# Appendix H

# BIOLOGICAL RESOURCES SUMMARY OF THE OFF-SITE SEWER OPTIONS

**Appendix H**
**BIOLOGICAL RESOURCES SUMMARY OF THE OFF-SITE SEWER OPTIONS**
**VALIANO PROJECT**

The purpose of this report is to describe the results of a general biological survey of the off-site sewer options for the Valiano project, analyze potential impacts to biological resources from implementation of the different options, and discuss potential mitigation measures.

As proposed, the project would include an on-site wastewater treatment and water reclamation facility. However, as an alternative to on-site treatment, the project may implement one of three off-site sewer options alternatives: (1) Escondido option, (2) Vallecitos option, and (3) Harmony Grove option. These options are further discussed below.

## OFF-SITE SEWER OPTIONS

### Off-site Sewer Option 1: Connection to the City of Escondido (City) Hale Avenue Resource Recovery Facility (HARRF)

This option would be via an out-of-service agreement between the County of San Diego (County) and City. It involves the following off-site facilities/activities (Figure 1a):

(1) Installation of approximately 2,700 linear feet of new sewer main from the new LS-12 on the Project site to an existing City pump station (LS-12), with these facilities to be located within existing City and County streets. This line will be owned and operated by the City.

(2) Installation of approximately 1,600 linear feet of new force main pipeline from the Project site to an existing City sewer line, with the new facilities to be located within an existing San Diego Gas & Electric (SDG&E) easement. This line will be owned and operated by the City.

(3) Abandonment of approximately 1,600 linear feet of existing sewer force main located in an existing City easement. The abandonment of the force main is anticipated to be slurry fill of the line; force main removal is not anticipated.

(4) Installation of approximately 200 linear feet of new recycled water pipeline from the proposed Rincon Del Diablo MWD (District) Recycled Water (RW) Pipeline, to be constructed as part of the Harmony Grove Village development, to the Project site, with the new facilities to be located within City streets. This line will be owned and operated by the District. The District's existing RW system will convey RW from HARRF to the vicinity of Country Club Drive and the SDG&E easement.

The RW water from HARRF can also be stored in the Wet Weather Storage on the project site through the existing off-site RW system and the proposed RW backbone system through the Project. This will allow the City to reduce peak wet weather impacts on the City's land outfall. The backbone RW system will include a pipeline through the

main arterial street in the northern portion of the Project, then, east in Mt. Whitney Road, south on Country Club Drive to the connection with the existing RW system in the vicinity of the SDG&E easement and the new LS-12.

(5) Installation of approximately 1,000 linear feet of a new sewer return line from the Wet Weather Storage to the new gravity sewer main in Country Club Drive, as identified in Item 1 above. This line will be within existing County streets and will be owned and operated by the City.

**Off-site Sewer Option 2: Connection to Vallecitos Water District (VWD) Facilities**

This option would be via annexation into the VWD for sewer service only. It involves the installation of approximately 3,400 linear feet of new force main from the Project site to an existing VWD pipeline (Figure 2a). This would require four on-site pump stations. One sewer lift station will be private and owned and operated by the Valiano Homeowners Association (HOA). The three larger lift stations will be owned and operated by the VWD and will have back-up generators. The on-site sewer system will be owned and operated by VWD.

Existing VWD pipelines would need to be upgraded as follows:

