding to implement Phase II creek restoration and trail improvements along Las Virgenes Creek between Agoura Road and El Encanto Drive. Work will include:

1. Habitat Restoration and Erosion Control
2. Fish Passage Improvements
3. Trail and Environmental Education



Location



Las Virgenes Creek Restoration Project – Phase II

Community
Workshop

August 6, 2015



Phase 1 Restoration



Background Planning

- 2007 Trails Master Plan
- 2030 Calabasas General Plan
- 2003 Las Virgenes Creek Restoration
- 2004 Pedestrian Plan
- 2010 Visioning Workshops

**Las Virgenes
Creek is a key
habitat corridor
and link to
regional trails**



Las Virgenes Creek Restoration Project – Phase II

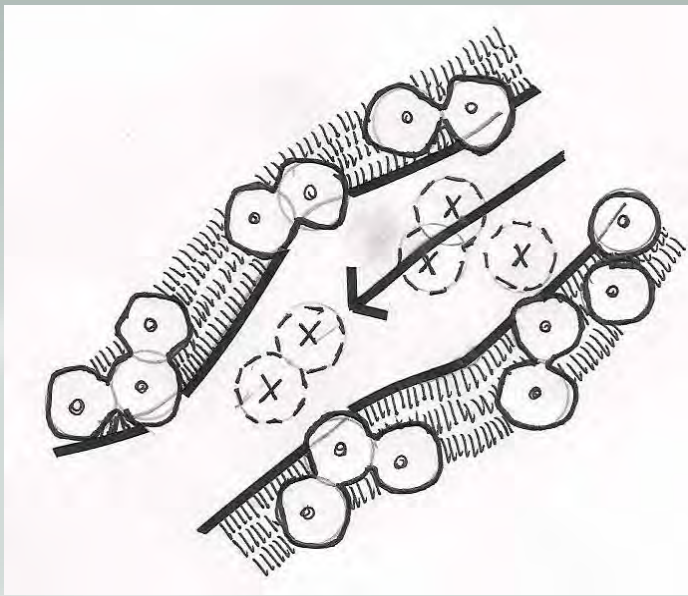
Community
Workshop

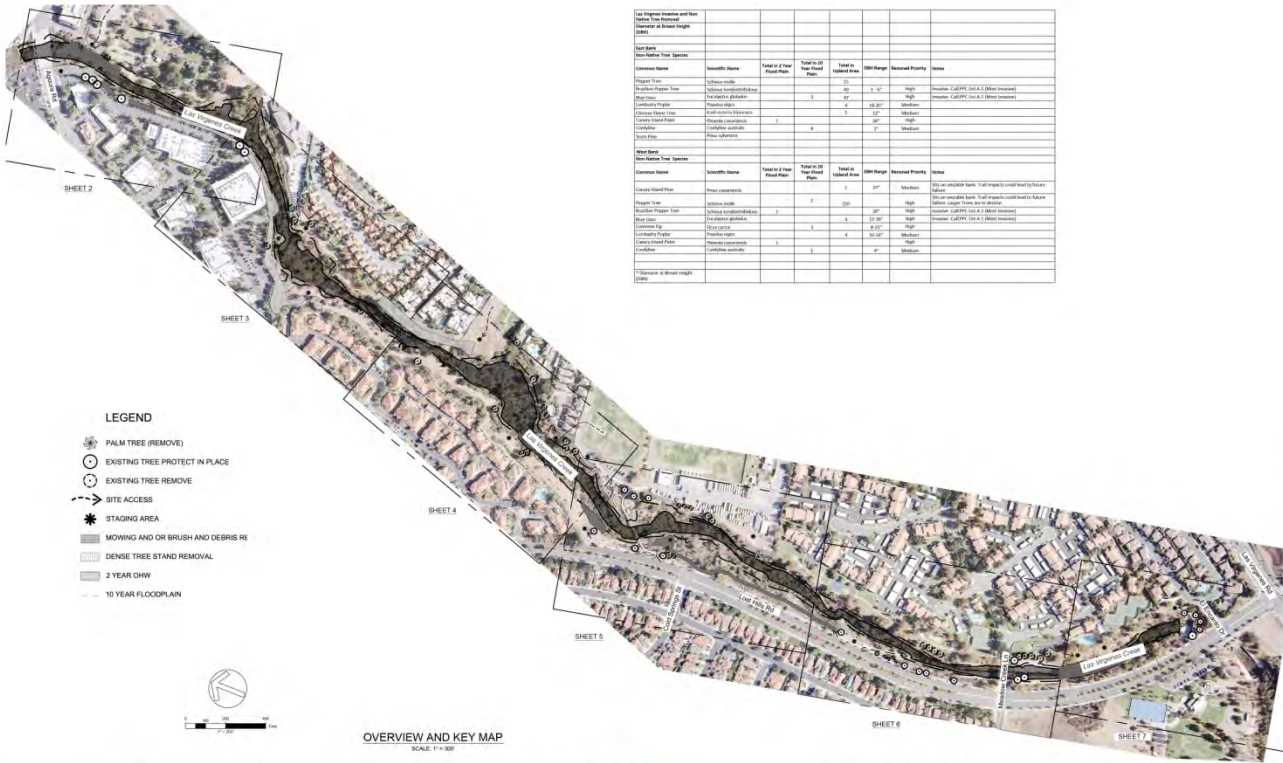
August 6, 2015

1. Habitat Restoration and Erosion Control

- Debris/rubble removal
- Removal of non-native invasive species
- Thinning of limbs that block flood flows and trail clearance
- Repair of erosion sites
- Replant with native riparian species







