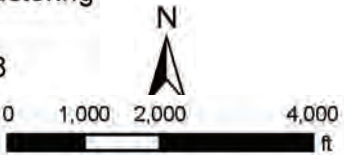


Source: PG&E, 2012.



- 12 kV Distribution Reconductoring
- Fulton No. 1 60 kV
- Proposed Substation Site 8
- Sonoma County Airport
- Town Boundary






**Figure 4-1**

**Project Overview Map**



Source: PG&E, 2012.

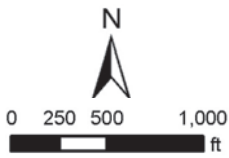
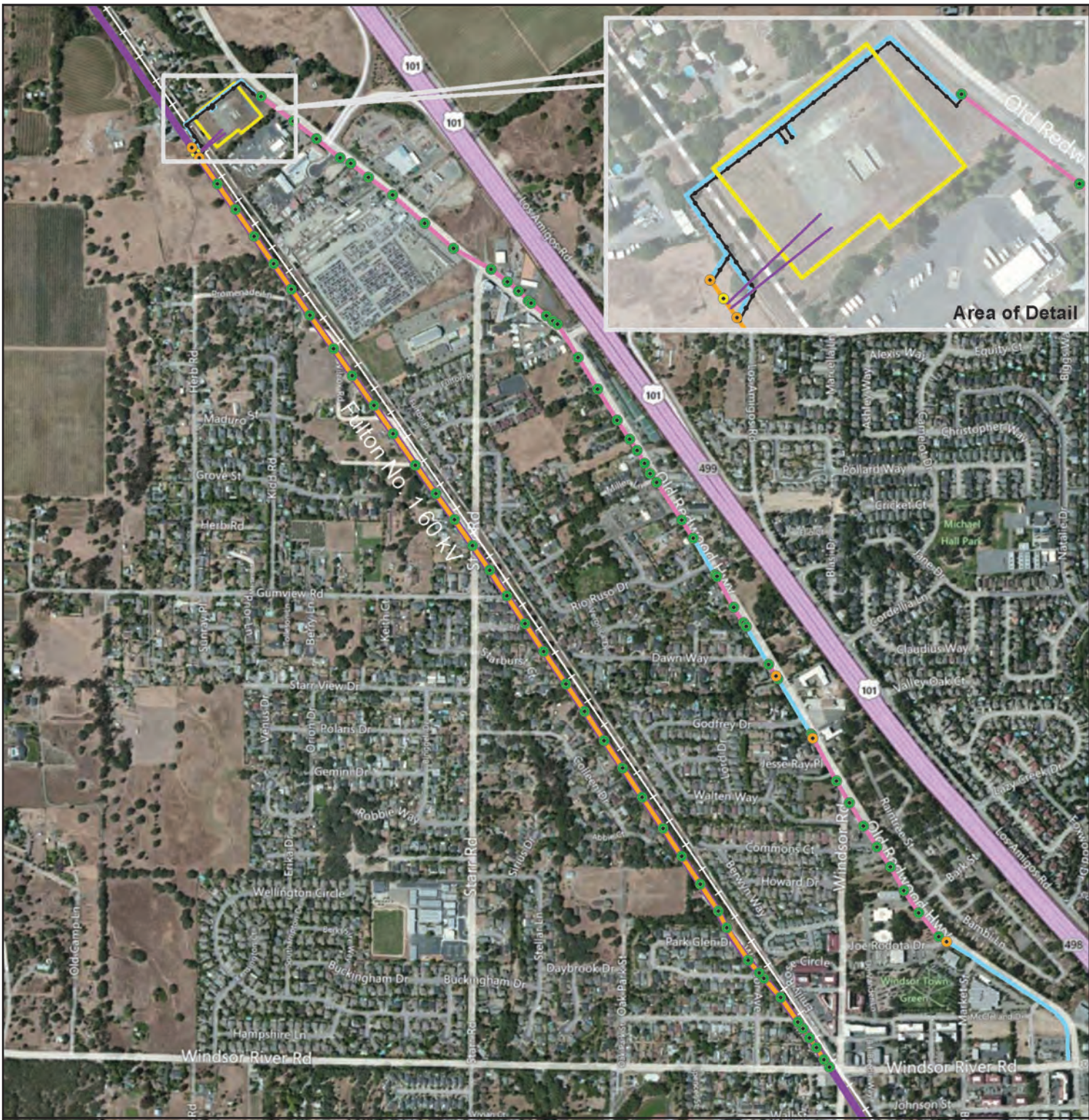


-  Proposed 115 kV Loop (Initially 60 kV Loop)
-  Site 8
-  Fulton No. 1 60 kV



**Figure 4-2**

**Windsor Substation Site - Aerial Map**



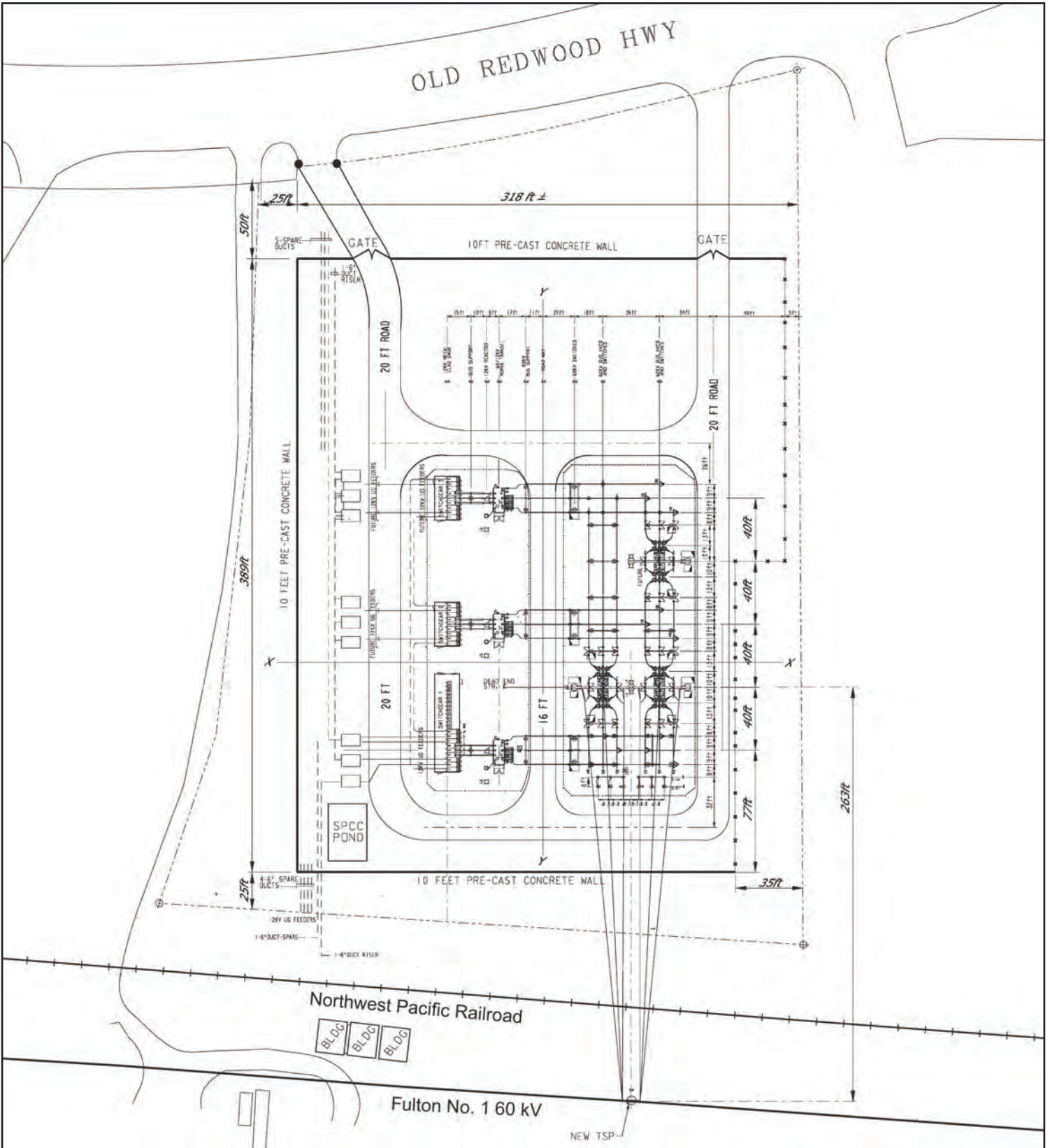
Source: PG&E, 2012.