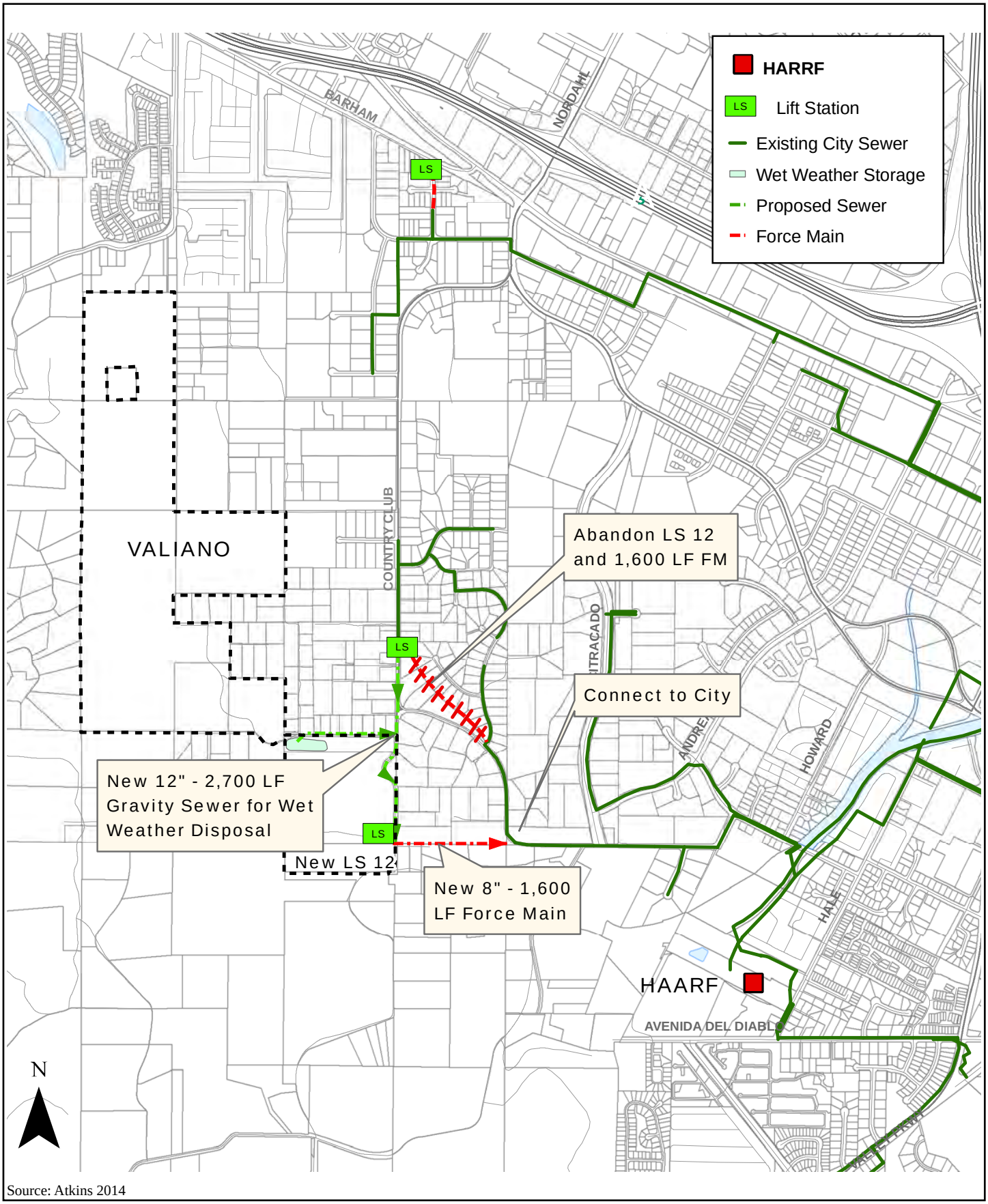
- Approximately 3,200 linear feet of pipeline through the mobile home park and on Barham Drive
- Approximately 500 linear feet of pipeline under State Route (SR-) 78 from Barham Drive to Rancheros Drive

Additional facilities that may require upgrading have been identified in the VWD *Water, Wastewater, and Recycled Water Master Plan* (November 2010) and may be required as a condition of development by VWD or contribution through annexation and connection fees. The VWD *Water, Wastewater, and Recycled Water Master Plan Final Program EIR SCH No. 2010071073* (March 2011) includes the following capital improvement projects.

- SP-2 – replace 3,200 linear feet of 21-inch sewer with 39-inch sewer
- SP-11 – replace 1,400 linear feet of 21-inch sewer with 36-inch, and install 800 linear feet of 8-inch sewer
- SP-12 – replace 2,000 linear feet of 21-inch sewer with 36-inch
- Possible improvements to the Land Outfall

**Off-site Sewer Option 3: Connection to the Harmony Grove Water Reclamation Facility**

This option would occur via expansion of the County Harmony Grove Sewer Service Area. This option involves: (1) the installation of approximately 5,100 linear feet of force main from the Project Sewer Lift Station site to the Harmony Grove water reclamation facility (WRF), with these facilities to be located within existing City/County streets; and (2) the construction of a new pump station and backup power generator at the Valiano Sewer Lift Station site (Figure 3a). The County would own and operate the sewer lift station.




