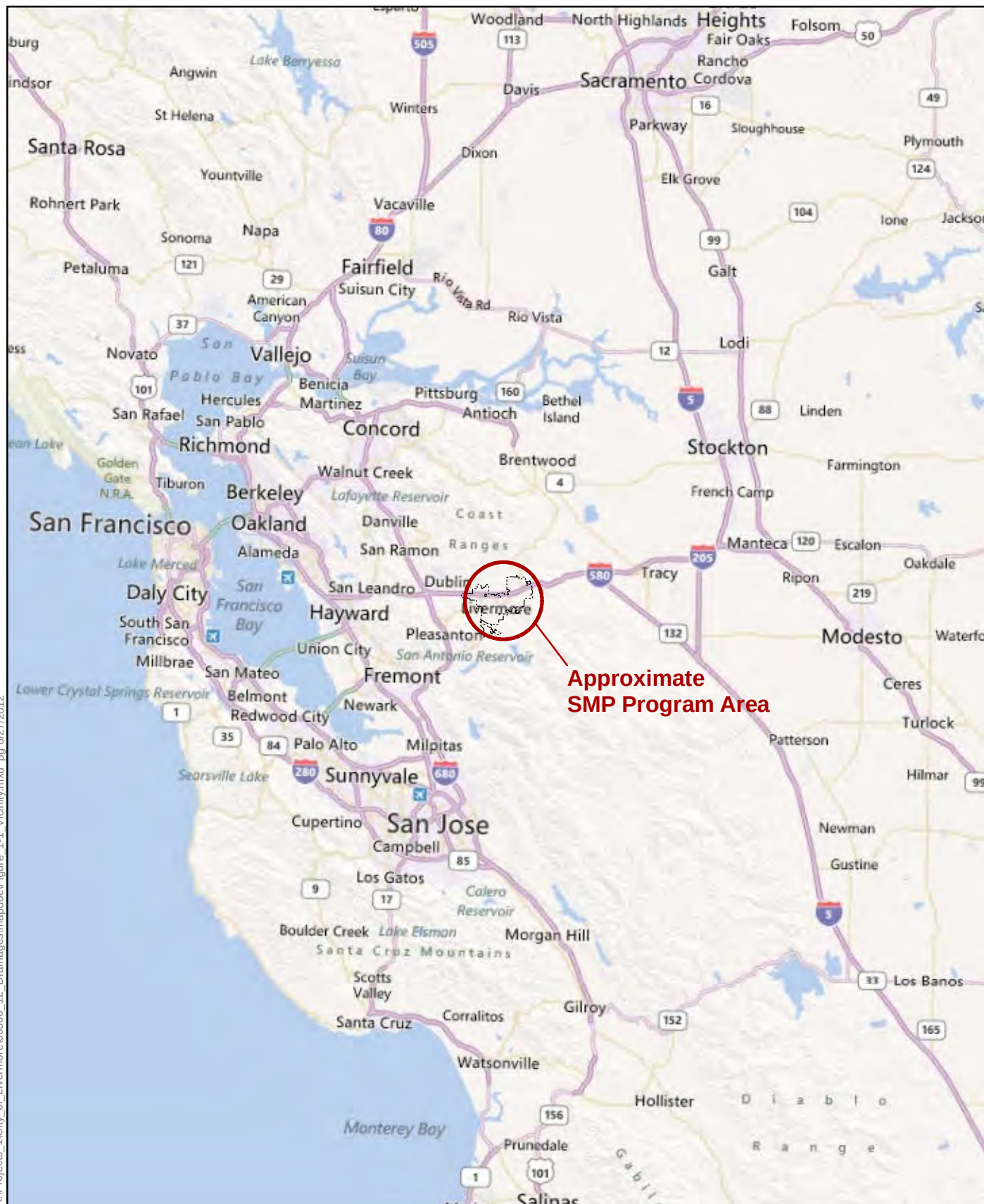


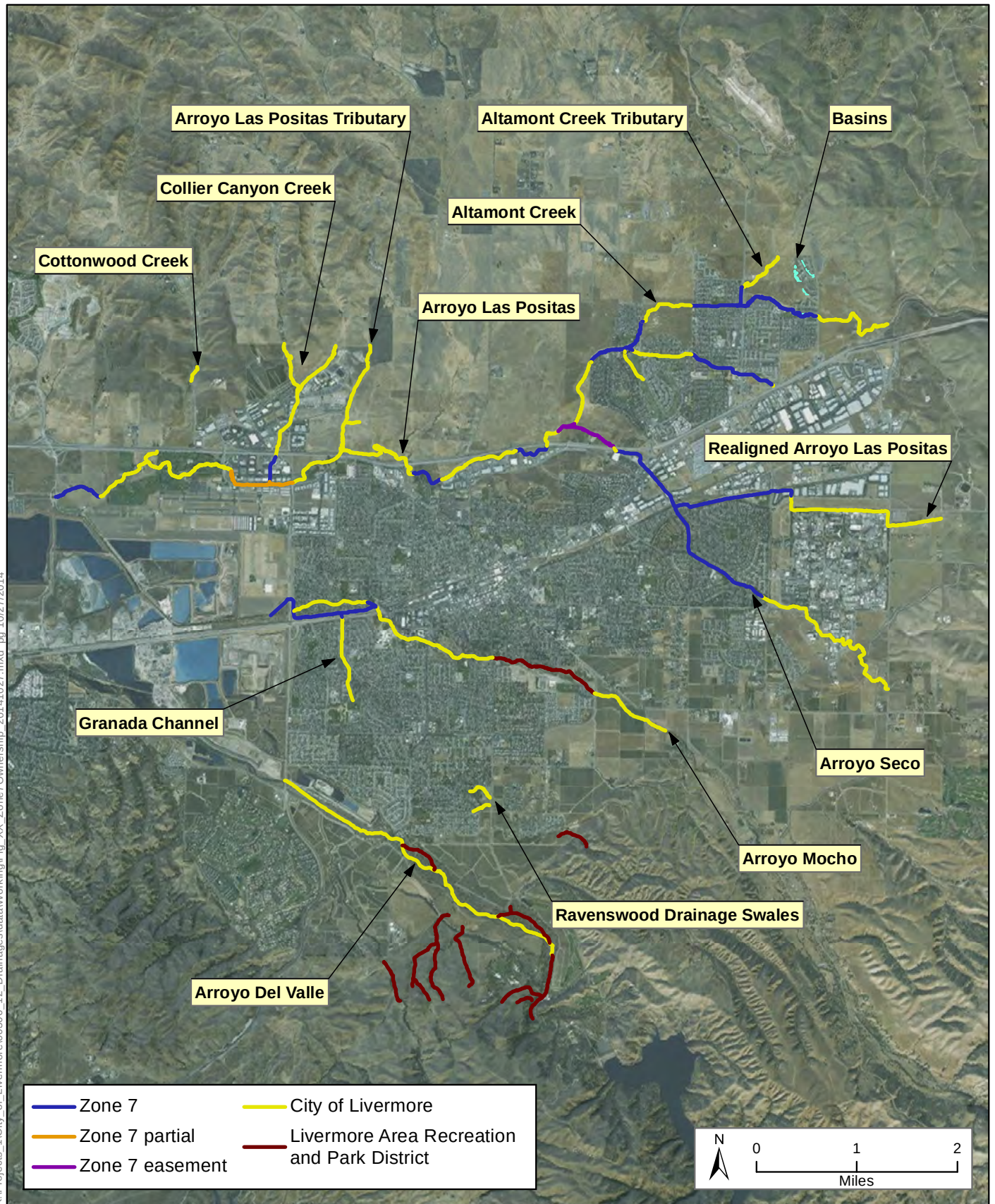
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City of Livermore Stream Maintenance Program

Figure 1-1
Regional Vicinity

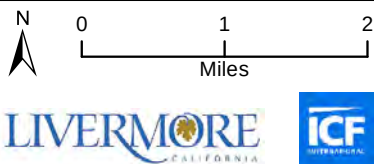
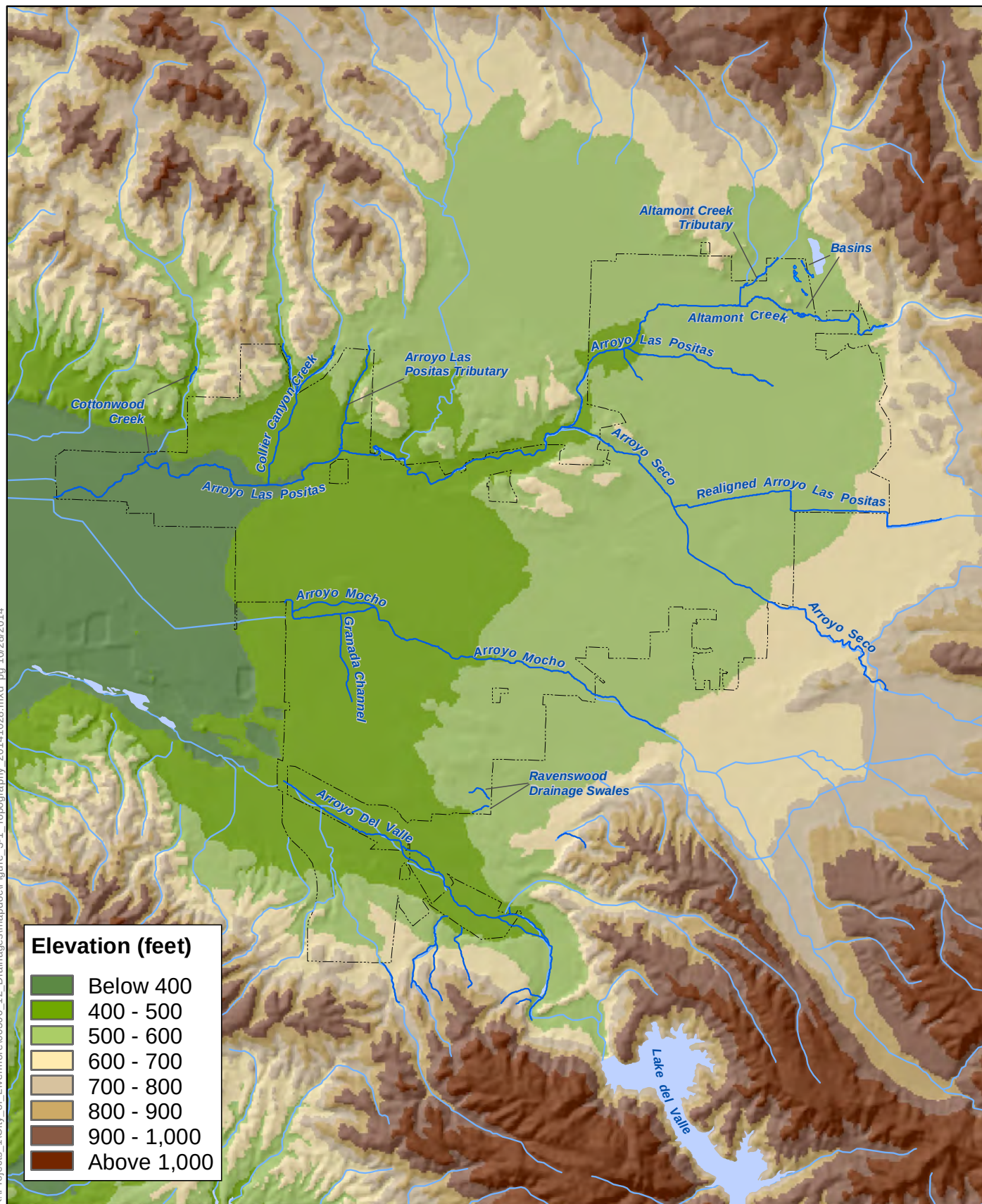
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City of Livermore Stream Maintenance Program

Figure 1-2
Ownership Map

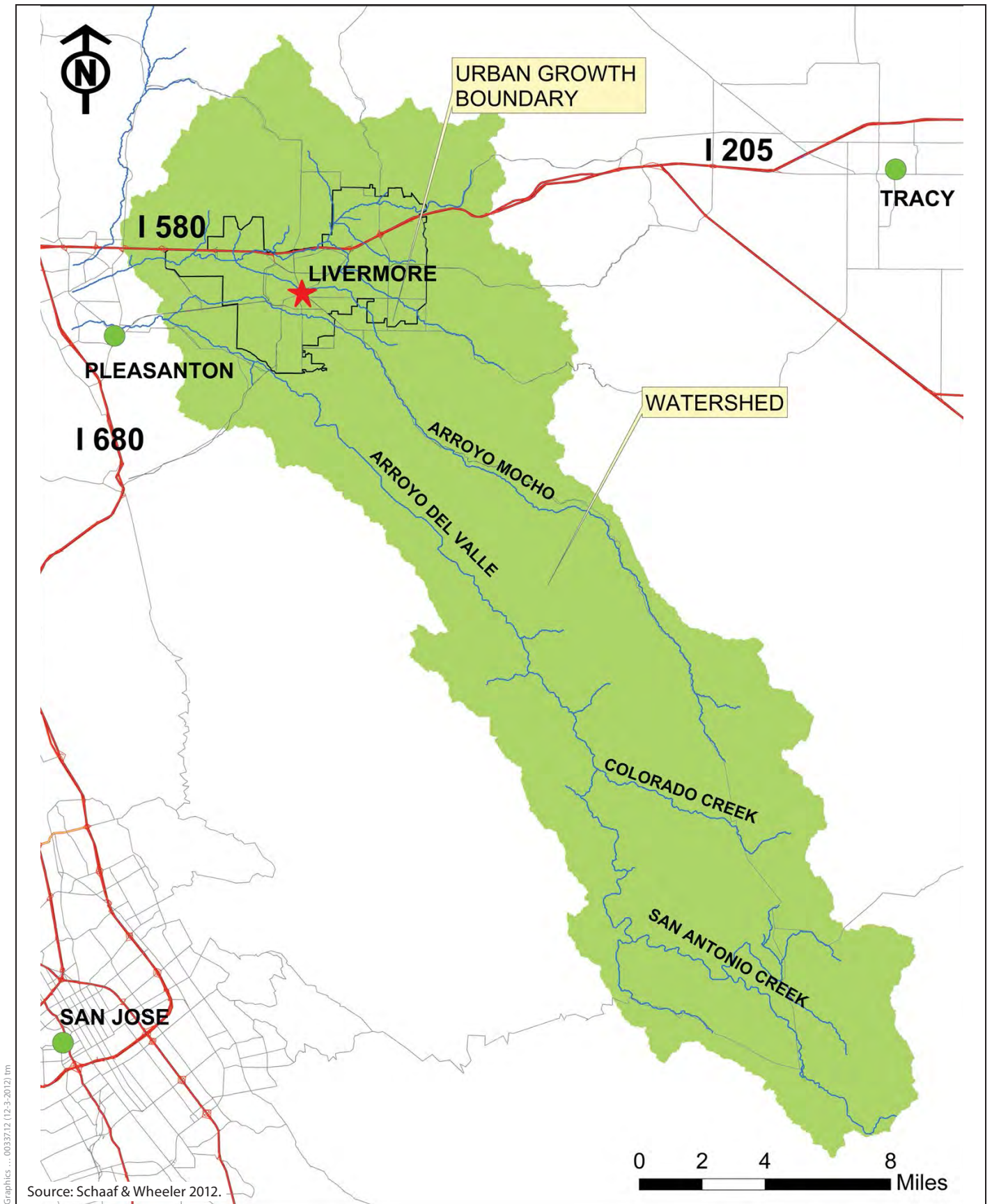
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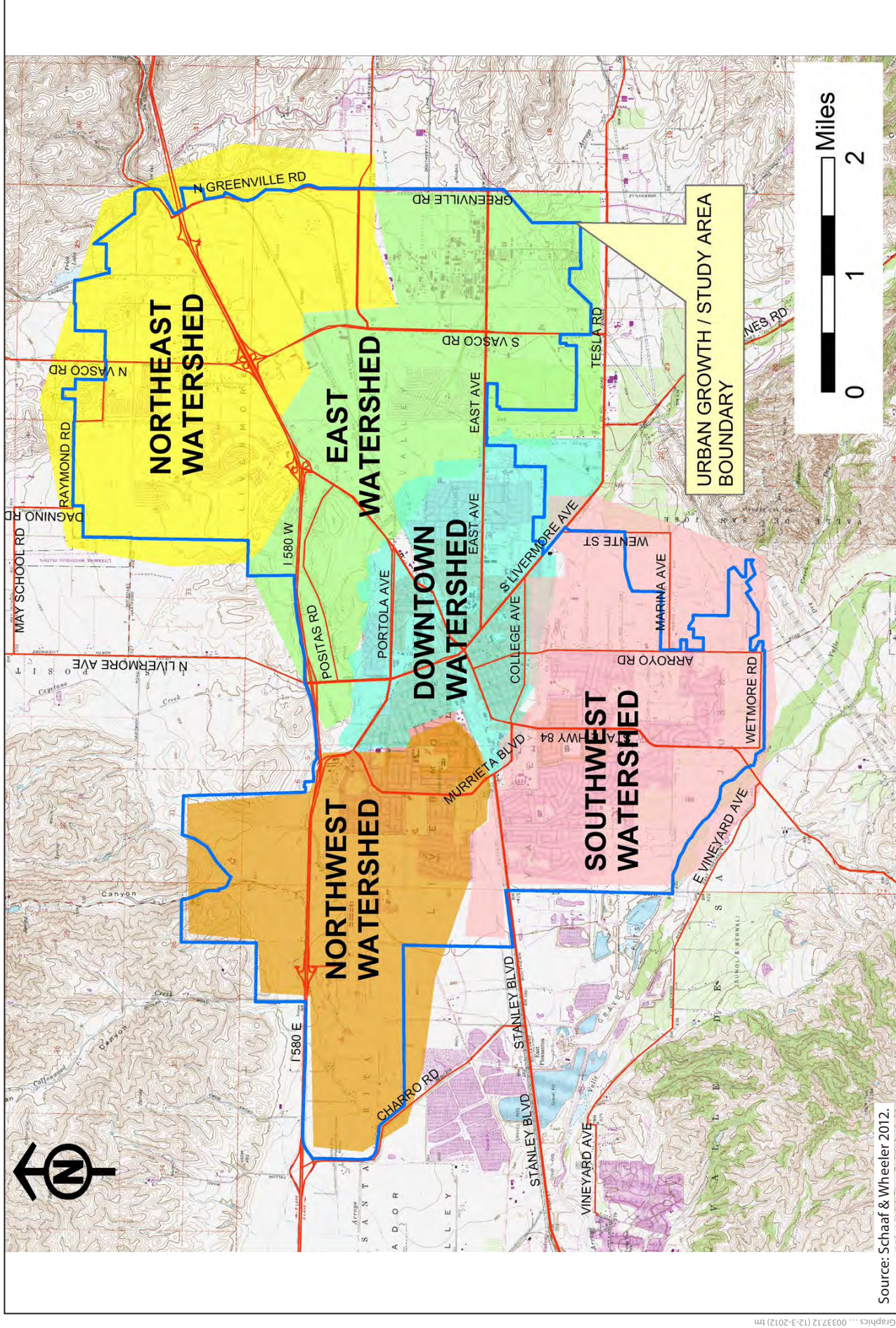


- SMP Drainage
- Other Drainages
- Livermore City Limits (approximate)

City of Livermore Stream Maintenance Program

Figure 3-1
Topography



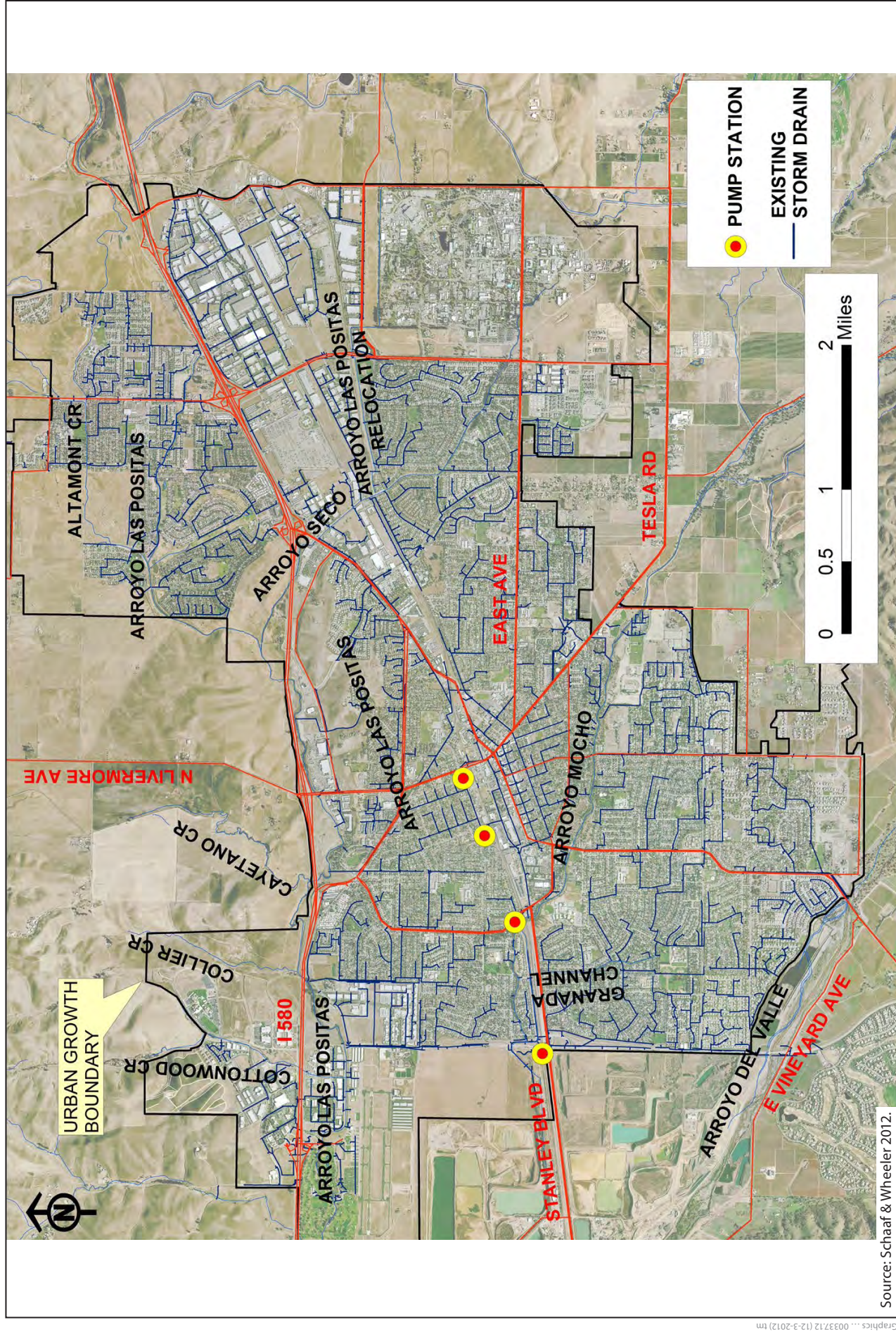


Source: Schaaf & Wheeler 2012.



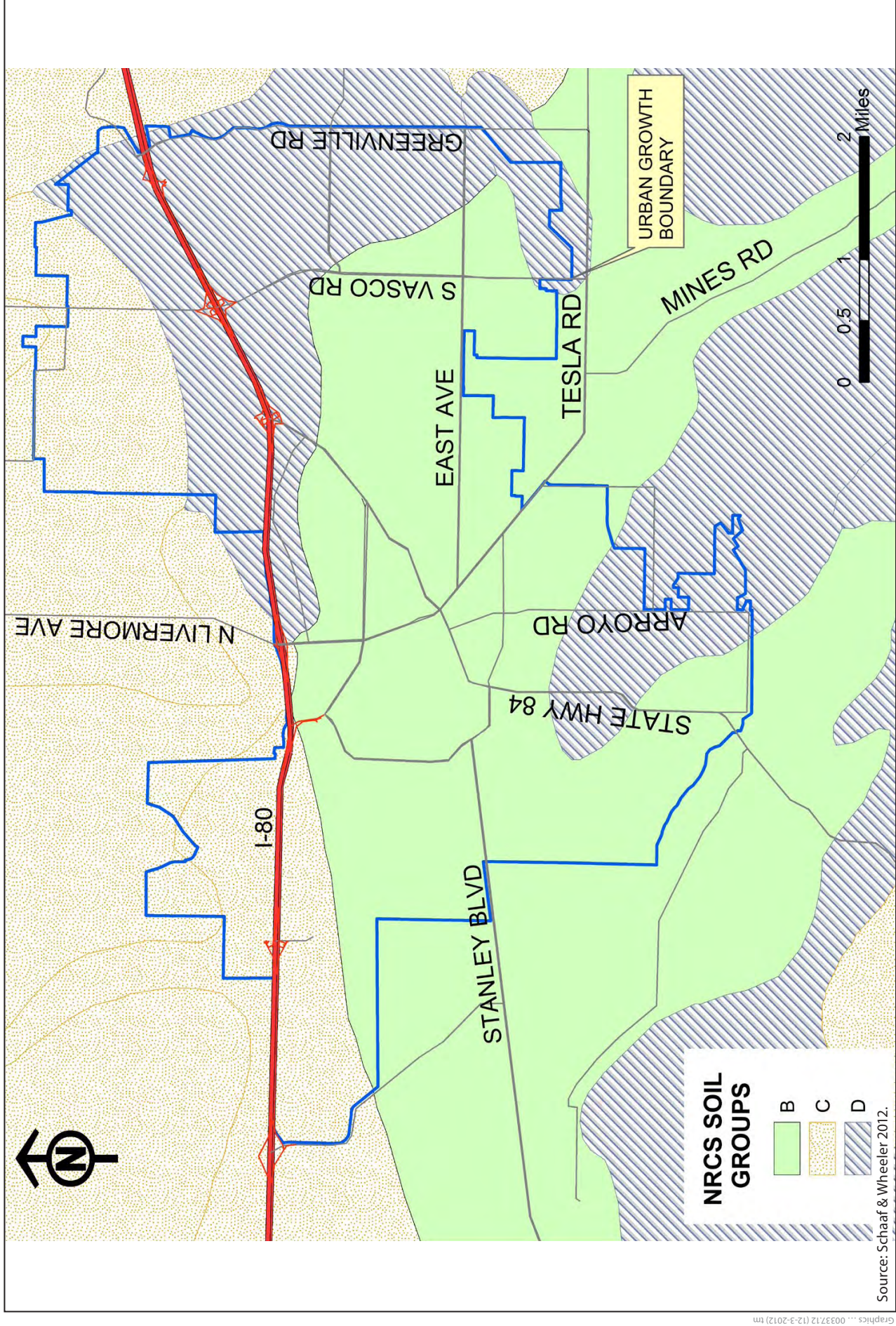
City of Livermore Stream Maintenance Program

Figure 3-3
Livermore Drainage Areas

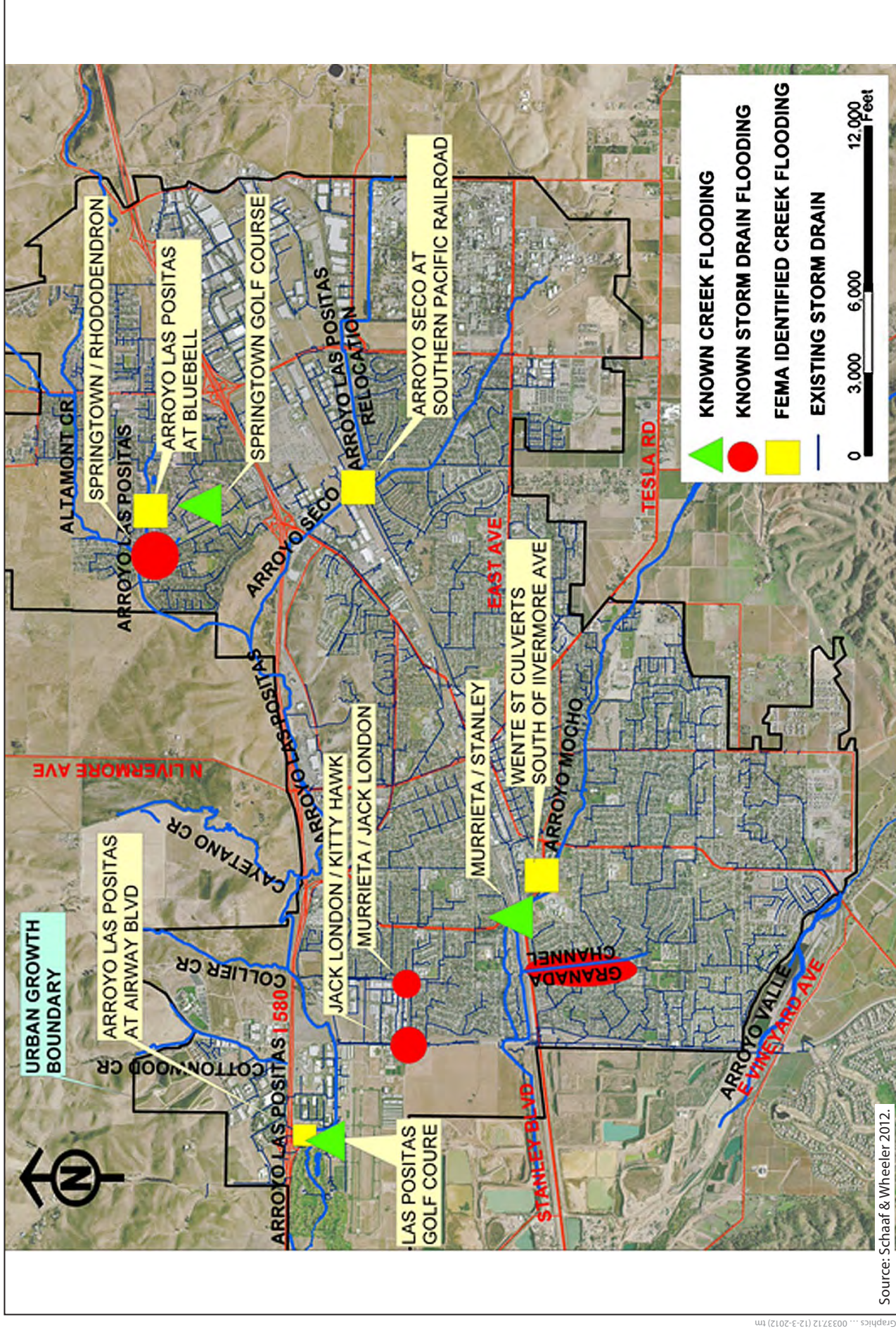


**City of Livermore
Stream Maintenance Program
Figure 3-4
Livermore Drainage Network**

Figure 3-4 Livermore Drainage Network



City of Livermore
Stream Maintenance Program
Figure 3-5
 Hydrologic Soil Groups in Livermore



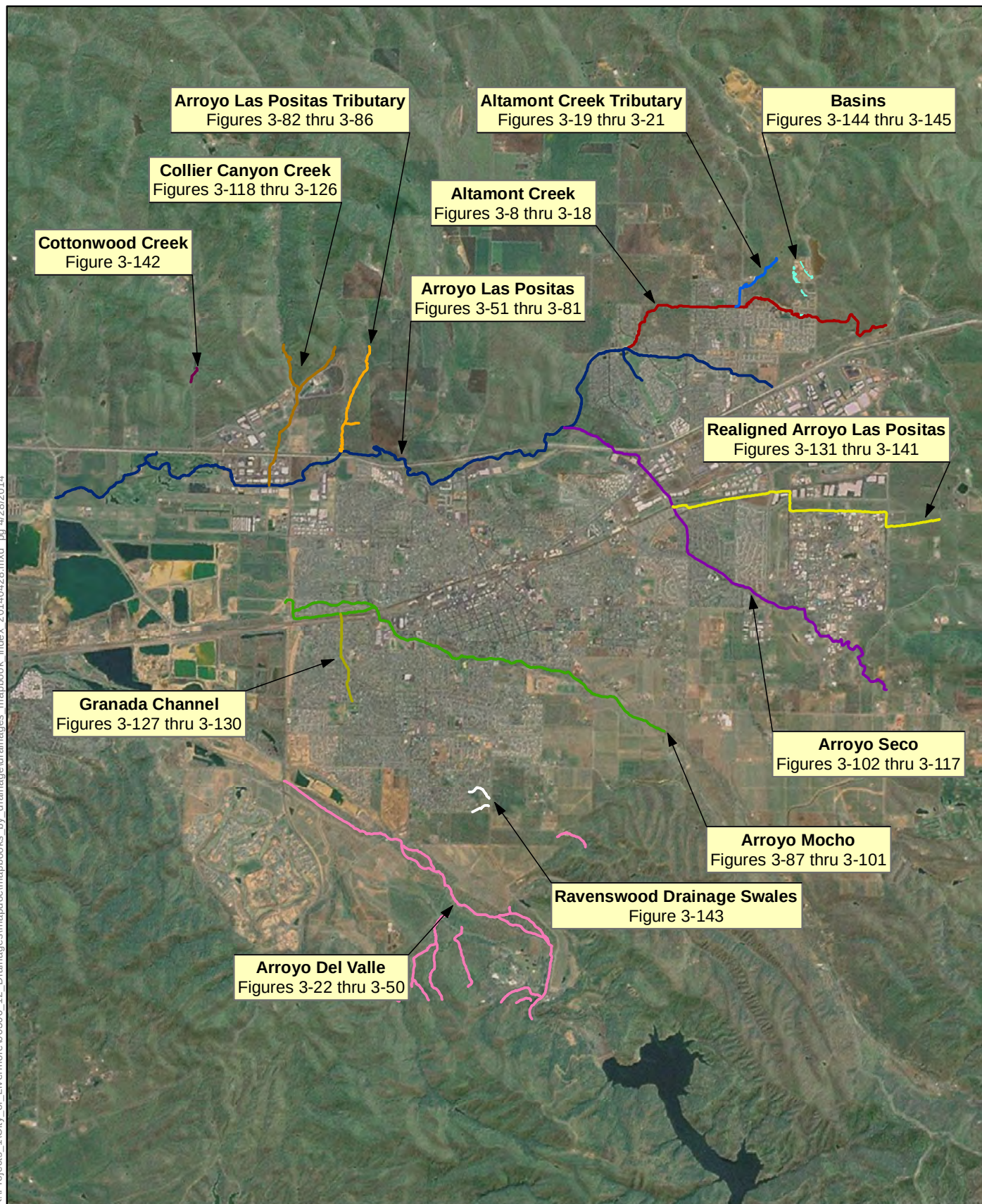
Source: Schaaf & Wheeler 2012.