Common Name	Scientific Name	Total # of Trees	Total # of Trees to be Removed	Total # of Trees to be Protected	Total # of Trees to be Planted	DBH Range	Retention Priority	Notes
Palmer Tree	Schinus molle	10	0	10	0	1 - 4"	High	Remove CALPIE (CALA 1 - Other Issues)
Palmer Tree	Schinus molle	10	0	10	0	1 - 4"	High	Remove CALPIE (CALA 1 - Other Issues)
Palmer Tree	Schinus molle	10	0	10	0	1 - 4"	High	Remove CALPIE (CALA 1 - Other Issues)
Palmer Tree	Schinus molle	10	0	10	0	1 - 4"	High	Remove CALPIE (CALA 1 - Other Issues)
Palmer Tree	Schinus molle	10	0	10	0	1 - 4"	High	Remove CALPIE (CALA 1 - Other Issues)
Palmer Tree	Schinus molle	10	0	10	0	1 - 4"	High	Remove CALPIE (CALA 1 - Other Issues)

- LEGEND**
- PALM TREE (REMOVE)
 - EXISTING TREE PROTECT IN PLACE
 - EXISTING TREE REMOVE
 - SITE ACCESS
 - STAGING AREA
 - MOWING AND OR BRUSH AND DEBRIS RE
 - DENSE TREE STAND REMOVAL
 - 2 YEAR DWH
 - 10 YEAR FLOODPLAIN



OVERVIEW AND KEY MAP
SCALE 1" = 400'

APPROVED: **QUESTA**
 design: _____
 operations: _____

SCALE: AS SHOWN
 DRAWN: MM
 CHECKED: _____
 DATE: 7-30-2015 PROJECT NO:1500058

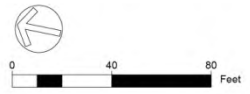
VEGETATION MANAGEMENT & DEBRIS REMOVAL PLAN
 LAS VIRGENES CREEK RESTORATION PROJECT - PHASE II
 CALABASAS, CA

CONTRACT NO. _____ SHEET NO. 1
 OF 180





- LEGEND**
- PALM TREE (REMOVE)
 - EXISTING TREE PROTECT IN PLACE
 - EXISTING TREE REMOVE
 - SITE ACCESS
 - STAGING AREA
 - MOWING AND OR BRUSH AND DEBRIS REMOVAL
 - DENSE TREE STAND REMOVAL
 - 2 YEAR OHW
 - 10 YEAR FLOODPLAIN



REVISIONS	DATE
△	
△	
△	

APPROVED
 design:
 operations:

scale: 1" = 40'
 drawn: MM
 checked: —
 date: 7-30-2015

VEGETATION MANAGEMENT & DEBRIS REMOVAL PLAN
 LAS VIRGENES CREEK RESTORATION PROJECT – PHASE II
 CALABASAS, CA
 PROJECT NO.1500058

SHEET NO.
 2
 OF 1 TBD

P:\2015\1500058\1500058.dwg | Project: Las Virgenes Creek Restoration | Date: 7/30/2015 | 11:25:34 AM | M:\





- LEGEND**
- PALM TREE (REMOVE)
 - EXISTING TREE PROTECT IN PLACE
 - EXISTING TREE REMOVE
 - SITE ACCESS
 - STAGING AREA
 - MOWING AND OR BRUSH AND DEBRIS RE
 - DENSE TREE STAND REMOVAL
 - 2 YEAR OHW
 - 10 YEAR FLOODPLAIN



REVISIONS	DATE

APPROVED: QUESTA
 design: QUESTA
 operations: QUESTA

scale: 1" = 40'
 drawn: MM
 checked: —
 date: 7-30-2015

VEGETATION MANAGEMENT & DEBRIS REMOVAL PLAN
 LAS VIRGENES CREEK RESTORATION AND PUBLIC ACCESS
 CALABASAS, CA
 PROJECT NO.1400174

SHEET NO. 3
 OF 1 TBD
 CONTRACT NO.

Vegetation debris to be removed for flood conveyance



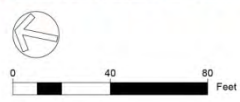
Las Virgenes Creek Restoration Project – Phase II

Community Workshop

August 6, 2015



- LEGEND**
- PALM TREE (REMOVE)
 - EXISTING TREE PROTECT IN PLACE
 - EXISTING TREE REMOVE
 - SITE ACCESS
 - STAGING AREA
 - MOWING AND OR BRUSH AND DEBRIS REMOVAL
 - DENSE TREE STAND REMOVAL
 - 2 YEAR CHW