- Wood-to-Wood Pole Replacement
- Wood-to-Steel Pole Replacement
- New Riser Pole
- Future Underground Distribution Line Conduits
- Overhead Double Circuit 12 kV Distribution Line Underbuild of Existing Fulton No. 160 kV Power Line
- Overhead Double Circuit Reconductoring of Existing 12 kV Distribution Line
- Underground Double Circuit Reconductoring of Existing 12 kV Distribution Line
- Proposed 115 kV Loop (Initially 60 kV Loop)
- Fulton No. 160 kV
- Site 8

**Figure 4-3**

**Windsor Substation  
Associated Reconductoring**

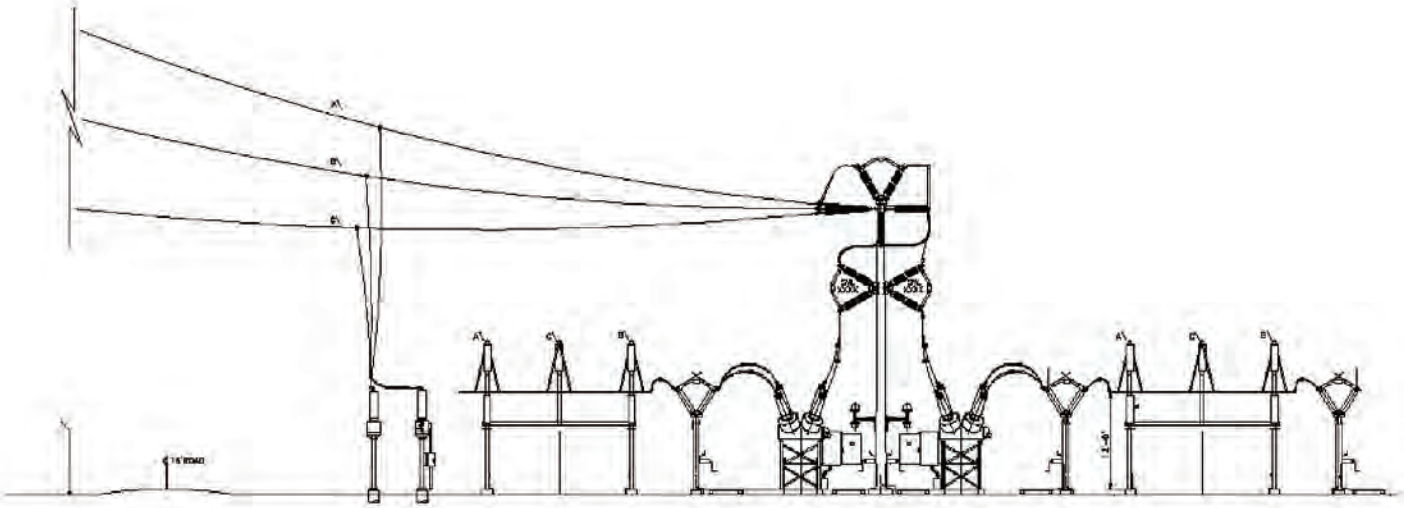


Source: PG&E, 2012 2013.

Figure 4-4



Typical Three Bank Substation



Source: PG&E, 2010.