Source: Atkins 2014

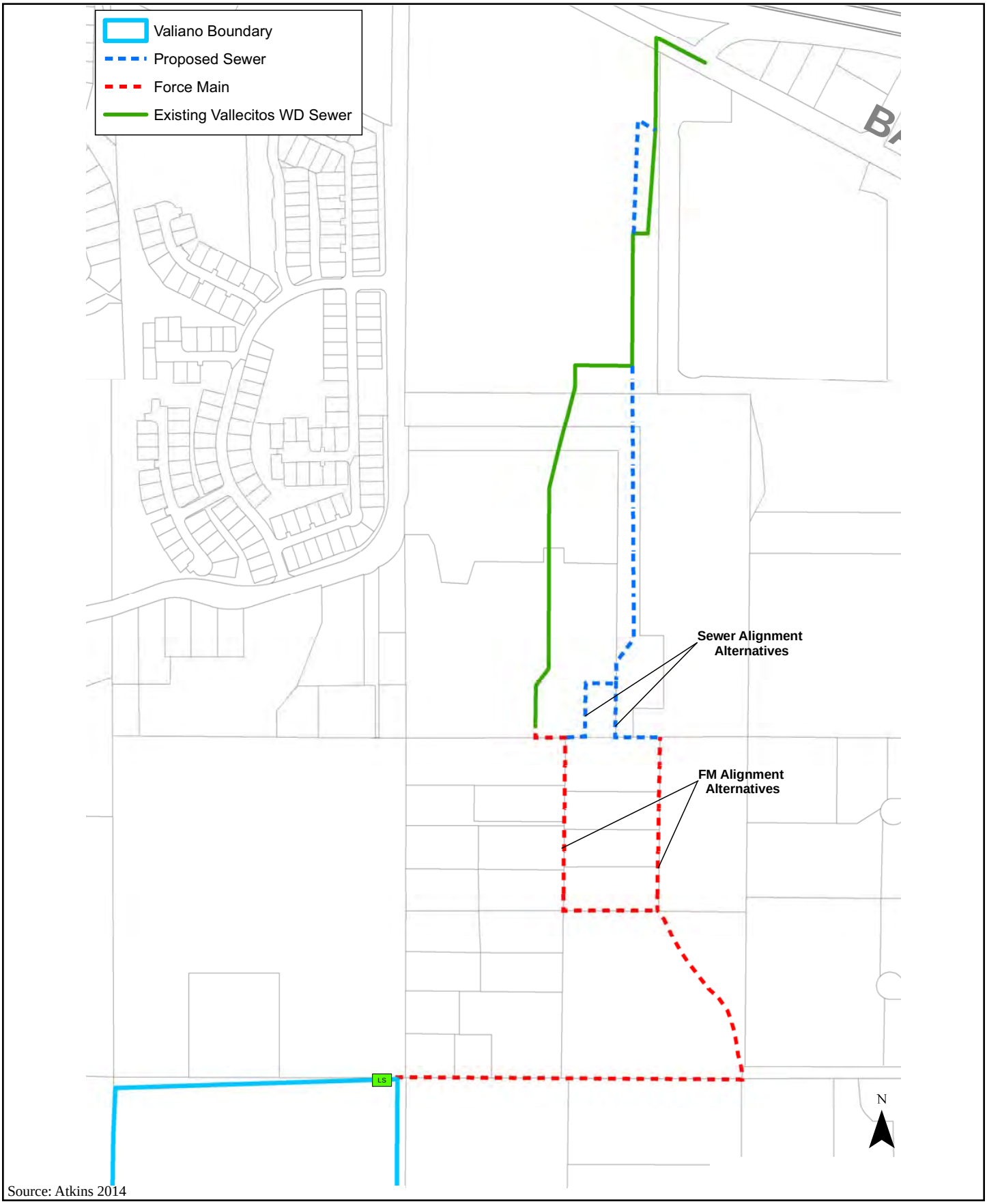
I:\PROJECTS\UIPQ\IPQ-08_Valiano\Map\BIO\SewerOptions_OffSite\Fig1a_HaleAveConnection.indd IPQ-08 07/21/14 -KF

# Off-site Sewer Option 1: Connection to City of Escondido Hale Avenue Resource Recovery Facility

VALIANO

Figure 1a

HELIX Environmental Planning




I:\PROJECTS\VI\IPQ\IPQ-08_Valiano\Map\BIO\SewerOptions_OffSite\Fig2a_VallecitosConnection.indd IPQ-08 07/21/14 -KF