REVISIONS DATE

▲

▲

▲

APPROVED: QUESTA CONSULTING

design: _____

operations: _____

scale: 1" = 40'

drawn: MM

checked: ___

date: 7-30-15

PROJECT NO.1420174

VEGETATION MANAGEMENT & DEBRIS REMOVAL PLAN
LAS VIRGENES CREEK RESTORATION AND PUBLIC ACCESS
 CALABASAS, CA

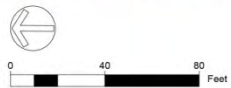
SHEET NO. 5
 OF : TBD

CONTRACT NO. _____

© 2015 QUESTA CONSULTING, LLC. VIRGENES_CREEK_RESTORATION_PHASE_II_VEGMANAGEMENT_PLAN_7-30-15_02.23.15_TML - 040001



- LEGEND**
- PALM TREE (REMOVE)
 - EXISTING TREE PROTECT IN PLACE
 - EXISTING TREE REMOVE
 - SITE ACCESS
 - STAGING AREA
 - MOWING AND GR BRUSH AND DEBRIS REMOVAL
 - DENSE TREE STAND REMOVAL
 - 2 YEAR OHW
 - 10 YEAR FLOODPLAIN



REVISIONS	DATE
▲	
▲	
▲	

APPROVED: QUESTA ENGINEERING GROUP

design: _____
checked: _____
date: 7-30-2015

scale: 1" = 40'
drawn: MM
checked: _____
date: 7-30-2015

VEGETATION MANAGEMENT & DEBRIS REMOVAL PLAN
LAS VIRGENES CREEK RESTORATION AND PUBLIC ACCESS
CALABASAS, CA

SHEET NO. 6
OF 1 TBD



Bare soil/gully erosion on eastern bank



2. Fish Passage Improvements

- Remove failing wall south of Meadow Creek Lane, restore slope
- Install step pools for fish
- Install baffles on existing structure to allow fish movement
- Replant to provide shade to creek

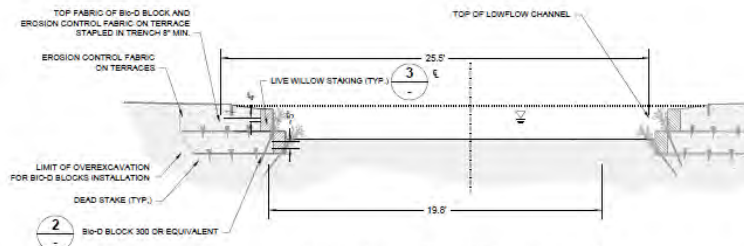




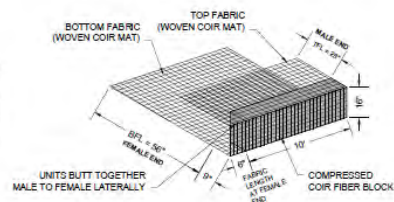
Las Virgenes Creek Restoration Project – Phase II

Community
Workshop

August 6, 2015



1 TYPICAL LOWFLOW CHANNEL CONSTRUCTION
NTS



2 Bio-D BLOCK 300
NOT TO SCALE

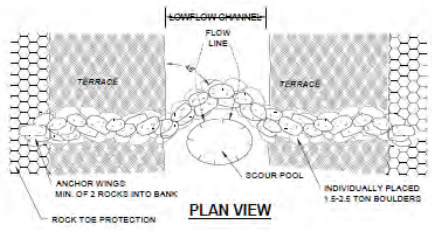


1-1/2" - 2" THICK LIVE WILLOW STAKE AXE-SCORED AT THE BOTTOM TO FACILITATE ROOT GROWTH AFTER TREATMENT WITH ROOTING HORMONE. WILLOW STAKES SHALL BE SOAKED IN WATER FOR MIN. OF 24 HOURS PRIOR TO INSTALLATION.