City of Livermore Stream Maintenance Program

Figure 3-6
Known Flooding Locations in Livermore

K:\Projects_1\City_of_Livermore\00300_12_Drainages\mapdocs\mapbooks_by_drainage\drainages_mapbook_index_20140428.mxd pp 4/28/2014



City of Livermore Stream Maintenance Program

Figure 3-7
Drainage Index Map



City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

Land Cover

- Alkali Meadow and Scalds
- Alkali Wetland
- California Annual Grassland
- Golf Course / Urban Park
- Seasonal Wetland
- Urban - Suburban
- Valley Sink Scrub

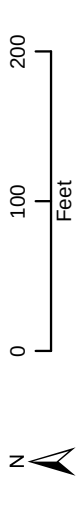
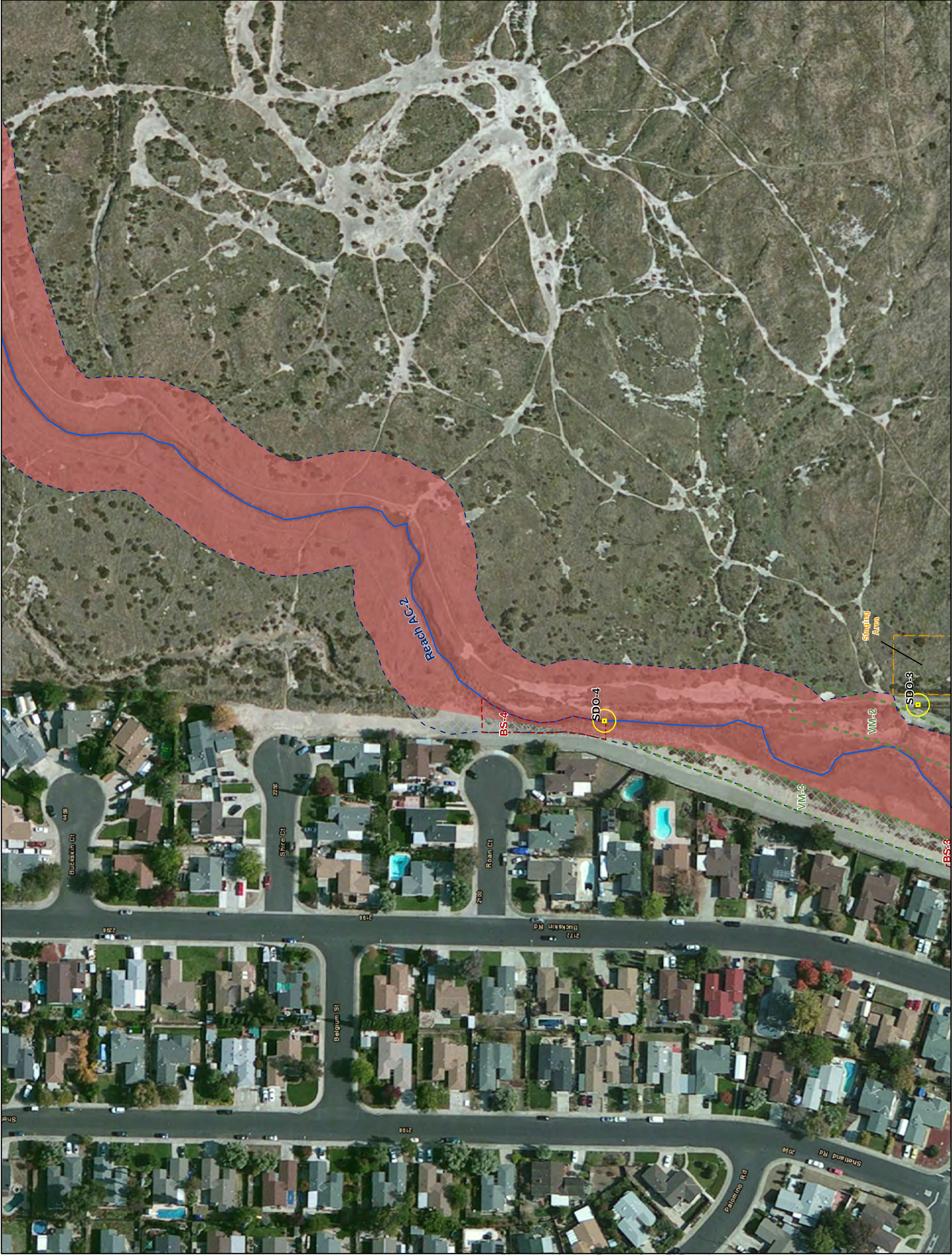


Figure 3-18
Altamont Creek
Page 1 of 11



City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

- Land Cover
- Alkali Meadow and Scalds
 - Alkali Wetland
 - California Annual Grassland
 - Golf Course / Urban Park
 - Seasonal Wetland
 - Urban - Suburban
 - Valley Sink Scrub

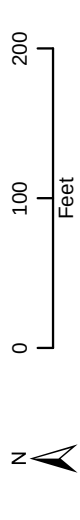


Figure 3-17
Altamont Creek
Page 2 of 11



- Stream with Reach ID

Reach Break

75-foot Stream Buffer

Storm Drain Outfall (SDO) Impact Area
- Land Cover

Alkali Meadow and Scalds

Alkali Wetland

California Annual Grassland

Golf Course / Urban Park

Seasonal Wetland

Urban - Suburban

Valley Sink Scrub

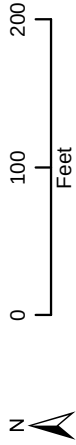
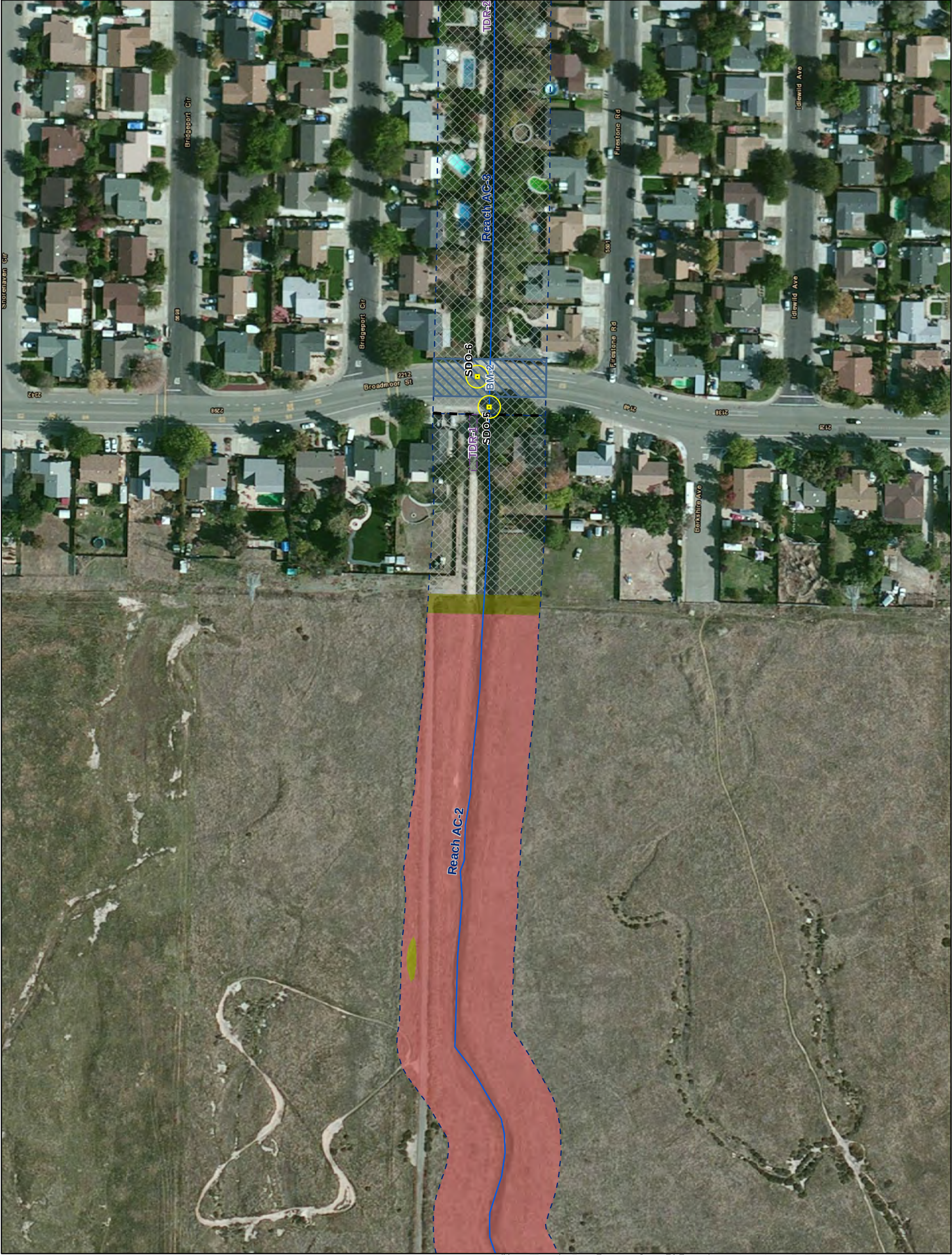


Figure 3-16
Altamont Creek
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- Alkali Meadow and Scalds
 - Alkali Wetland
 - California Annual Grassland
 - Golf Course / Urban Park
 - Seasonal Wetland
 - Urban - Suburban
 - Valley Sink Scrub

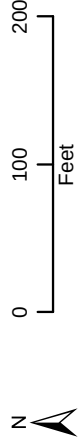
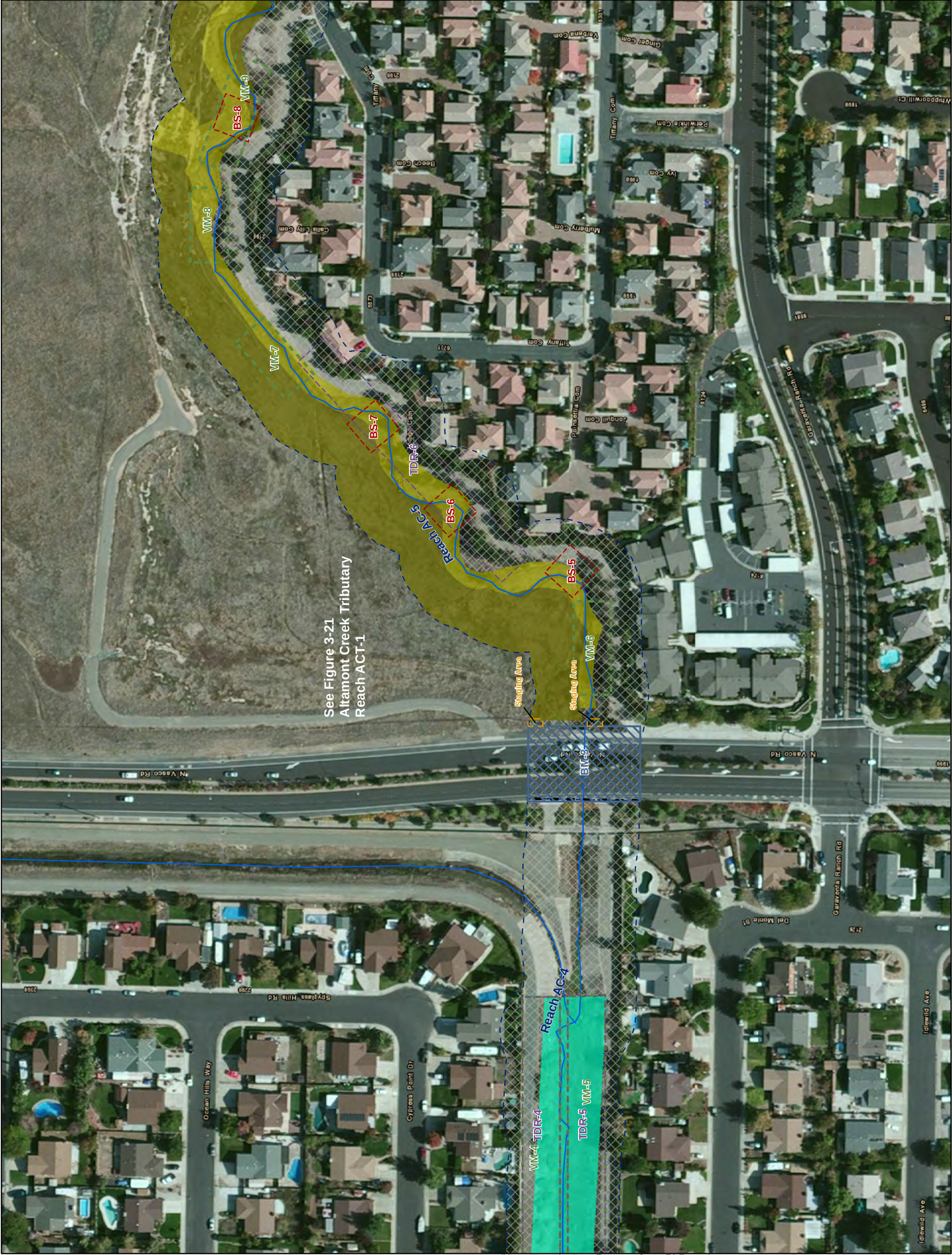


Figure 3-15
Altamont Creek
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- Alkali Meadow and Scalds
 - Alkali Wetland
 - California Annual Grassland
 - Golf Course / Urban Park
 - Seasonal Wetland
 - Urban - Suburban
 - Valley Sink Scrub

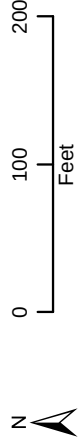


Figure 3-13
Altamont Creek
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID

Reach Break

75-foot Stream Buffer

Storm Drain Outfall (SDO) Impact Area
- Land Cover

Alkali Meadow and Scalds

Alkali Wetland

California Annual Grassland

Golf Course / Urban Park

Seasonal Wetland

Urban - Suburban

Valley Sink Scrub

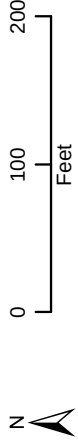
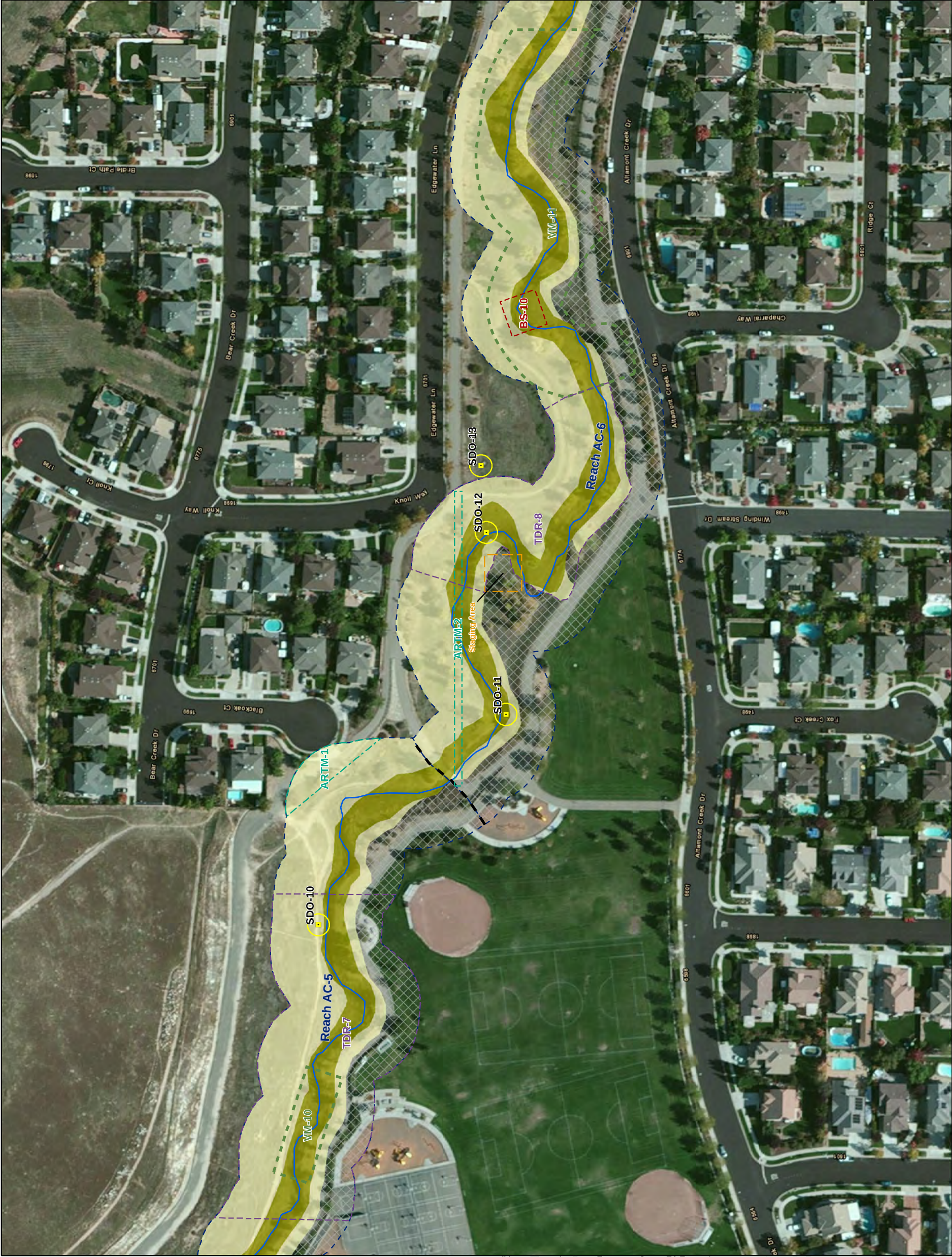


Figure 3-12
Altamont Creek
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

- Land Cover
- Alkali Meadow and Scalds
 - Alkali Wetland
 - California Annual Grassland
 - Golf Course / Urban Park
 - Seasonal Wetland
 - Urban - Suburban
 - Valley Sink Scrub



Figure 3-11
Altamont Creek
Page 8 of 11

City of Livermore
Stream Maintenance Program



- Stream with Reach ID

Reach Break

75-foot Stream Buffer

Storm Drain Outfall (SDO) Impact Area
- Land Cover

Alkali Meadow and Scalds

Alkali Wetland

California Annual Grassland

Golf Course / Urban Park

Seasonal Wetland

Urban - Suburban

Valley Sink Scrub



Figure 3-10
Altamont Creek
Page 9 of 11



- Stream with Reach ID

Reach Break

75-foot Stream Buffer

Storm Drain Outfall (SDO) Impact Area
- Land Cover

Alkali Meadow and Scalds

Alkali Wetland

California Annual Grassland

Golf Course / Urban Park

Seasonal Wetland

Urban - Suburban

Valley Sink Scrub

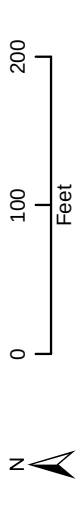
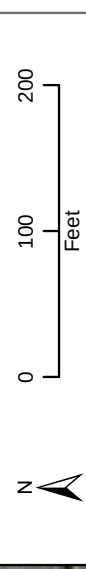
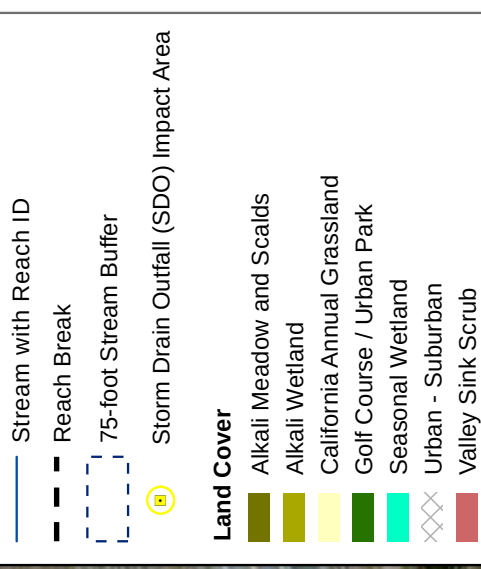
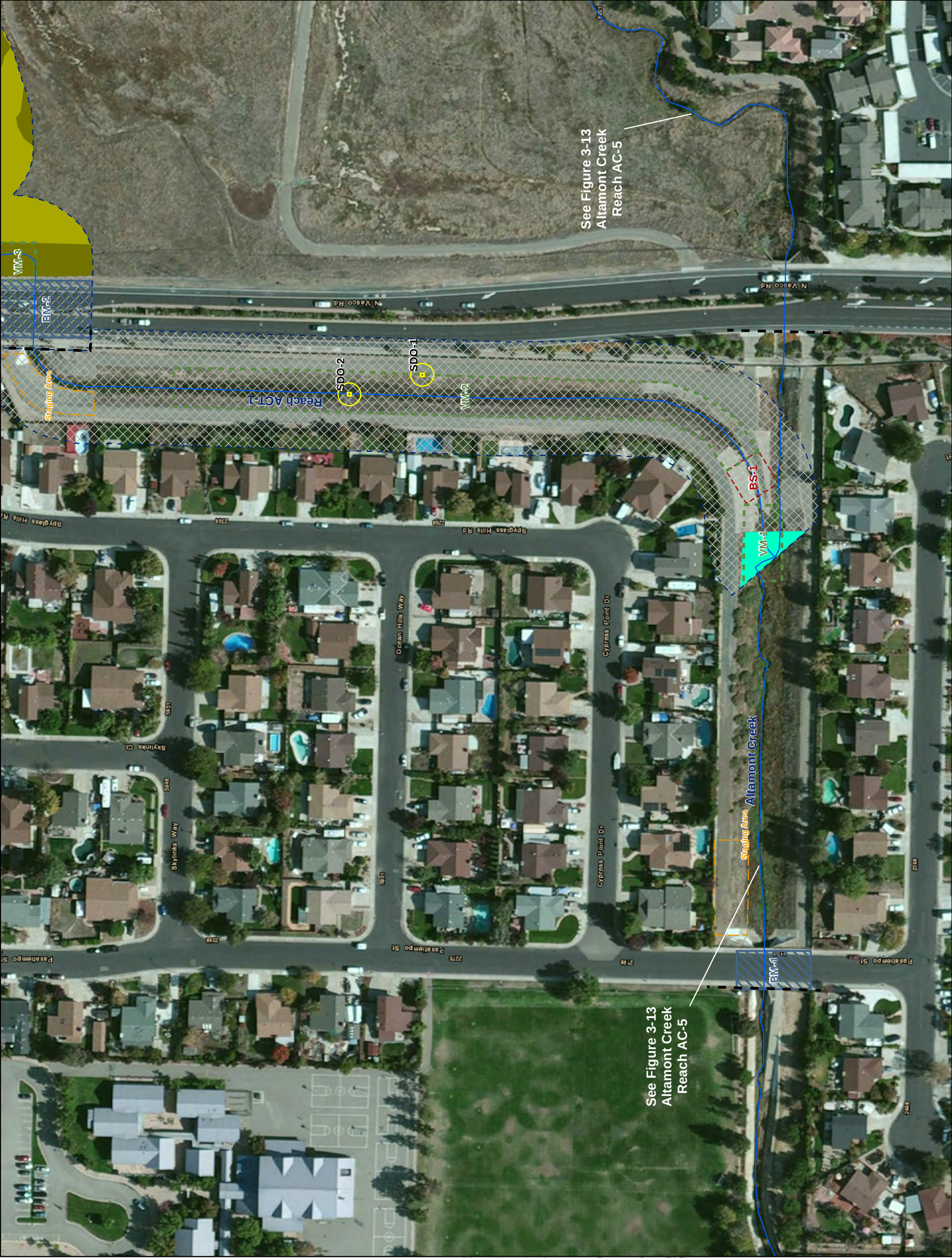


Figure 3-9
Altamont Creek
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

Land Cover

- Alkali Meadow and Scalds
- Alkali Wetland
- Seasonal Wetland
- Urban - Suburban
- Valley Sink Scrub

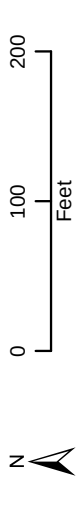


Figure 3-21
Altamont Creek Tributary
Page 1 of 3

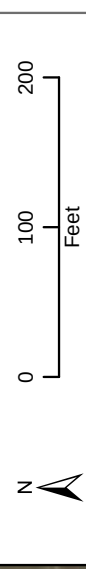
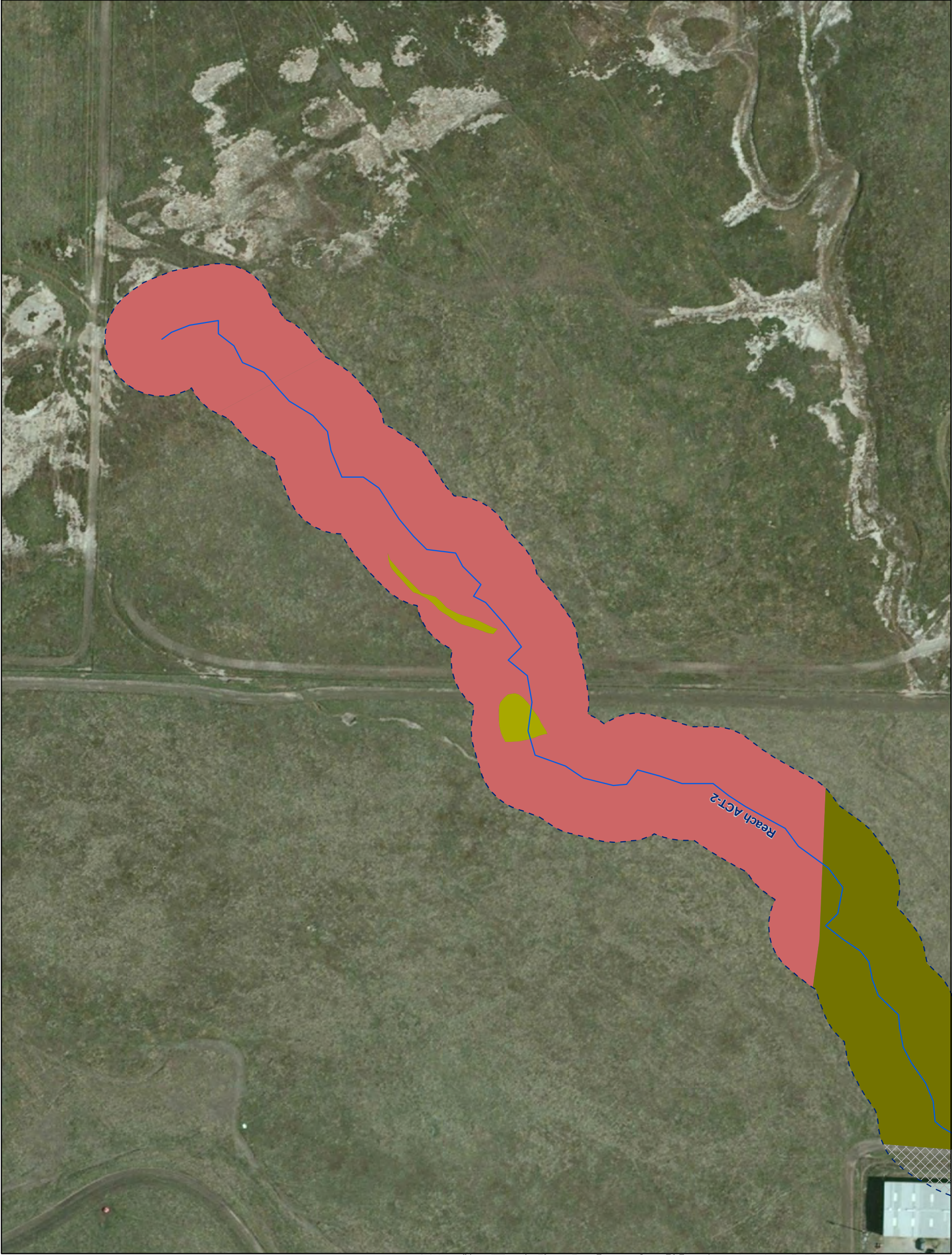


Figure 3-20
Altamont Creek Tributary
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- Alkali Meadow and Scalds
 - Alkali Wetland
 - Seasonal Wetland
 - Urban - Suburban
 - Valley Sink Scrub

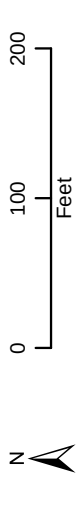


Figure 3-19
Altamont Creek Tributary
Page 3 of 3



- Stream with Reach ID

Reach Break

75-foot Stream Buffer

Storm Drain Outfall (SDO) Impact Area

Land Cover

California Annual Grassland

Mixed Evergreen Forest /

Oak Woodland

Mixed Riparian Forest and

Woodland

Mixed Willow Riparian Scrub

Northern Coastal Scrub

Pond

Riverine

Ruderal

Sycamore Alluvial Woodland

Urban - Suburban

Vineyard
-
-
- Figure 3-22
Arroyo Del Valle
Page 1 of 29
-



- Stream with Reach ID

Reach Break

75-foot Stream Buffer

Storm Drain Outfall (SDO) Impact Area

Land Cover

California Annual Grassland

Mixed Evergreen Forest /

Oak Woodland

Mixed Riparian Forest and

Woodland

Mixed Willow Riparian Scrub

Northern Coastal Scrub

Pond

Riverine

Ruderal

Sycamore Alluvial Woodland

Urban - Suburban

Vineyard
-
-
- Figure 3-23
Arroyo Del Valle
Page 2 of 29
-



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

Land Cover

- California Annual Grassland
- Mixed Evergreen Forest / Oak Woodland
- Mixed Riparian Forest and Woodland
- Mixed Willow Riparian Scrub
- Northern Coastal Scrub
- Pond
- Riverine
- Ruderal
- Sycamore Alluvial Woodland
- Urban - Suburban
- Vineyard

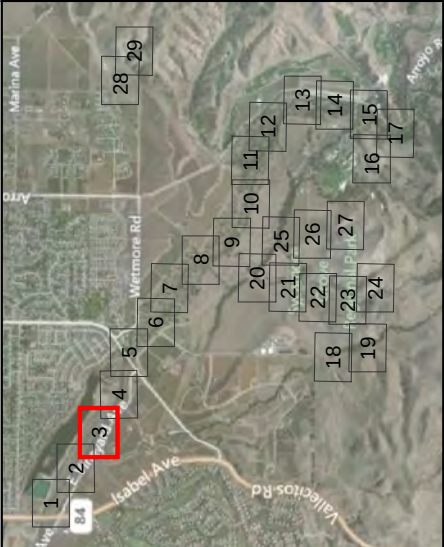
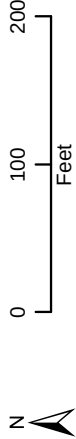
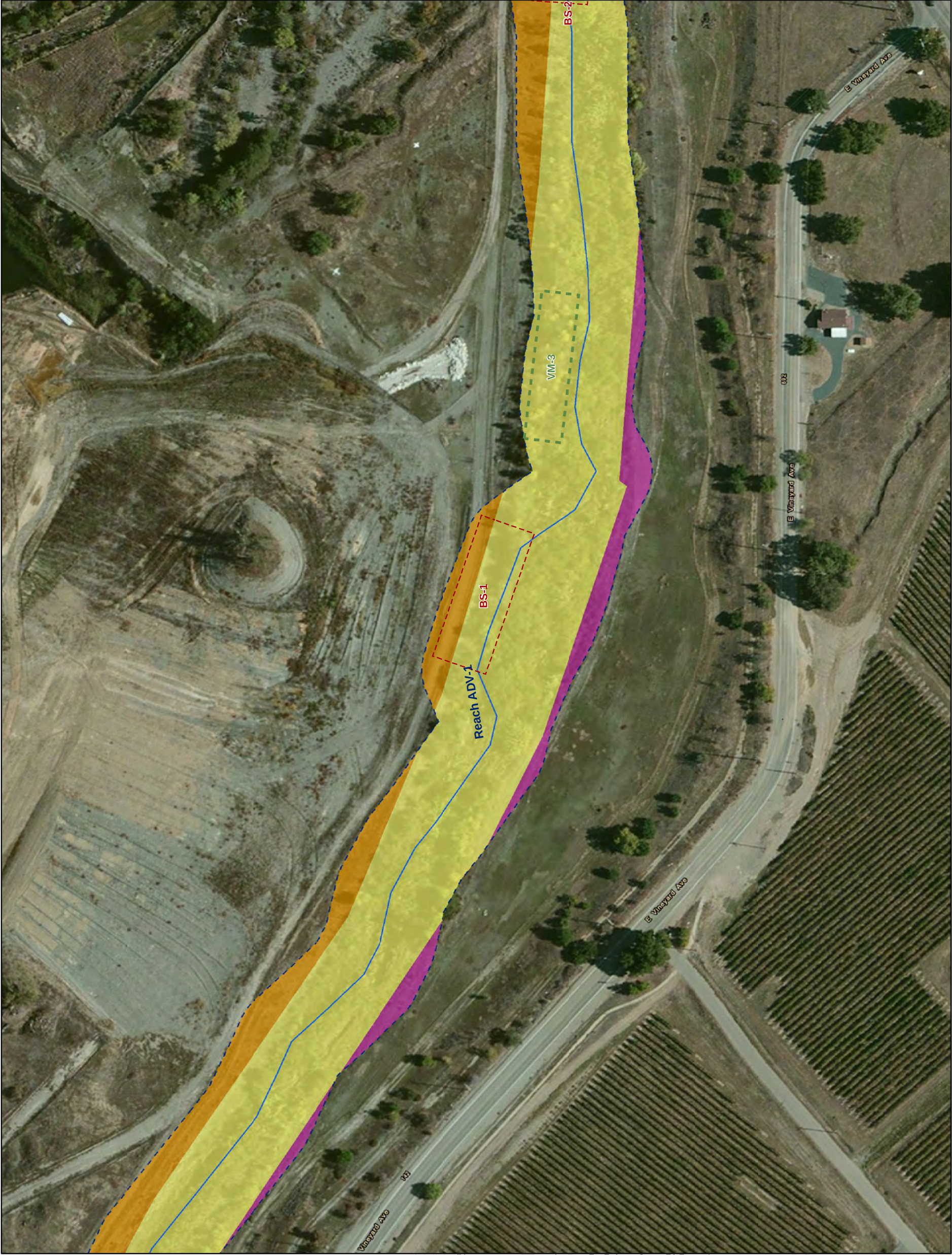


Figure 3-24
Arroyo Del Valle
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City of Livermore
Stream Maintenance Program

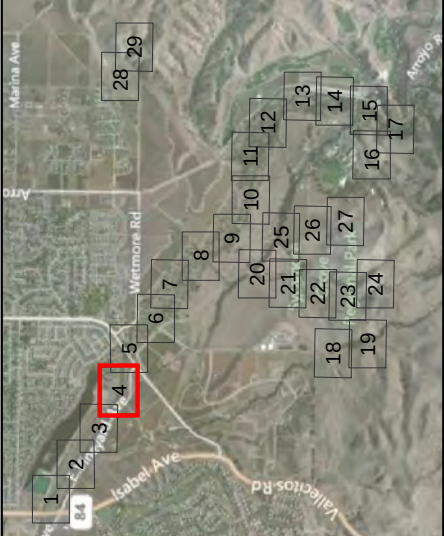


Figure 3-25
Arroyo Del Valle
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Mixed Evergreen Forest / Oak Woodland
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Northern Coastal Scrub
 - Pond
 - Riverine
 - Ruderal
 - Sycamore Alluvial Woodland
 - Urban - Suburban
 - Vineyard

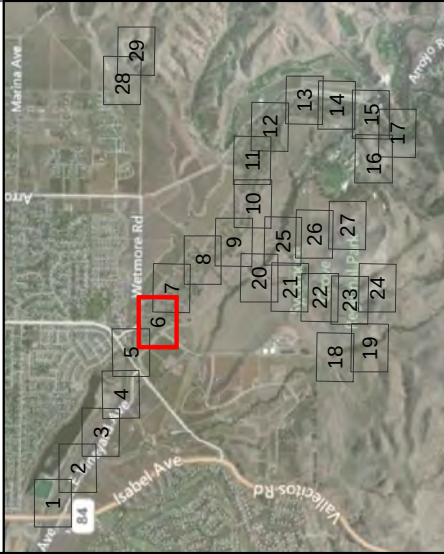
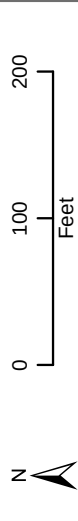


Figure 3-27
Arroyo Del Valle
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Mixed Evergreen Forest / Oak Woodland
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Northern Coastal Scrub
 - Pond
 - Riverine
 - Ruderal
 - Sycamore Alluvial Woodland
 - Urban - Suburban
 - Vineyard

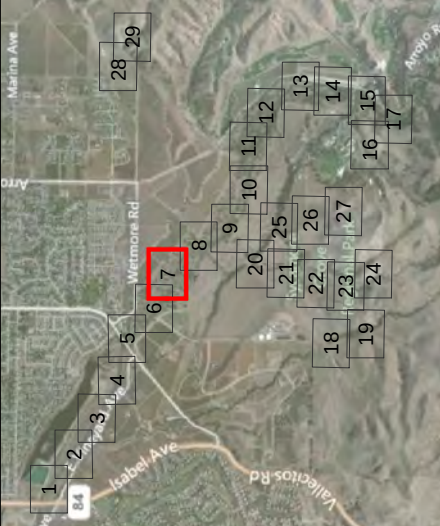


Figure 3-28
Arroyo Del Valle
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Figure 3-29
Arroyo Del Valle
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City of Livermore
Stream Maintenance Program

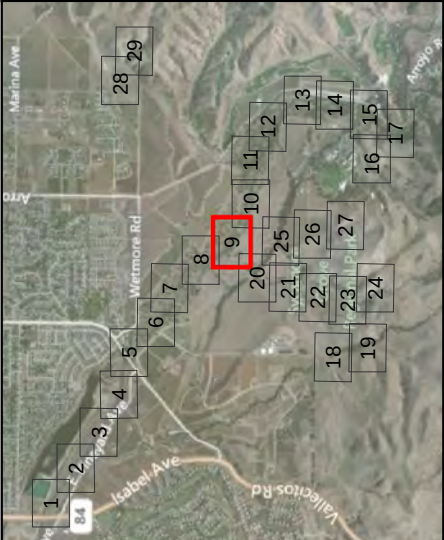


Figure 3-30
Arroyo Del Valle
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

Land Cover

- California Annual Grassland
- Mixed Evergreen Forest / Oak Woodland
- Mixed Riparian Forest and Woodland
- Mixed Willow Riparian Scrub
- Northern Coastal Scrub
- Pond
- Riverine
- Ruderal
- Sycamore Alluvial Woodland
- Urban - Suburban
- Vineyard

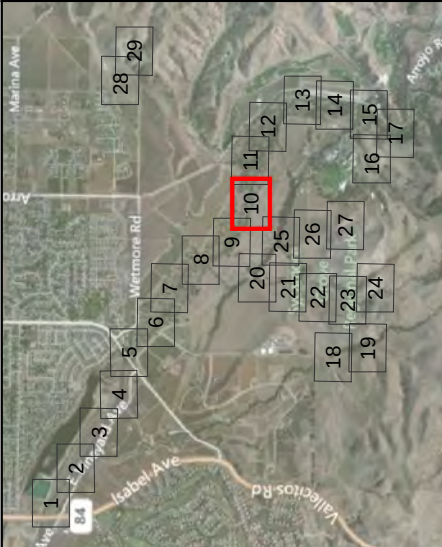


Figure 3-31
Arroyo Del Valle
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Figure 3-32
Arroyo Del Valle
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Mixed Evergreen Forest / Oak Woodland
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Northern Coastal Scrub
 - Pond
 - Riverine
 - Ruderal
 - Sycamore Alluvial Woodland
 - Urban - Suburban
 - Vineyard

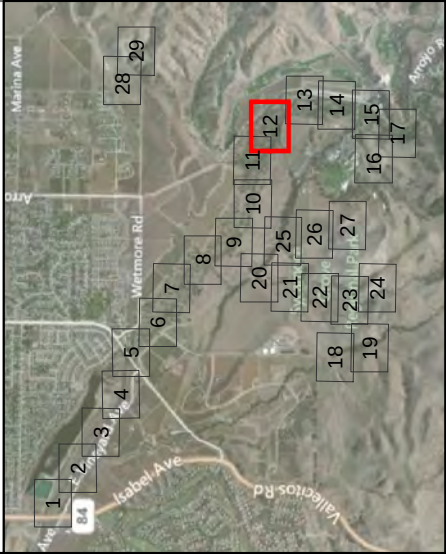
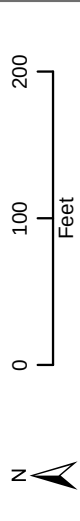


Figure 3-33
Arroyo Del Valle
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

- Land Cover
- California Annual Grassland
 - Mixed Evergreen Forest / Oak Woodland
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Northern Coastal Scrub
 - Pond
 - Riverine
 - Ruderal
 - Sycamore Alluvial Woodland
 - Urban - Suburban
 - Vineyard

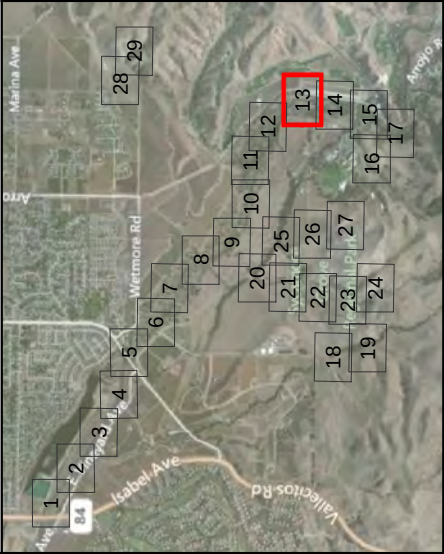


Figure 3-34
Arroyo Del Valle
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

Land Cover

- California Annual Grassland
- Mixed Evergreen Forest / Oak Woodland
- Mixed Riparian Forest and Woodland
- Mixed Willow Riparian Scrub
- Northern Coastal Scrub
- Pond
- Riverine
- Ruderal
- Sycamore Alluvial Woodland
- Urban - Suburban
- Vineyard