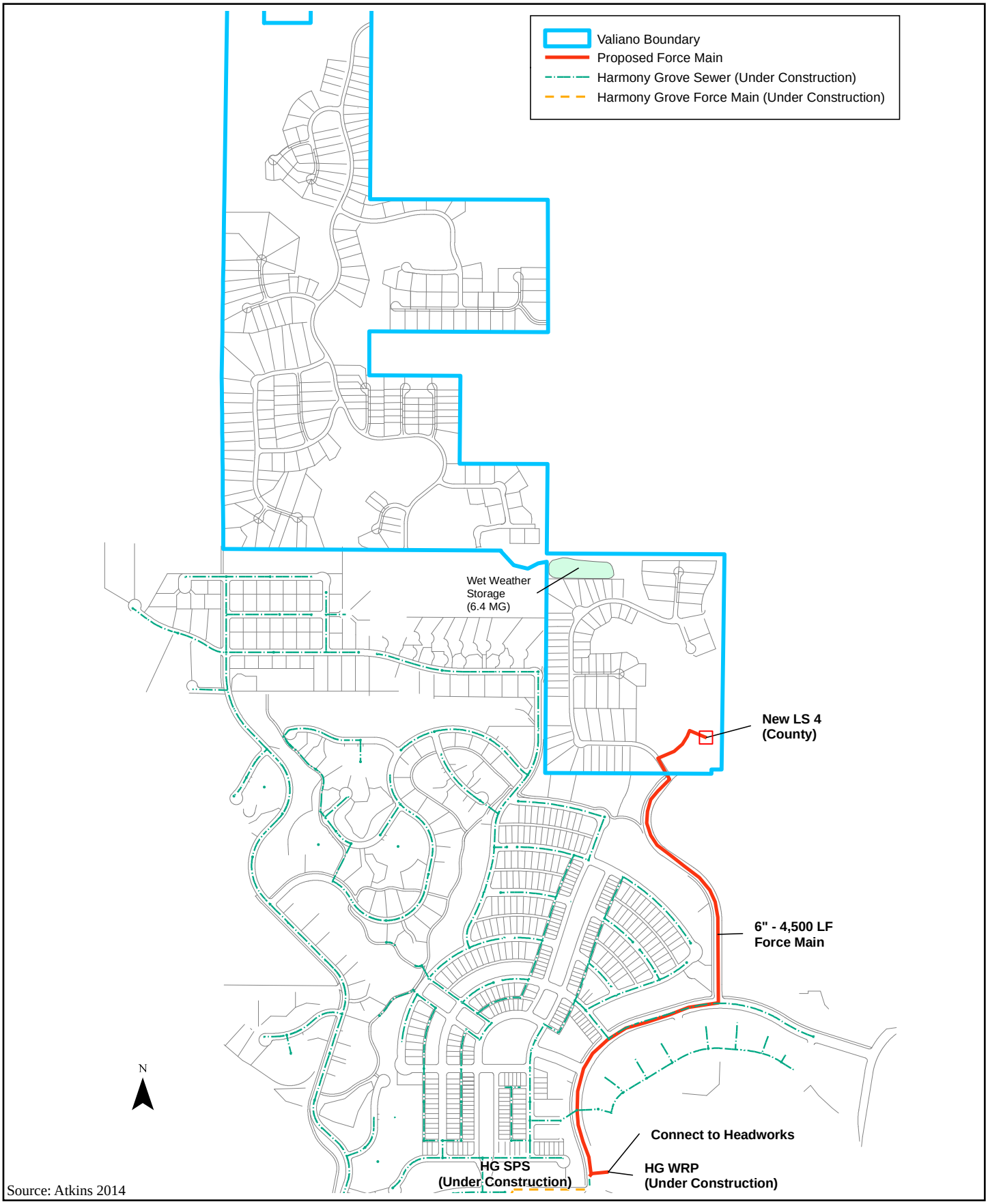
Source: Atkins 2014

# Off-site Sewer Option 2: Off-site Connection to Vallecitos Water District Facilities

VALIANO

Figure 2a

HELIX Environmental Planning




I:\PROJECTS\VI\PQ\IPQ-08_Valiano\Map\BIO\SewerOptions_OffSite\Fig3a_HarmonyGroveConnection.indd IPQ-08 07/21/14 -KF

Source: Atkins 2014

# Off-site Sewer Option 3: Connection to the Harmony Grove Treatment Plant

VALIANO

HELIX Environmental Planning

Figure 3a

This option will require working with the County on modifications to the WRF design criteria and potentially re-rating the design flow at the WRF to include the Project's sewer flows.