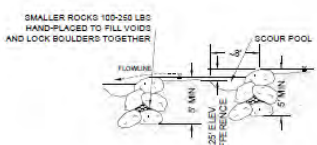
DEAD STAKE

LIVE STAKE

3 STAKING
NOT TO SCALE

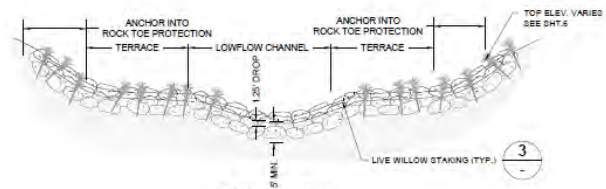


4 ROOTWAD INSTALLATION AND SCOUR POOL
NOT TO SCALE



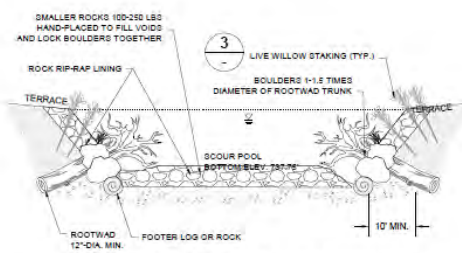
SIDE VIEW

5 ROCK DROP STRUCTURE
NOT TO SCALE

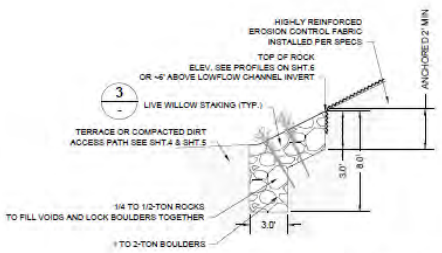


SECTION VIEW

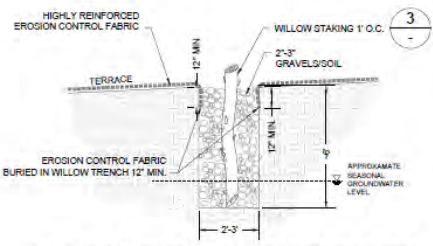
6 ROCK TOE PROTECTION
NTS



7 WILLOW TRENCH & EROSION CONTROL FABRIC INSTALLATION
SCALE: 1" = 2'



6 ROCK TOE PROTECTION
NTS



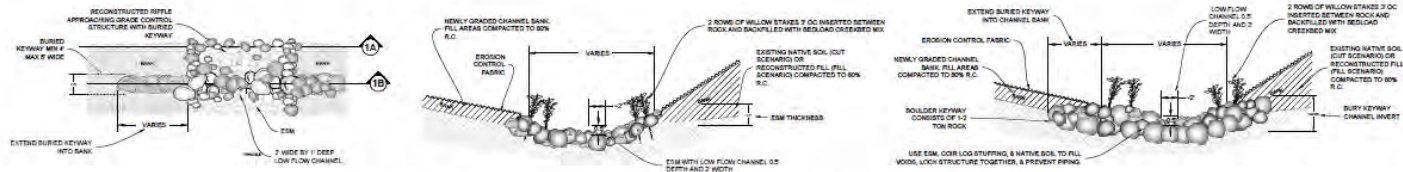
7 WILLOW TRENCH & EROSION CONTROL FABRIC INSTALLATION
SCALE: 1" = 2'

REVISIONS
DATE

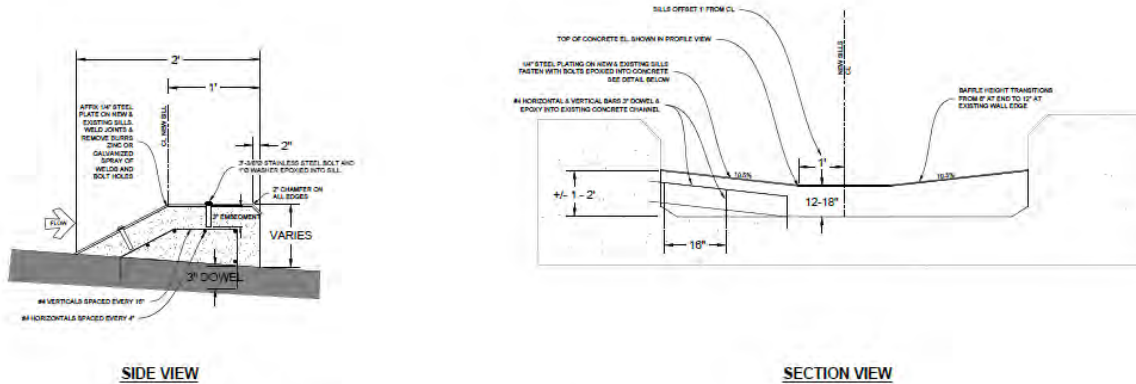
APPROVED: **QUESTA**
Engineer
REGISTERED

Scale: 1" = 40'
Sheet: 03
Project: 12-15-2014
PROJECT NO: 140074
LAS VIRGENES CREEK FISH BARRIER ENHANCEMENT
BANK STABILIZATION DETAILS
CALABASAS, CA
SHEET NO. 03
OF 11
CONTRACT NO.





1 CONSTRUCTED RIFFLE AND GRADE CONTROL BAFFLE PLAN AND SECTIONS
NTS



2 CONCRETE FISH PASSAGE WEIR
NTS

REVISIONS

DATE

APPROVED:
DESIGN:
OPERATIONS:



SCALE: 1" = 40'
DRAWN: OR
CHECKED: ..
DATE: 12-15-2014

LAS VIRGENES CREEK FISH BARRIER ENHANCEMENT
BANK STABILIZATION DETAILS
CALABASAS, CA

PROJECT NO. 1408174

CONTRACT NO.