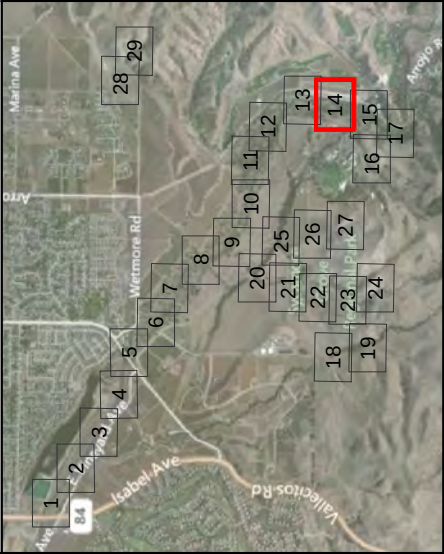


Figure 3-35
Arroyo Del Valle
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

Land Cover

- California Annual Grassland
- Mixed Evergreen Forest / Oak Woodland
- Mixed Riparian Forest and Woodland
- Mixed Willow Riparian Scrub
- Northern Coastal Scrub
- Pond
- Riverine
- Ruderal
- Sycamore Alluvial Woodland
- Urban - Suburban
- Vineyard

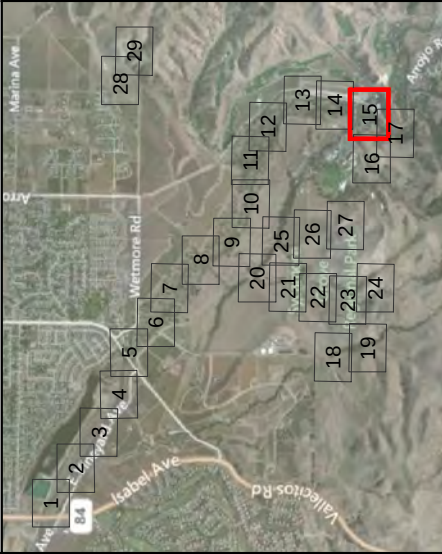
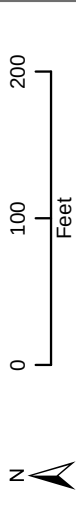


Figure 3-36
Arroyo Del Valle
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Mixed Evergreen Forest / Oak Woodland
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Northern Coastal Scrub
 - Pond
 - Riverine
 - Ruderal
 - Sycamore Alluvial Woodland
 - Urban - Suburban
 - Vineyard

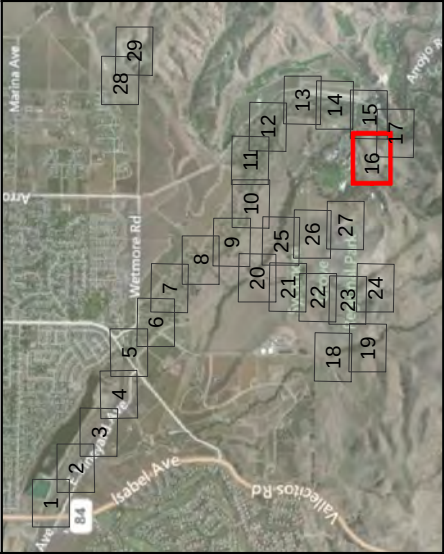
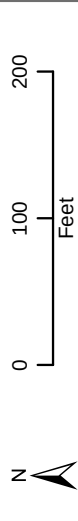


Figure 3-37
Arroyo Del Valle
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

- Land Cover
- California Annual Grassland
 - Mixed Evergreen Forest / Oak Woodland
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Northern Coastal Scrub
 - Pond
 - Riverine
 - Ruderal
 - Sycamore Alluvial Woodland
 - Urban - Suburban
 - Vineyard

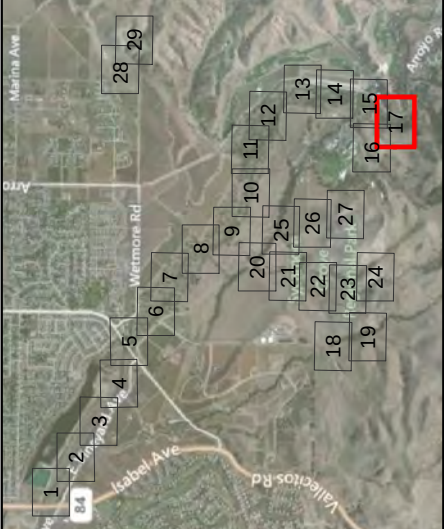
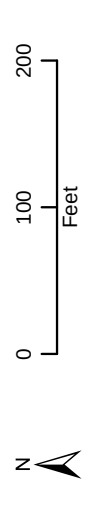


Figure 3-38
Arroyo Del Valle
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

- Land Cover
- California Annual Grassland
 - Mixed Evergreen Forest / Oak Woodland
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Northern Coastal Scrub
 - Pond
 - Riverine
 - Ruderal
 - Sycamore Alluvial Woodland
 - Urban - Suburban
 - Vineyard

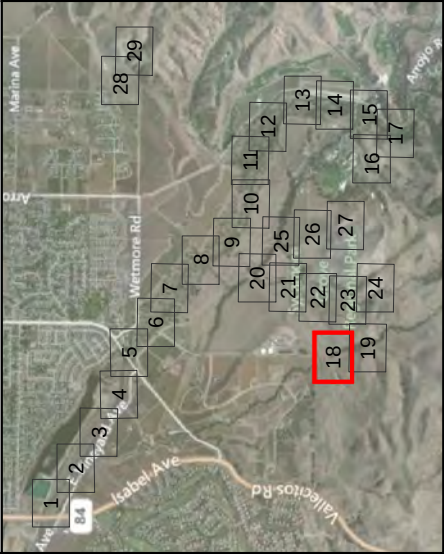


Figure 3-39
Arroyo Del Valle
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- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

Land Cover

- California Annual Grassland
- Mixed Evergreen Forest / Oak Woodland
- Mixed Riparian Forest and Woodland
- Mixed Willow Riparian Scrub
- Northern Coastal Scrub
- Pond
- Riverine
- Ruderal
- Sycamore Alluvial Woodland
- Urban - Suburban
- Vineyard

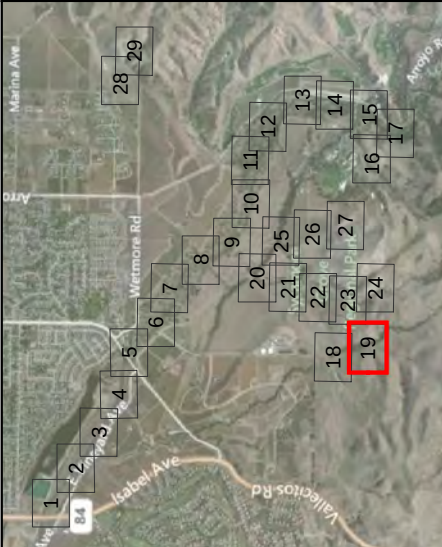
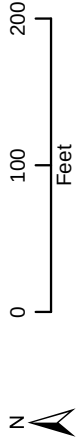


Figure 3-40
Arroyo Del Valle
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Mixed Evergreen Forest / Oak Woodland
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Northern Coastal Scrub
 - Pond
 - Riverine
 - Ruderal
 - Sycamore Alluvial Woodland
 - Urban - Suburban
 - Vineyard

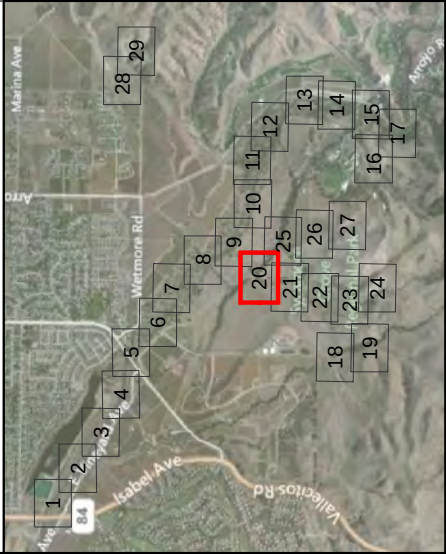
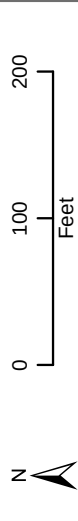


Figure 3-41
Arroyo Del Valle
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID

Reach Break

75-foot Stream Buffer

Storm Drain Outfall (SDO) Impact Area

Land Cover

California Annual Grassland

Mixed Evergreen Forest / Oak Woodland

Mixed Riparian Forest and Woodland

Mixed Willow Riparian Scrub

Northern Coastal Scrub

Pond

Riverine

Ruderal

Sycamore Alluvial Woodland

Urban - Suburban

Vineyard
-
-
- Figure 3-42
Arroyo Del Valle
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- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

Land Cover

- California Annual Grassland
- Mixed Evergreen Forest / Oak Woodland
- Mixed Riparian Forest and Woodland
- Mixed Willow Riparian Scrub
- Northern Coastal Scrub
- Pond
- Riverine
- Ruderal
- Sycamore Alluvial Woodland
- Urban - Suburban
- Vineyard

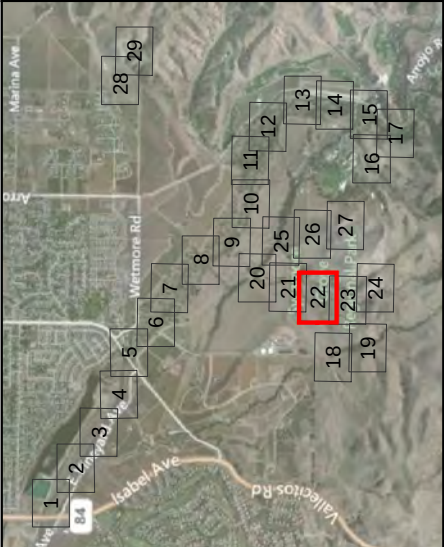
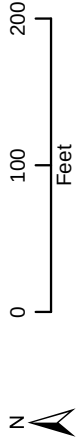


Figure 3-43
Arroyo Del Valle
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Mixed Evergreen Forest /
 - Oak Woodland
 - Mixed Riparian Forest and
 - Woodland
 - Mixed Willow Riparian Scrub
 - Northern Coastal Scrub
 - Pond
 - Riverine
 - Ruderal
 - Sycamore Alluvial Woodland
 - Urban - Suburban
 - Vineyard

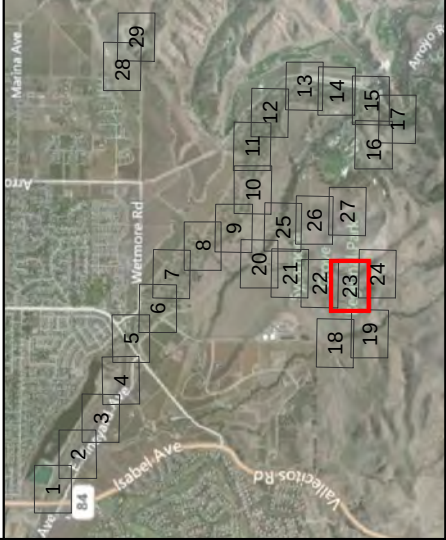


Figure 3-44
Arroyo Del Valle
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Mixed Evergreen Forest / Oak Woodland
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Northern Coastal Scrub
 - Pond
 - Riverine
 - Ruderal
 - Sycamore Alluvial Woodland
 - Urban - Suburban
 - Vineyard

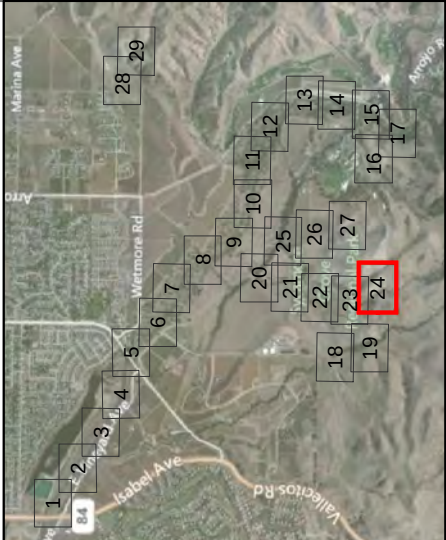
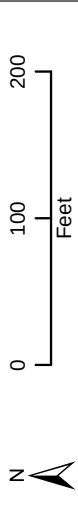


Figure 3-45
Arroyo Del Valle
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

- Land Cover
- California Annual Grassland
 - Mixed Evergreen Forest / Oak Woodland
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Northern Coastal Scrub
 - Pond
 - Riverine
 - Ruderal
 - Sycamore Alluvial Woodland
 - Urban - Suburban
 - Vineyard

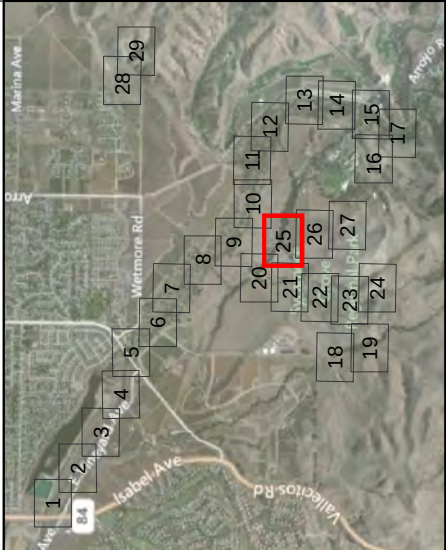
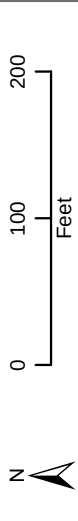
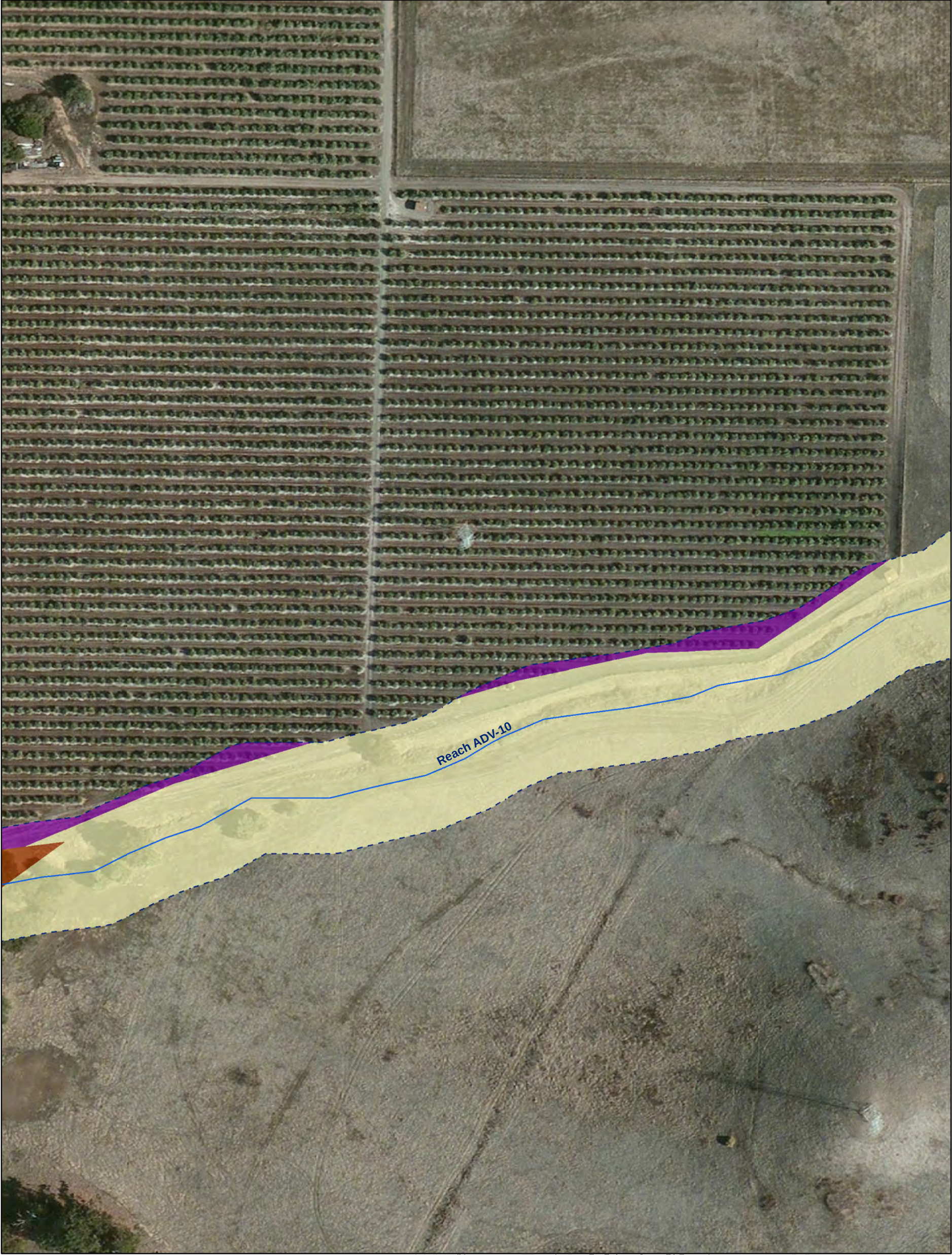


Figure 3-46
Arroyo Del Valle
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Mixed Evergreen Forest / Oak Woodland
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Northern Coastal Scrub
 - Pond
 - Riverine
 - Ruderal
 - Sycamore Alluvial Woodland
 - Urban - Suburban
 - Vineyard

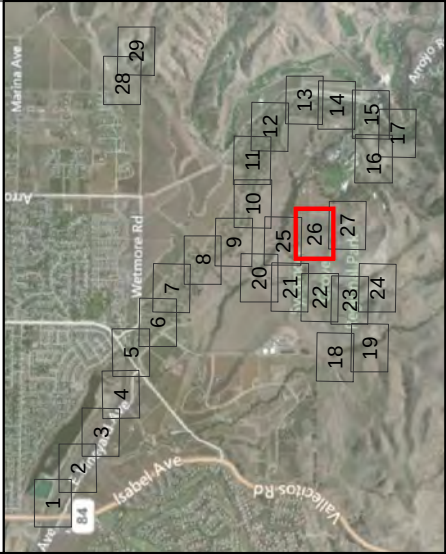
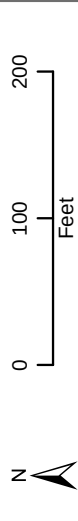


Figure 3-47
Arroyo Del Valle
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

Land Cover

- California Annual Grassland
- Mixed Evergreen Forest / Oak Woodland
- Mixed Riparian Forest and Woodland
- Mixed Willow Riparian Scrub
- Northern Coastal Scrub
- Pond
- Riverine
- Ruderal
- Sycamore Alluvial Woodland
- Urban - Suburban
- Vineyard

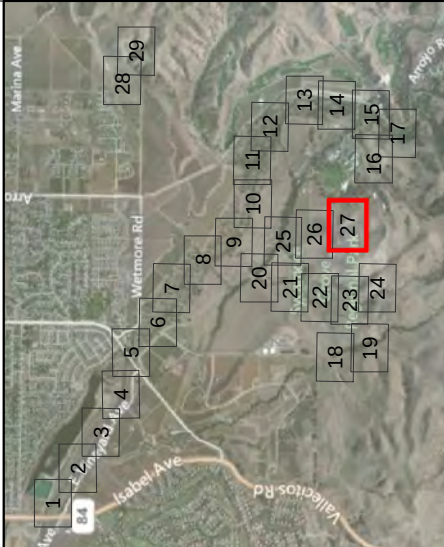
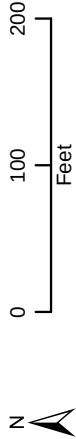


Figure 3-48
Arroyo Del Valle
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

- Land Cover
- California Annual Grassland
 - Mixed Evergreen Forest / Oak Woodland
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Northern Coastal Scrub
 - Pond
 - Riverine
 - Ruderal
 - Sycamore Alluvial Woodland
 - Urban - Suburban
 - Vineyard

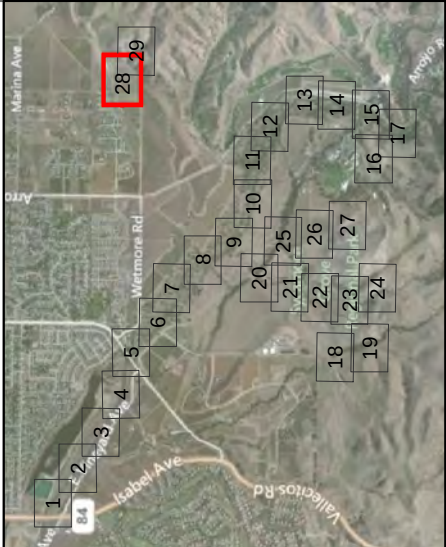
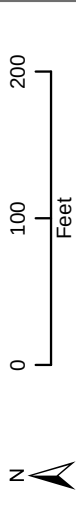


Figure 3-49
Arroyo Del Valle
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- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

Land Cover

- California Annual Grassland
- Mixed Evergreen Forest / Oak Woodland
- Mixed Riparian Forest and Woodland
- Mixed Willow Riparian Scrub
- Northern Coastal Scrub
- Pond
- Riverine
- Ruderal
- Sycamore Alluvial Woodland
- Urban - Suburban
- Vineyard

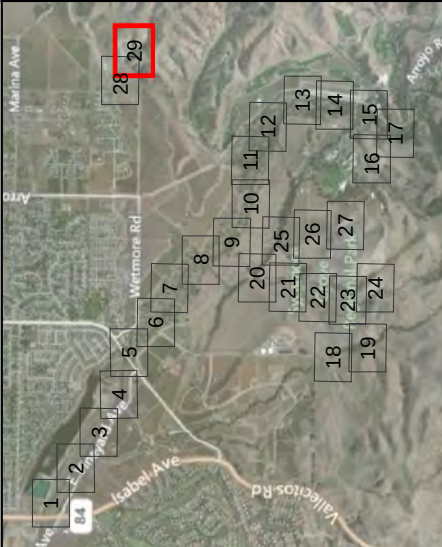
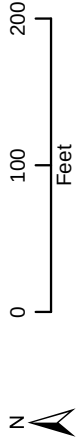


Figure 3-50
Arroyo Del Valle
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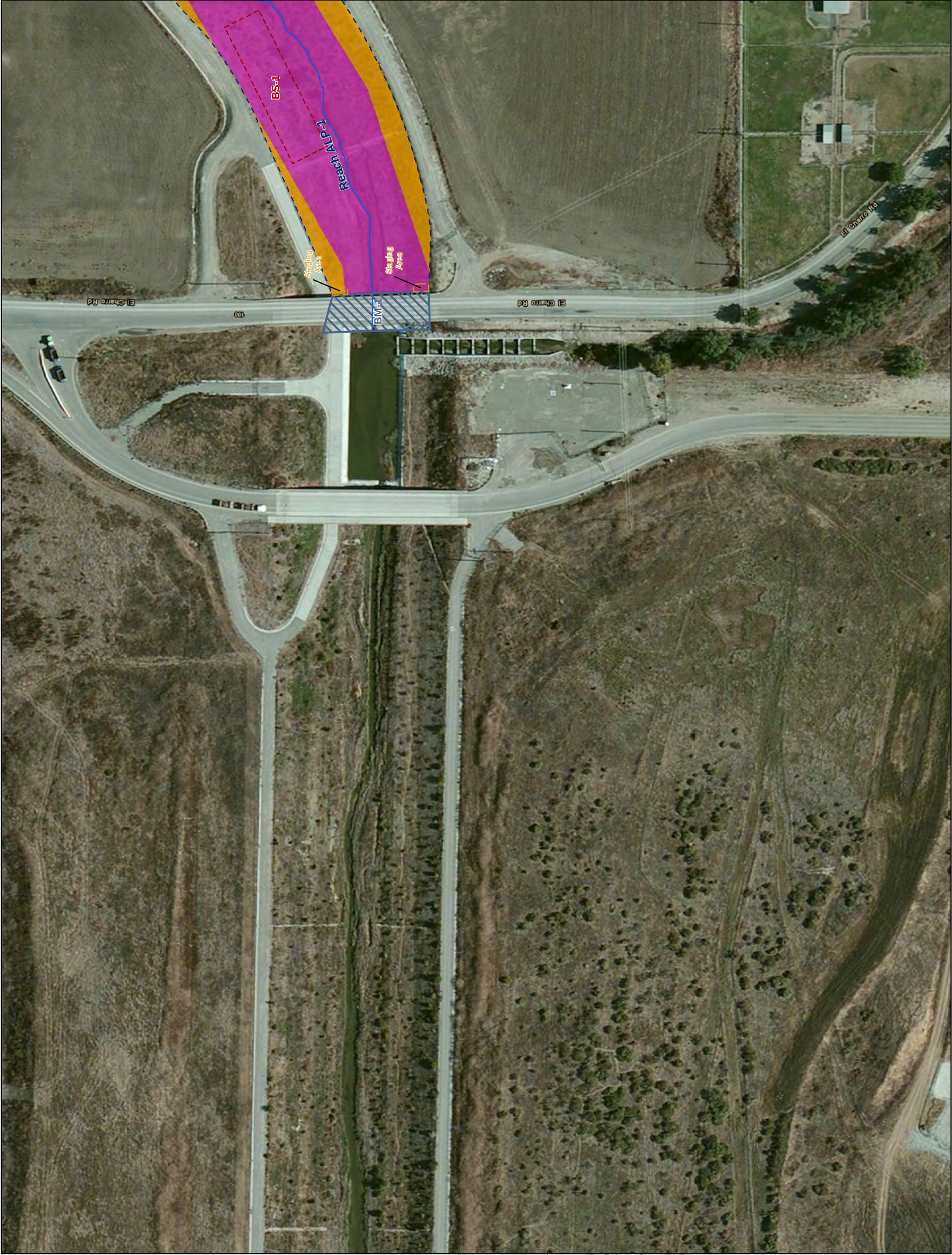


Figure 3-81
Arroyo Las Positas
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City of Livermore
Stream Maintenance Program



Figure 3-80
Arroyo Las Positas
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

- Land Cover**
- Alkali Meadow and Scalds
 - Alkali Wetland
 - California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Perennial Freshwater Marsh
 - Pond
 - Riverine
 - Ruderal
 - Rural - Residential
 - Seasonal Wetland
 - Urban - Suburban
 - Valley Sink Scrub

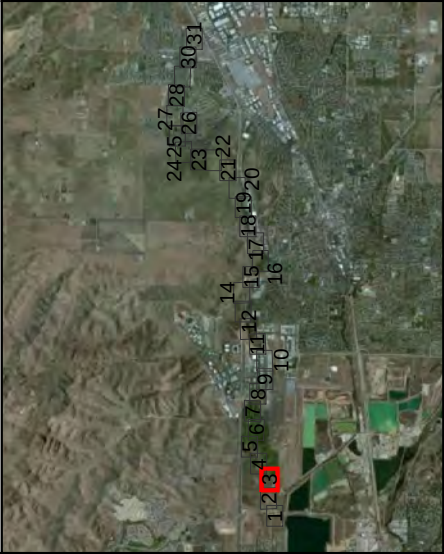
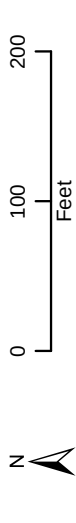


Figure 3-79
Arroyo Las Positas
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

- Land Cover
- Alkali Meadow and Scalds
 - Alkali Wetland
 - California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Perennial Freshwater Marsh
 - Pond
 - Riverine
 - Ruderal
 - Rural - Residential
 - Seasonal Wetland
 - Urban - Suburban
 - Valley Sink Scrub

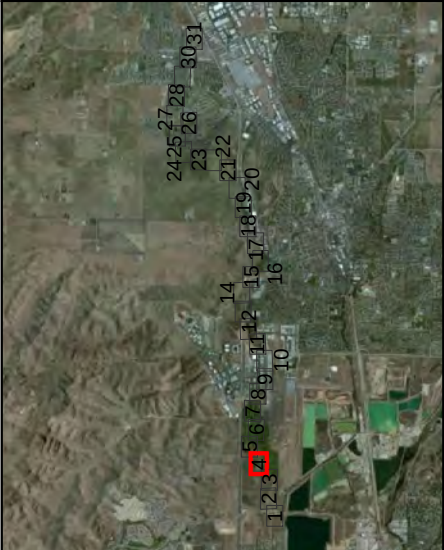
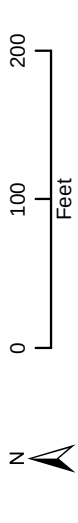


Figure 3-78
Arroyo Las Positas
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

- Land Cover
- Alkali Meadow and Scalds
 - Alkali Wetland
 - California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Perennial Freshwater Marsh
 - Pond
 - Riverine
 - Ruderal
 - Rural - Residential
 - Seasonal Wetland
 - Urban - Suburban
 - Valley Sink Scrub

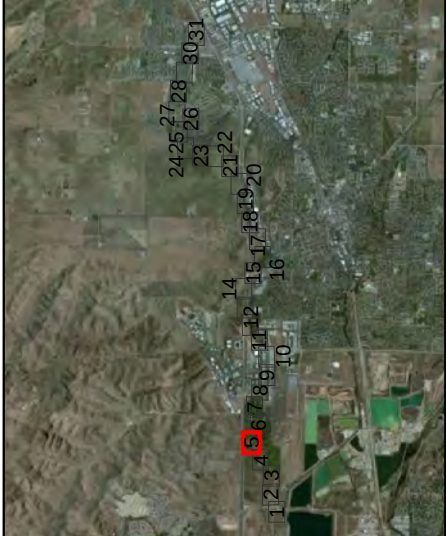
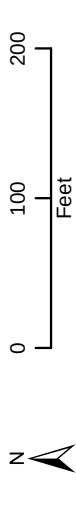


Figure 3-77
Arroyo Las Positas
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID

Reach Break

75-foot Stream Buffer

Storm Drain Outfall (SDO) Impact Area

Land Cover

Alkali Meadow and Scalds

Alkali Wetland

California Annual Grassland

Cropland

Golf Course / Urban Park

Mixed Riparian Forest and Woodland

Mixed Willow Riparian Scrub

Perennial Freshwater Marsh

Pond

Riverine

Ruderal

Rural - Residential

Seasonal Wetland

Urban - Suburban

Valley Sink Scrub

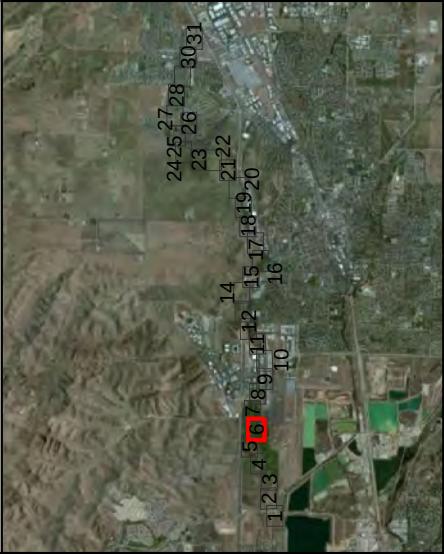


Figure 3-76
Arroyo Las Positas
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- Alkali Meadow and Scalds
 - Alkali Wetland
 - California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Perennial Freshwater Marsh
 - Pond
 - Riverine
 - Ruderal
 - Rural - Residential
 - Seasonal Wetland
 - Urban - Suburban
 - Valley Sink Scrub

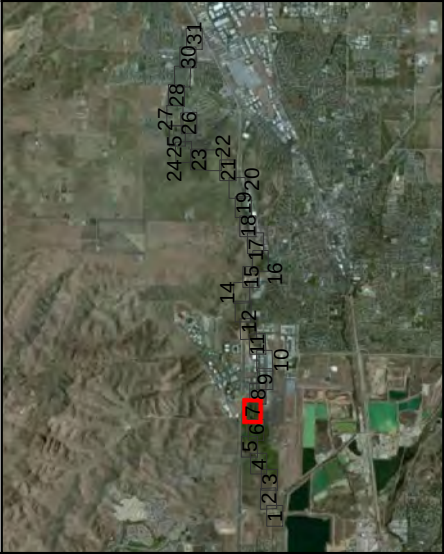
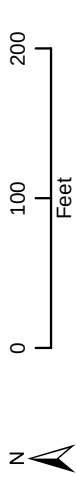


Figure 3-75
Arroyo Las Positas
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover
- Alkali Meadow and Scalds
 - Alkali Wetland
 - California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Perennial Freshwater Marsh
 - Pond
 - Riverine
 - Ruderal
 - Rural - Residential
 - Seasonal Wetland
 - Urban - Suburban
 - Valley Sink Scrub

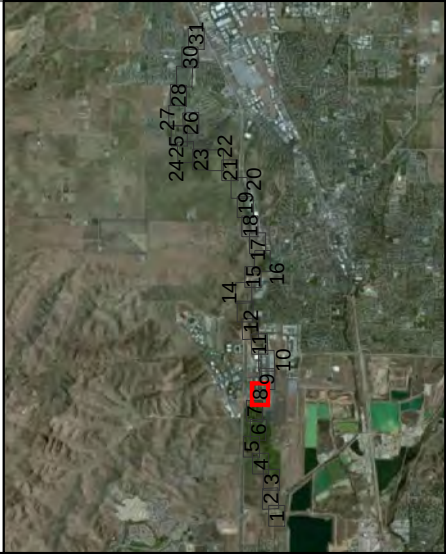
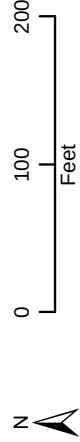


Figure 3-74
Arroyo Las Positas
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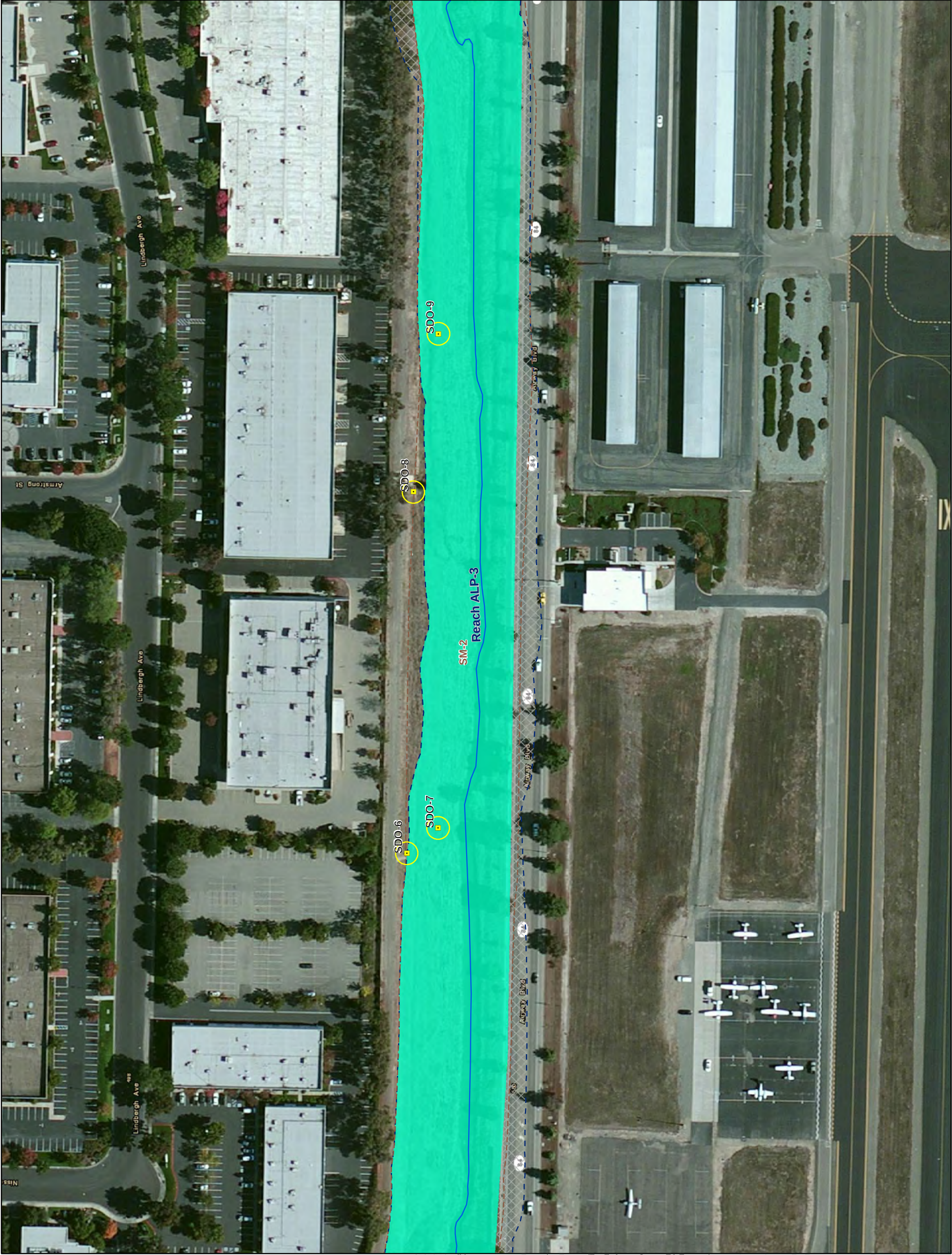
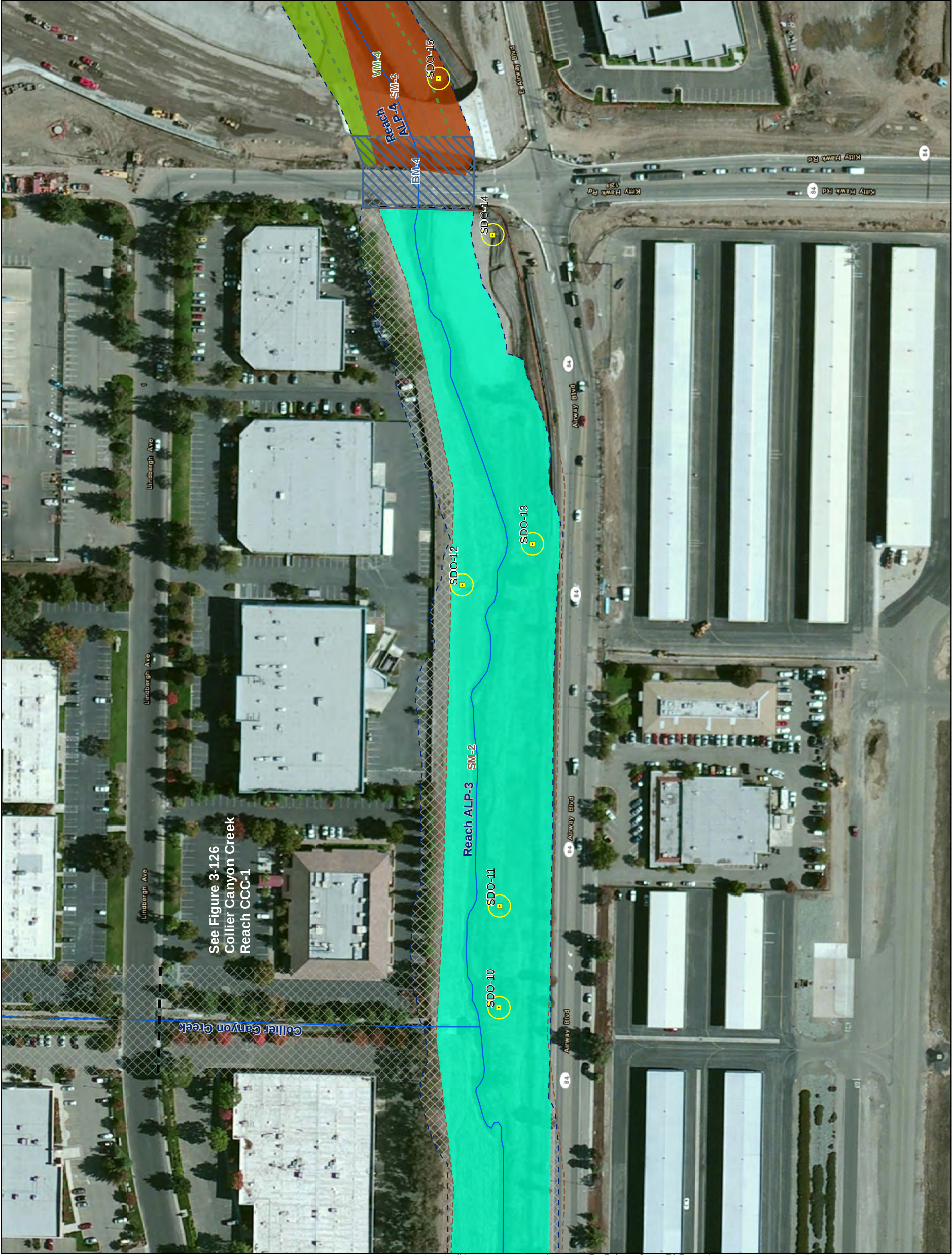