## METHODS

HELIX biologist Stacy Nigro conducted vegetation mapping and a general biological survey for the three off-site sewer options on July 22, 2014. The survey was conducted according to County Requirements (2010), which included mapping vegetation communities within 100 feet of the potential off-site sewer alignments (Figures 1b, 2b, and 3b). Vegetation was mapped on a 1"=100' scale aerial. The survey was conducted on foot with the aid of binoculars, and plant and animal species were recorded. Animal identifications were made in the field by direct, visual observation or indirectly by detection of calls, burrows, tracks, or scat. Plant identifications were made in the field or in the lab through comparison with voucher specimens or photographs. Focused species surveys were not conducted.

Prior to conducting the biological survey, a search of the California Department of Fish and Wildlife's (CDFW's) California Natural Diversity Database (2014) for information regarding sensitive species known to occur within the vicinity of the study area was conducted, as well as a review of U.S. Fish and Wildlife (USFWS) and Multiple Species Conservation Program (MSCP) sensitive species databases. A search of the San Diego Plant Atlas (SDNHM 2014) also was conducted.

Nomenclature used in this report comes from Holland (1986) and Oberbauer (2008) for vegetation; Baldwin et al (2012) for plants; and American Ornithologists' Union (2014) for birds.

## SURVEY RESULTS

### Vegetation

#### Off-site Sewer Option 1: Connection to the City of Escondido Hale Avenue Resource Recovery Facility

A total of nine vegetation communities were mapped within the Option 1 study area: coast live oak woodland, Diegan coastal sage scrub (including disturbed), non-native grassland, eucalyptus forest, extensive agriculture, intensive agriculture, non-native vegetation, disturbed habitat, and developed land (Figure 1b, Table 1).

#### Off-site Sewer Option 2: Connection to Vallecitos Water District Facilities

A total of eight vegetation communities were mapped within the Option 2 study area: coast live oak woodland, Diegan coastal sage scrub, non-native grassland, eucalyptus woodland, non-native vegetation, orchard, disturbed habitat, and developed land (Figure 2b, Table 1).

**Off-site Sewer Option 3: Connection to the Harmony Grove Water Reclamation Facility**

A total of seven vegetation communities were mapped within the Option 3 study area: coast live oak woodland, non-native grassland, eucalyptus woodland, non-native vegetation, intensive agriculture, disturbed habitat, and developed land (Figure 3b, Table 1).