SHEET NO. 10
OF 110

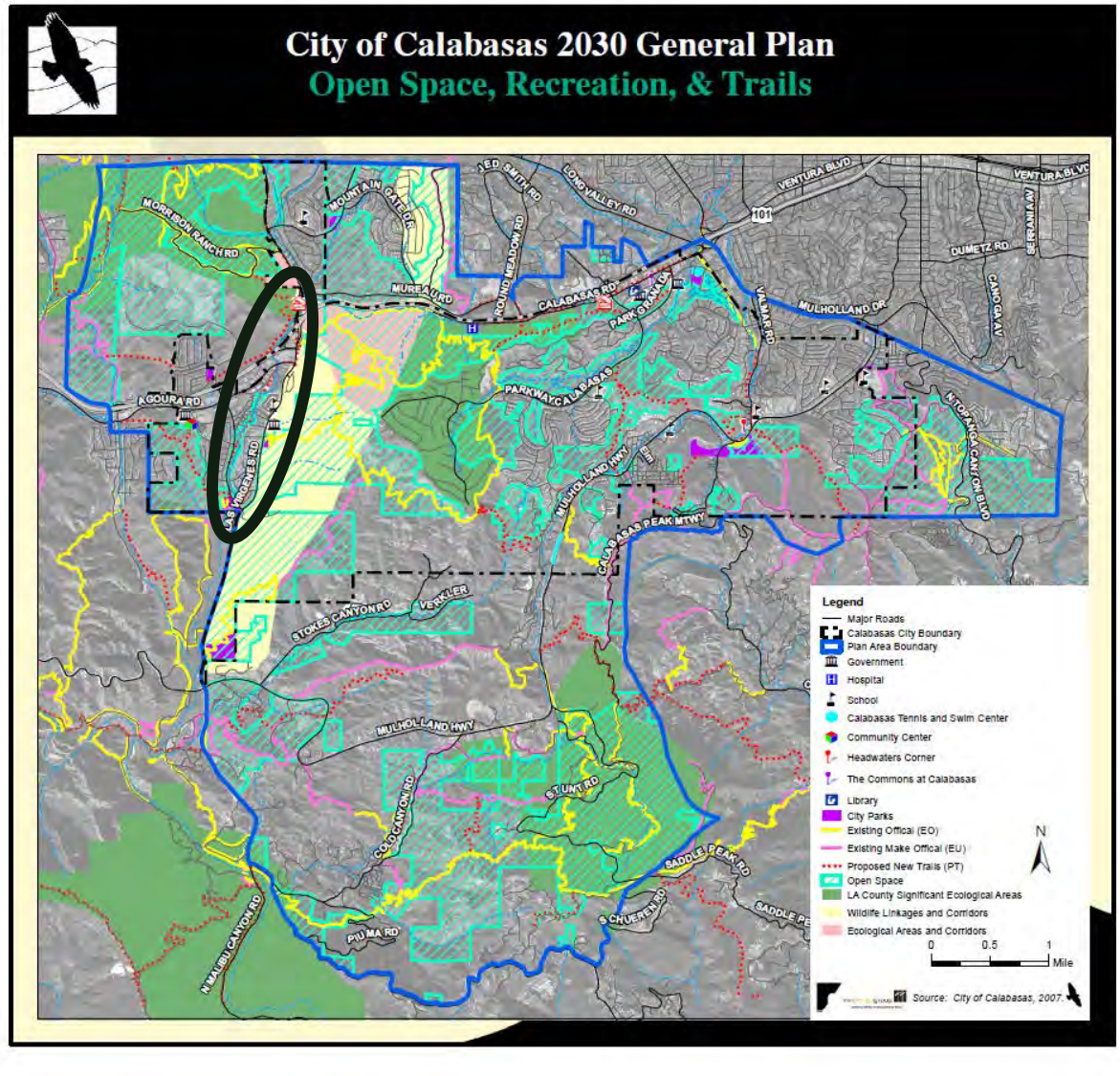


3. Trails

- Connect to existing and planned trails (Don Wallace)
- Complete trail consistent with adopted plans
- Incorporate environmental education areas
- Address privacy concerns



2030 General Plan



Las Virgenes Creek Restoration Project – Phase II

Community
Workshop

August 6, 2015

2007 Trails Master Plan



- 2007 Blueprint for 10-year development of trails within the community
- Provide a continuous trail system that will incorporate trail connections to open spaces, public facilities, and nearby regional parks



2010 Trail Visioning

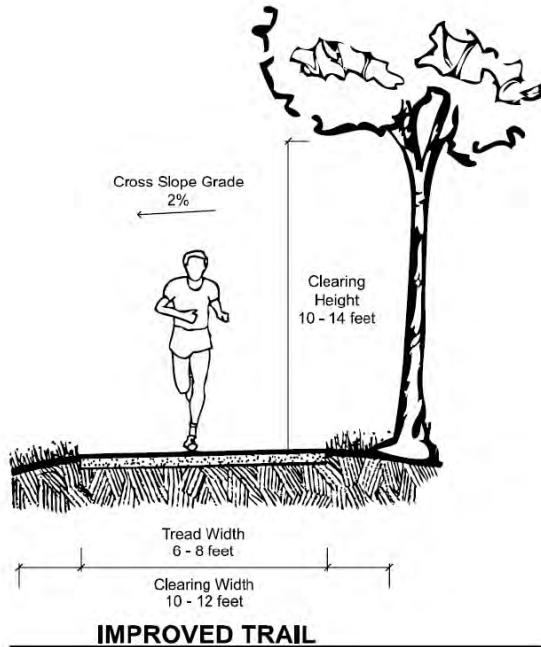
- 100 participants provided input in two workshops
- Overwhelming support for trail
- Design guidance:
 - Serve joggers, bikers and equestrians if possible
 - Quiet and rustic retreat
 - Wood benches, tables
 - Boulder seating
 - No/limited lighting, fencing
 - Natural landscape



- Connect to Saratoga community
- Wildlife Corridor
- Privacy concerns
- Dog waste
- Existing park course at Archstone
- Develop wildlife lagoon