Figure 3-73
Arroyo Las Positas
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- Alkali Meadow and Scalds
 - Alkali Wetland
 - California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Perennial Freshwater Marsh
 - Pond
 - Riverine
 - Ruderal
 - Rural - Residential
 - Seasonal Wetland
 - Urban - Suburban
 - Valley Sink Scrub

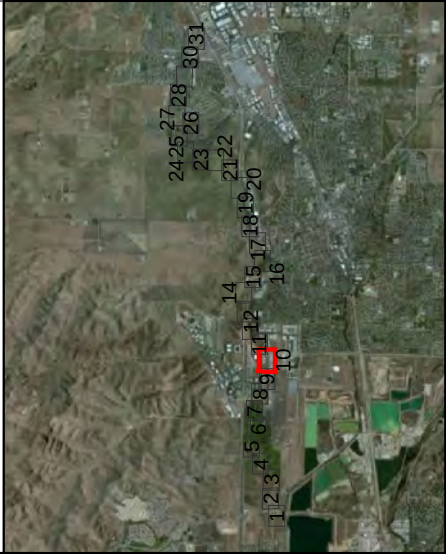
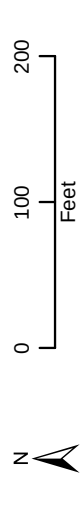
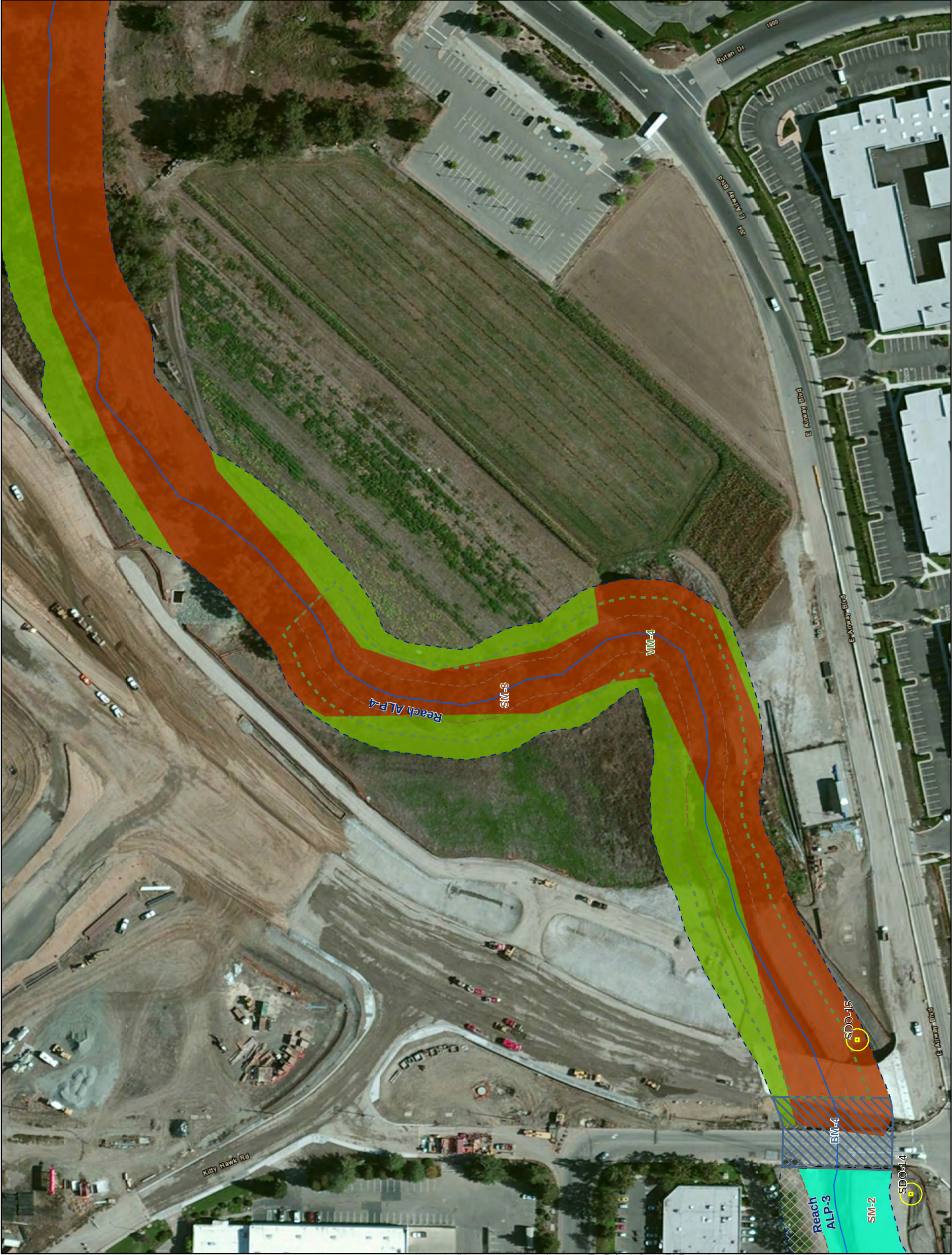


Figure 3-72
Arroyo Las Positas
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- Alkali Meadow and Scalds
 - Alkali Wetland
 - California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Perennial Freshwater Marsh
 - Pond
 - Riverine
 - Ruderal
 - Rural - Residential
 - Seasonal Wetland
 - Urban - Suburban
 - Valley Sink Scrub

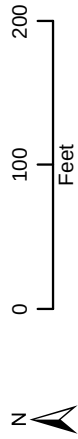


Figure 3-71
Arroyo Las Positas
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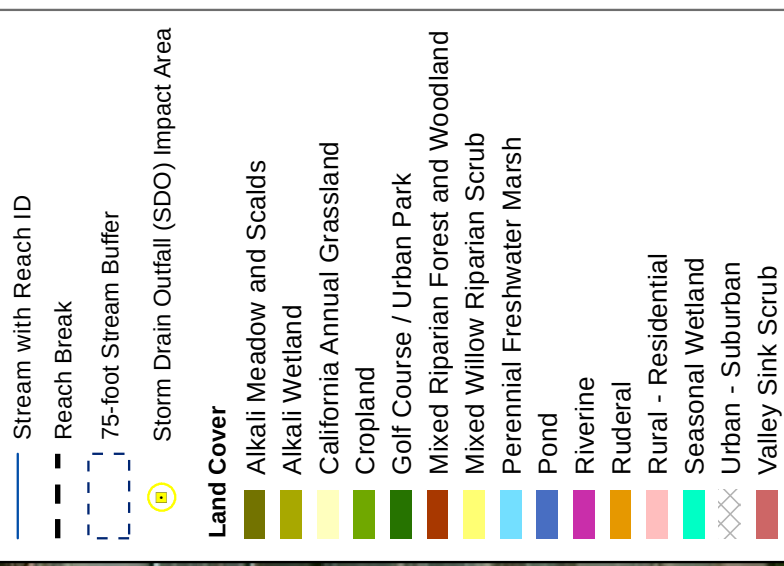


Figure 3-70
Arroyo Las Positas
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID

Reach Break

75-foot Stream Buffer

Storm Drain Outfall (SDO) Impact Area

Land Cover

Alkali Meadow and Scalds

Alkali Wetland

California Annual Grassland

Cropland

Golf Course / Urban Park

Mixed Riparian Forest and Woodland

Mixed Willow Riparian Scrub

Perennial Freshwater Marsh

Pond

Riverine

Ruderal

Rural - Residential

Seasonal Wetland

Urban - Suburban

Valley Sink Scrub

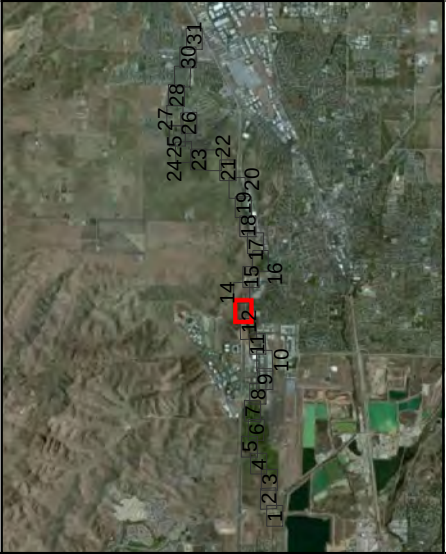
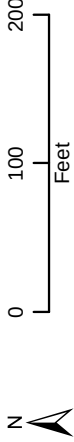


Figure 3-69
Arroyo Las Positas
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City of Livermore
Stream Maintenance Program

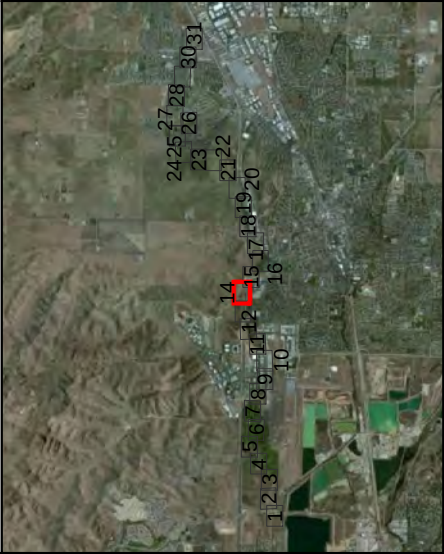


Figure 3-68
Arroyo Las Positas
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID

Reach Break

75-foot Stream Buffer

Storm Drain Outfall (SDO) Impact Area

Stream with Reach ID

Reach Break

75-foot Stream Buffer

Storm Drain Outfall (SDO) Impact Area
- Land Cover

Alkali Meadow and Scalds

Alkali Wetland

California Annual Grassland

Cropland

Golf Course / Urban Park

Mixed Riparian Forest and Woodland

Mixed Willow Riparian Scrub

Perennial Freshwater Marsh

Pond

Riverine

Ruderal

Rural - Residential

Seasonal Wetland

Urban - Suburban

Valley Sink Scrub

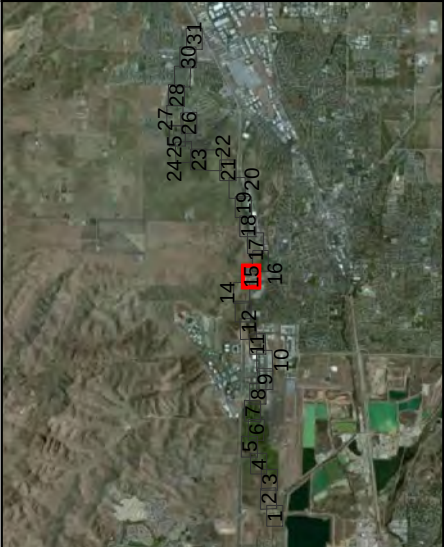
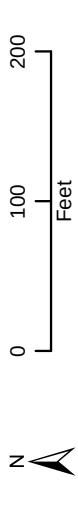


Figure 3-67
Arroyo Las Positas
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

- Land Cover
- Alkali Meadow and Scalds
 - Alkali Wetland
 - California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Perennial Freshwater Marsh
 - Pond
 - Riverine
 - Ruderal
 - Rural - Residential
 - Seasonal Wetland
 - Urban - Suburban
 - Valley Sink Scrub

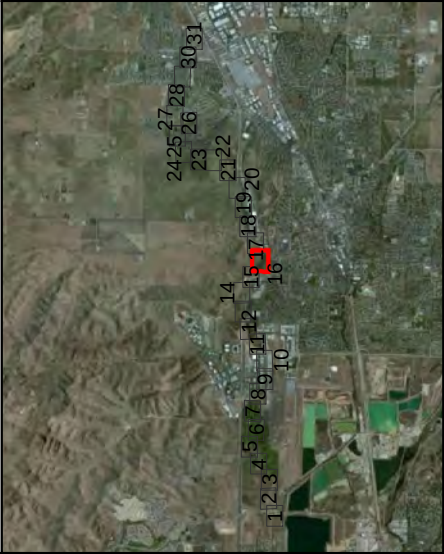
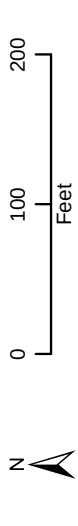


Figure 3-66
Arroyo Las Positas
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- Alkali Meadow and Scalds
 - Alkali Wetland
 - California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Perennial Freshwater Marsh
 - Pond
 - Riverine
 - Ruderal
 - Rural - Residential
 - Seasonal Wetland
 - Urban - Suburban
 - Valley Sink Scrub

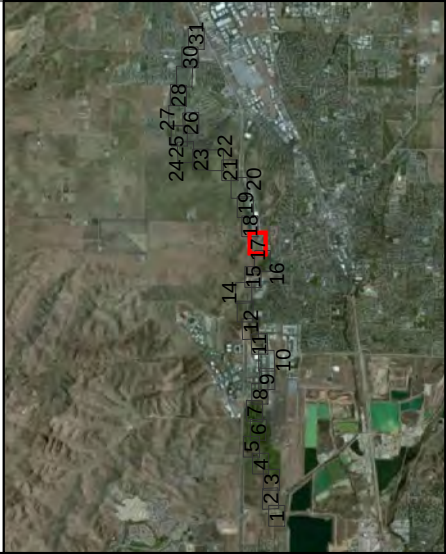
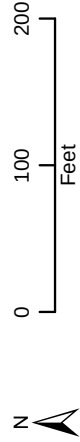
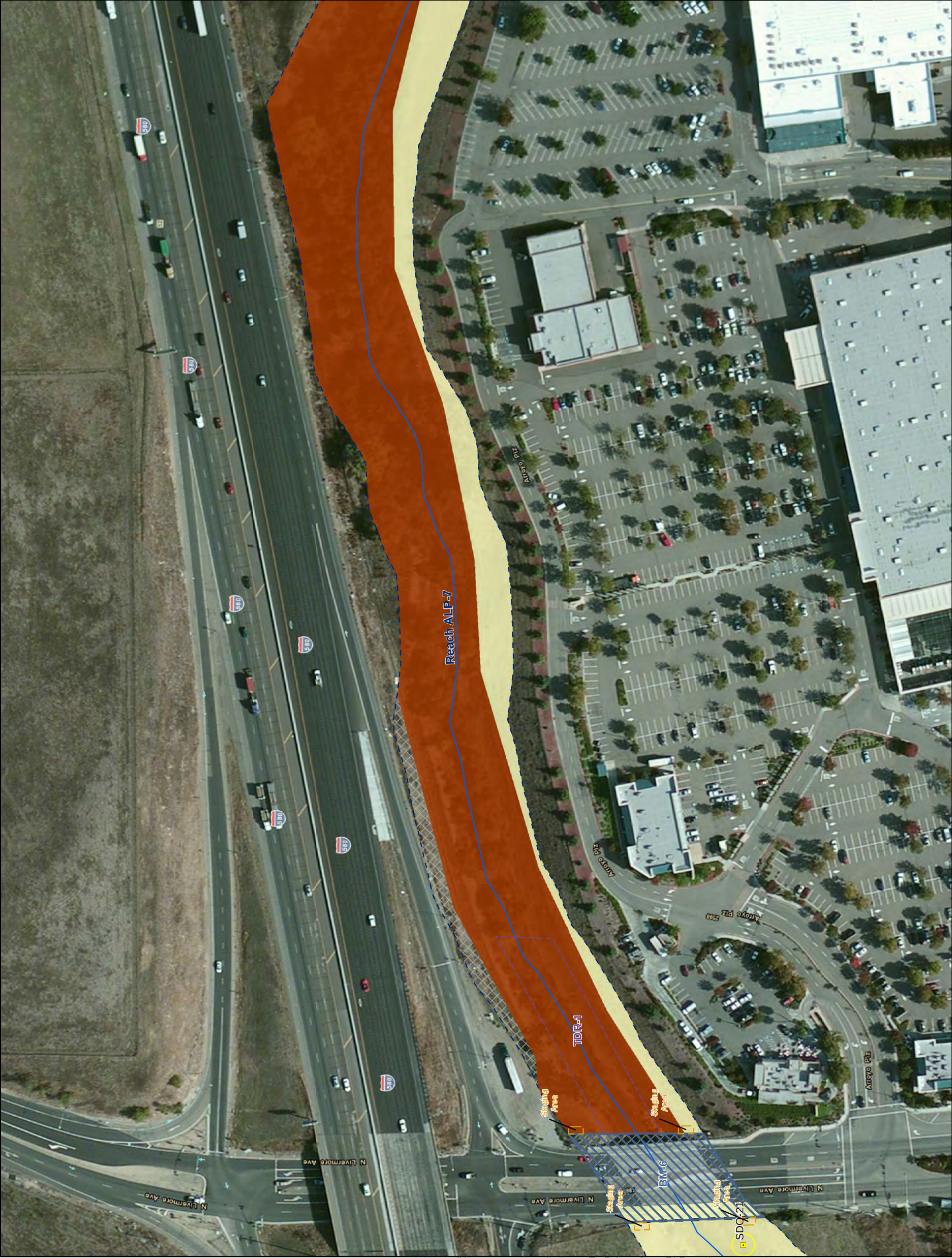


Figure 3-65
Arroyo Las Positas
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID

Reach Break

75-foot Stream Buffer

Storm Drain Outfall (SDO) Impact Area

Land Cover

Alkali Meadow and Scalds

Alkali Wetland

California Annual Grassland

Cropland

Golf Course / Urban Park

Mixed Riparian Forest and Woodland

Mixed Willow Riparian Scrub

Perennial Freshwater Marsh

Pond

Riverine

Ruderal

Rural - Residential

Seasonal Wetland

Urban - Suburban

Valley Sink Scrub

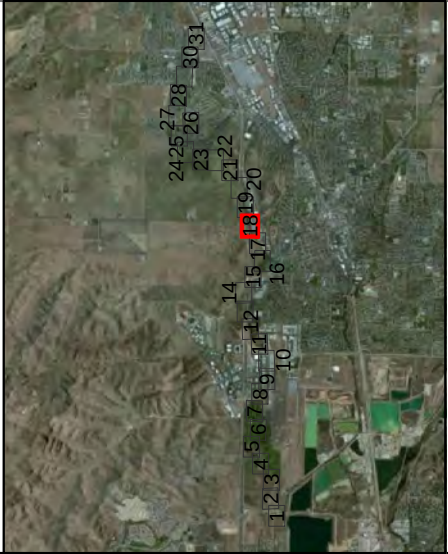
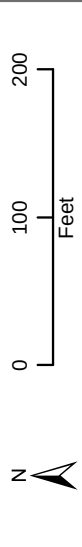


Figure 3-64
Arroyo Las Positas
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID

Reach Break

75-foot Stream Buffer

Storm Drain Outfall (SDO) Impact Area

Stream with Reach ID

Reach Break

75-foot Stream Buffer

Storm Drain Outfall (SDO) Impact Area
- Land Cover

Alkali Meadow and Scalds

Alkali Wetland

California Annual Grassland

Cropland

Golf Course / Urban Park

Mixed Riparian Forest and Woodland

Mixed Willow Riparian Scrub

Perennial Freshwater Marsh

Pond

Riverine

Ruderal

Rural - Residential

Seasonal Wetland

Urban - Suburban

Valley Sink Scrub

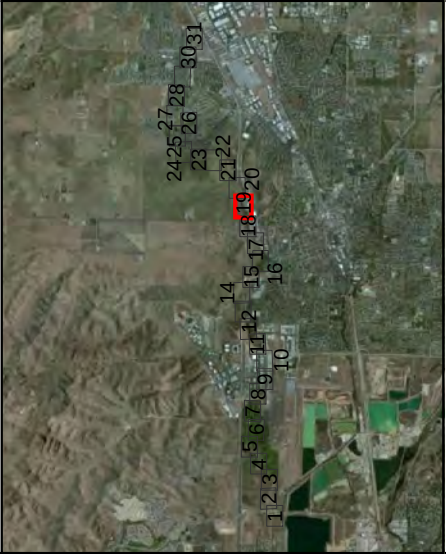
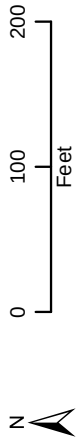


Figure 3-63
Arroyo Las Positas
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- Alkali Meadow and Scalds
 - Alkali Wetland
 - California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Perennial Freshwater Marsh
 - Pond
 - Riverine
 - Ruderal
 - Rural - Residential
 - Seasonal Wetland
 - Urban - Suburban
 - Valley Sink Scrub

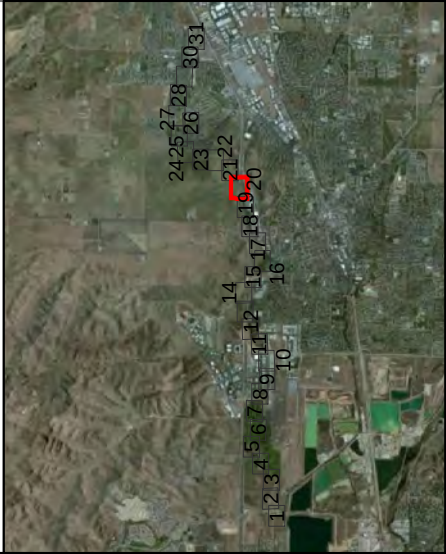


Figure 3-62
Arroyo Las Positas
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- Alkali Meadow and Scalds
 - Alkali Wetland
 - California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Perennial Freshwater Marsh
 - Pond
 - Riverine
 - Ruderal
 - Rural - Residential
 - Seasonal Wetland
 - Urban - Suburban
 - Valley Sink Scrub

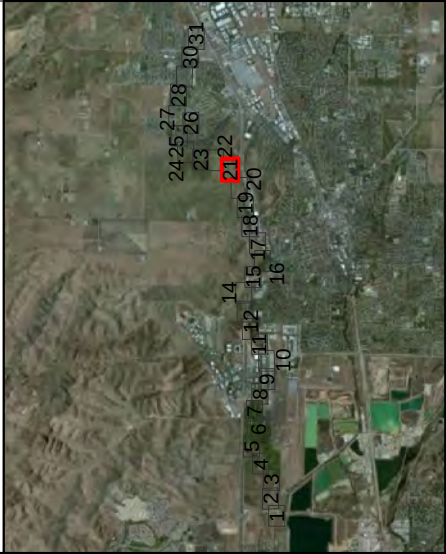


Figure 3-61
Arroyo Las Positas
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- Alkali Meadow and Scalds
 - Alkali Wetland
 - California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Perennial Freshwater Marsh
 - Pond
 - Riverine
 - Ruderal
 - Rural - Residential
 - Seasonal Wetland
 - Urban - Suburban
 - Valley Sink Scrub

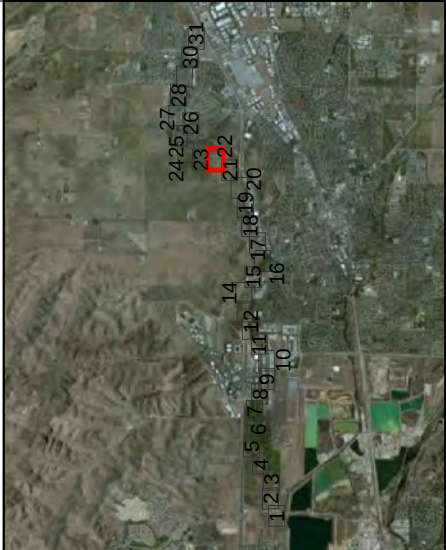


Figure 3-60
Arroyo Las Positas
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- Alkali Meadow and Scalds
 - Alkali Wetland
 - California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Perennial Freshwater Marsh
 - Pond
 - Riverine
 - Ruderal
 - Rural - Residential
 - Seasonal Wetland
 - Urban - Suburban
 - Valley Sink Scrub

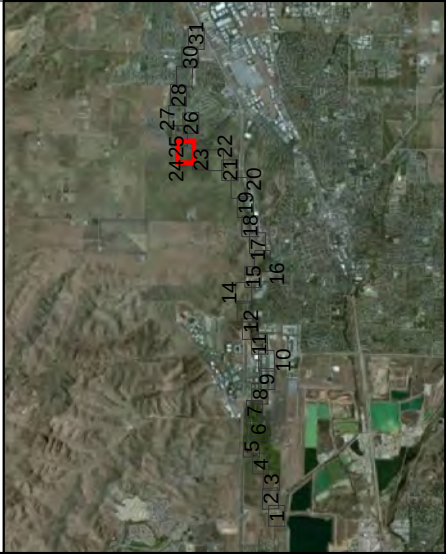
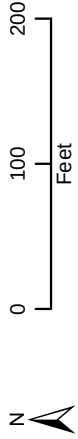


Figure 3-58
Arroyo Las Positas
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID

Reach Break

75-foot Stream Buffer

Storm Drain Outfall (SDO) Impact Area

Land Cover

Alkali Meadow and Scalds

Alkali Wetland

California Annual Grassland

Cropland

Golf Course / Urban Park

Mixed Riparian Forest and Woodland

Mixed Willow Riparian Scrub

Perennial Freshwater Marsh

Pond

Riverine

Ruderal

Rural - Residential

Seasonal Wetland

Urban - Suburban

Valley Sink Scrub

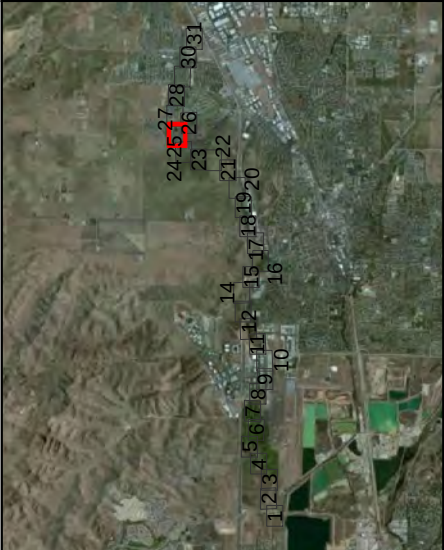
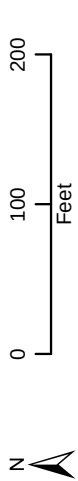
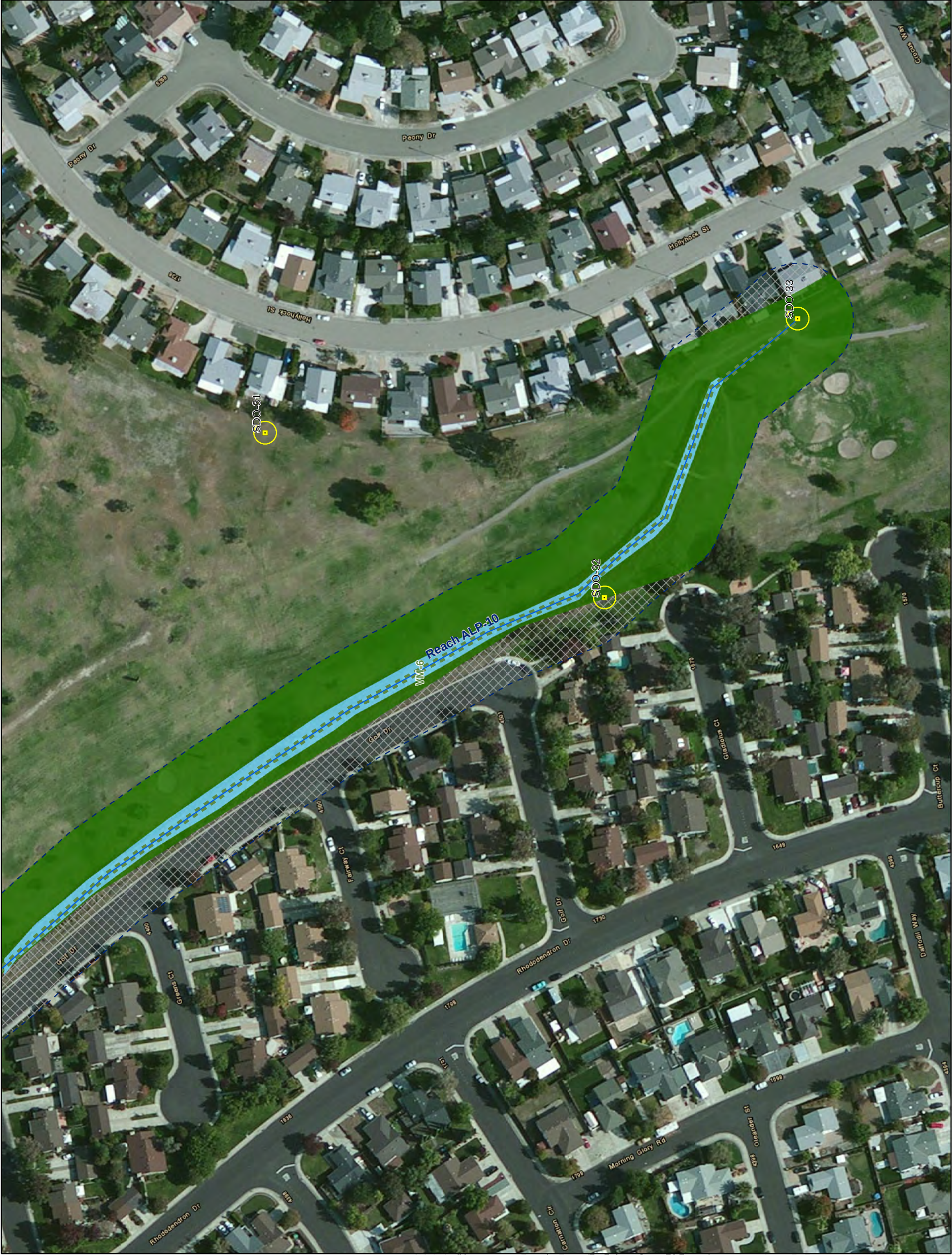


Figure 3-57
Arroyo Las Positas
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- Alkali Meadow and Scalds
 - Alkali Wetland
 - California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Perennial Freshwater Marsh
 - Pond
 - Riverine
 - Ruderal
 - Rural - Residential
 - Seasonal Wetland
 - Urban - Suburban
 - Valley Sink Scrub

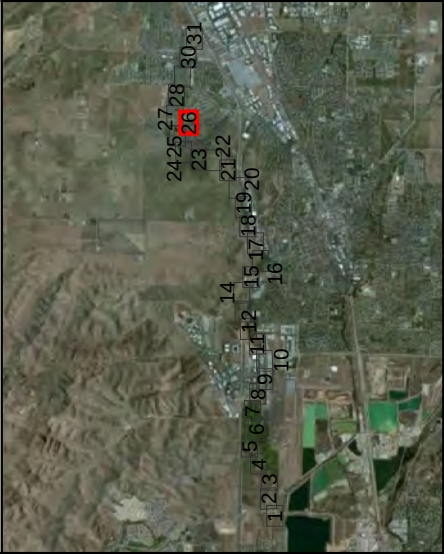
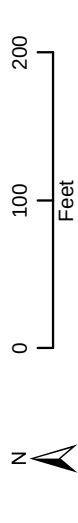


Figure 3-56
Arroyo Las Positas
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID

Reach Break

75-foot Stream Buffer

Storm Drain Outfall (SDO) Impact Area

Land Cover

Alkali Meadow and Scalds

Alkali Wetland

California Annual Grassland

Cropland

Golf Course / Urban Park

Mixed Riparian Forest and Woodland

Mixed Willow Riparian Scrub

Perennial Freshwater Marsh

Pond

Riverine

Ruderal

Rural - Residential

Seasonal Wetland

Urban - Suburban

Valley Sink Scrub

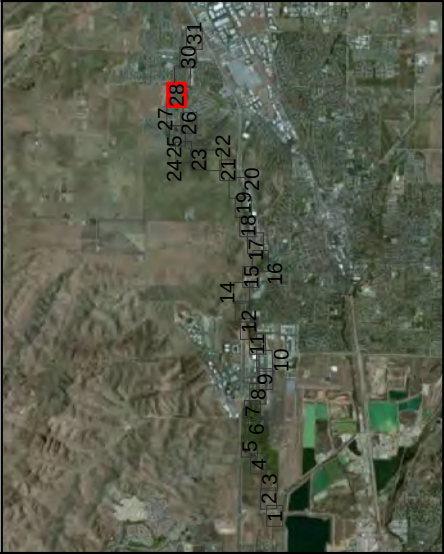
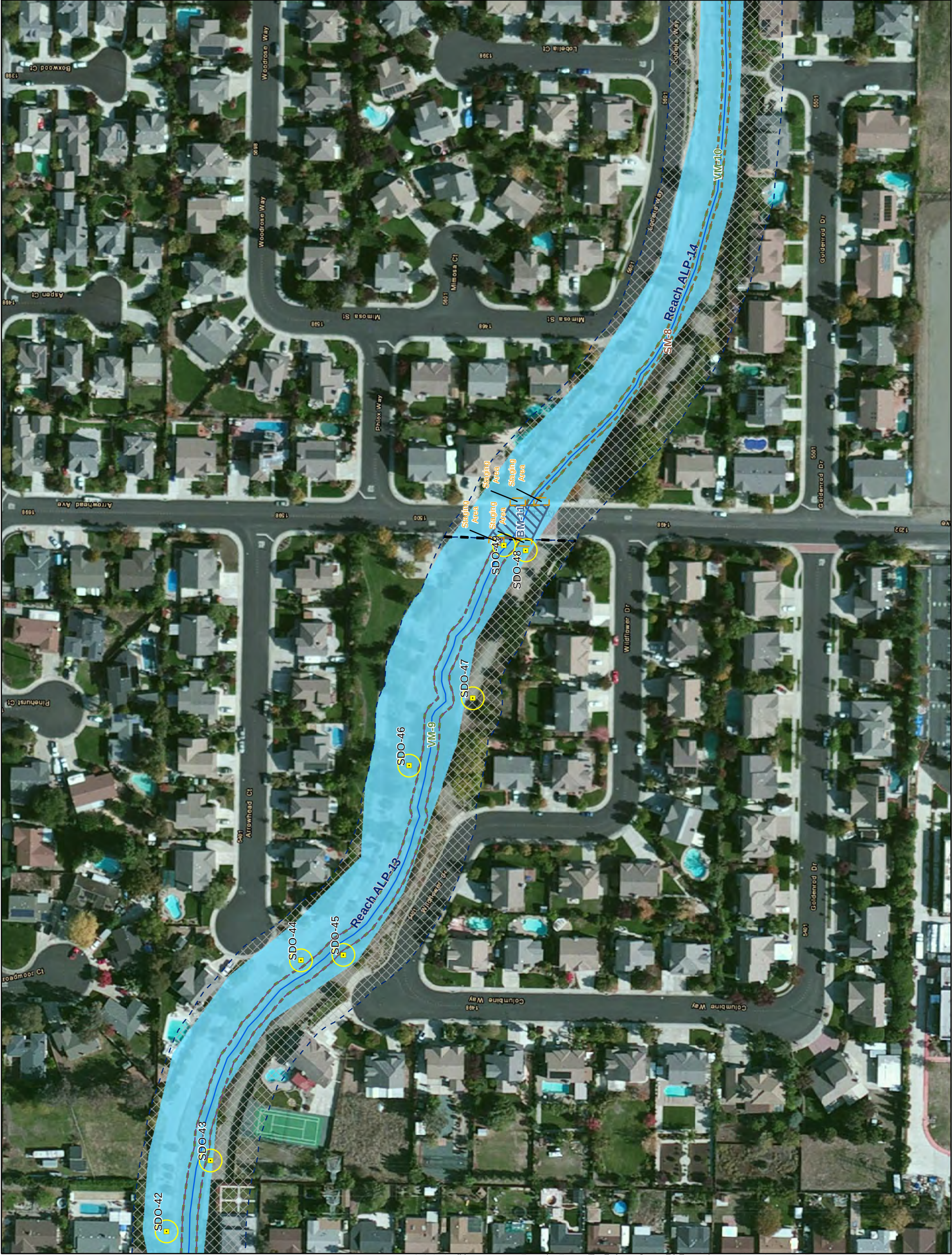


Figure 3-54
Arroyo Las Positas
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

- Land Cover**
- Alkali Meadow and Scalds
 - Alkali Wetland
 - California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Perennial Freshwater Marsh
 - Pond
 - Riverine
 - Ruderal
 - Rural - Residential
 - Seasonal Wetland
 - Urban - Suburban
 - Valley Sink Scrub