**Table 1**
**VEGETATION COMMUNITIES IN THE STUDY AREA OF THE OFF-SITE SEWER OPTIONS**

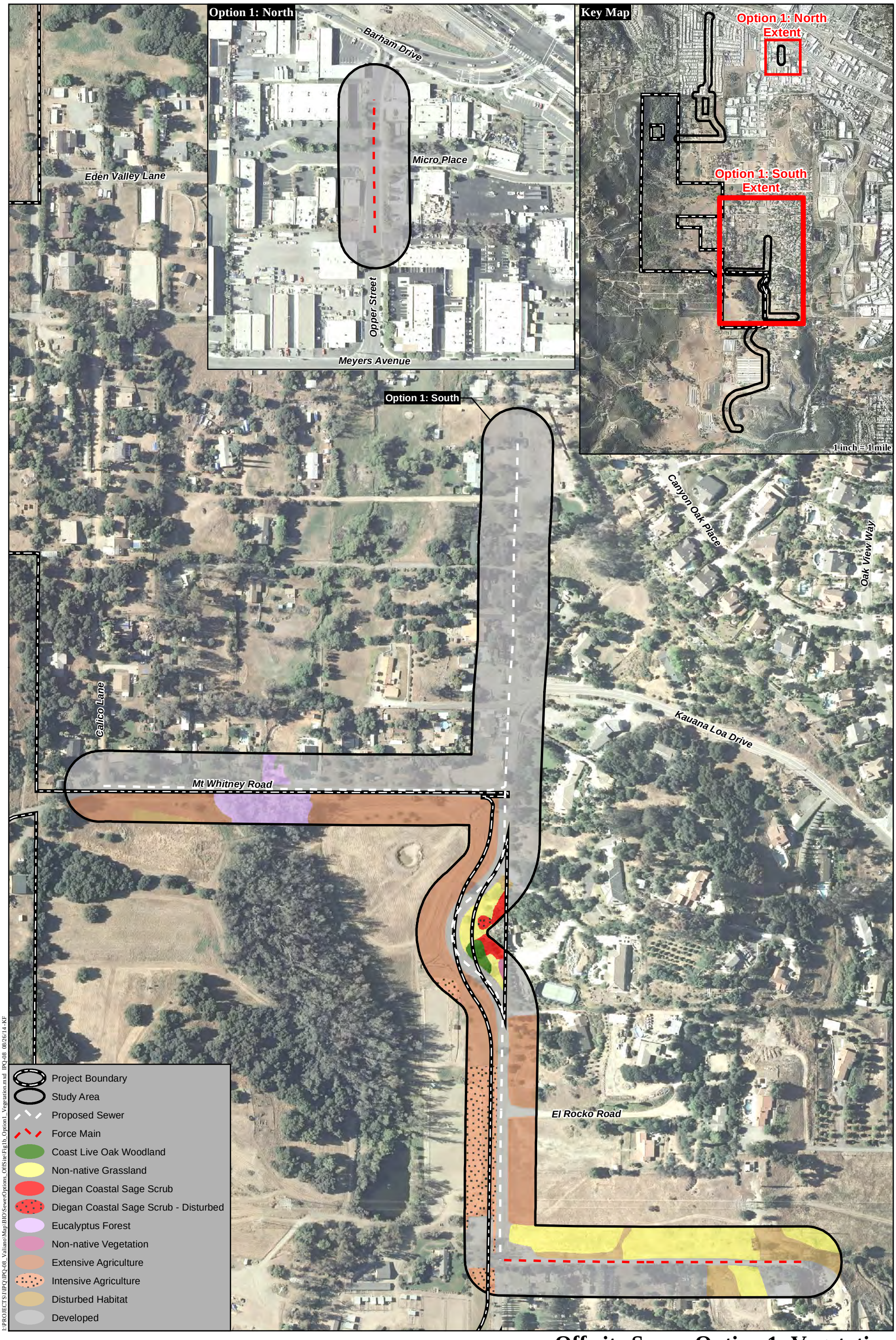
| VEGETATION COMMUNITY* | ACREAGE** | | |
|---|---|---|---|
| | **Option 1 City of Escondido /Hale Avenue** | **Option 2 Vallecitos Water District** | **Option 3 Harmony Grove Reclamation Facility** |
| Coast Live Oak Woodland (71160) | 0.1 | 0.1 | <0.1 |
| Diegan Coastal Sage Scrub - including disturbed (32500) | 0.1 | 0.2 | -- |
| Eucalyptus Forest (79100) | 0.6 | -- | -- |
| Eucalyptus Woodland (11100) | -- | 0.1 | 0.6 |
| Non-native Grassland (42200) | 1.8 | 3.2 | 1.7 |
| Non-native Vegetation (11000) | <0.1 | 0.7 | <0.1 |
| Orchard (18100) | -- | 0.5 | -- |
| Intensive Agriculture (18200) | 1.0 | -- | 0.3 |
| Extensive Agriculture (18300) | 4.2 | -- | -- |
| Disturbed Habitat (11300) | 0.8 | 3.3 | 0.1 |
| Developed Land (12000) | 14.6 | 22.5 | 17.7 |
| **Total** | **23.3** | **30.6** | **20.5** |

* Vegetation categories and numerical codes are from Holland (1986) and Oberbauer (2008).
** Rounded to the nearest 0.1 acre, thus, totals reflect rounding.

**Sensitive Species**

**Plants**

No sensitive plant species were detected within the off-site sewer options study area during the July 22, 2014 biological survey. Furthermore, no sensitive plant species are expected to occur within the study areas of any of the three off-site sewer option alignments, as many of these areas are developed, overlap with previously surveyed areas for the proposed project (no sensitive plants were documented on the proposed project site), consist of agricultural lands or other disturbed, non-native habitats, lack appropriate soil types, and contain limited area of potentially suitable habitat.