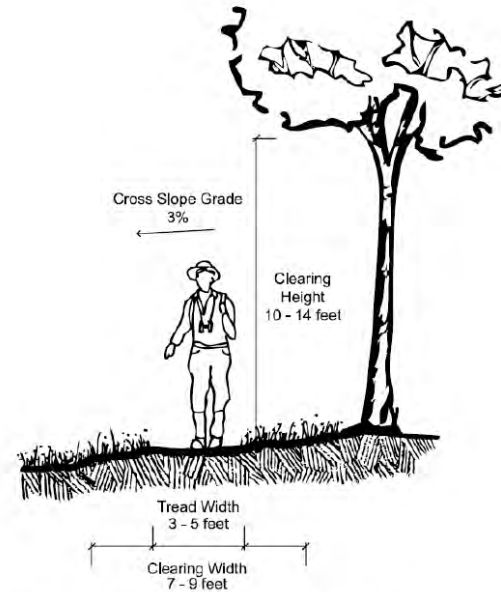
Trail Types



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

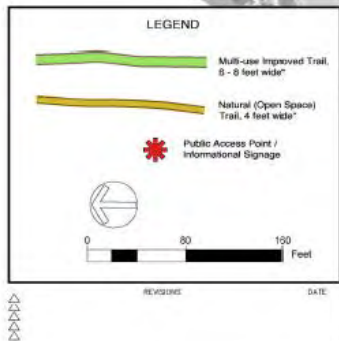
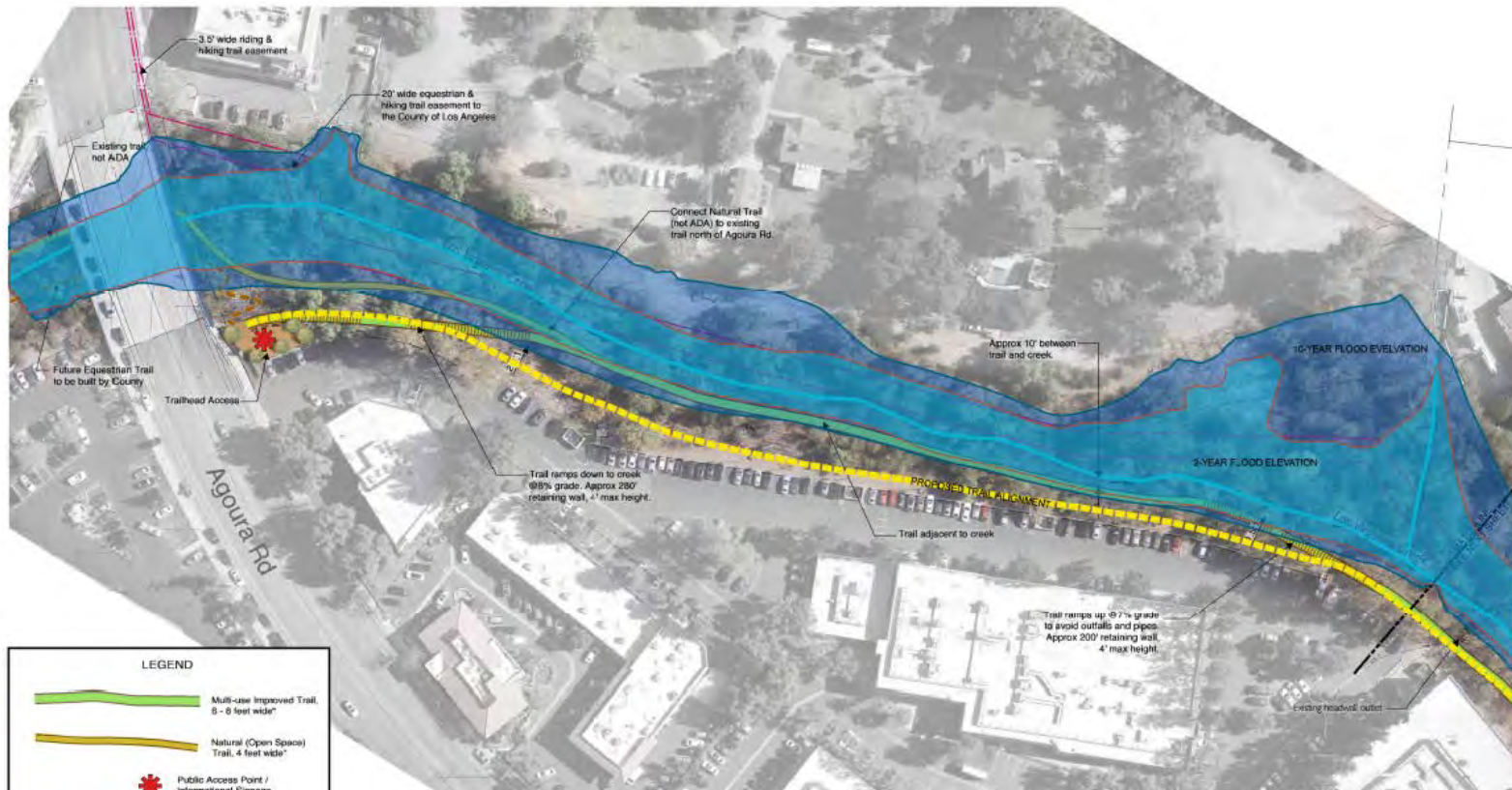