**Figure 4-5**

**Typical Three Bank Substation Profile**



1. Old Redwood Highway near Highway 101 offramp looking north



2. Old Redwood Highway near corner of site looking north



3. Old Redwood Highway near Bisacno Road looking south \*

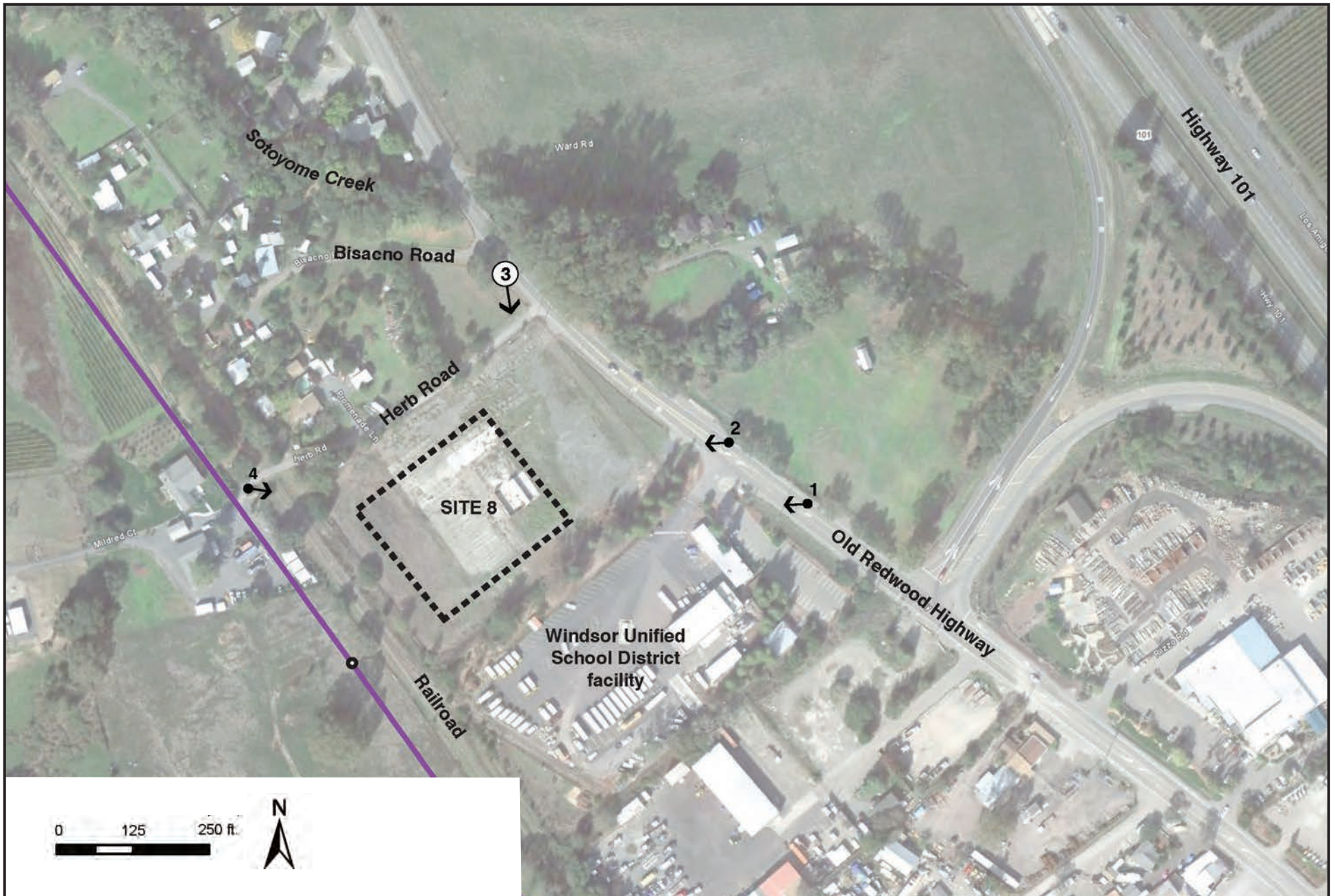


4. Herb Road near corner of site looking east



\*Simulation view  
Source: PG&E, 2011.

**Figure 5.1-1**  
**Windsor Substation**  
**Site Photographs**

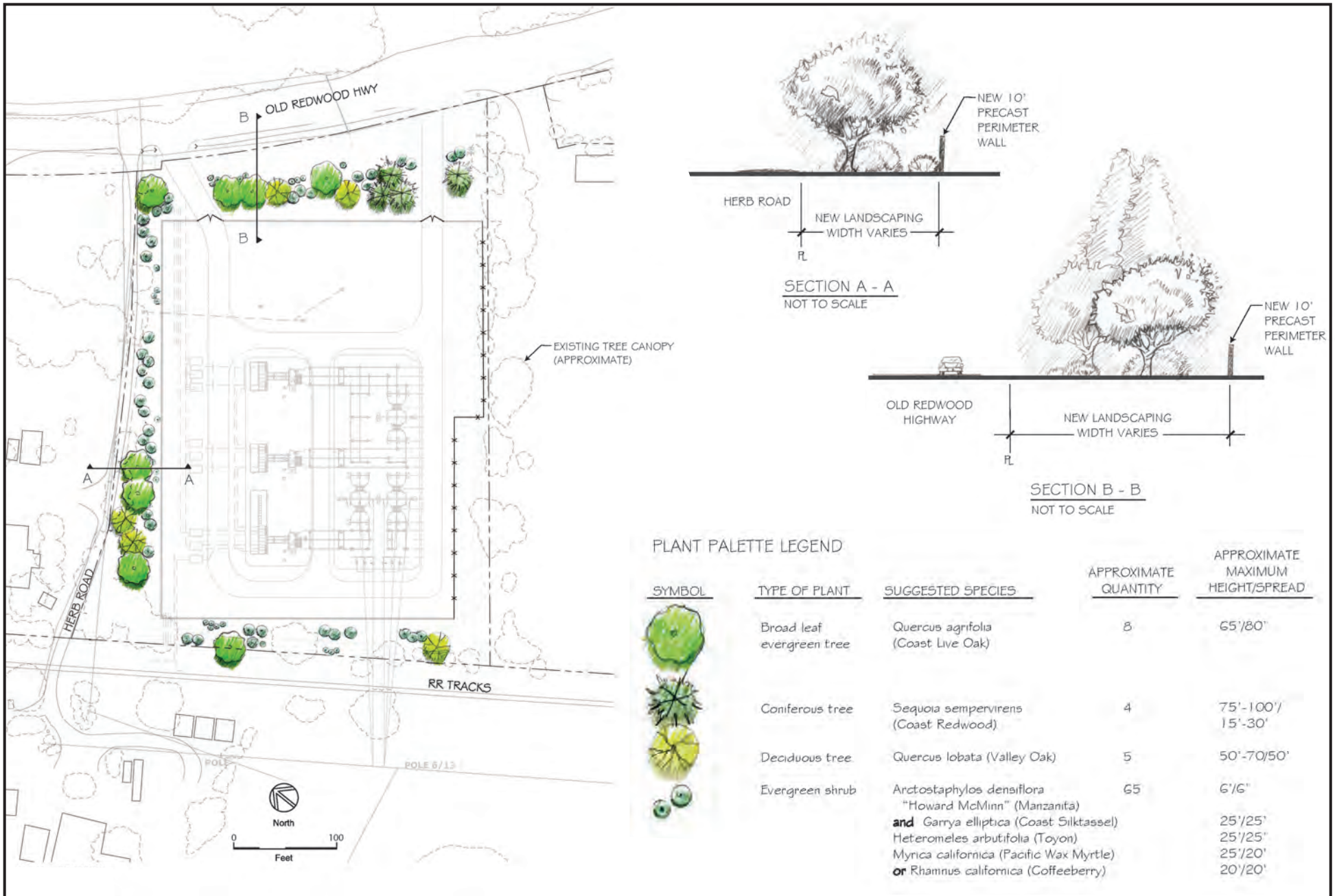


Source: PG&E, 2011.