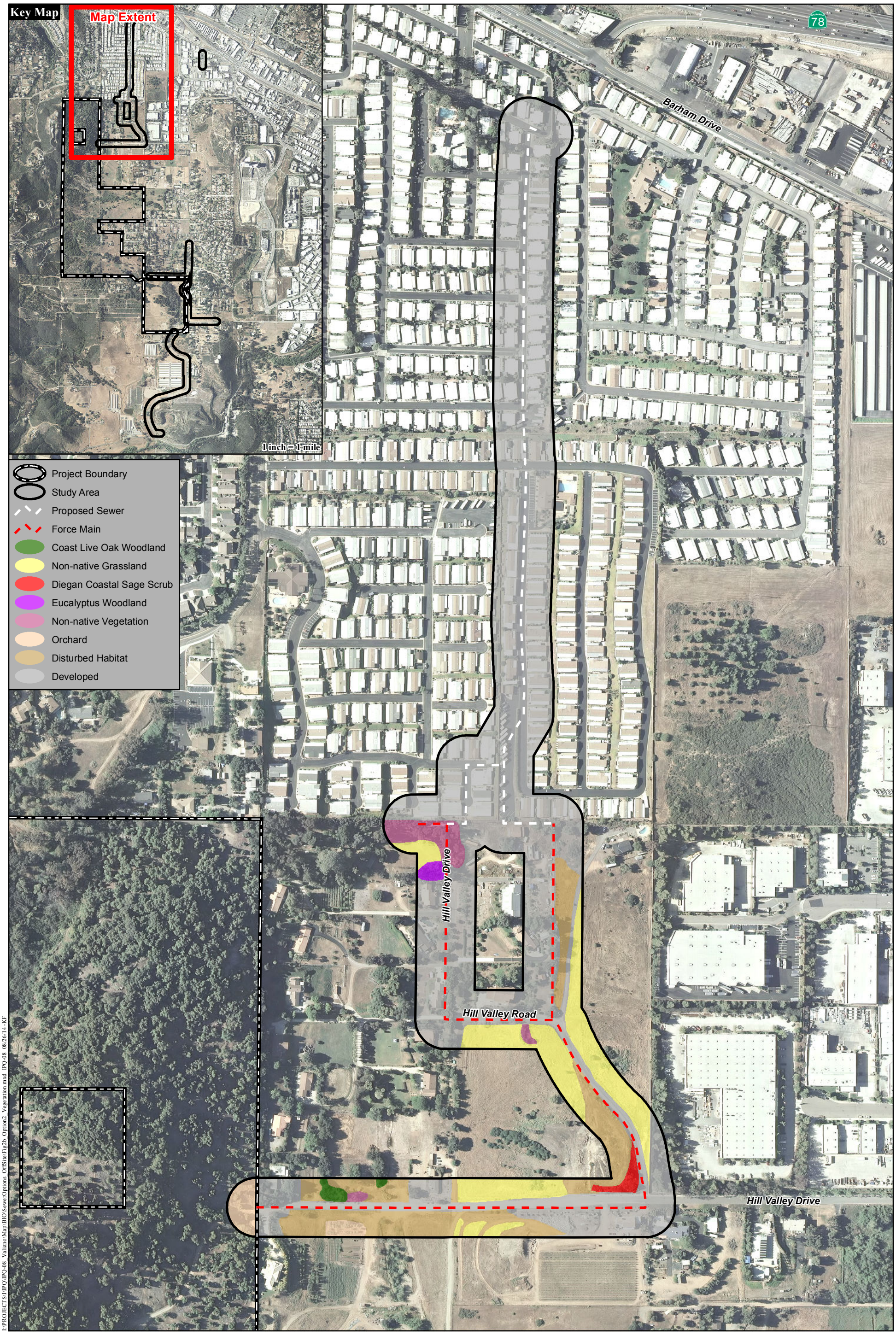

# Off-site Sewer Option 1: Vegetation

VALIANO

HELIX Environmental Planning

N 0 250 Feet

Figure 1b




I:\PROJECTS\1\IPQ\IPQ-08_Valiano\Map\BIO\SewerOptions_OffSite\Fig2b_Option2_Vegetation.mxd IPQ-08 08/26/14 KF