NATURAL (OPEN SPACE) TRAIL

Preferred Standards:

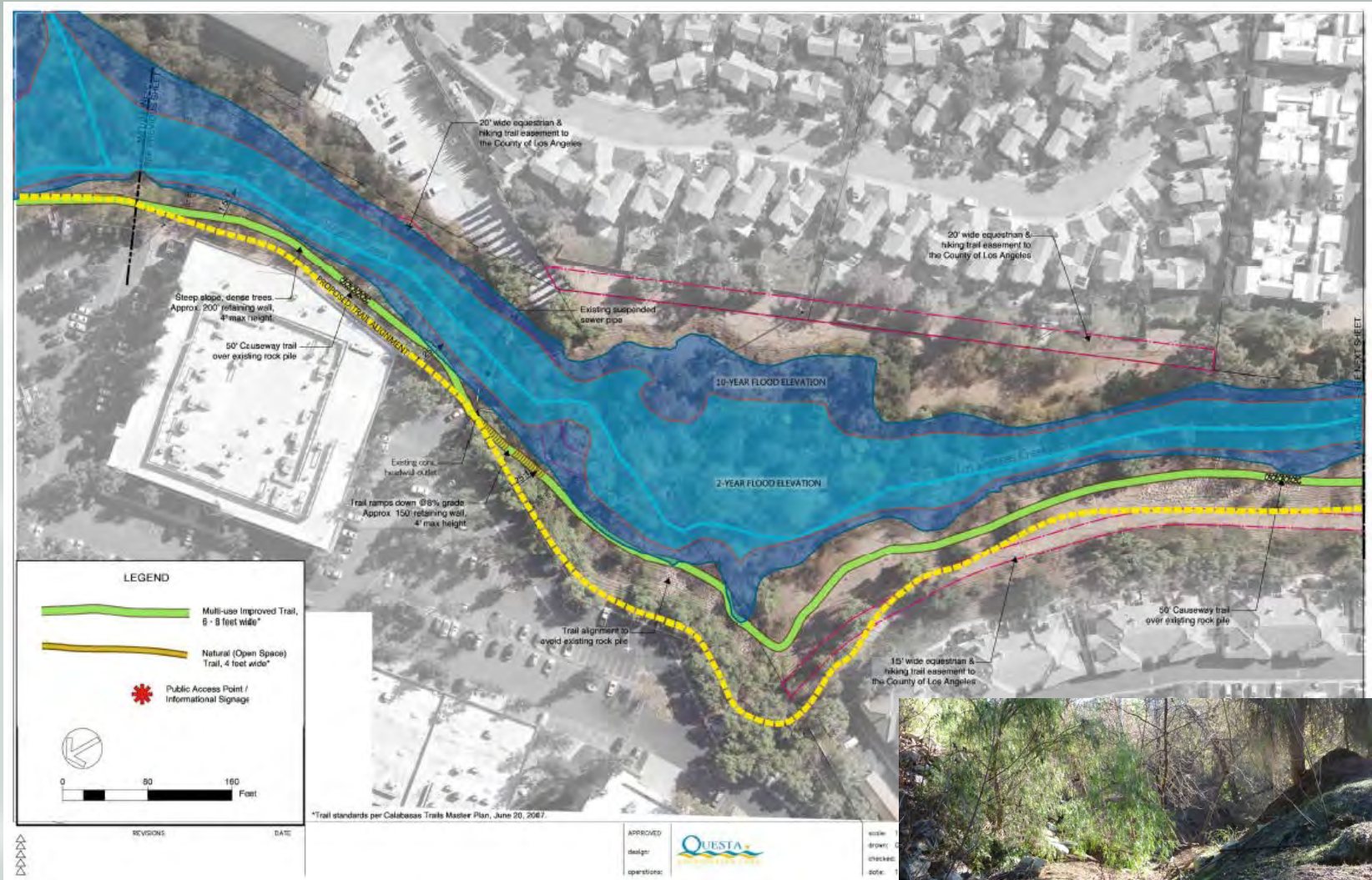
Tread Width	3 – 5 feet
Clearing Width	7 – 9 feet
Tread Surface	Natural/native soil
Percent Grade	Grades should not exceed 10 percent
	<u>Desired Grade:</u> 0 to 5 percent
	<u>Maximum Grade:</u> 5 to 10 percent (sustained, 15 percent (shorter than 50 yards)
	<u>Cross Slope Grade:</u> 3 percent (maximum)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