- ← ③ Simulation Viewpoint
- ← ● 1 Photo Viewpoints (1-4)
- Fulton No. 1 60 kV

- Interconnect Pole
- Site 8

**Figure 5.1-2**  
**Windsor Substation**  
**Site Photo Viewpoints**







Existing view from Old Redwood Highway looking south



Visual simulation of proposed project without landscaping



Visual simulation of proposed project with landscaping shown at 8 years maturity

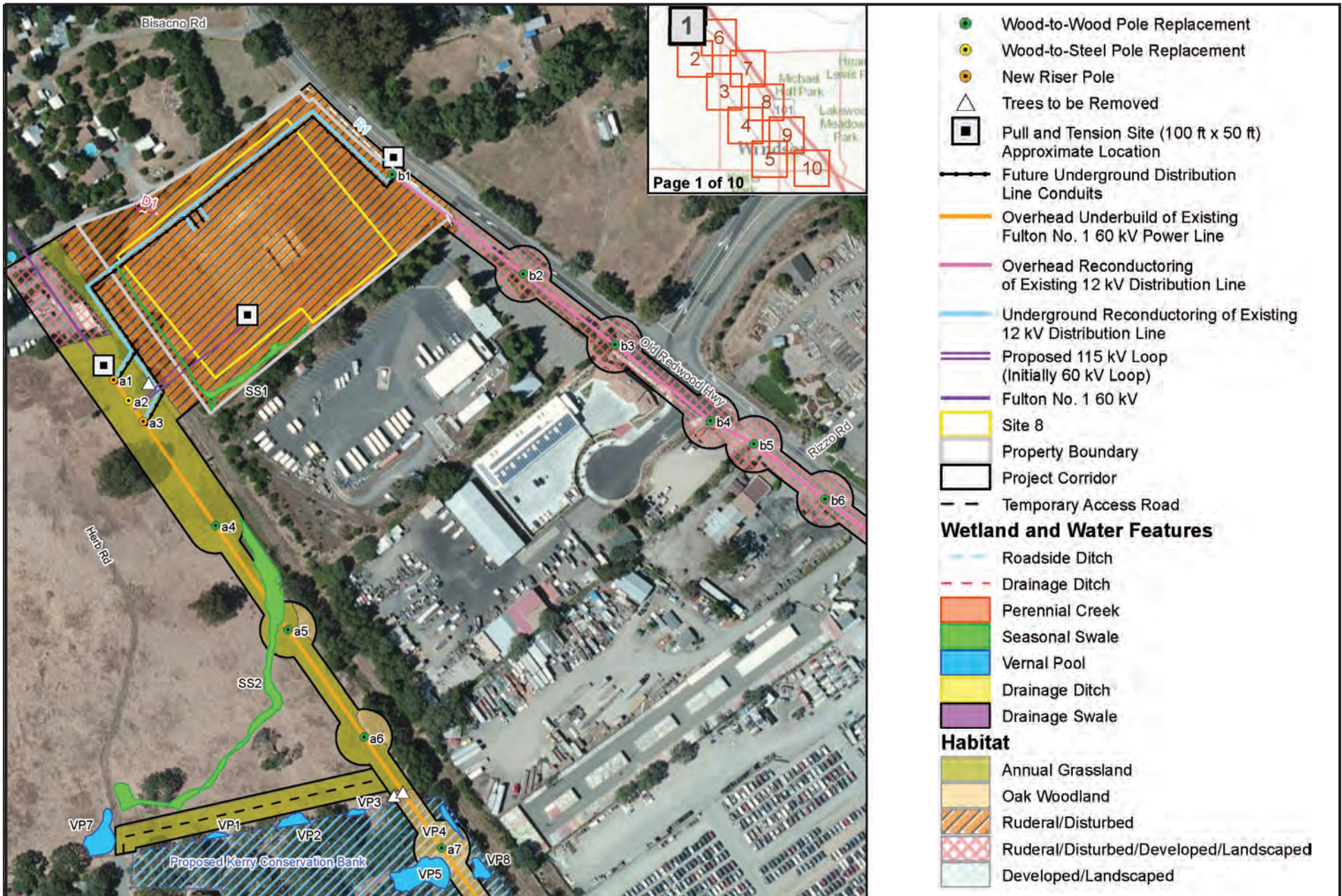


Figure 5.4-1

Windsor Substation Project  
Biological Resources Mapset  
Map 1

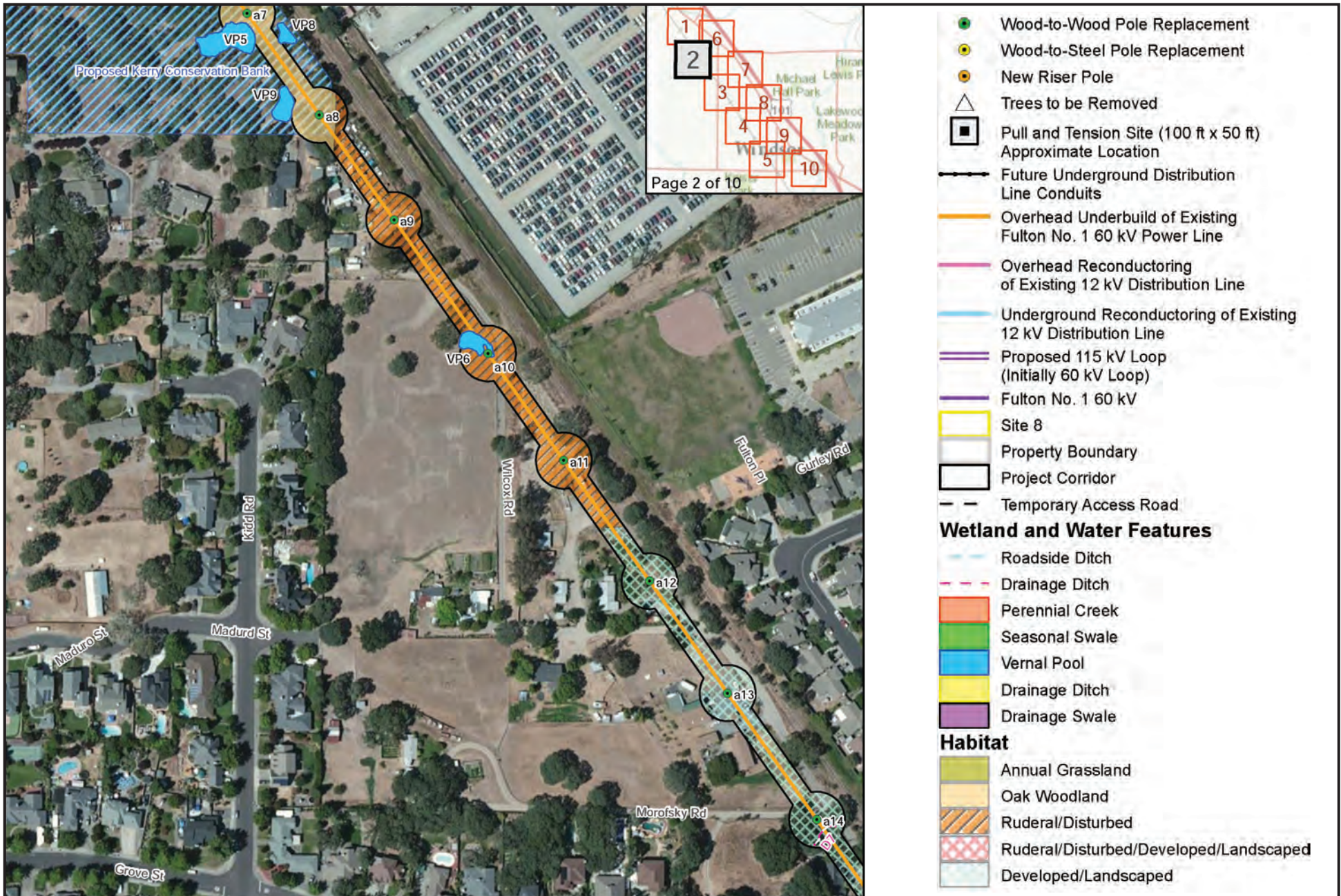


Figure 5.4-1

Windsor Substation Project  
Biological Resources Mapset  
Map 2



Source: PG&E, 2012.