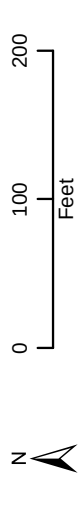
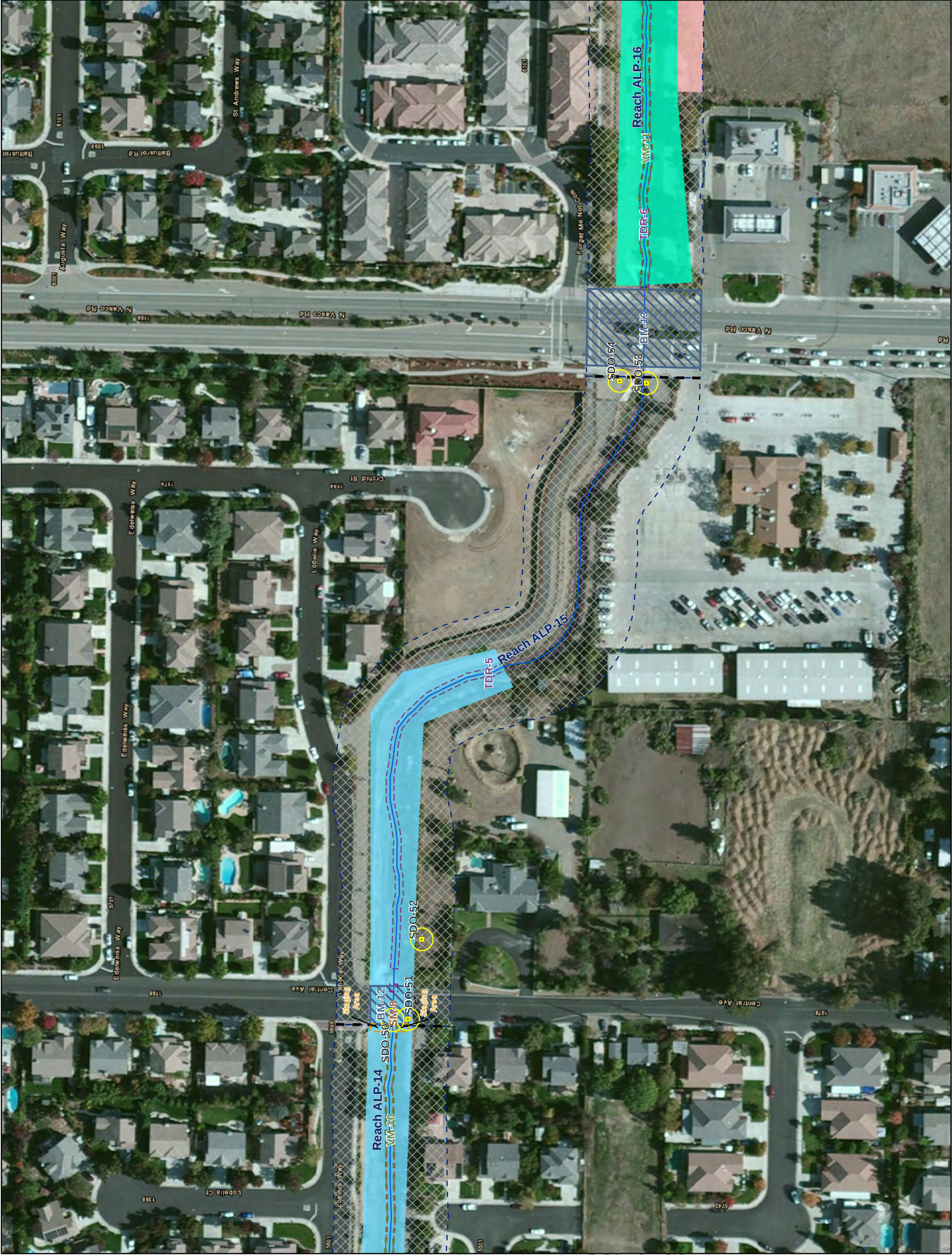


Figure 3-53
Arroyo Las Positas
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- Alkali Meadow and Scalds
 - Alkali Wetland
 - California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Perennial Freshwater Marsh
 - Pond
 - Riverine
 - Ruderal
 - Rural - Residential
 - Seasonal Wetland
 - Urban - Suburban
 - Valley Sink Scrub

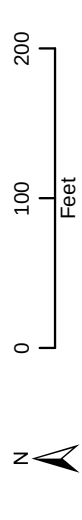
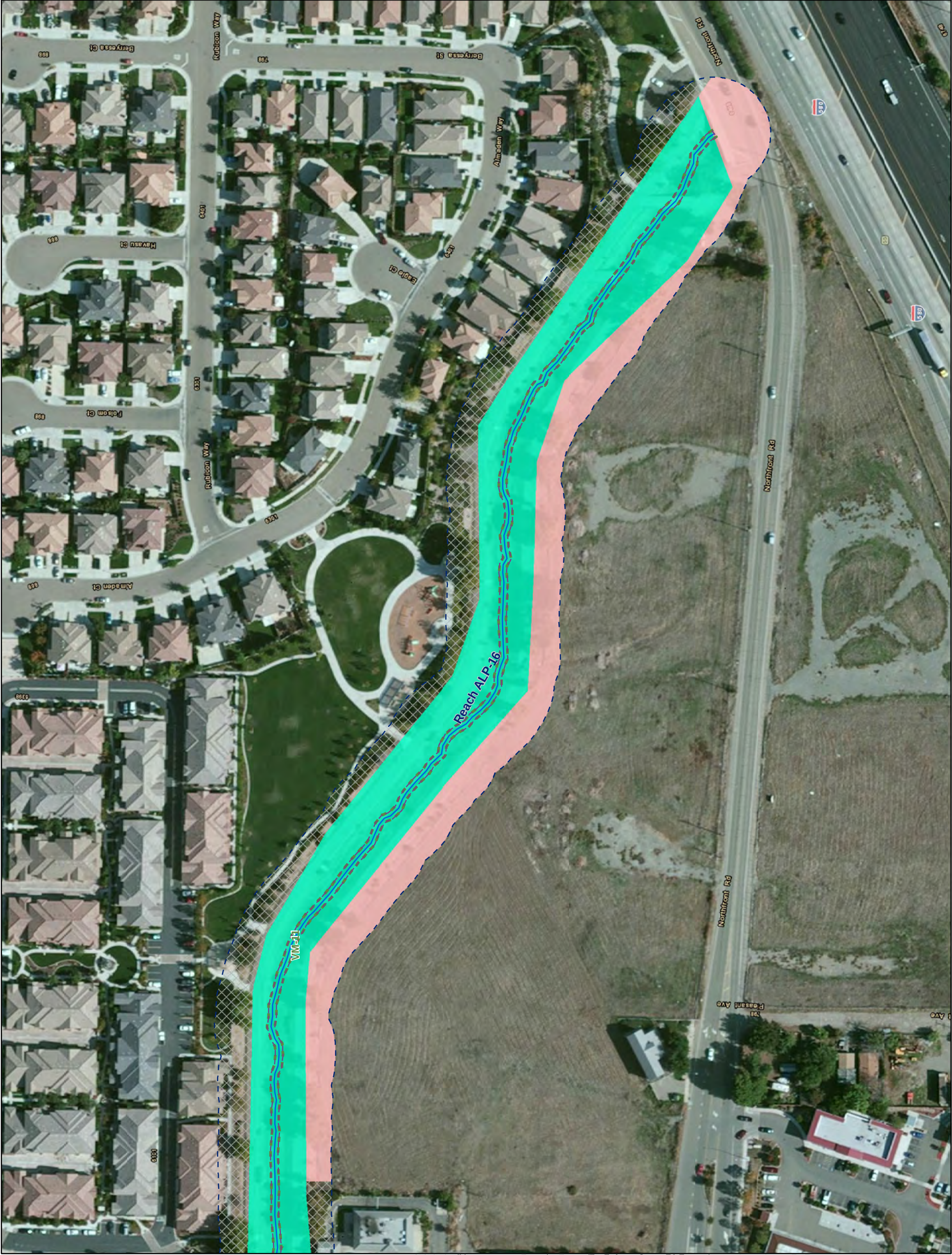


Figure 3-52
Arroyo Las Positas
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

- Land Cover
- Alkali Meadow and Scalds
 - Alkali Wetland
 - California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Perennial Freshwater Marsh
 - Pond
 - Riverine
 - Ruderal
 - Rural - Residential
 - Seasonal Wetland
 - Urban - Suburban
 - Valley Sink Scrub



Figure 3-51
Arroyo Las Positas
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Cropland
 - Urban - Suburban

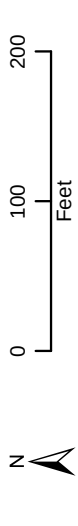


Figure 3-86
Arroyo Las Positas Tributary
Page 1 of 5



City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Cropland
 - Urban - Suburban



Figure 3-85
Arroyo Las Positas Tributary
Page 2 of 5



City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Cropland
 - Urban - Suburban

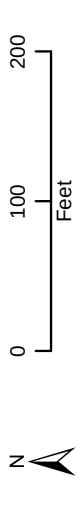


Figure 3-84
Arroyo Las Positas Tributary
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Cropland
 - Urban - Suburban

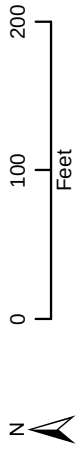


Figure 3-83
Arroyo Las Positas Tributary
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover
- California Annual Grassland
 - Cropland
 - Urban - Suburban

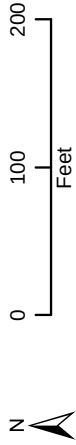
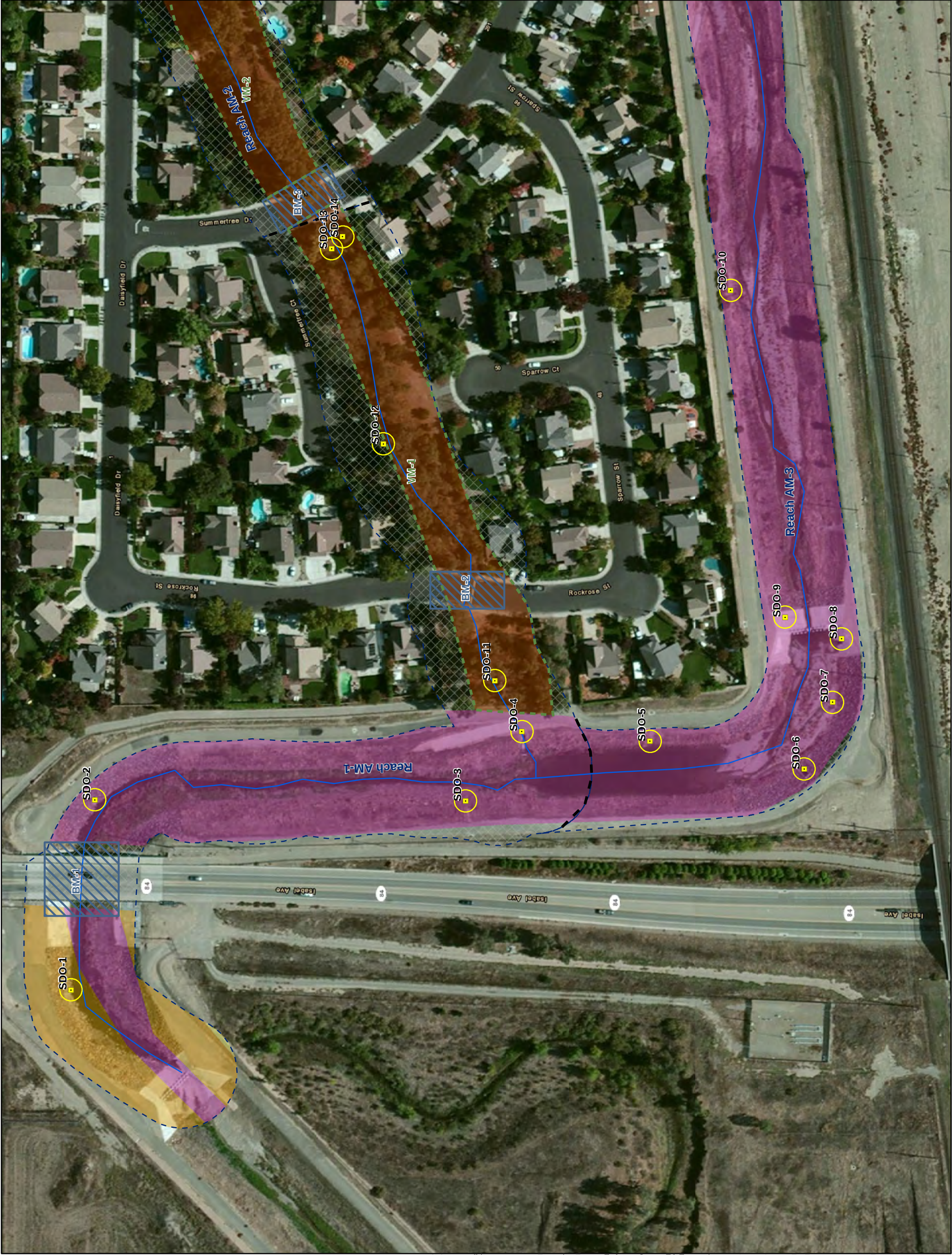


Figure 3-82
Arroyo Las Positas Tributary
Page 5 of 5



City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

- Land Cover
- California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Riverine
 - Ruderal
 - Urban - Suburban
 - Vineyard

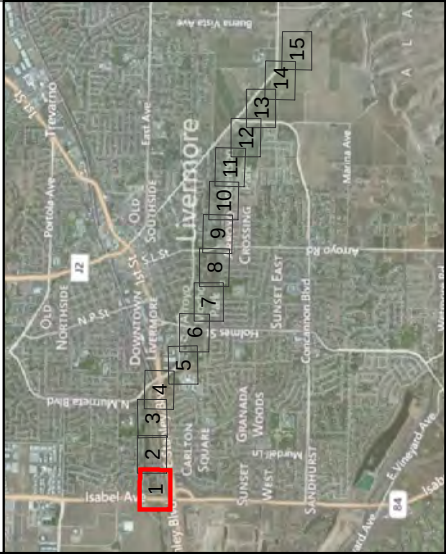
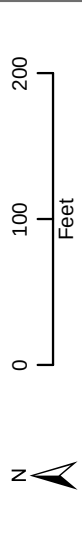
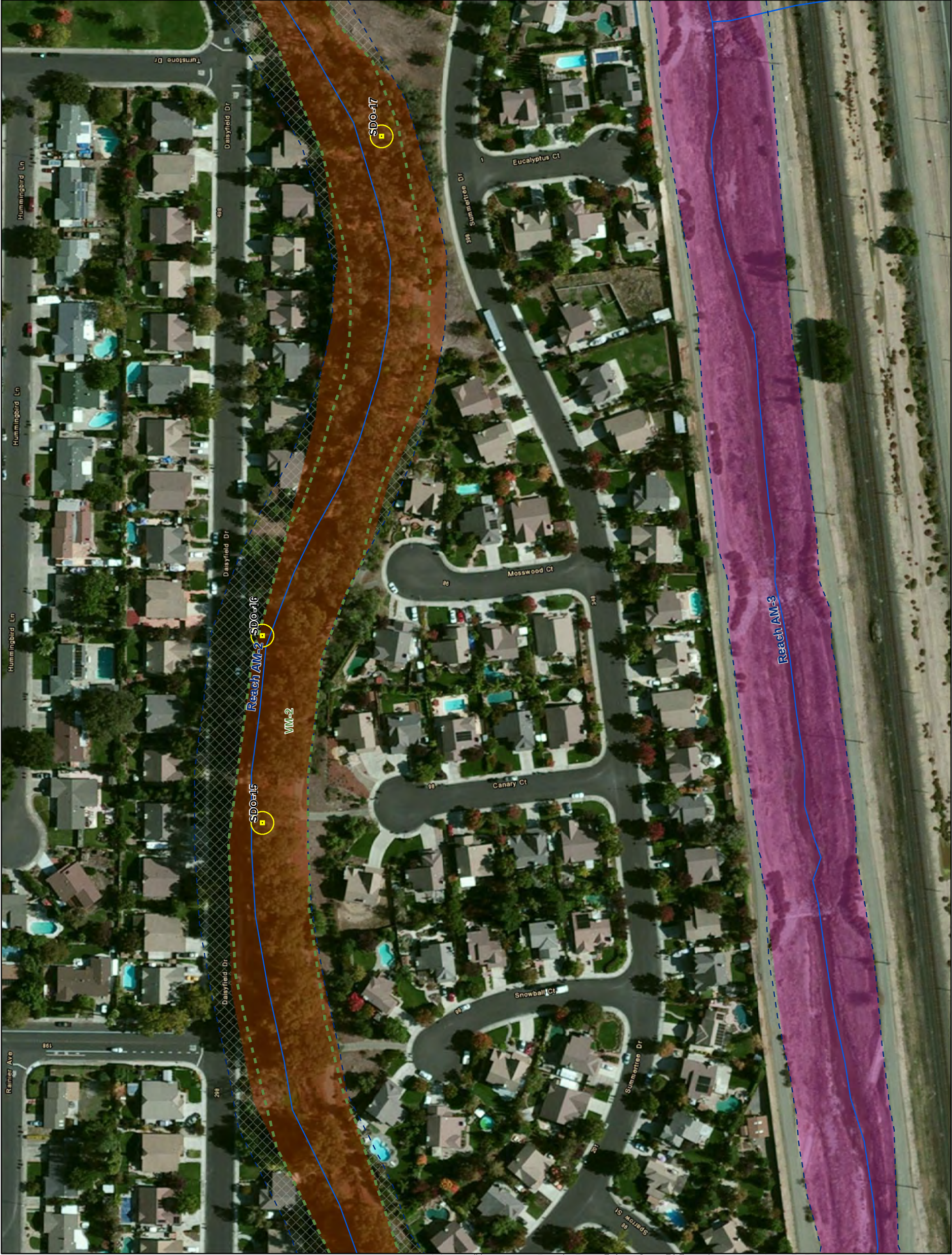


Figure 3-101
Arroyo Mocho
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

- Land Cover
- California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Riverine
 - Ruderal
 - Urban - Suburban
 - Vineyard

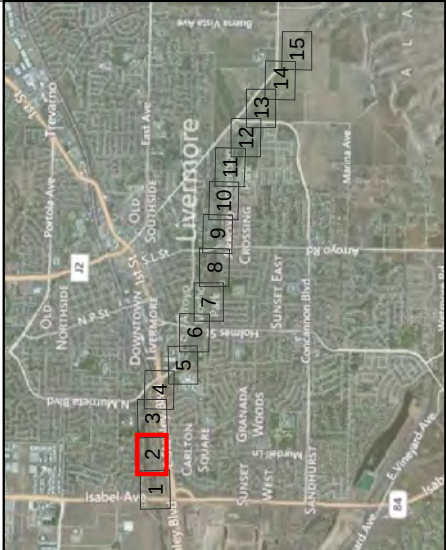
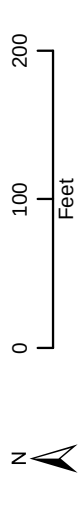


Figure 3-100
Arroyo Mocho
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

- Land Cover
- California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Riverine
 - Ruderal
 - Urban - Suburban
 - Vineyard

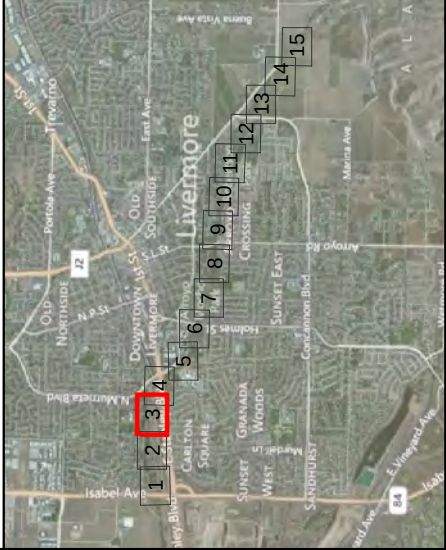
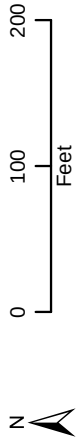


Figure 3-99



City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Riverine
 - Ruderal
 - Urban - Suburban
 - Vineyard

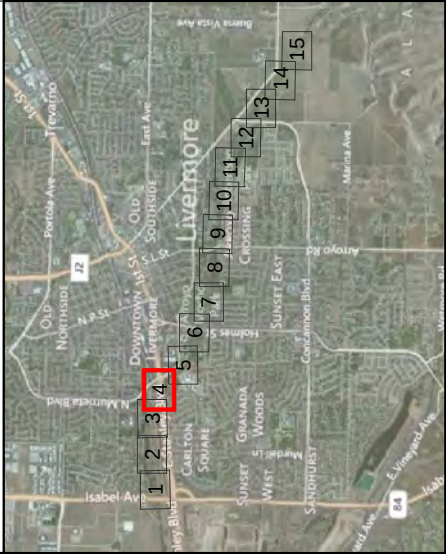
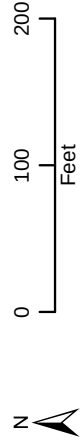
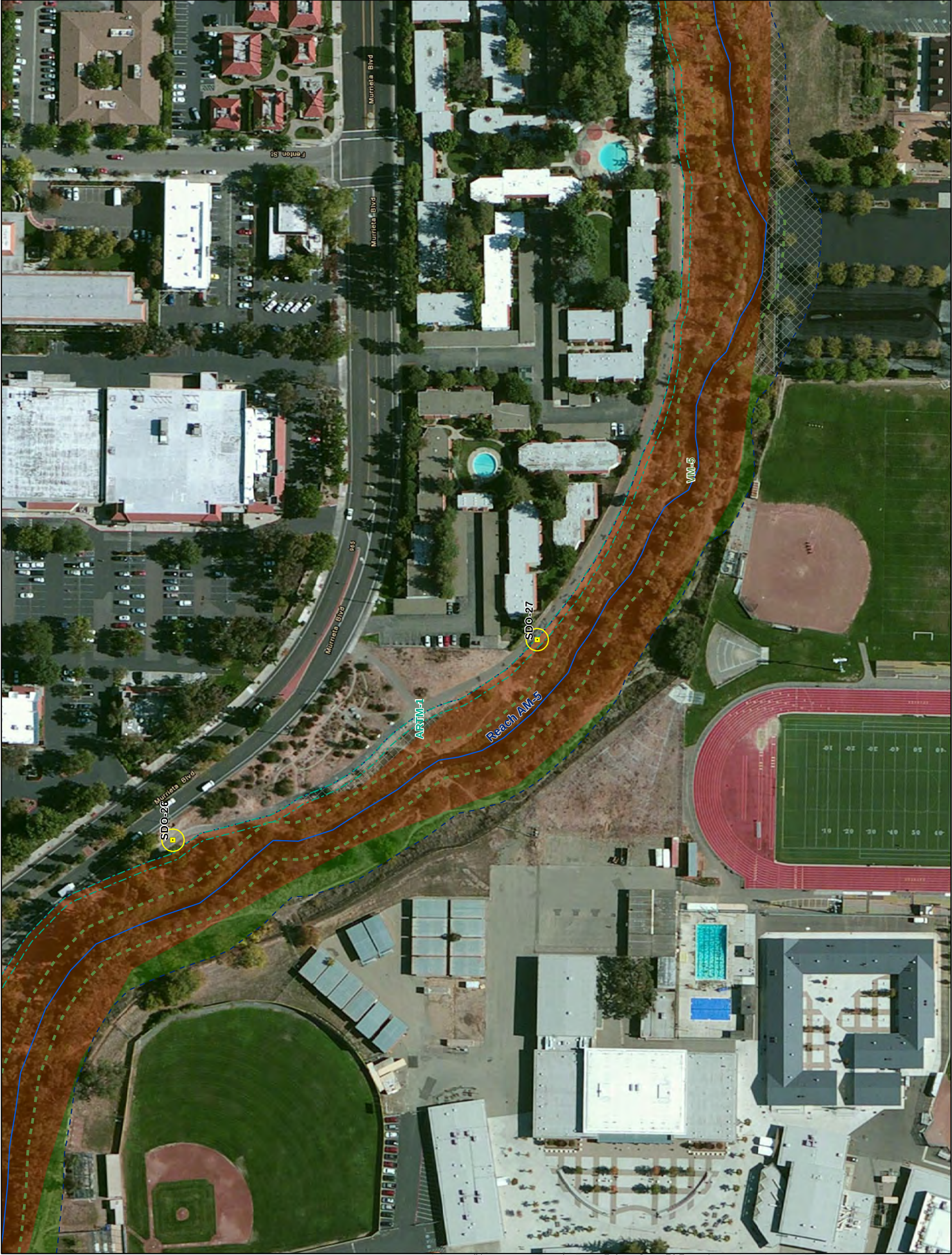


Figure 3-98
Arroyo Mocho
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

- Land Cover
- California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Riverine
 - Ruderal
 - Urban - Suburban
 - Vineyard

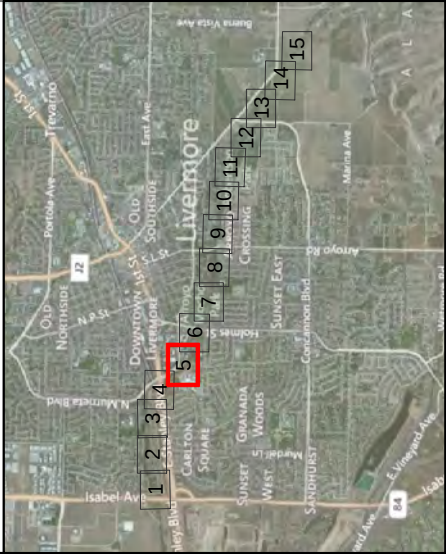
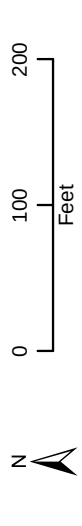
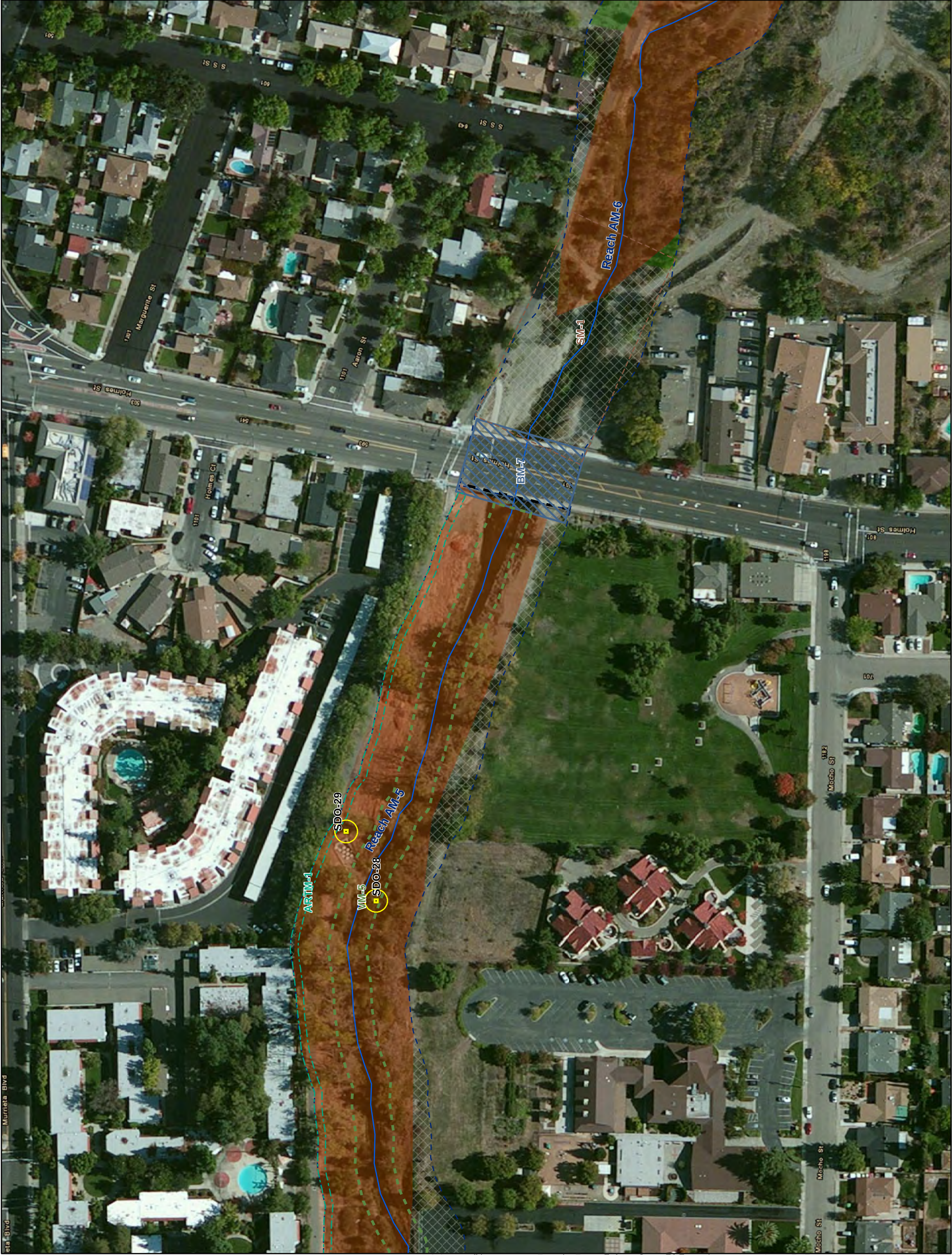


Figure 3-97
Arroyo Mocho
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City of Livermore
Stream Maintenance Program

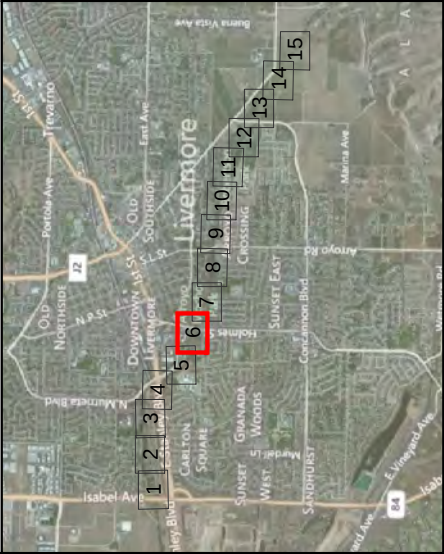
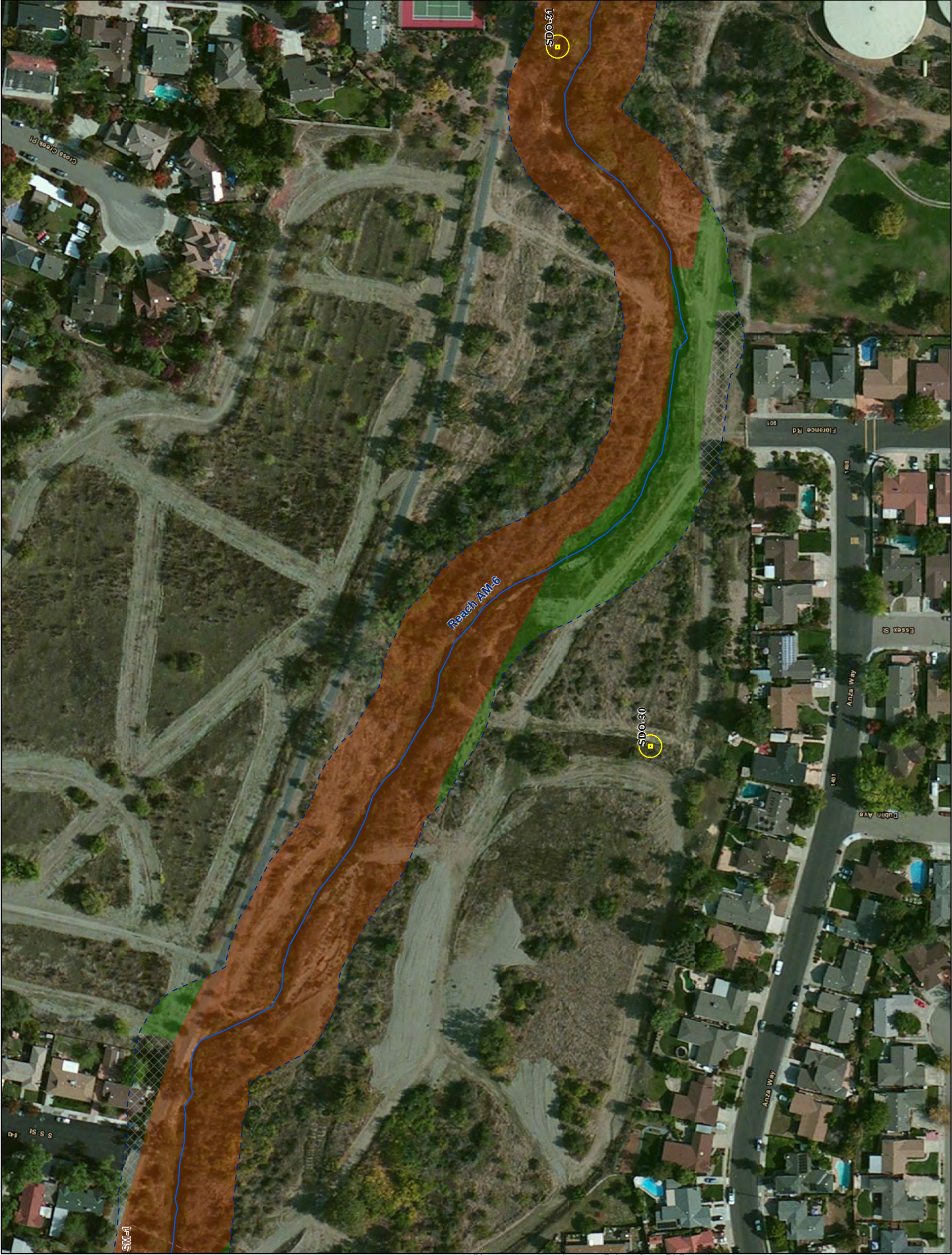


Figure 3-96
Arroyo Mocho
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Riverine
 - Ruderal
 - Urban - Suburban
 - Vineyard

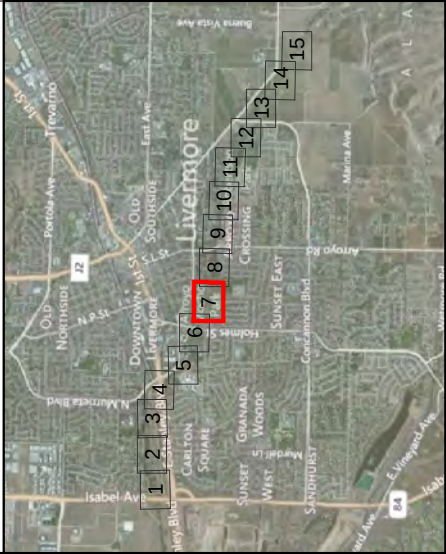
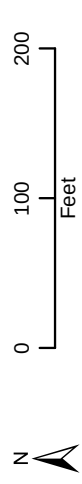


Figure 3-95
Arroyo Mocho
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

Land Cover

- California Annual Grassland
- Cropland
- Golf Course / Urban Park
- Mixed Riparian Forest and Woodland
- Mixed Willow Riparian Scrub
- Riverine
- Ruderal
- Urban - Suburban
- Vineyard

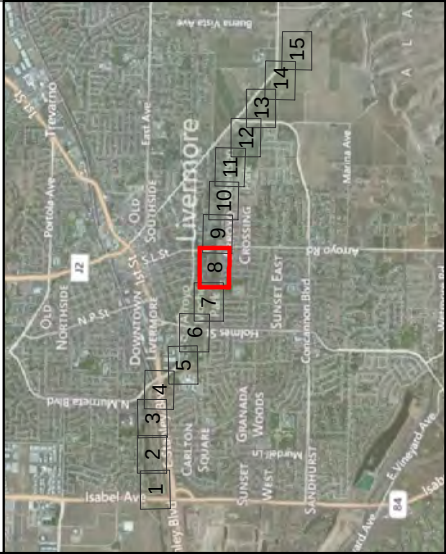
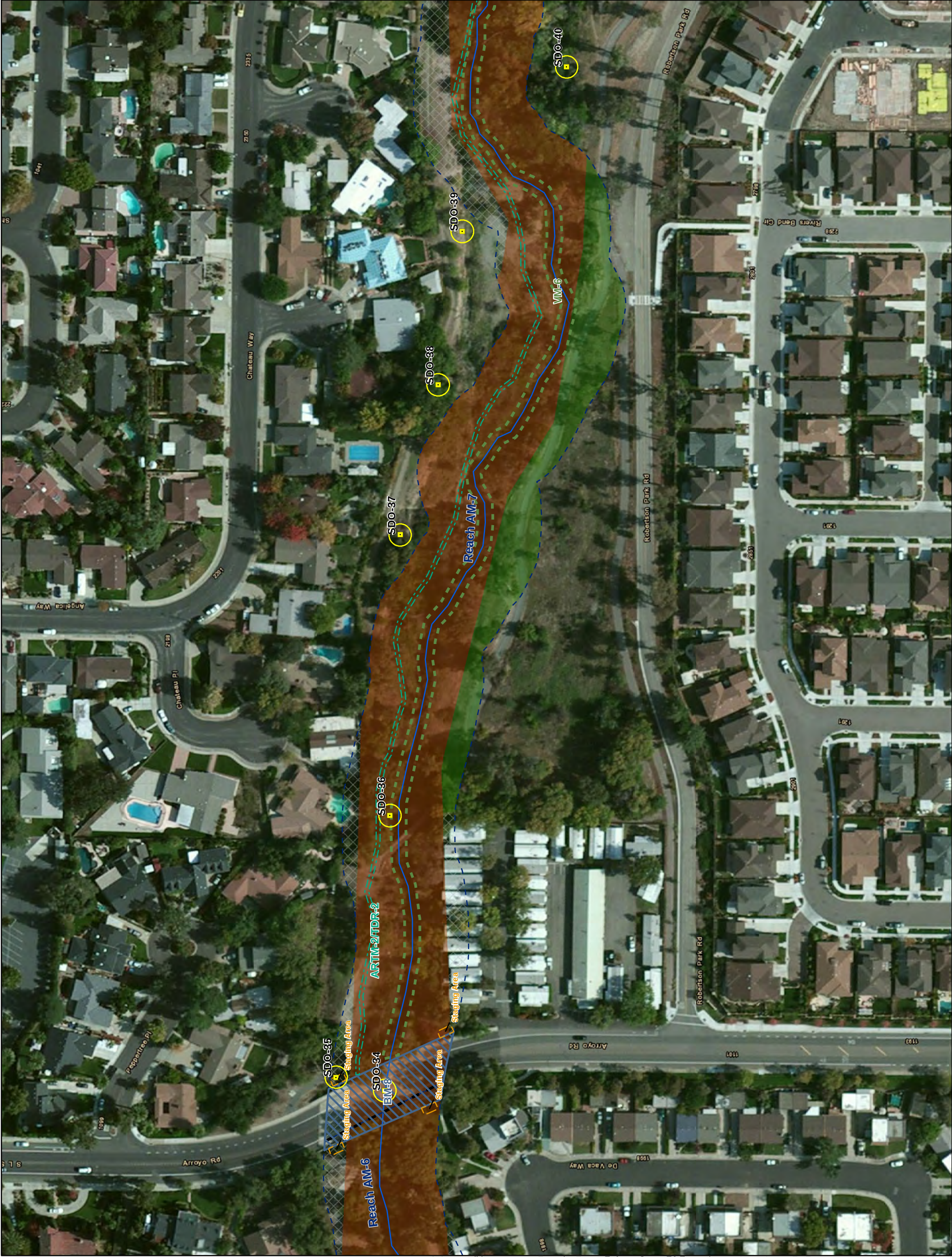