*Trail standards per

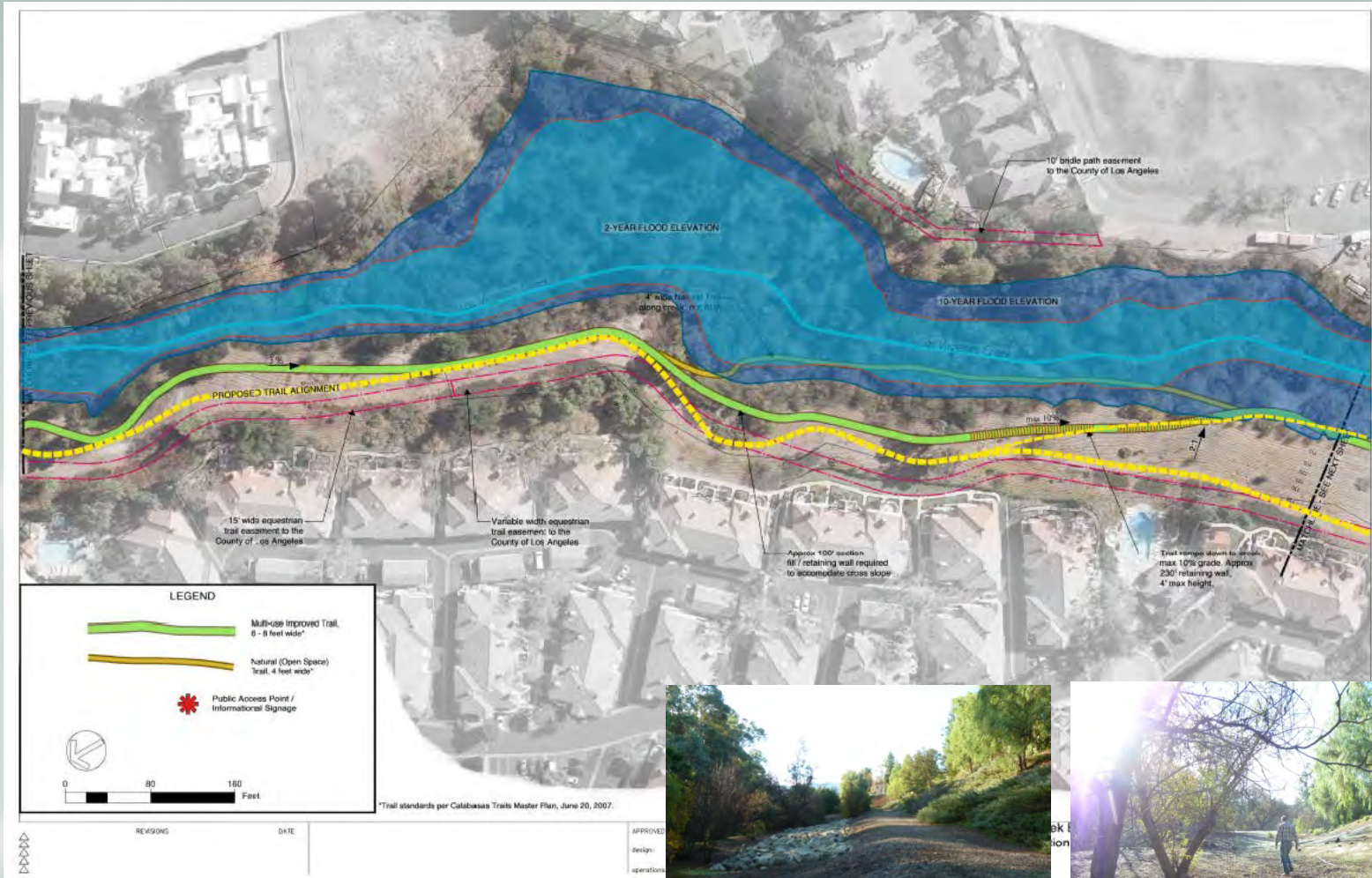




Las Virgenes Creek Restoration Project – Phase II

Community Workshop

August 6, 2015



Las Virgenes Creek Restoration Project – Phase II

Community Workshop

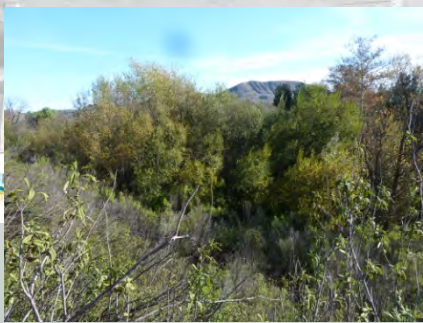
August 6, 2015



Las Virgenes Creek Restoration Project – Phase II

Community Workshop

August 6, 2015



Las Virgenes Creek Restoration Project – Phase II

Community Workshop

August 6, 2015



Las Virgenes Creek Restoration Project – Phase II

Community Workshop

August 6, 2015

Environmental Education



Las Virgenes Creek Restoration Project – Phase II

Community Workshop

August 6, 2015

Privacy Concerns

Ventura County
Sheriff's
Department:

- Arroyo Simi Trail
- Camarillo Trail



Las Virgenes Creek Restoration Project – Phase II

Community
Workshop

August 6, 2015

Next Steps

- Plan and Permit Approval
- Secure additional grant funding to complete work (estimated \$2.5M)
- Continue community support (petition)
- Implementation:
 - Vegetation Management Winter 2016
 - Trails, environmental education, erosion control & fish passage, December 2016



Contact Information:

- **City of Calabasas:**
Alex Farassati, Project Manager
afarassati@cityofcalabasas.com
(818) 224-1680
- **Website: www.cityofcalabasas.com**



Questions and Comments



CITY *of* CALABASAS

Thank you!