0 62.5 125 250 ft



**Figure 5.4-1**

**Windsor Substation Project  
Biological Resources Mapset  
Map 3**



Figure 5.4-1

Windsor Substation Project  
Biological Resources Mapset  
Map 4

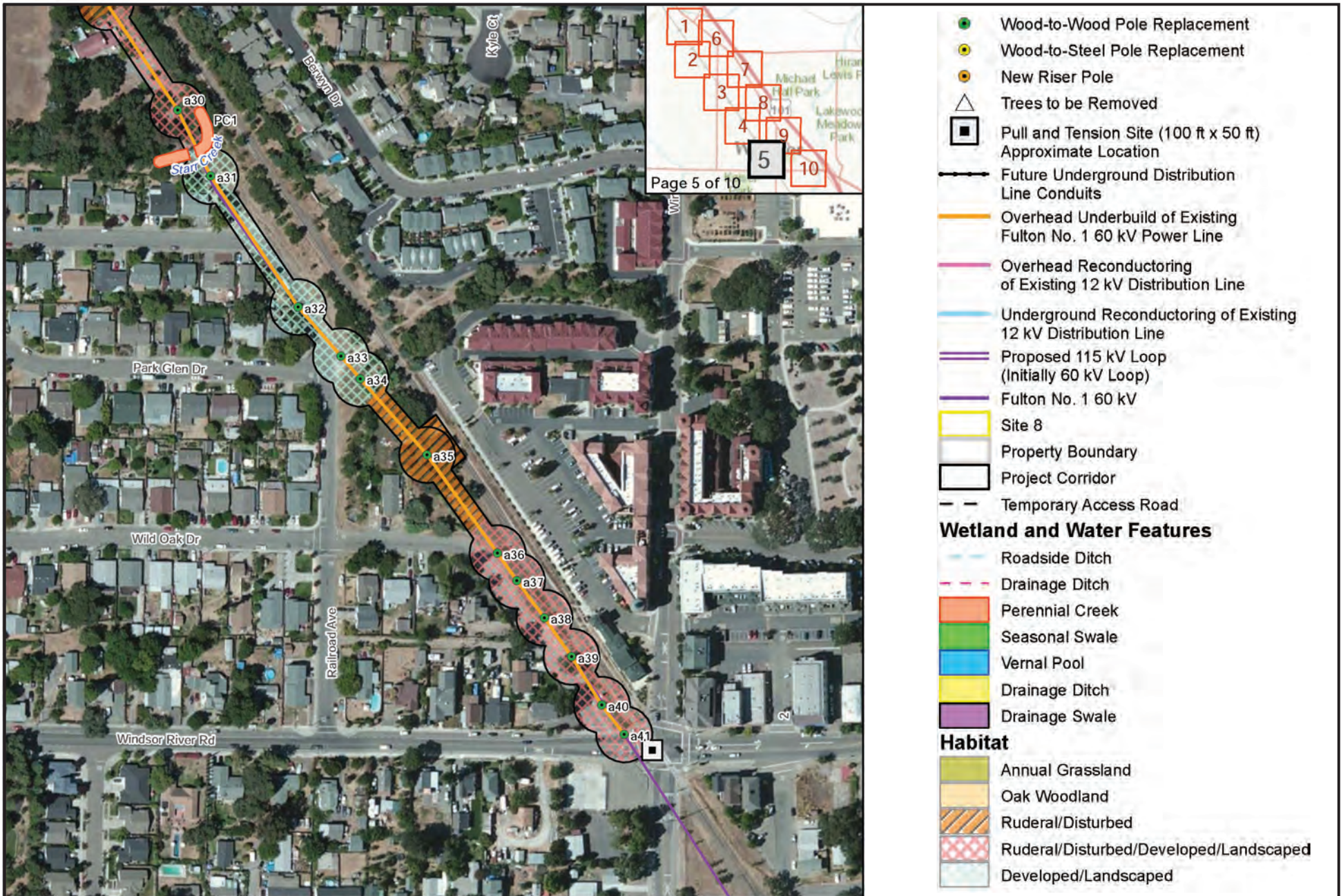
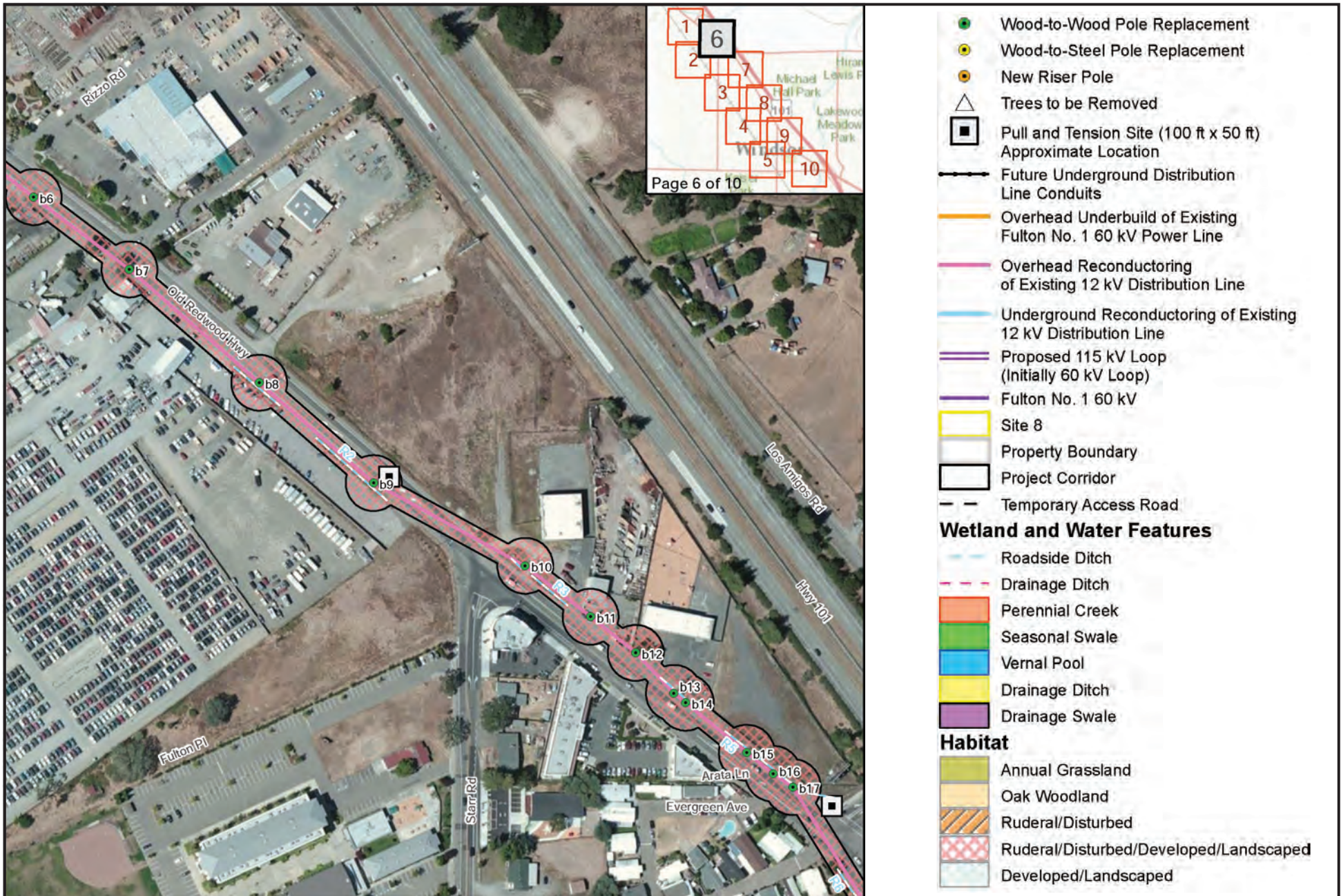