Figure 3-94
Arroyo Mocho
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Riverine
 - Ruderal
 - Urban - Suburban
 - Vineyard

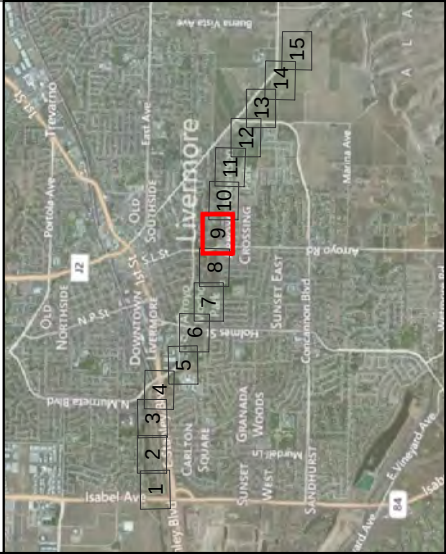
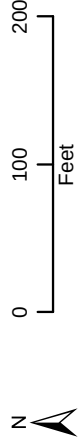
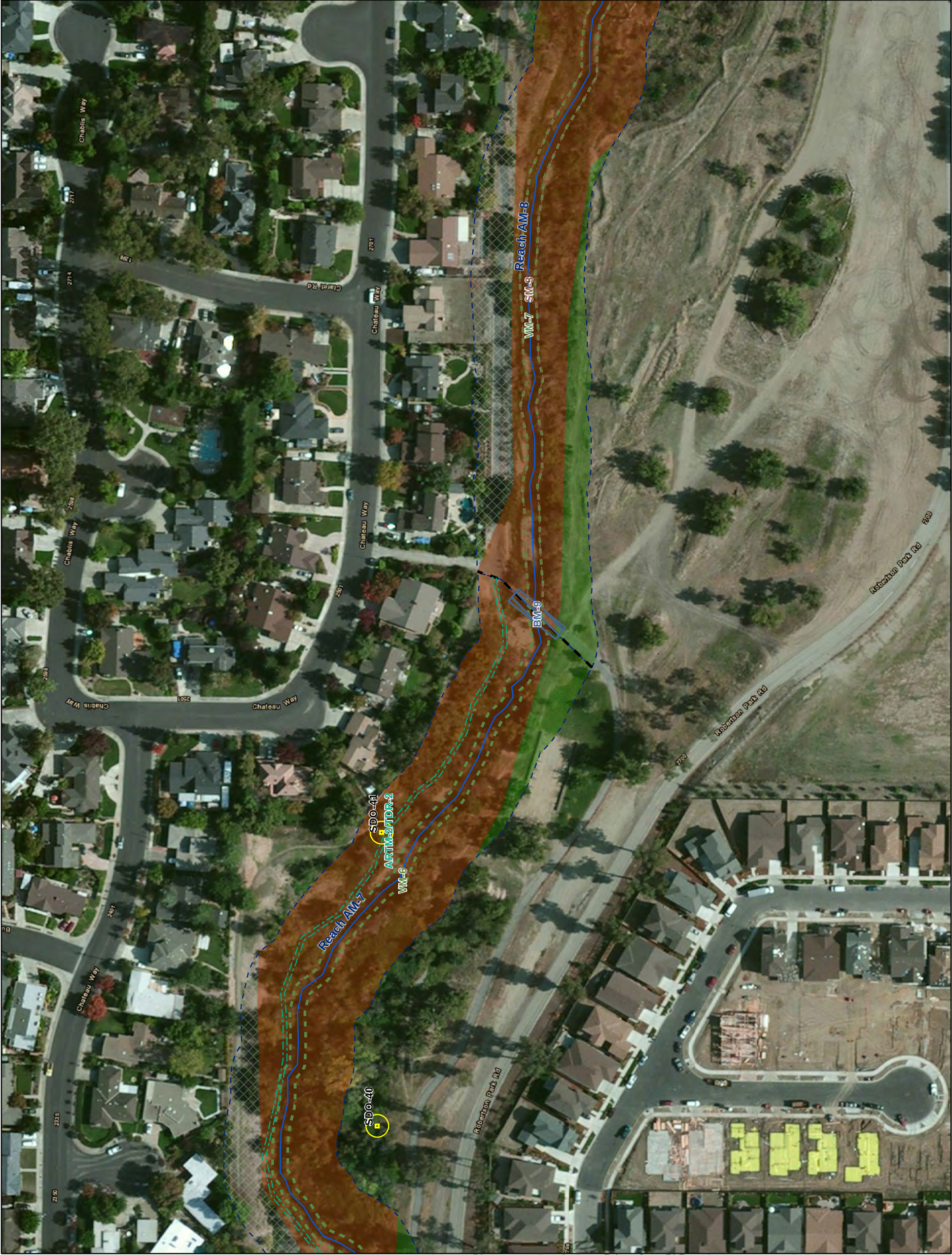


Figure 3-93
Arroyo Mocho
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Riverine
 - Ruderal
 - Urban - Suburban
 - Vineyard

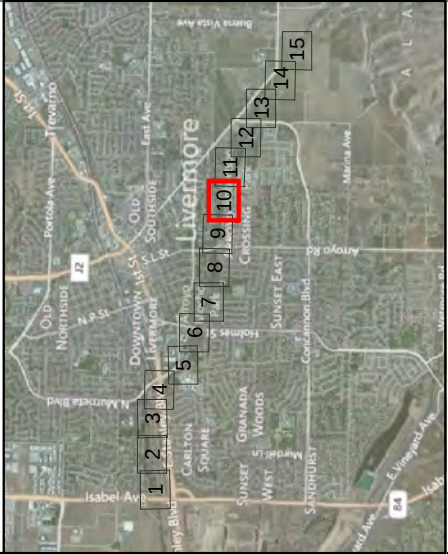
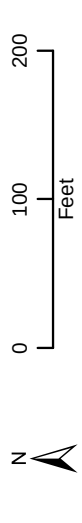


Figure 3-92
Arroyo Mocho
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

Land Cover

- California Annual Grassland
- Cropland
- Golf Course / Urban Park
- Mixed Riparian Forest and Woodland
- Mixed Willow Riparian Scrub
- Riverine
- Ruderal
- Urban - Suburban
- Vineyard

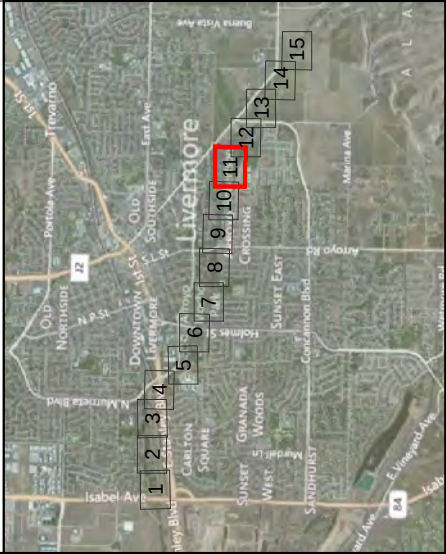
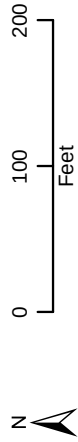
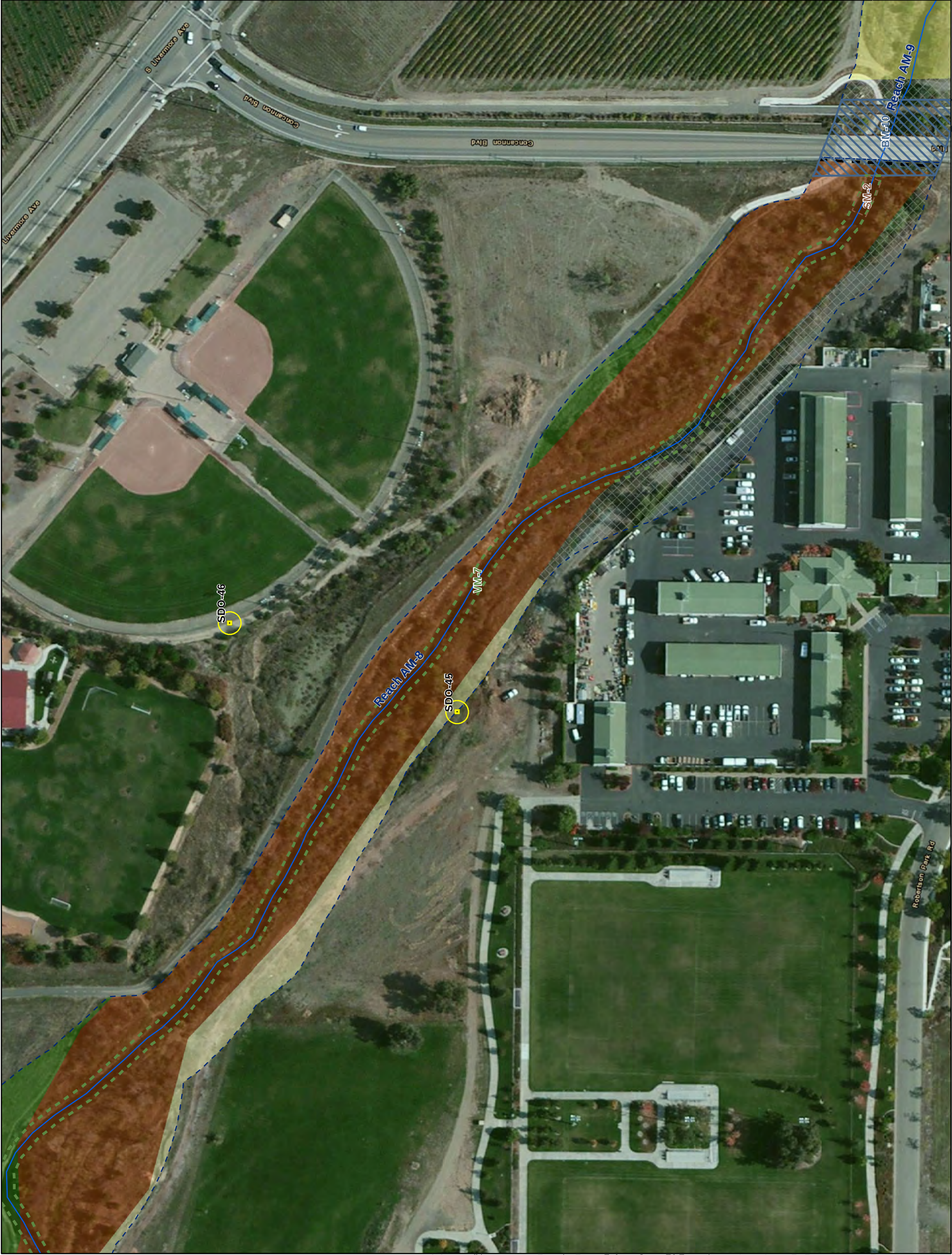


Figure 3-91

Arroyo Mocho

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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

Land Cover

- California Annual Grassland
- Cropland
- Golf Course / Urban Park
- Mixed Riparian Forest and Woodland
- Mixed Willow Riparian Scrub
- Riverine
- Ruderal
- Urban - Suburban
- Vineyard

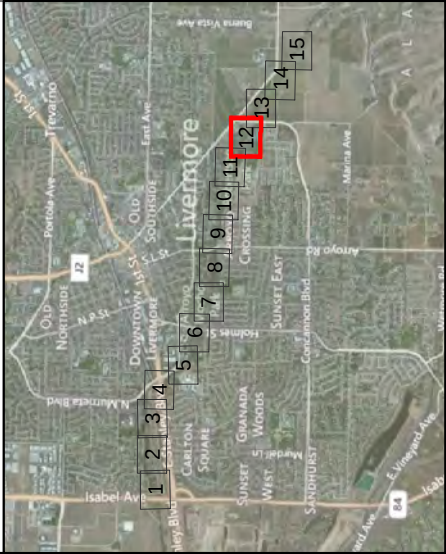


Figure 3-90
Arroyo Mocho
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City of Livermore
Stream Maintenance Program

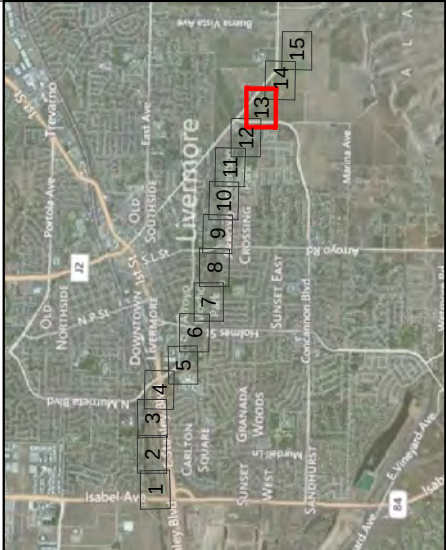
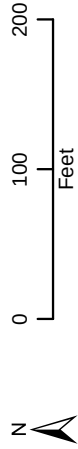


Figure 3-89
Arroyo Mocho
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

Land Cover

- California Annual Grassland
- Cropland
- Golf Course / Urban Park
- Mixed Riparian Forest and Woodland
- Mixed Willow Riparian Scrub
- Riverine
- Ruderal
- Urban - Suburban
- Vineyard

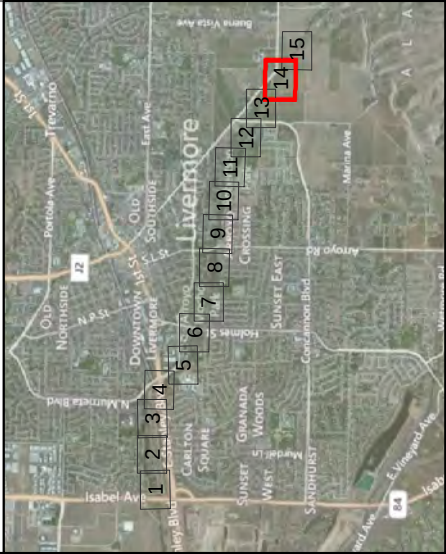
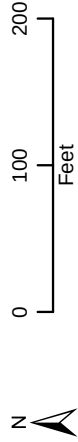


Figure 3-88
Arroyo Mocho
Page 14 of 15



City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

- Land Cover
- California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Mixed Willow Riparian Scrub
 - Riverine
 - Ruderal
 - Urban - Suburban
 - Vineyard

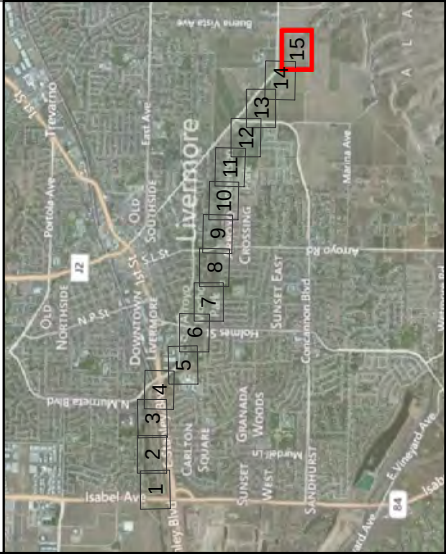


Figure 3-87
Arroyo Mocho
Page 15 of 15



See Figure 3-61
Arroyo Las Positas Reach ALP-9

City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Mixed Riparian Forest and Woodland
 - Riverine
 - Ruderal
 - Rural - Residential
 - Seasonal Wetland
 - Urban - Suburban

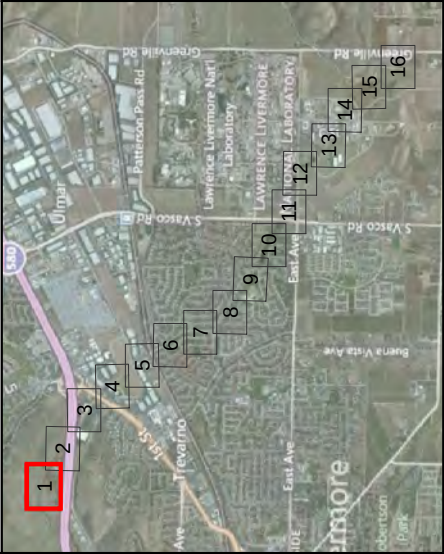


Figure 3-117
Arroyo Seco
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Mixed Riparian Forest and Woodland
 - Riverine
 - Ruderal
 - Rural - Residential
 - Seasonal Wetland
 - Urban - Suburban

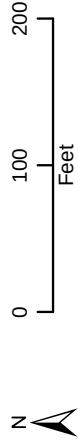


Figure 3-116
Arroyo Seco
Page 2 of 16

City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

Land Cover

- California Annual Grassland
- Mixed Riparian Forest and Woodland
- Riverine
- Ruderal
- Rural - Residential
- Seasonal Wetland
- Urban - Suburban

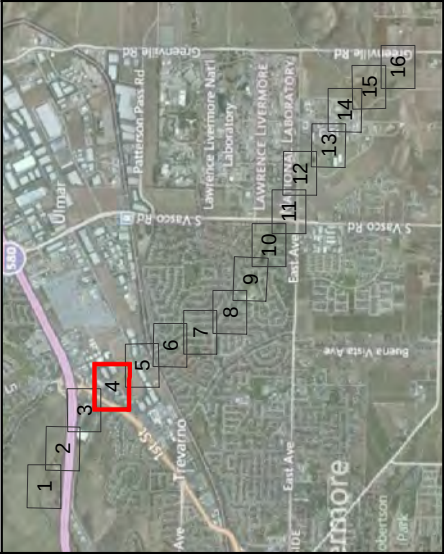
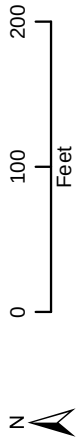
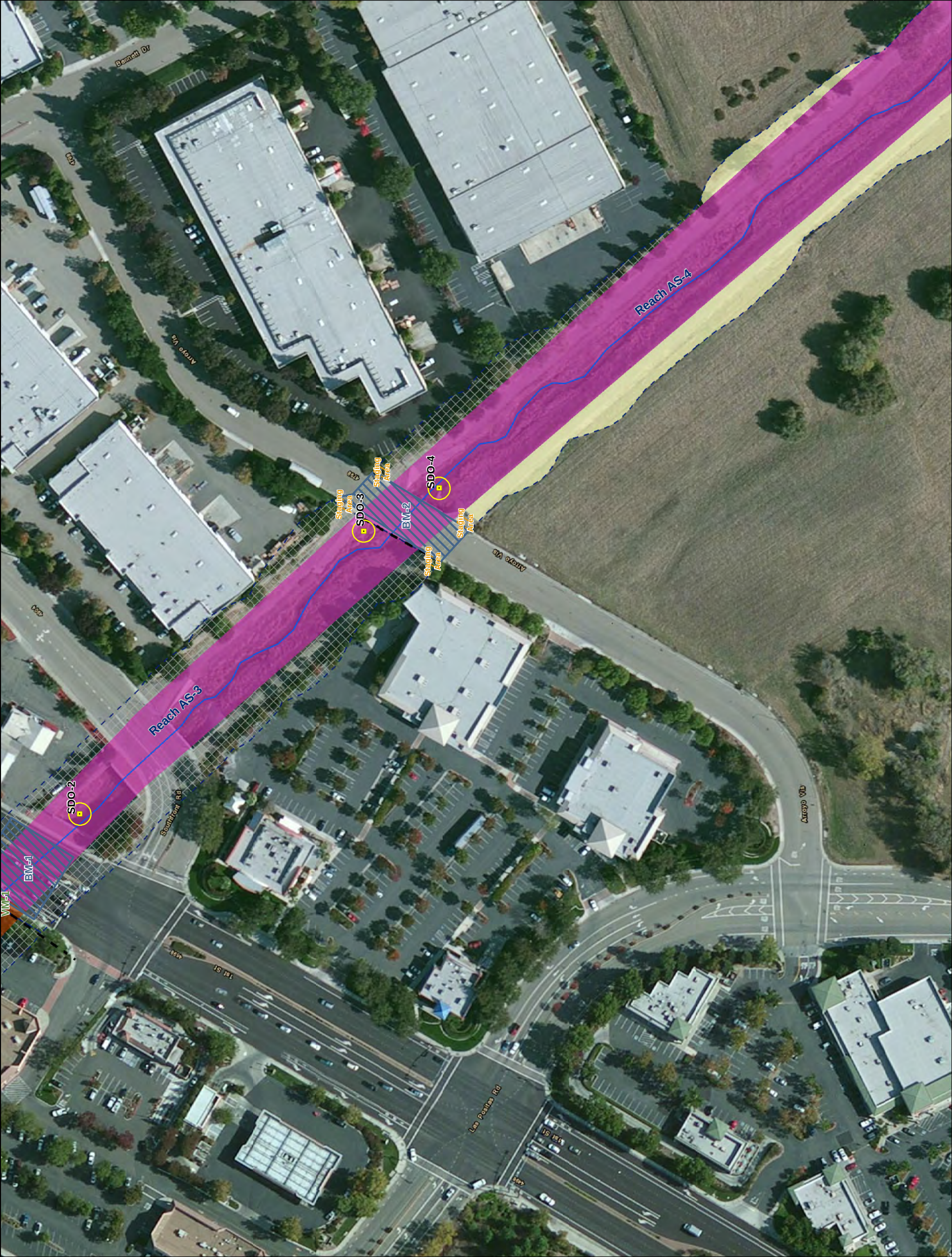
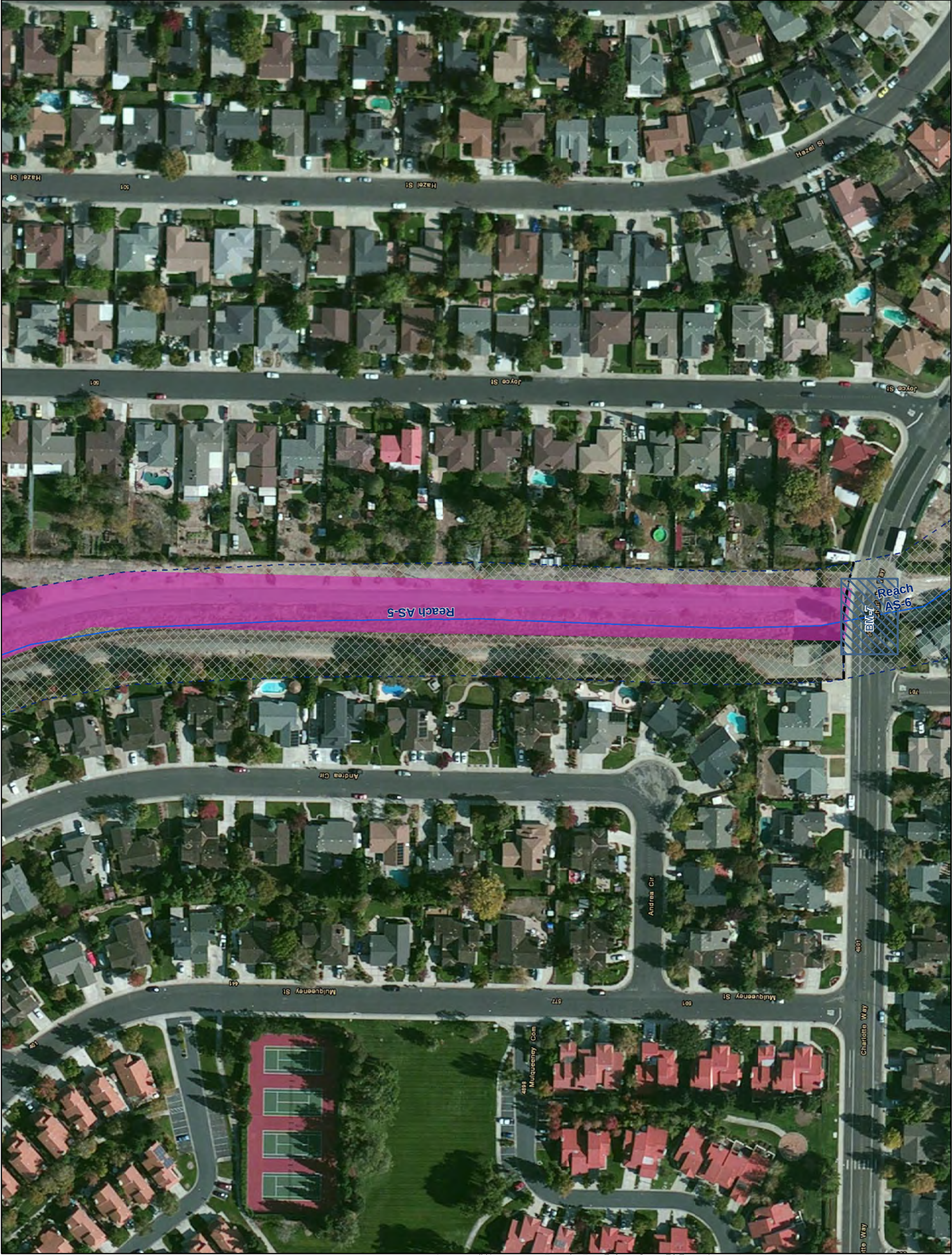


Figure 3-114
Arroyo Seco
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

Land Cover

- California Annual Grassland
- Mixed Riparian Forest and Woodland
- Riverine
- Ruderal
- Rural - Residential
- Seasonal Wetland
- Urban - Suburban

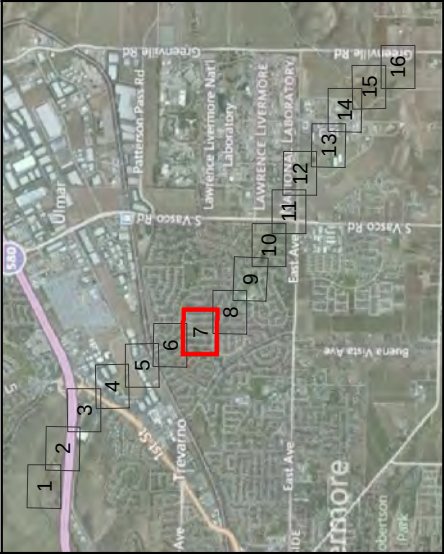


Figure 3-111
Arroyo Seco
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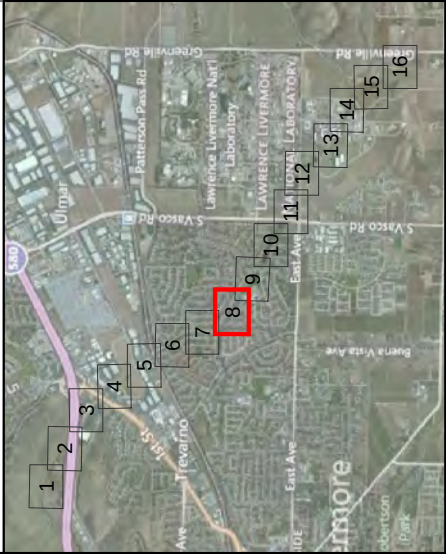
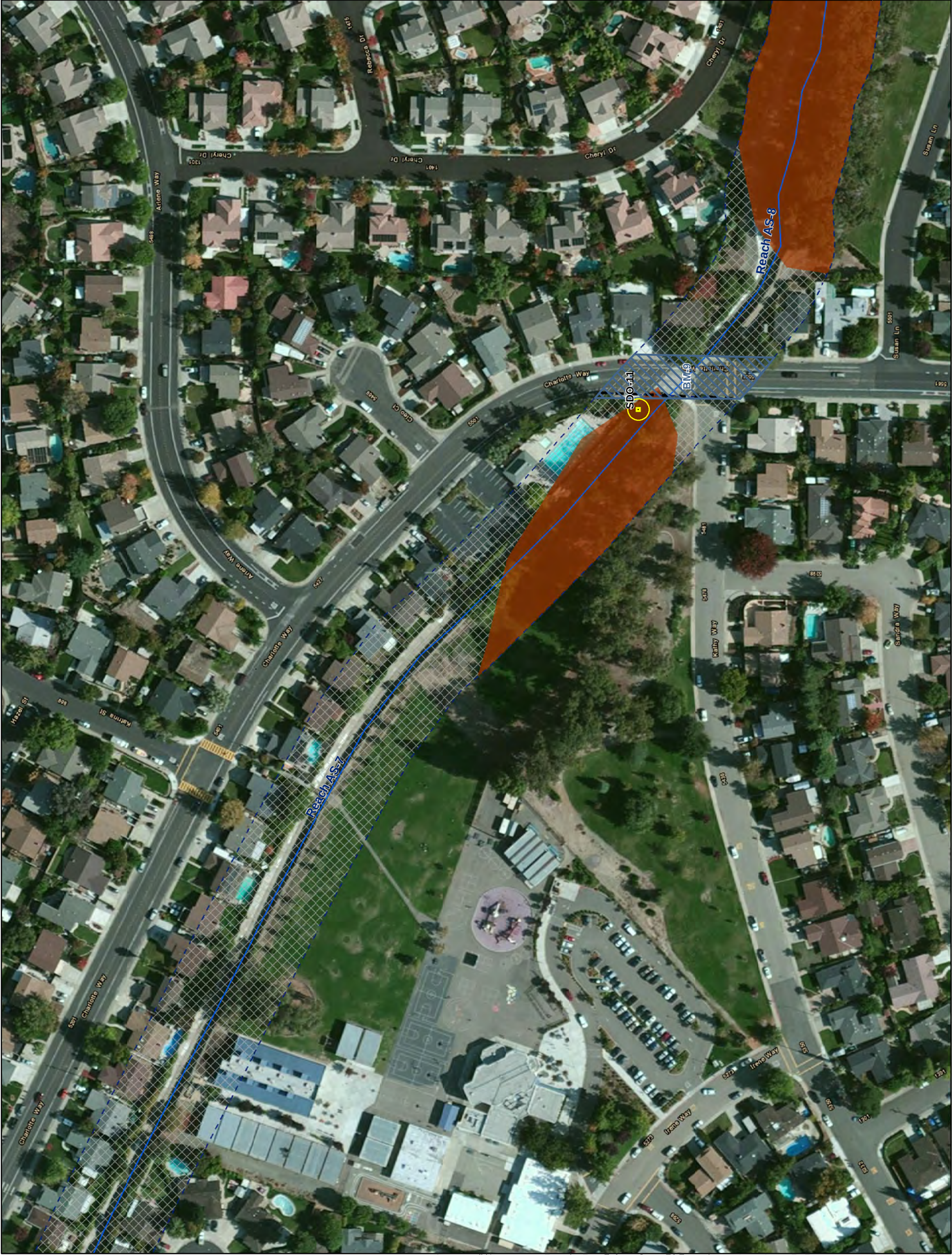


Figure 3-110
Arroyo Seco
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Mixed Riparian Forest and Woodland
 - Riverine
 - Ruderal
 - Rural - Residential
 - Seasonal Wetland
 - Urban - Suburban

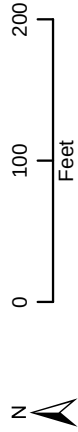
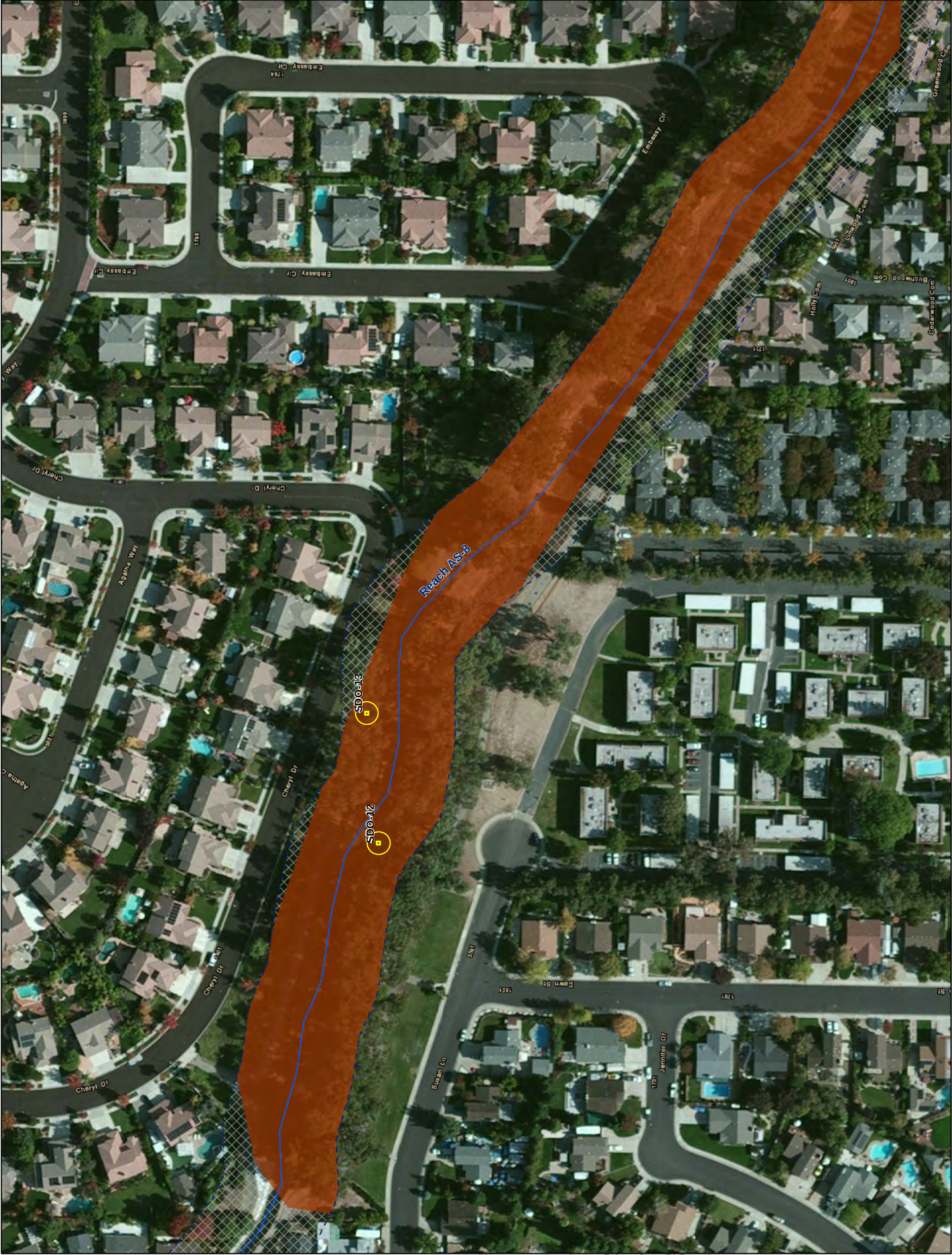


Figure 3-109
Arroyo Seco
Page 9 of 16



City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

- Land Cover
- California Annual Grassland
 - Mixed Riparian Forest and Woodland
 - Riverine
 - Ruderal
 - Rural - Residential
 - Seasonal Wetland
 - Urban - Suburban

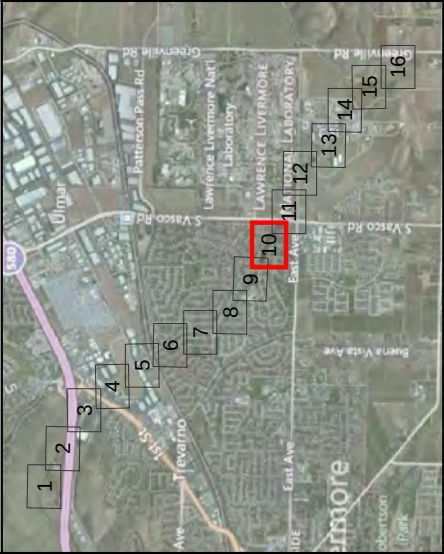
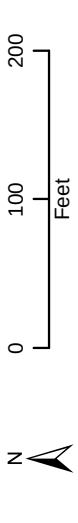


Figure 3-108
Arroyo Seco
Page 10 of 16



City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

- Land Cover
- California Annual Grassland
 - Mixed Riparian Forest and Woodland
 - Riverine
 - Ruderal
 - Rural - Residential
 - Seasonal Wetland
 - Urban - Suburban

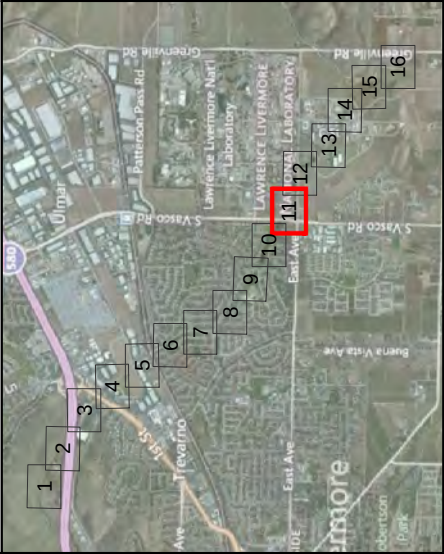
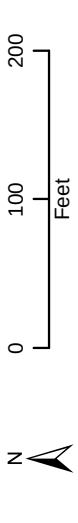


Figure 3-107
Arroyo Seco
Page 11 of 16



City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Mixed Riparian Forest and Woodland
 - Riverine
 - Ruderal
 - Rural - Residential
 - Seasonal Wetland
 - Urban - Suburban