Figure 5.4-1

Windsor Substation Project  
Biological Resources Mapset  
Map 5

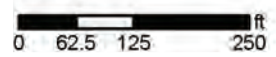




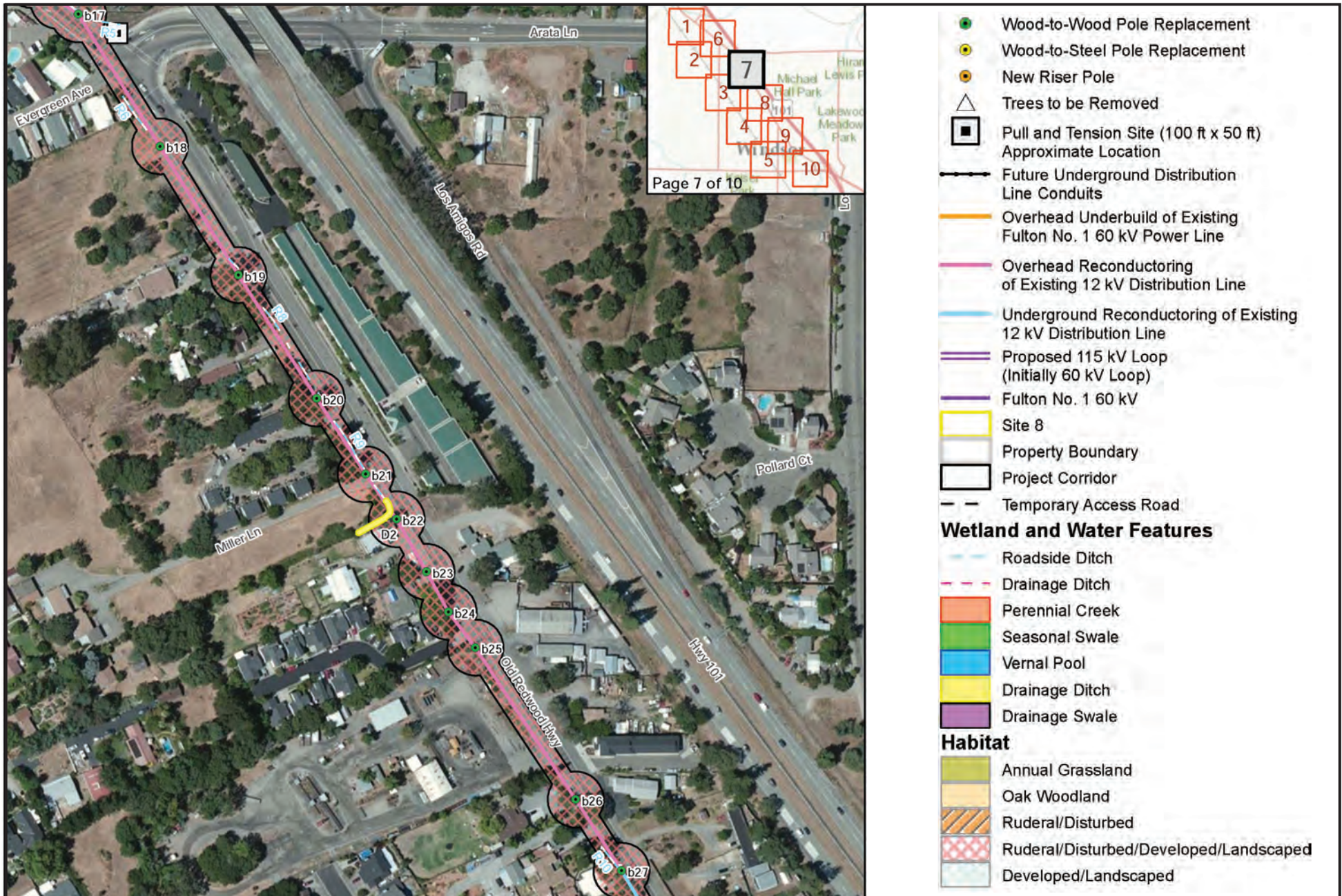
Page 6 of 10



Source: PG&E, 2012.



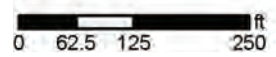
**Figure 5.4-1**  
**Windsor Substation Project**  
**Biological Resources Mapset**  
**Map 6**



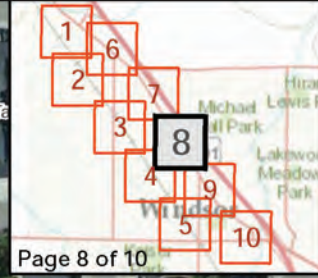
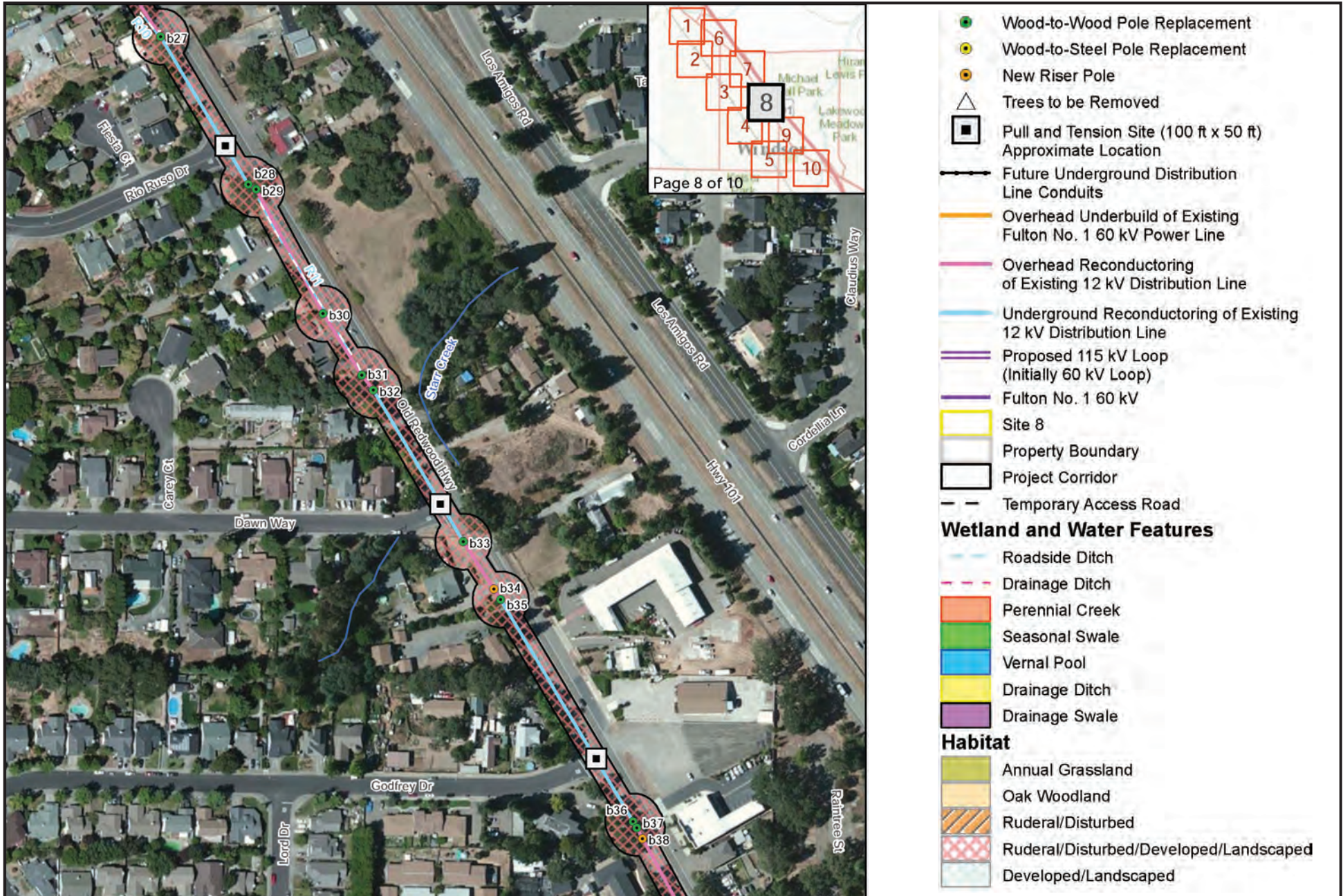
Page 7 of 10



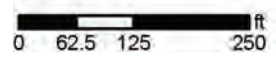
Source: PG&E, 2012.



**Figure 5.4-1**  
**Windsor Substation Project**  
**Biological Resources Mapset**  
**Map 7**



Source: PG&E, 2012.



**Figure 5.4-1**  
**Windsor Substation Project**  
**Biological Resources Mapset**  
**Map 8**

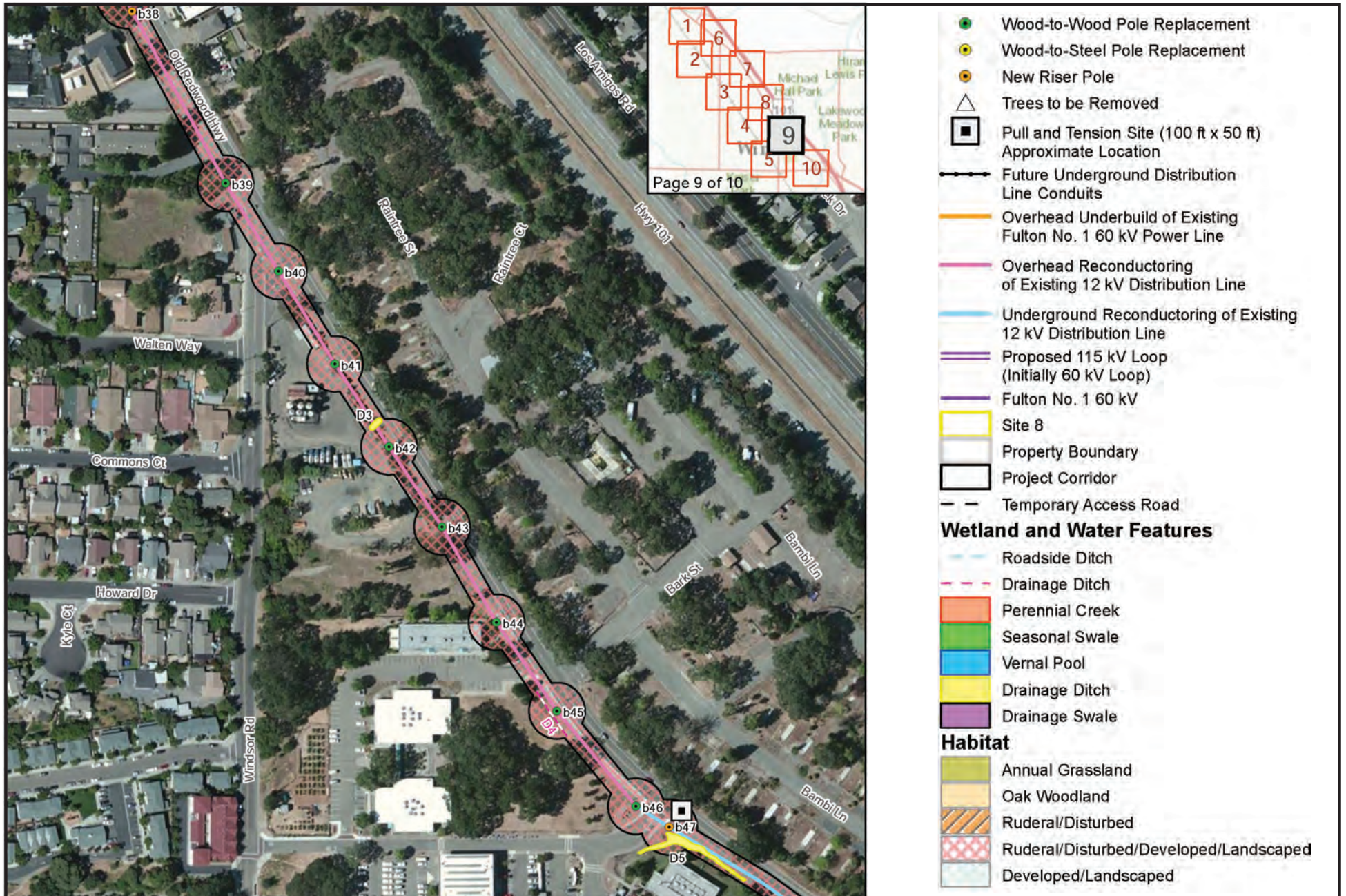


Figure 5.4-1

Windsor Substation Project  
Biological Resources Mapset  
Map 9



- Wood-to-Wood Pole Replacement
  - Wood-to-Steel Pole Replacement
  - New Riser Pole
  - Trees to be Removed
  - Pull and Tension Site (100 ft x 50 ft) Approximate Location
  - Future Underground Distribution Line Conduits
  - Overhead Underbuild of Existing Fulton No. 1 60 kV Power Line
  - Overhead Reconductoring of Existing 12 kV Distribution Line
  - Underground Reconductoring of Existing 12 kV Distribution Line
  - Proposed 115 kV Loop (Initially 60 kV Loop)
  - Fulton No. 1 60 kV
  - Site 8
  - Property Boundary
  - Project Corridor
  - Temporary Access Road
- Wetland and Water Features**
- Roadside Ditch
  - Drainage Ditch
  - Perennial Creek
  - Seasonal Swale
  - Vernal Pool
  - Drainage Ditch
  - Drainage Swale
- Habitat**
- Annual Grassland
  - Oak Woodland
  - Ruderal/Disturbed
  - Ruderal/Disturbed/Developed/Landscaped
  - Developed/Landscaped