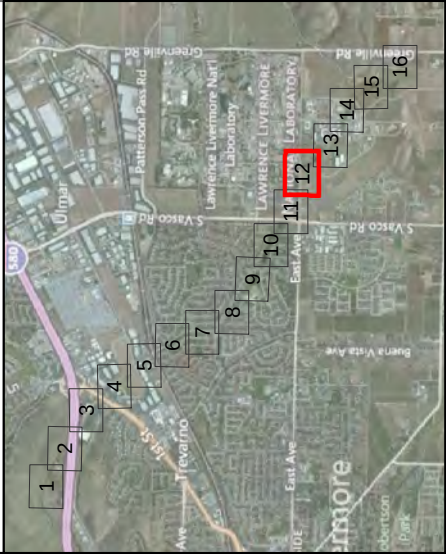
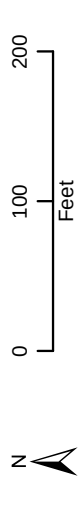


Figure 3-106
Arroyo Seco
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Mixed Riparian Forest and Woodland
 - Riverine
 - Ruderal
 - Rural - Residential
 - Seasonal Wetland
 - Urban - Suburban

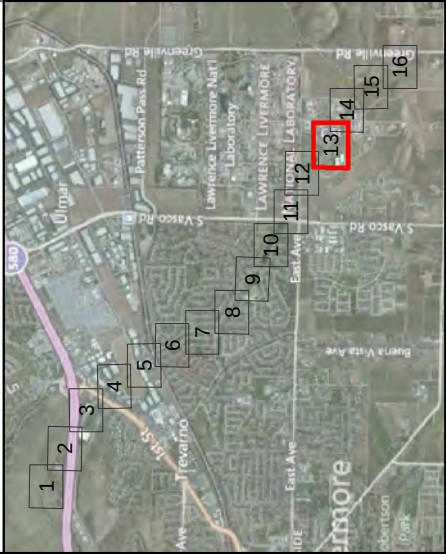
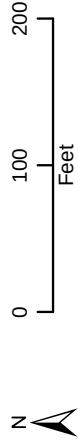


Figure 3-105
Arroyo Seco
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Mixed Riparian Forest and Woodland
 - Riverine
 - Ruderal
 - Rural - Residential
 - Seasonal Wetland
 - Urban - Suburban

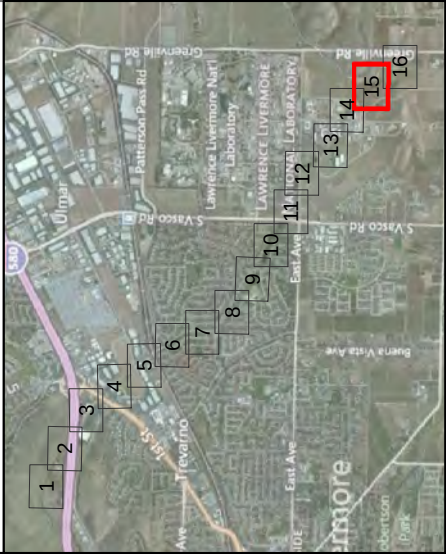
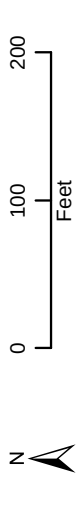


Figure 3-103
Arroyo Seco
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
- Reach Break
- 75-foot Stream Buffer
- Storm Drain Outfall (SDO) Impact Area

- Land Cover
- California Annual Grassland
 - Mixed Riparian Forest and Woodland
 - Riverine
 - Ruderal
 - Rural - Residential
 - Seasonal Wetland
 - Urban - Suburban

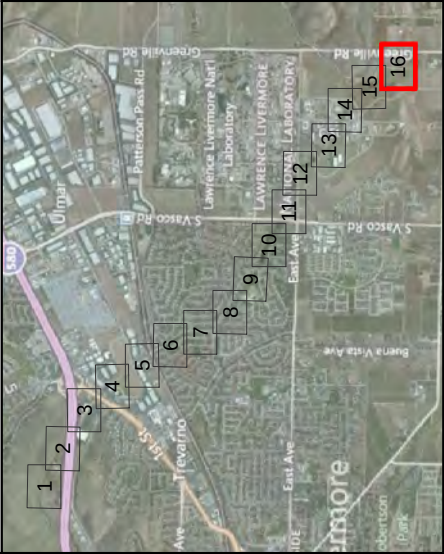
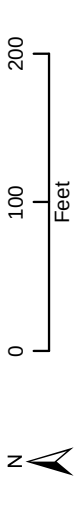
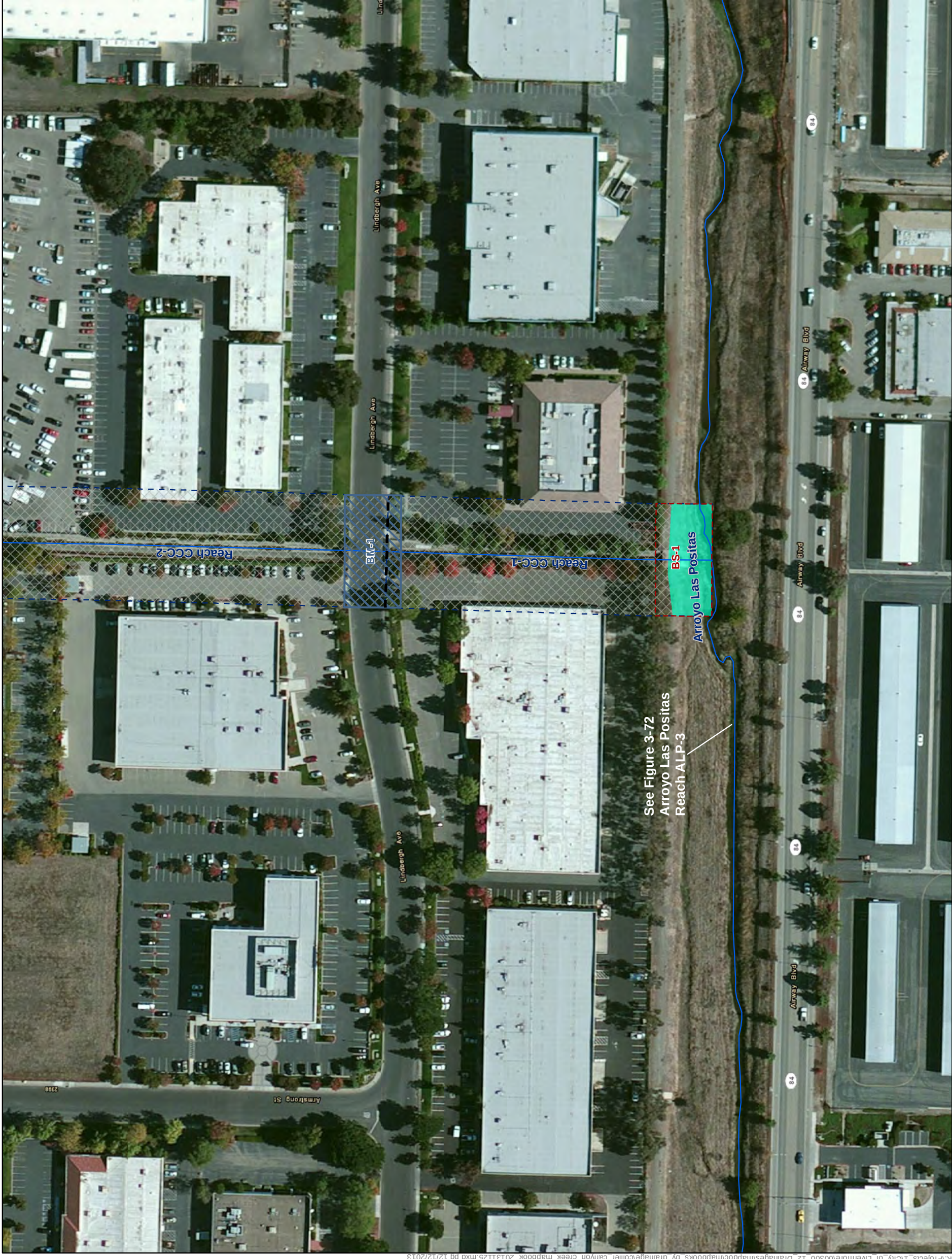
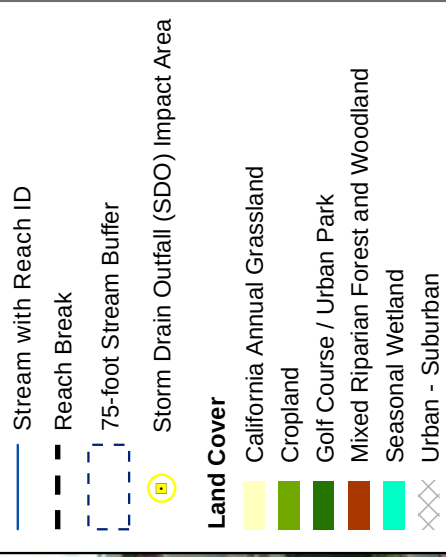
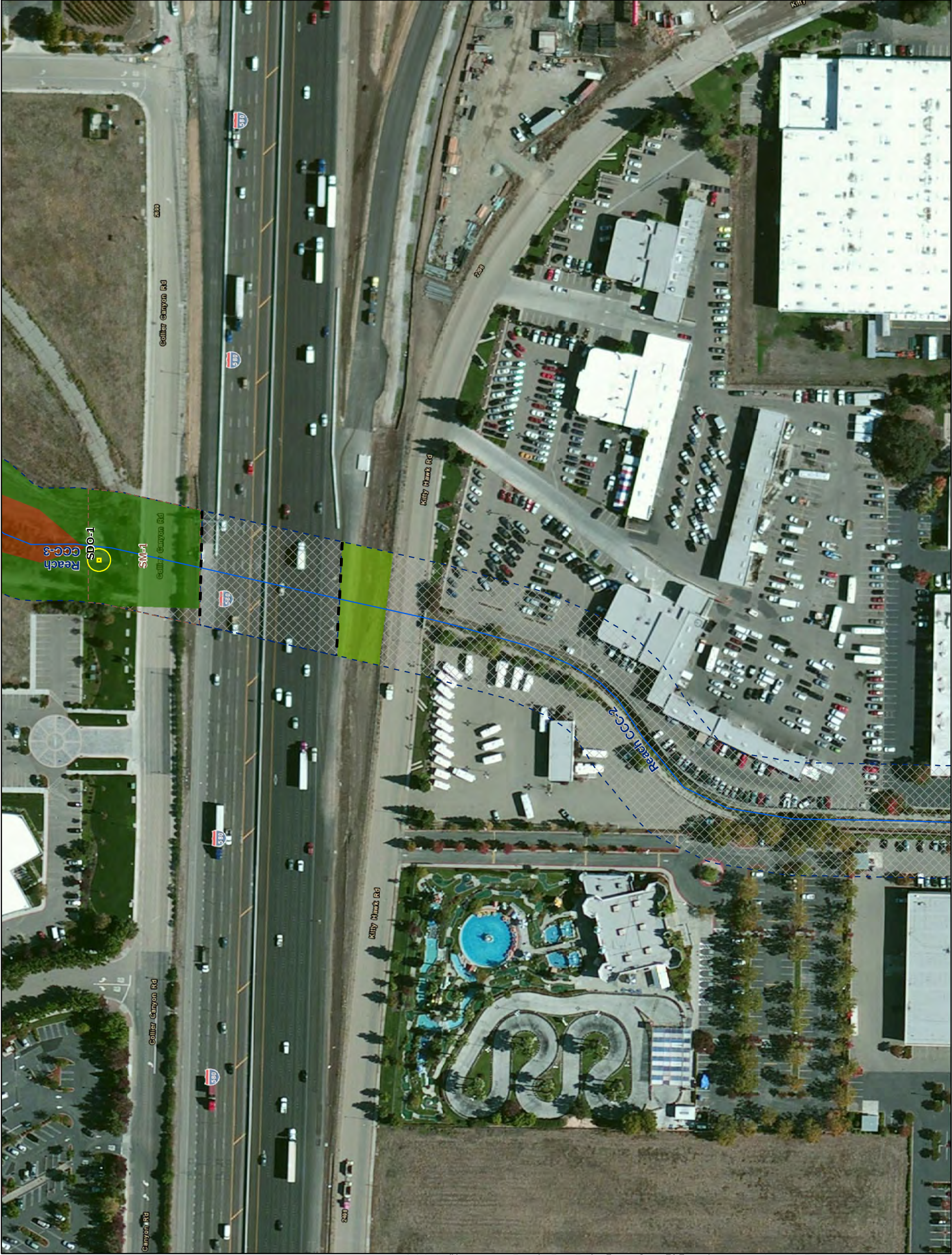


Figure 3-102
Arroyo Seco
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Seasonal Wetland
 - Urban - Suburban

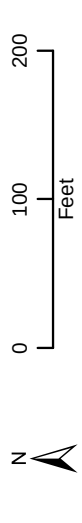
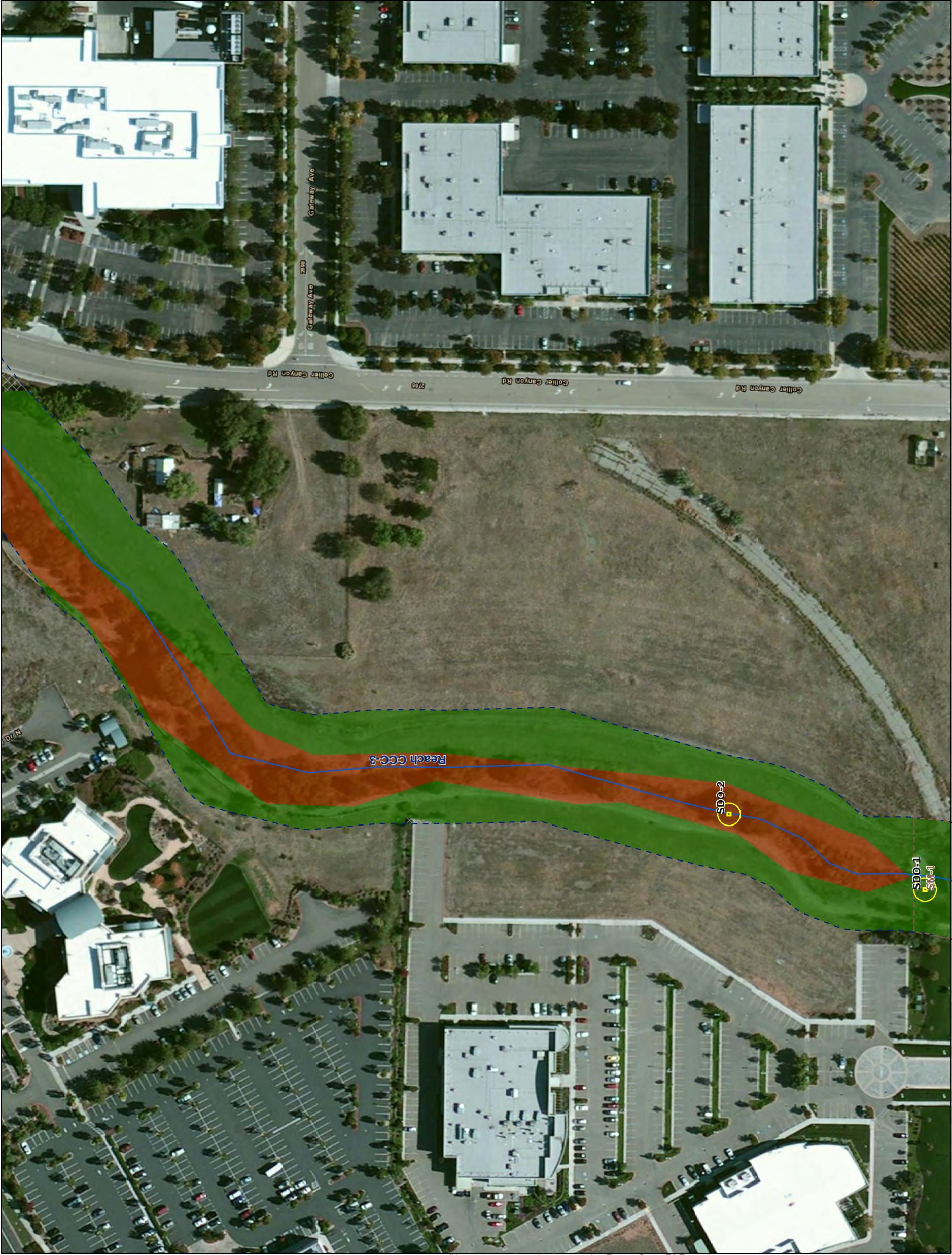


Figure 3-125
Collier Creek
Page 2 of 9



Stream with Reach ID

Reach Break

75-foot Stream Buffer

Storm Drain Outfall (SDO) Impact Area

Land Cover

California Annual Grassland

Cropland

Golf Course / Urban Park

Mixed Riparian Forest and Woodland

Seasonal Wetland

Urban - Suburban

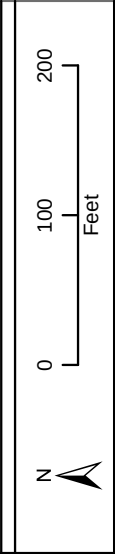


Figure 3-124
Collier Creek
Page 3 of 9



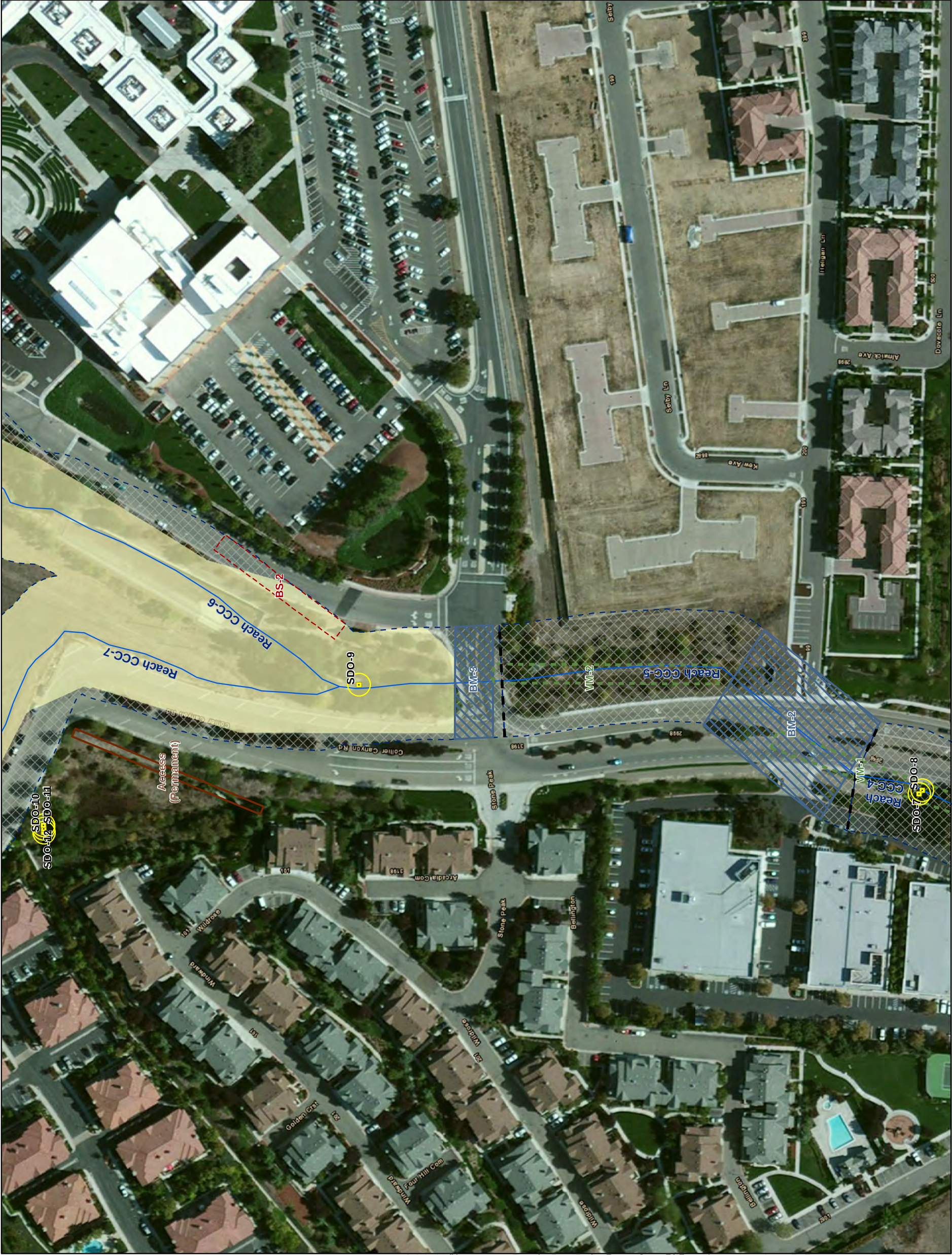
City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Seasonal Wetland
 - Urban - Suburban



Figure 3-123
Collier Creek
Page 4 of 9



City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Seasonal Wetland
 - Urban - Suburban



Figure 3-122
Collier Creek
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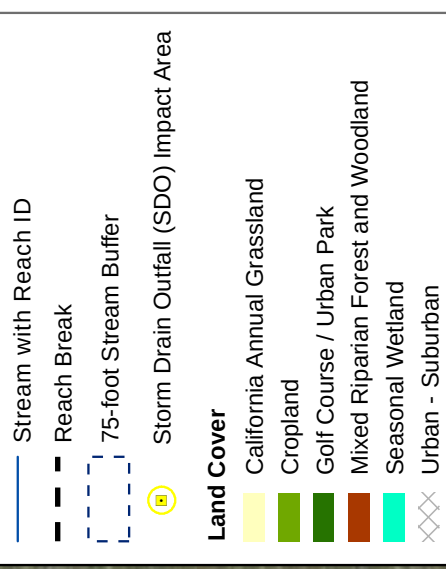
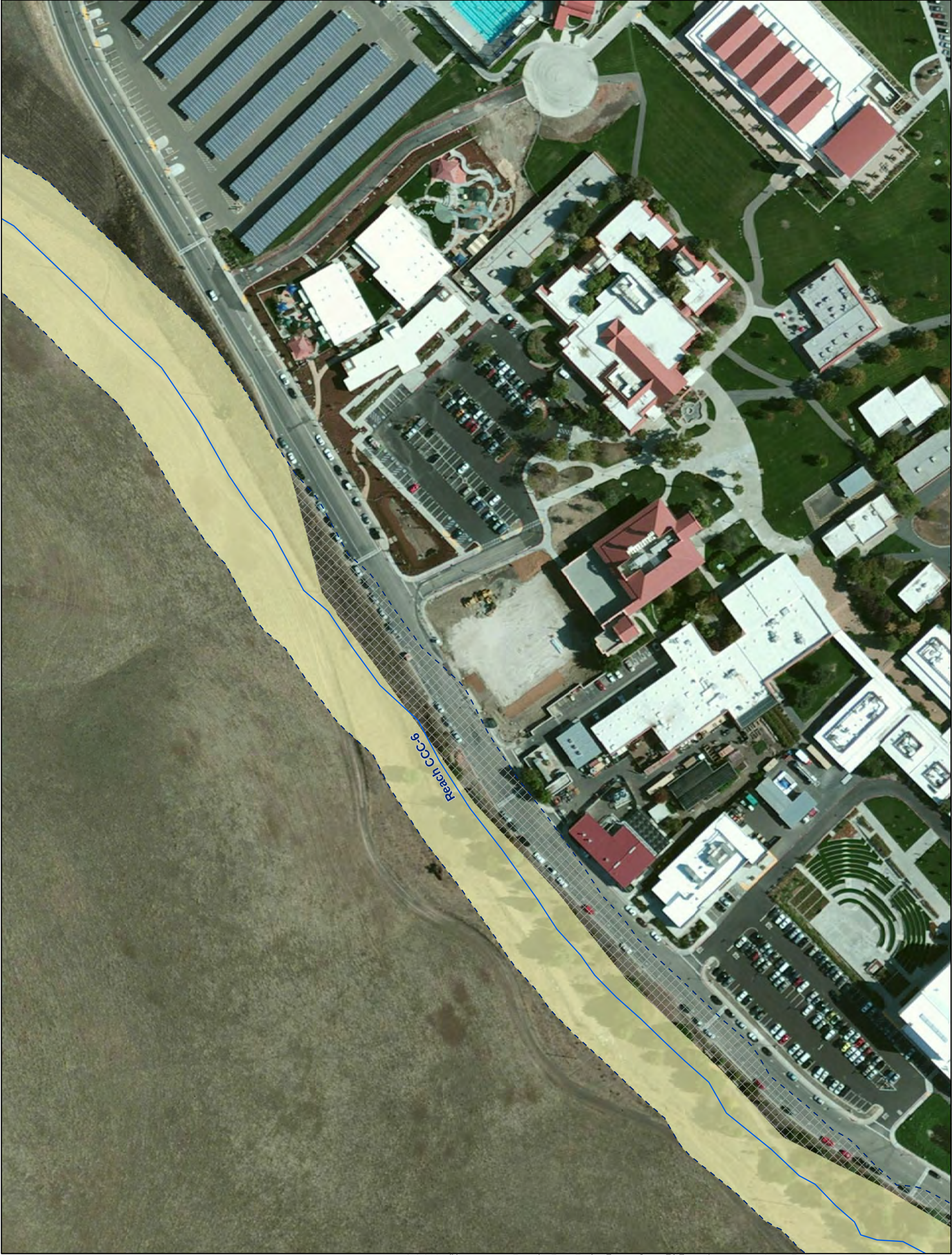


Figure 3-120
Collier Creek
Page 7 of 9





City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Cropland
 - Golf Course / Urban Park
 - Mixed Riparian Forest and Woodland
 - Seasonal Wetland
 - Urban - Suburban



Figure 3-119
Collier Creek
Page 8 of 9



- Stream with Reach ID

Reach Break

75-foot Stream Buffer

Storm Drain Outfall (SDO) Impact Area
- Land Cover

California Annual Grassland

Cropland

Golf Course / Urban Park

Mixed Riparian Forest and Woodland

Seasonal Wetland

Urban - Suburban



Figure 3-118
Collier Creek
Page 9 of 9



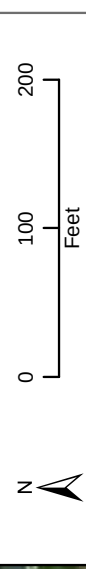
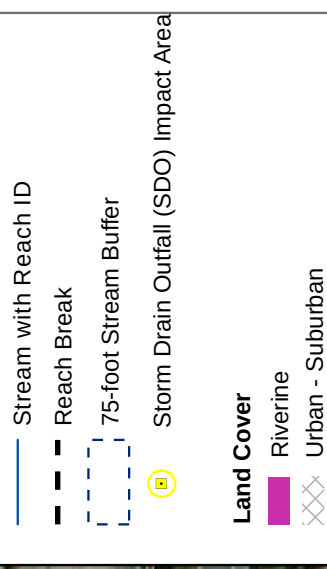
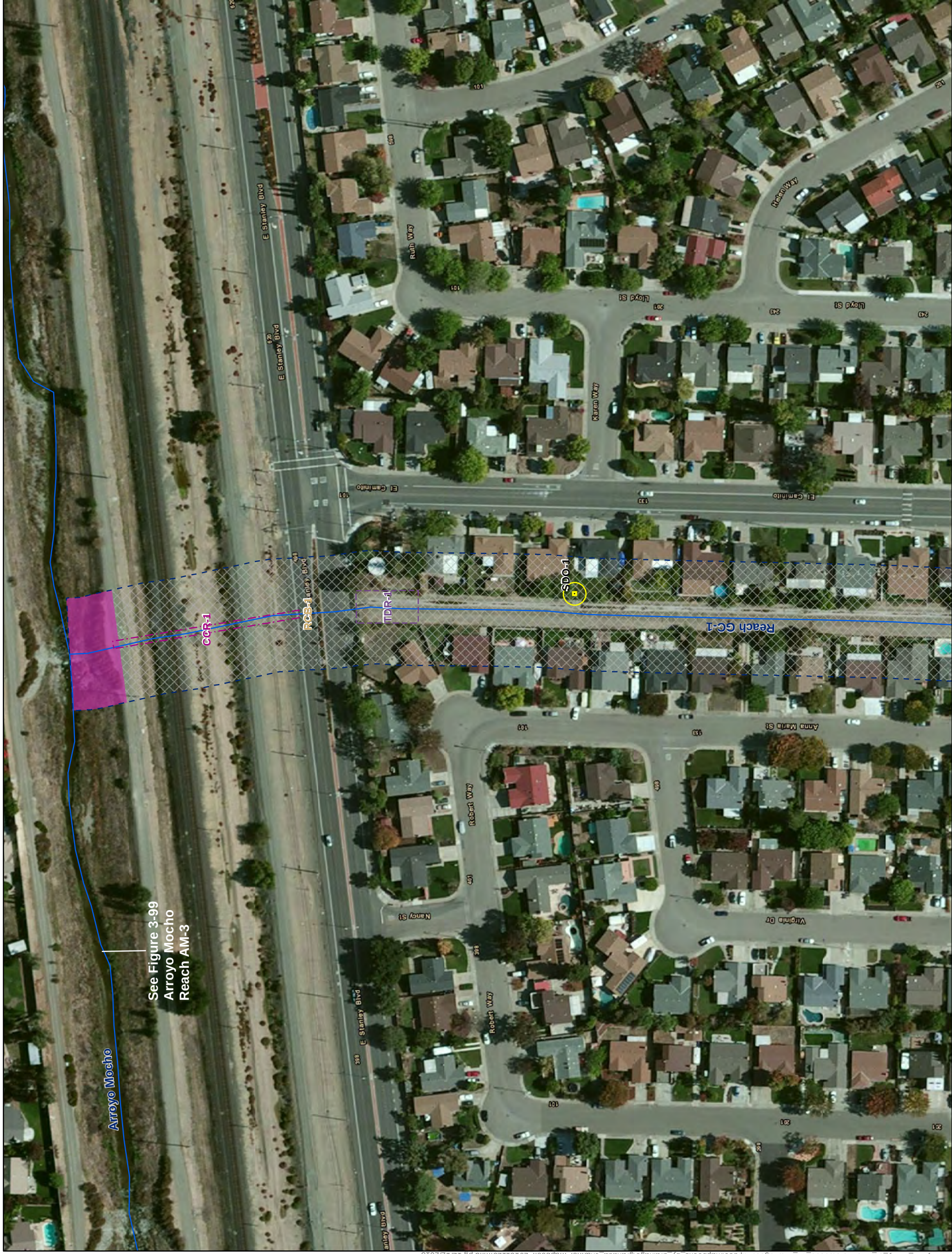
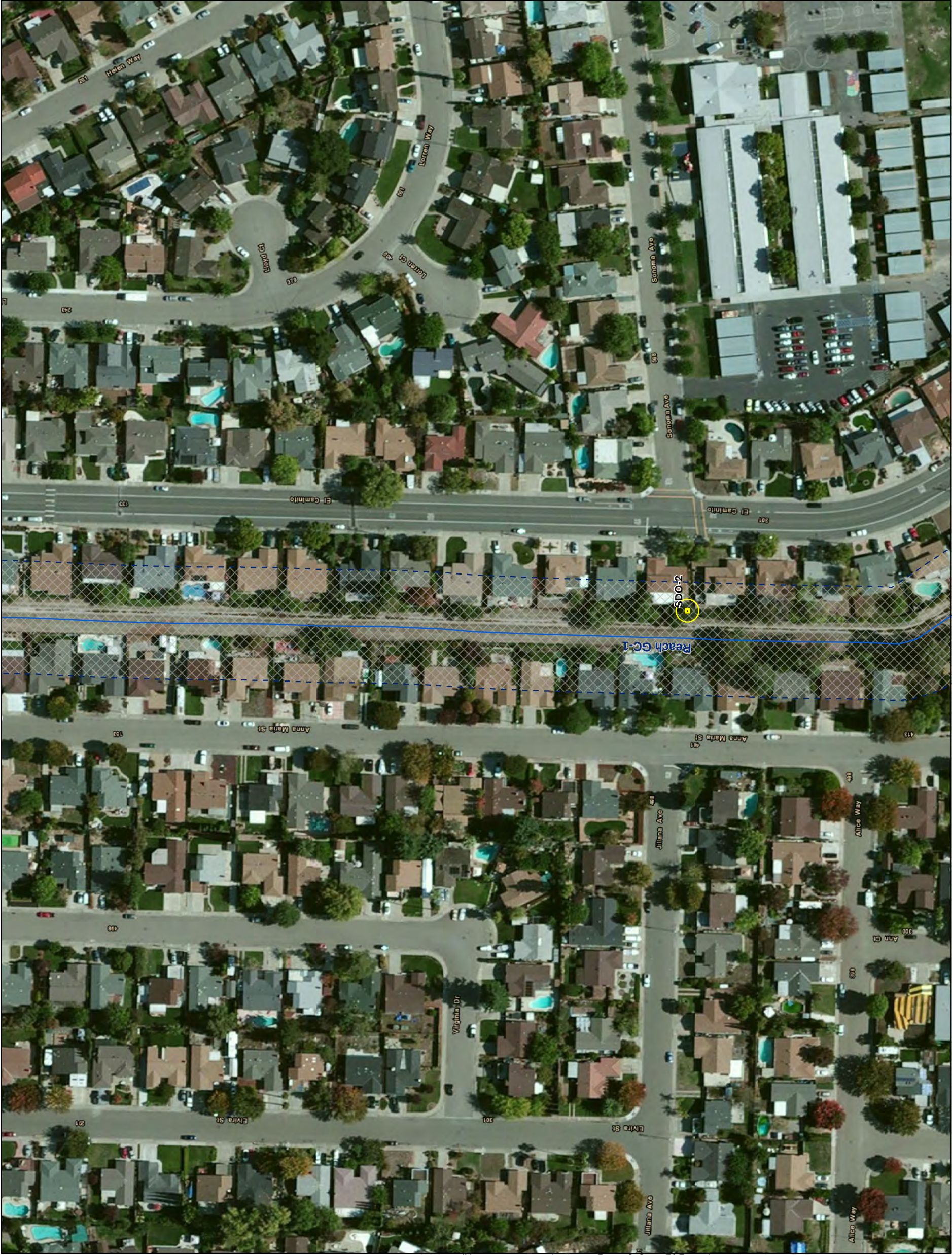
City of Livermore
Stream Maintenance Program

Figure 3-130
Granada Channel
Page 1 of 4





City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- Riverine
 - Urban - Suburban

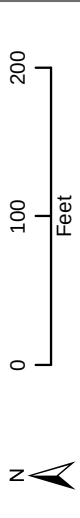
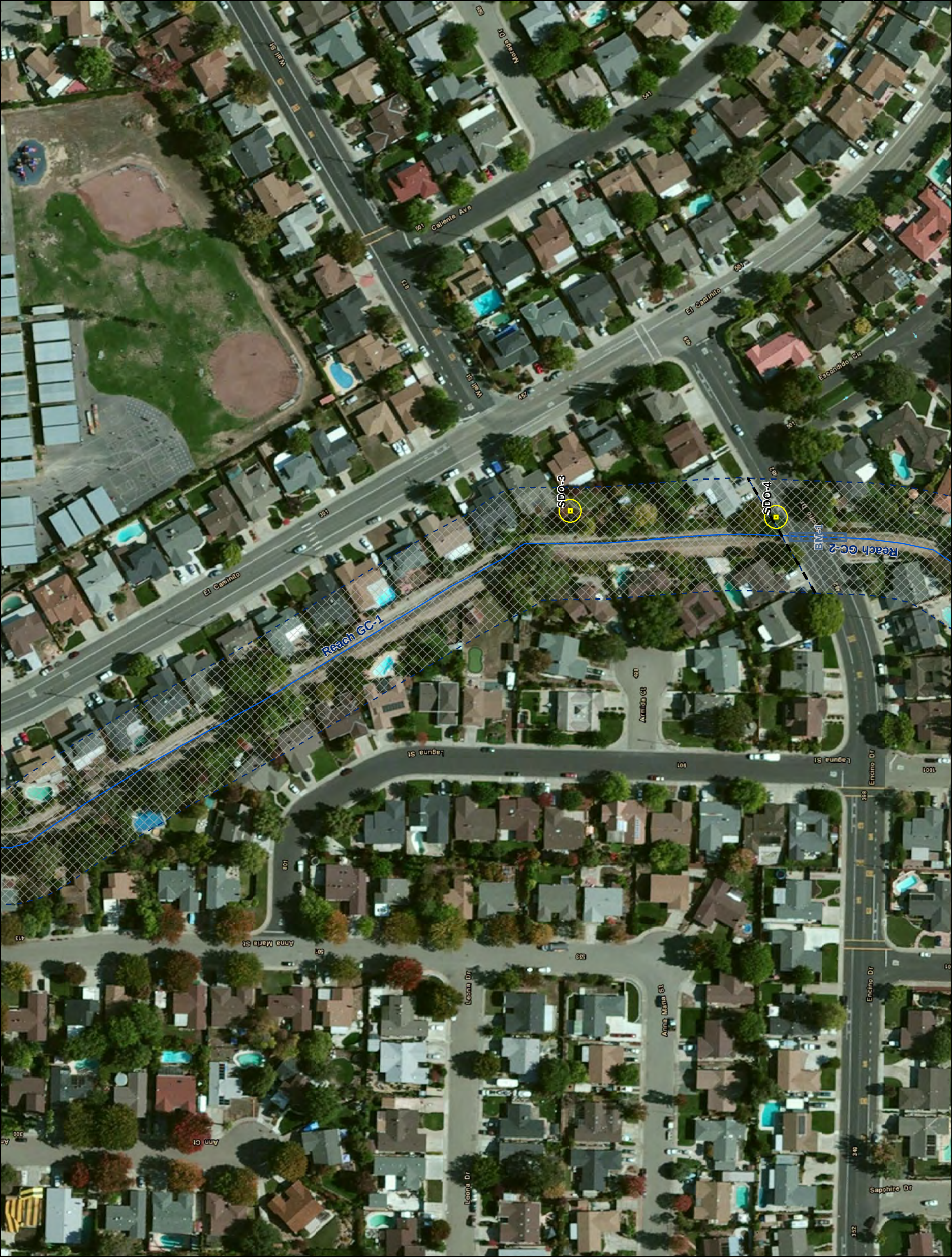