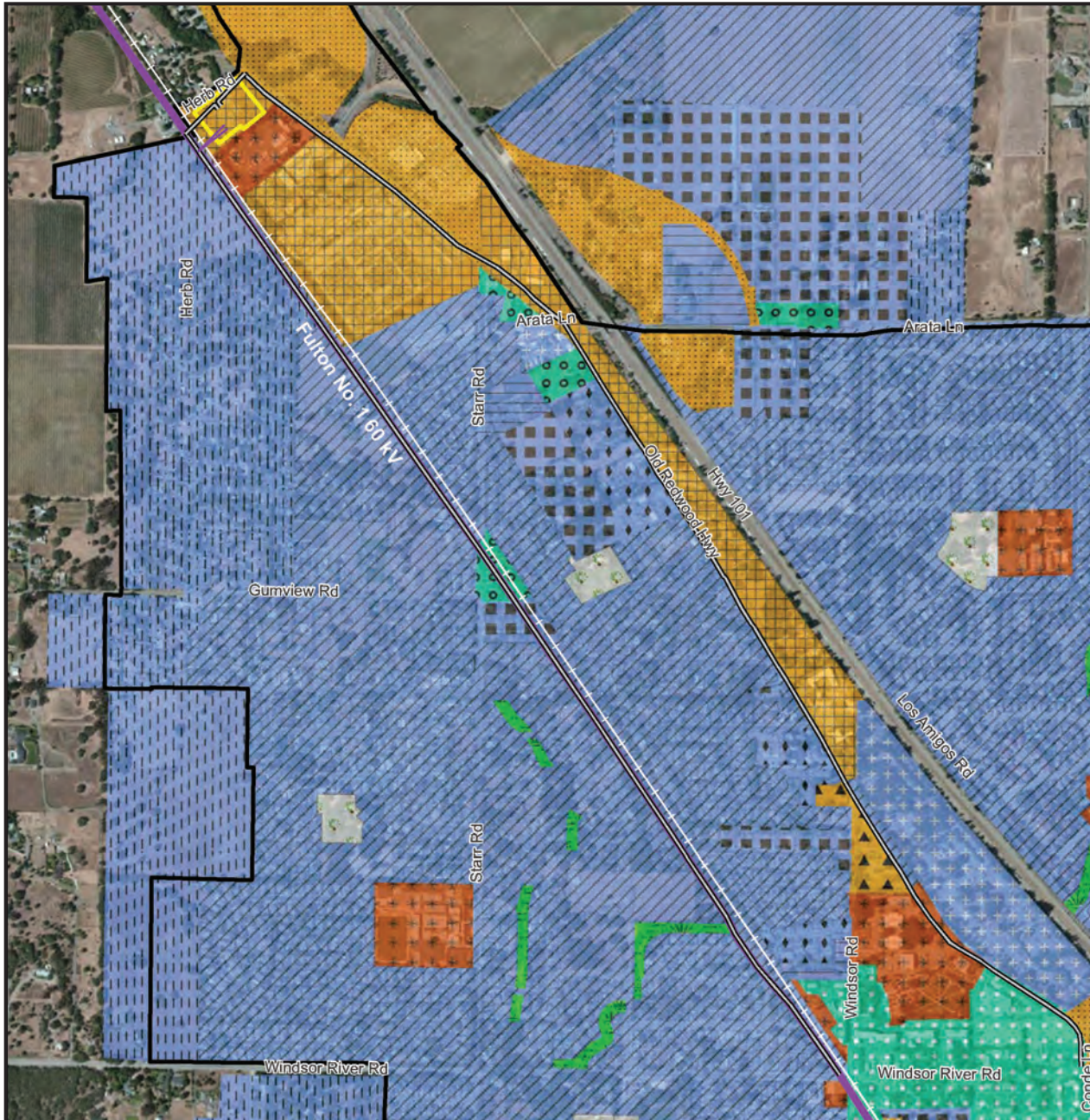


Source: PG&E, 2012.

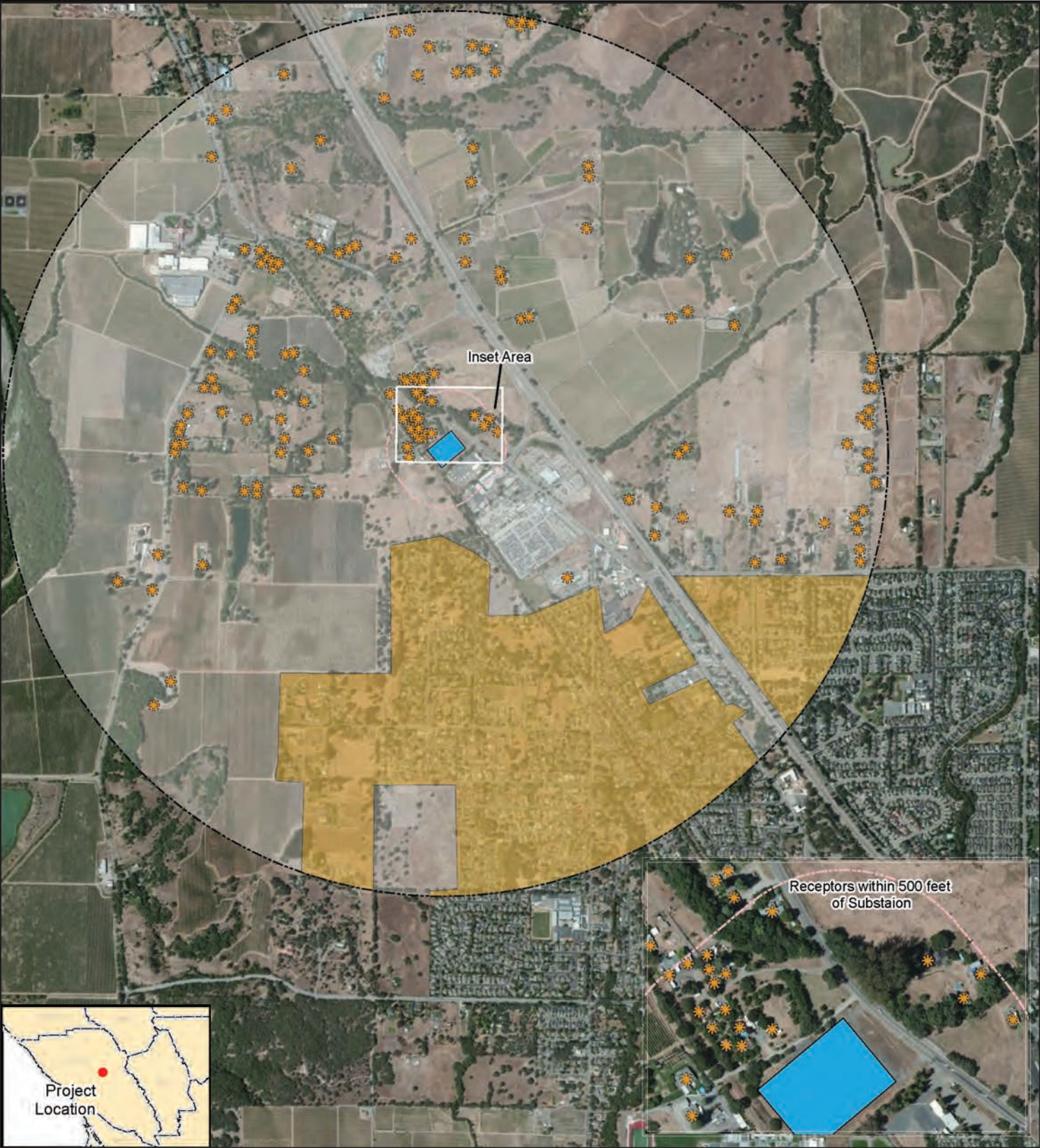


**Figure 5.4-1**

**Windsor Substation Project  
Biological Resources Mapset  
Map 10**



- 12 kV Distribution Reconductoring
  - Proposed 115 kV Loop (Initially 60 kV Loop)
  - Fulton No. 1 60 kV
  - Site 8
  - ⊕ Town Boundary
- Town of Windsor Land Use Categories**
- RESIDENTIAL**
- High Density Residential
  - Medium-High Density Residential
  - Mobile Home Park
  - Village Residential
  - Surrounding Residential
  - Estate Residential
- MIXED USE**
- Town Center/Mixed Use
  - Neighborhood Center/Mixed Use
- COMMERCIAL/INDUSTRIAL**
- Retail Commercial
  - Service Commercial
  - Gateway Commercial
  - Light Industrial
- PARKS/OPEN SPACE**
- Parks
  - Open Space
- PUBLIC/QUASI-PUBLIC/INSTITUTIONAL**
- Cemetary/School/Wastewater-Treatment Plant



Source: PG&E, 2012.



- Windsor Substation Footprint
  - Sensitive Receptors
  - Residential Developments
  - 1-mile buffer
  - 500-foot buffer
- 0 1,250 2,500 Feet

Figure 5.12-1

Existing Sensitive Receptors

Future Sound Levels w/ 10ft sound wall  
Transformers modeled as 72dBA @ 3ft