Figure 3-129
Granada Channel
Page 2 of 4



City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- Riverine
 - Urban - Suburban

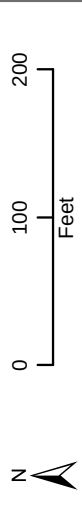
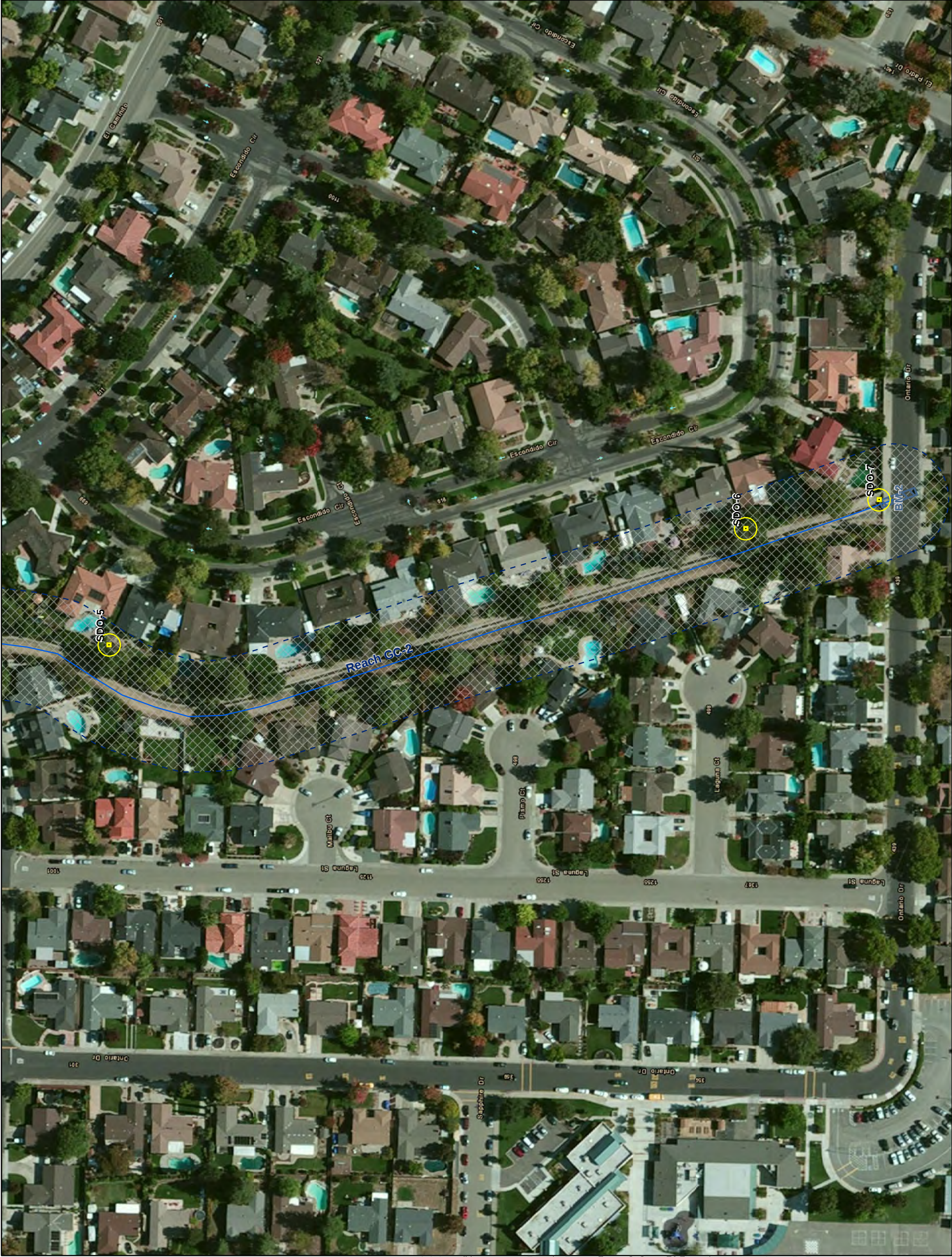


Figure 3-128
Granada Channel
Page 3 of 4



City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- Riverine
 - Urban - Suburban

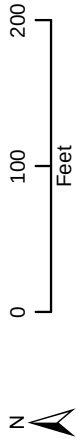
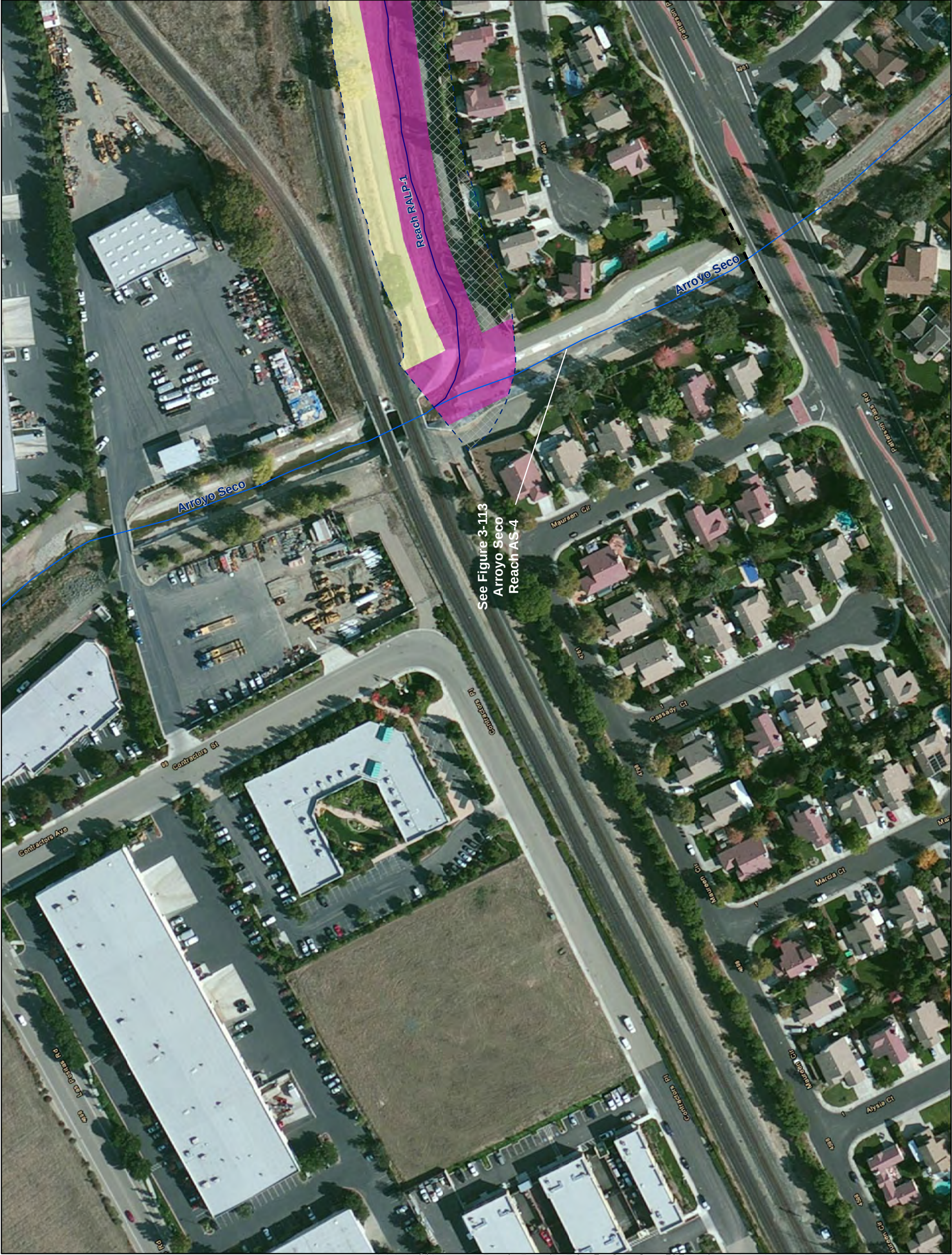


Figure 3-127
Granada Channel
Page 4 of 4



City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover
- California Annual Grassland
 - Golf Course / Urban Park
 - Riverine
 - Ruderal
 - Urban - Suburban

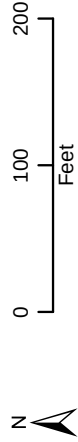
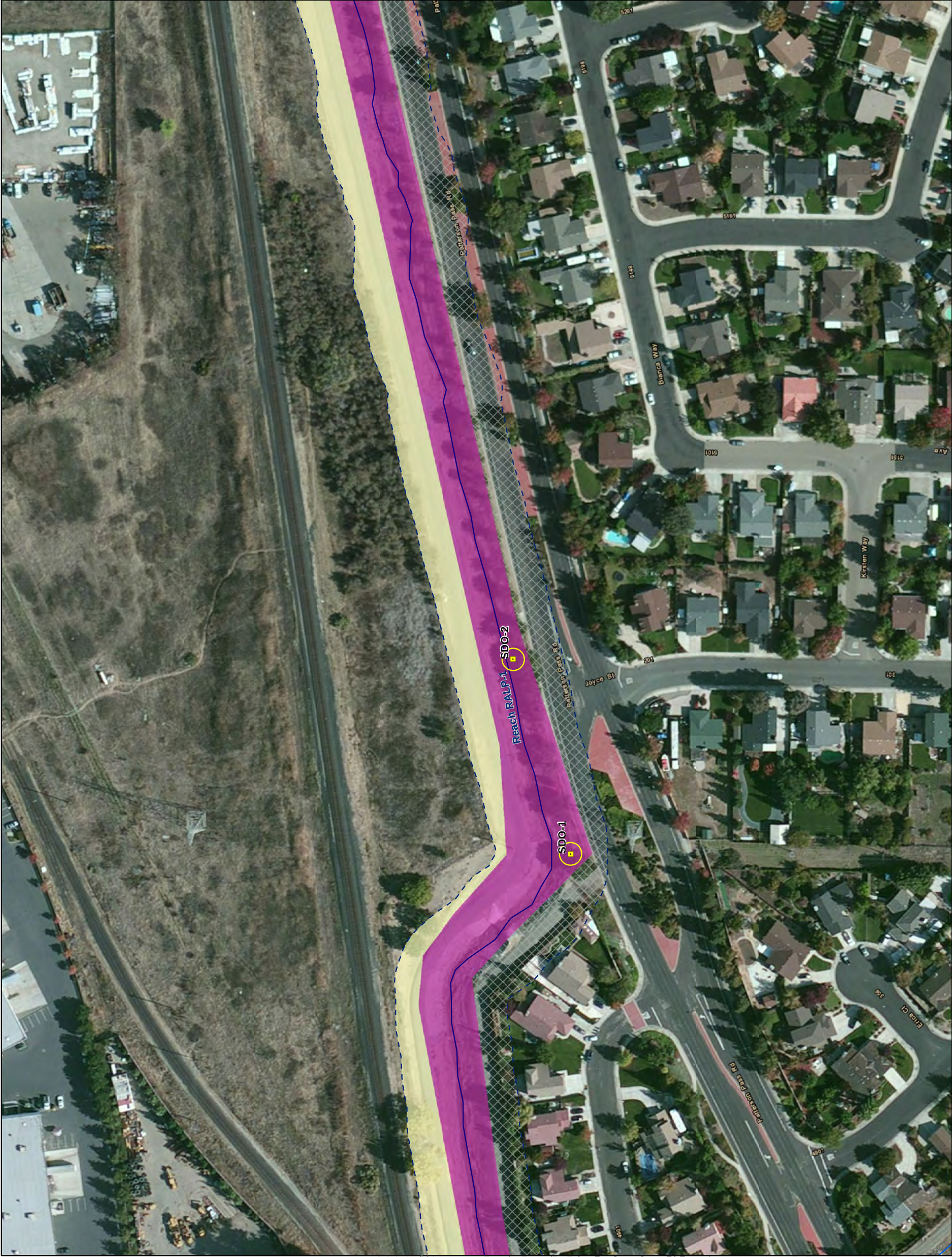


Figure 3-141
Realigned Arroyo Las Positas
Page 1 of 11



City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Golf Course / Urban Park
 - Riverine
 - Ruderal
 - Urban - Suburban

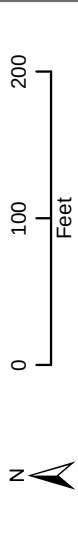


Figure 3-140
Realigned Arroyo Las Positas
Page 2 of 11



City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Golf Course / Urban Park
 - Riverine
 - Ruderal
 - Urban - Suburban

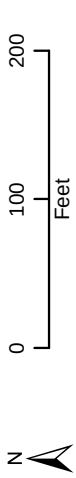


Figure 3-139
Realigned Arroyo Las Positas
Page 3 of 11



City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Golf Course / Urban Park
 - Riverine
 - Ruderal
 - Urban - Suburban



Figure 3-138
Realigned Arroyo Las Positas
Page 4 of 11



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Golf Course / Urban Park
 - Riverine
 - Ruderal
 - Urban - Suburban

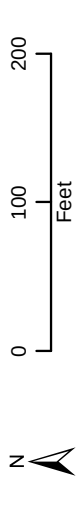
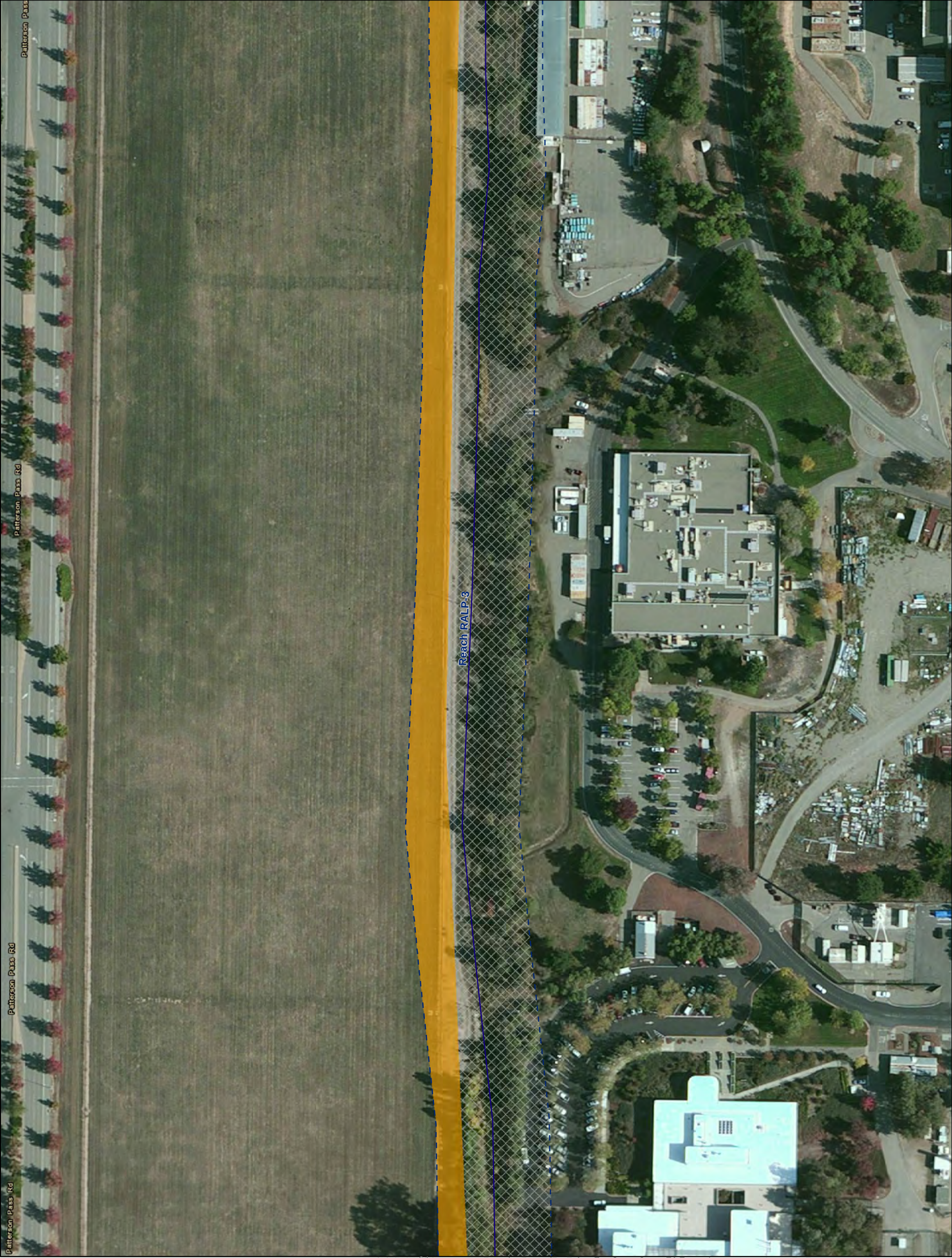


Figure 3-137
Realigned Arroyo Las Positas
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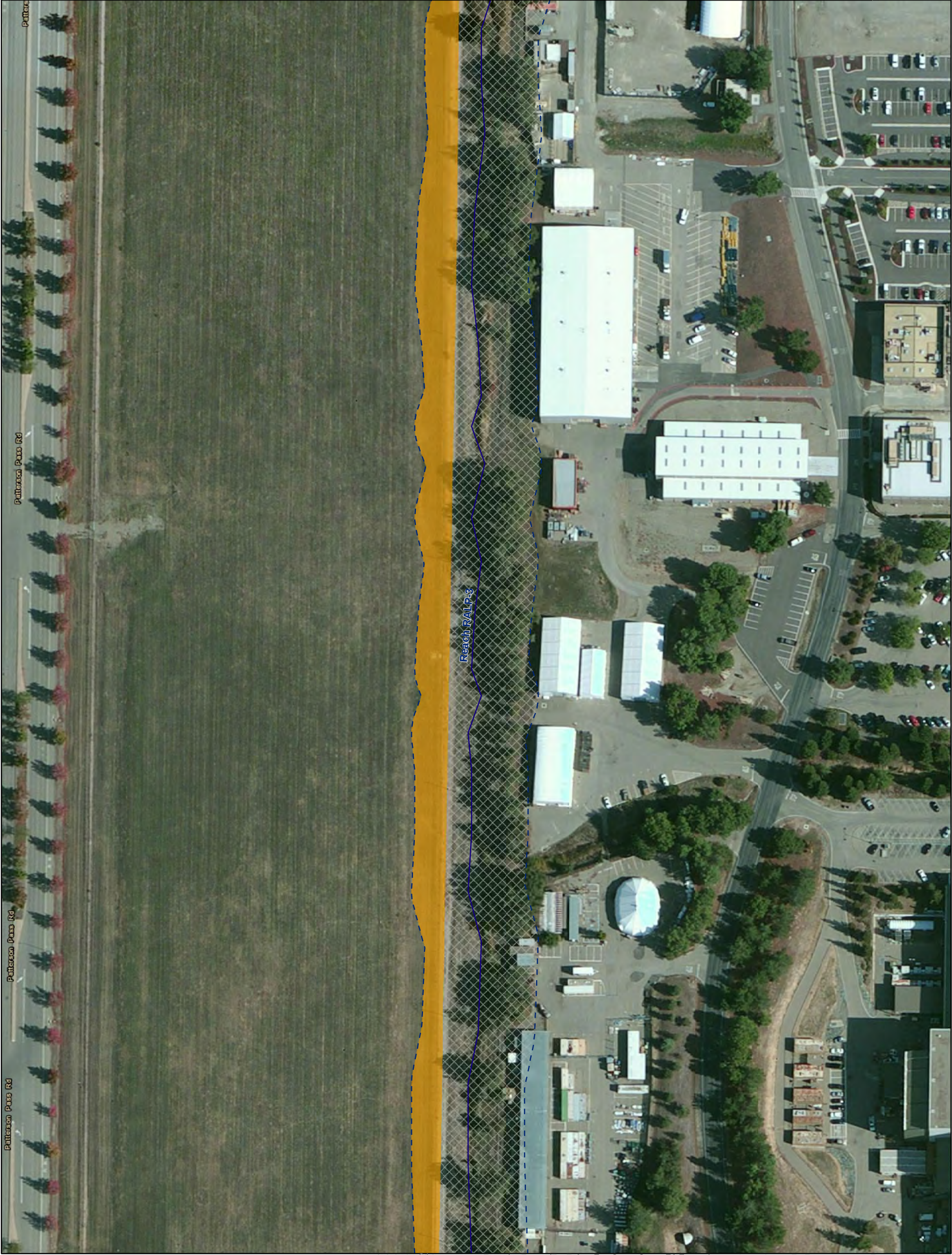
City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Golf Course / Urban Park
 - Riverine
 - Ruderal
 - Urban - Suburban



Figure 3-135
Realigned Arroyo Las Positas
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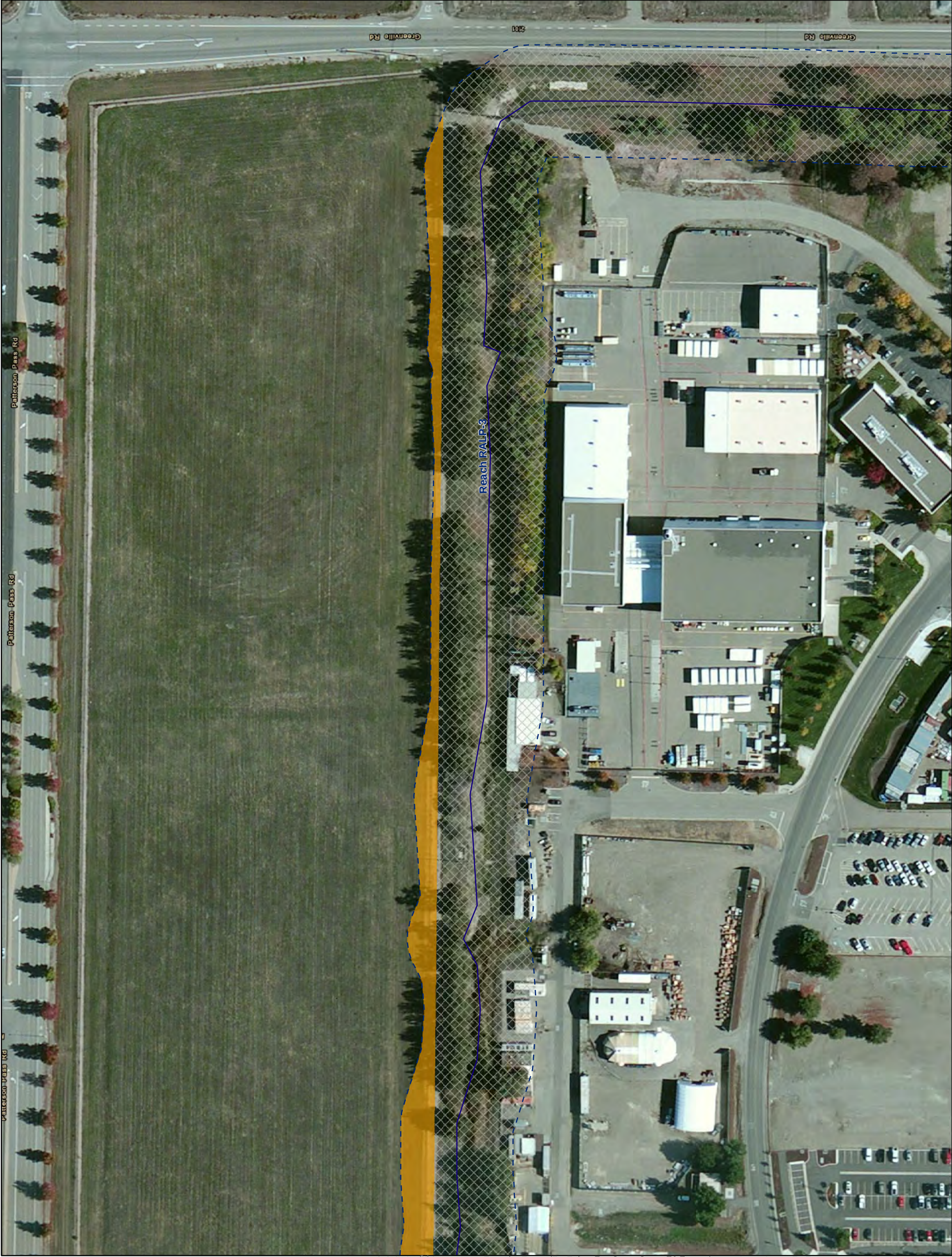
City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Golf Course / Urban Park
 - Riverine
 - Ruderal
 - Urban - Suburban



Figure 3-134
Realigned Arroyo Las Positas
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Golf Course / Urban Park
 - Riverine
 - Ruderal
 - Urban - Suburban

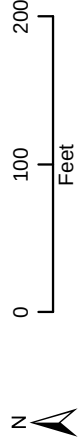


Figure 3-133
Realigned Arroyo Las Positas
Page 9 of 11



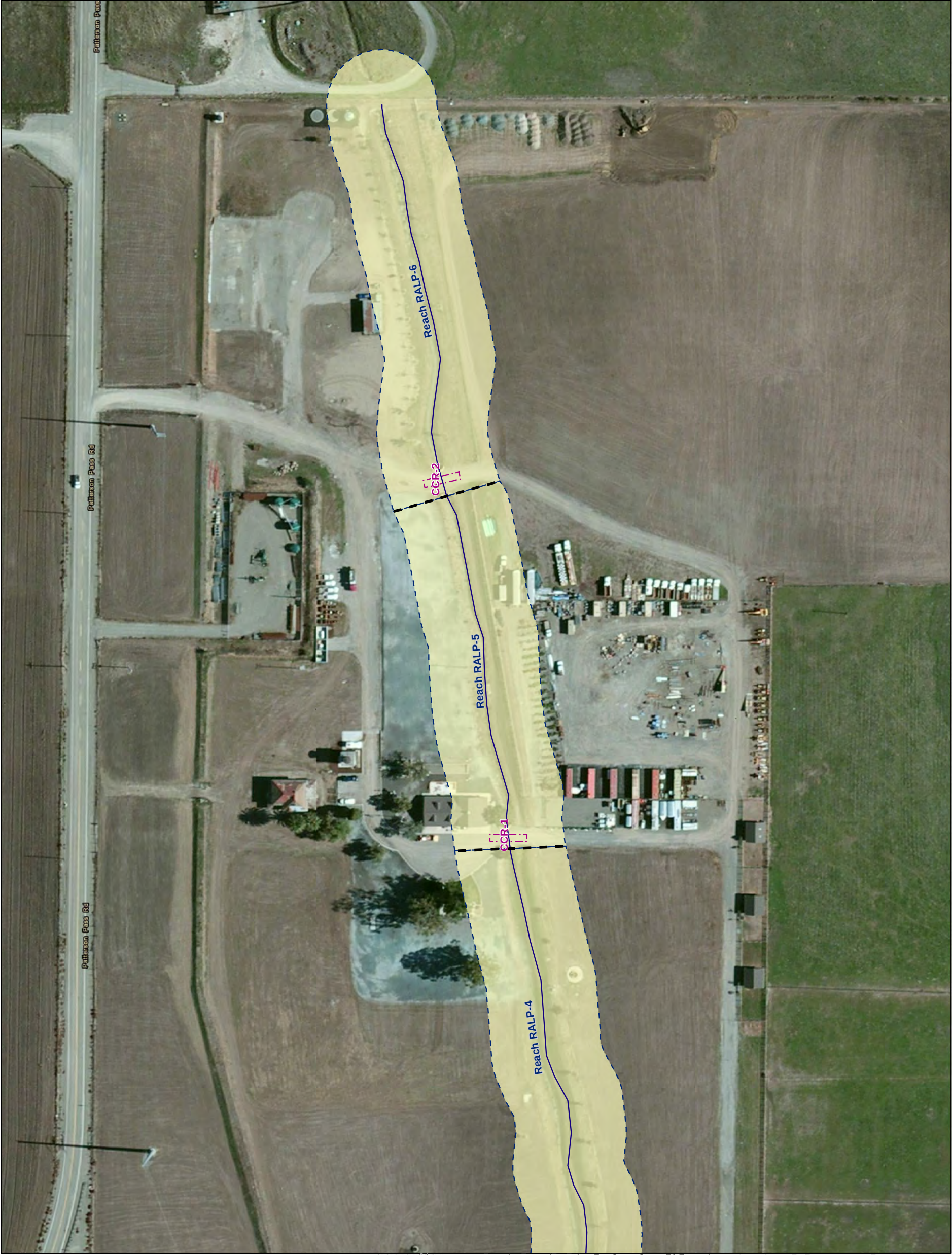
City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Golf Course / Urban Park
 - Riverine
 - Ruderal
 - Urban - Suburban



Figure 3-132
Realigned Arroyo Las Positas
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Golf Course / Urban Park
 - Riverine
 - Ruderal
 - Urban - Suburban

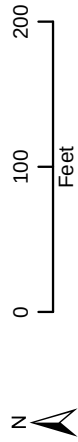


Figure 3-131
Realigned Arroyo Las Positas
Page 11 of 11



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover**
- California Annual Grassland
 - Mixed Riparian Forest and Woodland
 - Seasonal Wetland

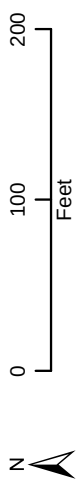
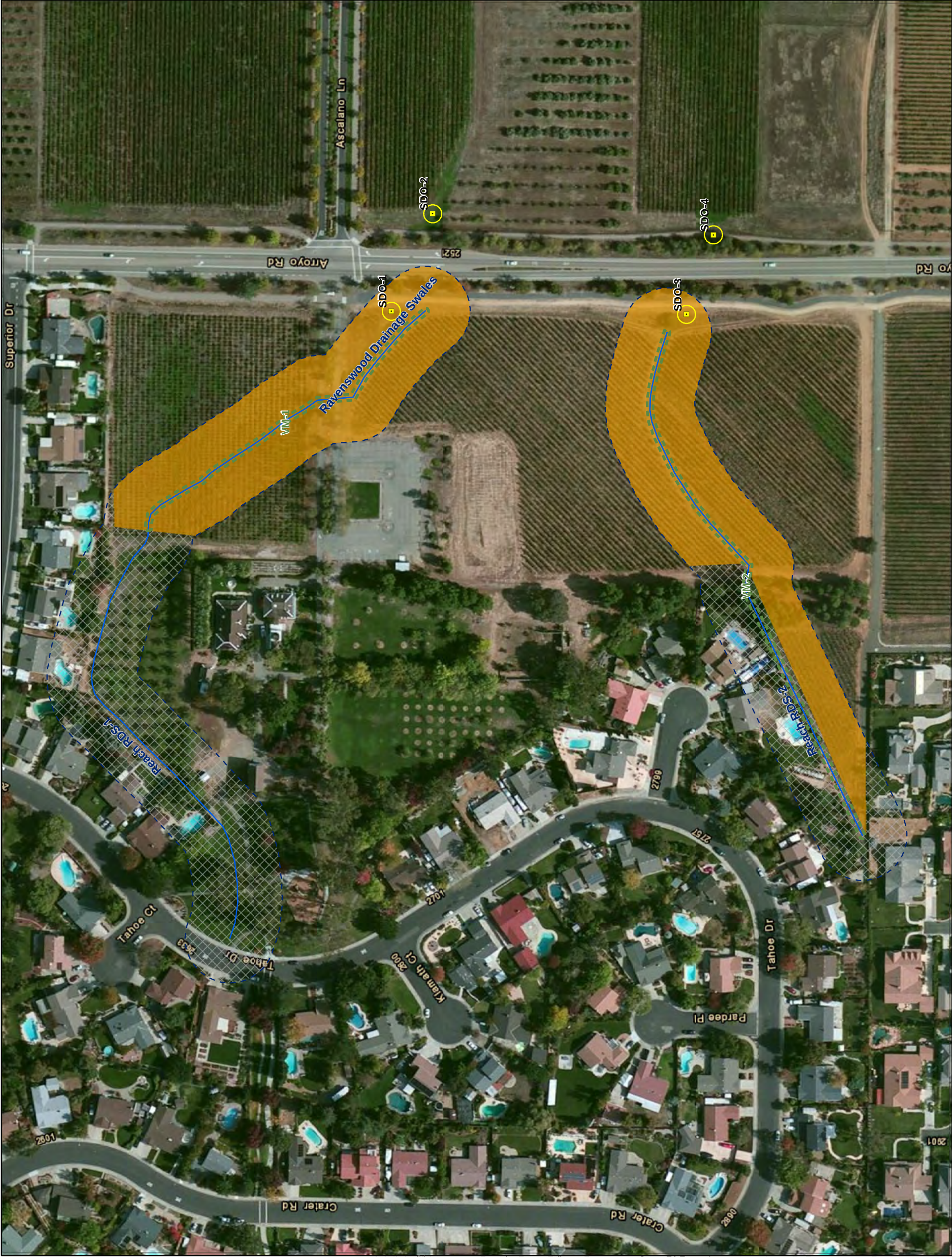


Figure 3-142
Cottonwood Creek
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City of Livermore
Stream Maintenance Program



- Stream with Reach ID
 - Reach Break
 - 75-foot Stream Buffer
 - Storm Drain Outfall (SDO) Impact Area
- Land Cover
- Ruderal
 - Urban - Suburban

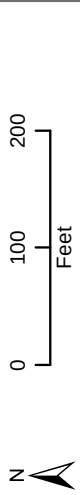


Figure 3-143
Ravenswood Drainage Swales
Page 1 of 1



- Basin
- Reach Break
- 75-foot Basin Buffer
- Storm Drain Outfall (SDO) Impact Area

Land Cover

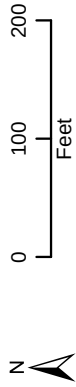
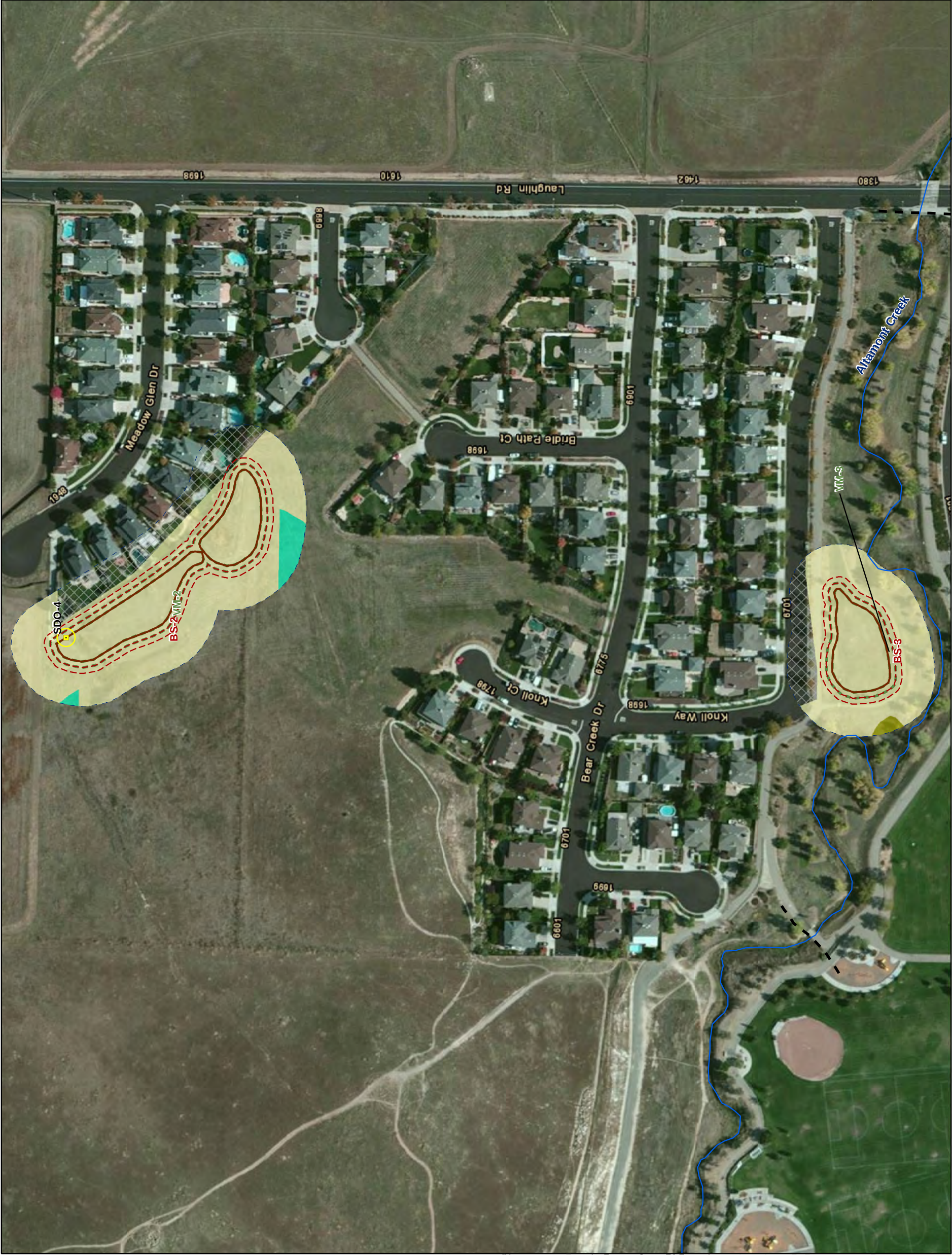


Figure 3-145
Bear Creek Basins
Page 1 of 2





- Basin
- Reach Break
- 75-foot Basin Buffer
- Storm Drain Outfall (SDO) Impact Area

Land Cover

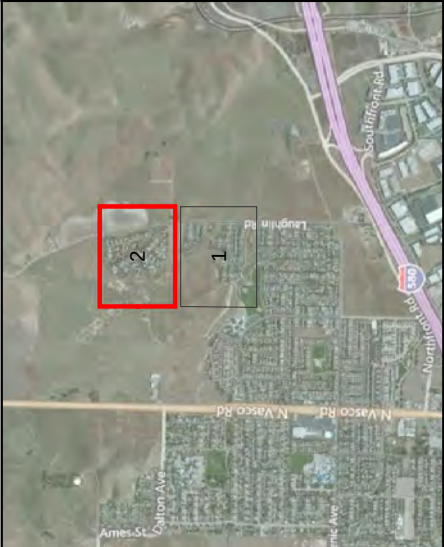
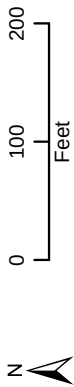


Figure 3-144
Bear Creek Basins
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