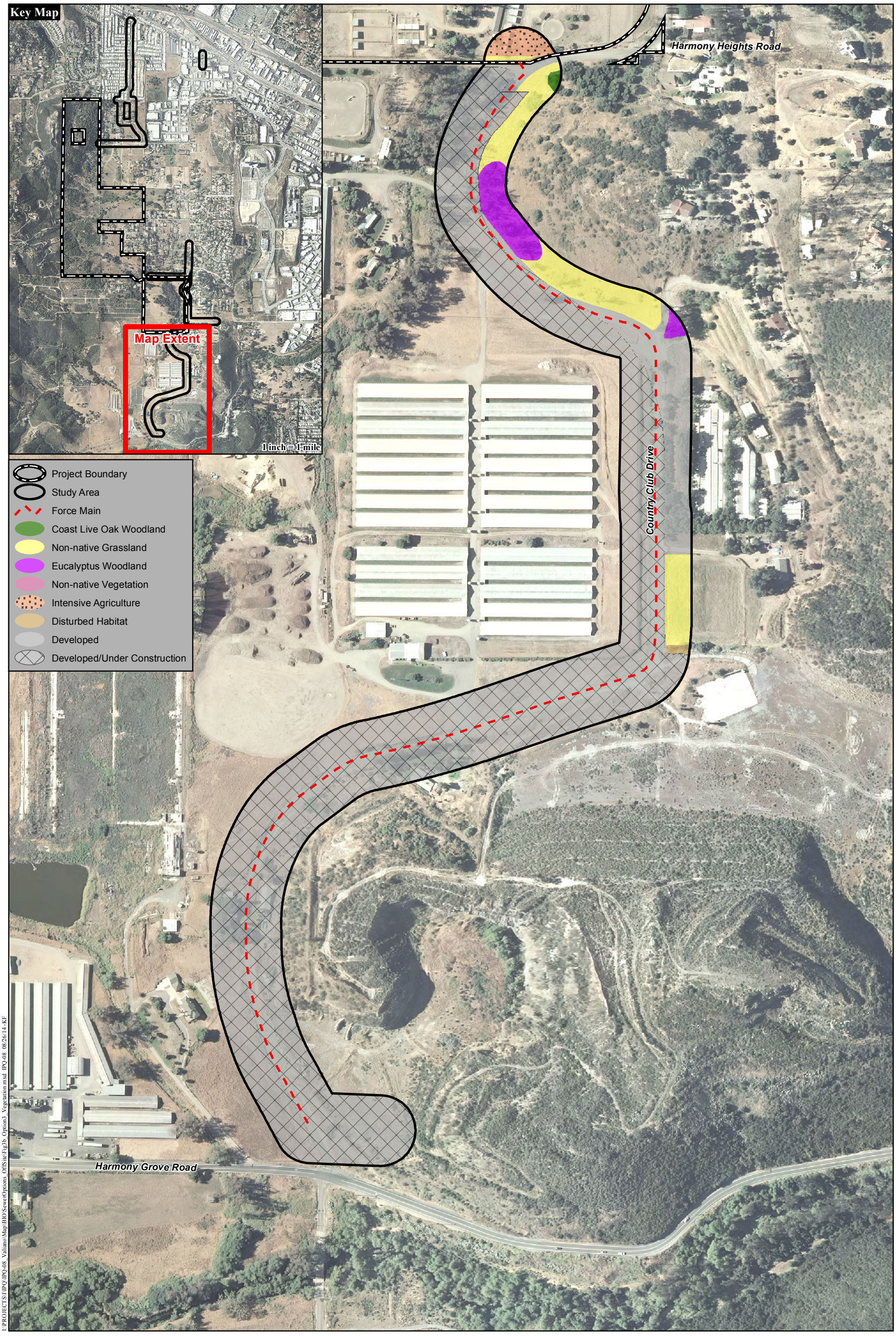
# Off-site Sewer Option 2: Vegetation

VALIANO

HELIX Environmental Planning

0 300 Feet

Figure 2b




# Off-site Sewer Option 3: Vegetation

VALIANO

HELIX Environmental Planning

0 250 Feet

Figure 3b

**Animals**

No sensitive animal species were detected within the off-site sewer options study area during the July 22, 2014 biological survey. Although no sensitive animal species were detected, there is potential for nesting birds, including raptors, to occur within portions of the study areas for each of the three off-site sewer options. No federally or state listed species are expected to occur within the study area due to lack of suitable habitat, but lower sensitivity birds such as Cooper's hawk (*Accipiter cooperi*) and red-shouldered hawk (*Buteo lineatus*) may utilize coast live oak woodland and eucalyptus woodland/forest for perching or nesting, and grassland may be used by other sensitive raptor species such as northern harrier (*Circus cyaneus*). No wetland or riparian habitat occurs within the study areas of the off-site sewer options, therefore, no riparian-associated birds are expected to occur.

**IMPACTS AND MITIGATION**

Implementation of any of the three off-site sewer options described above would be located within developed lands and would not impact sensitive vegetation communities, thus no habitat mitigation would be required. No direct impacts to sensitive vegetation communities or sensitive plant or animal species would occur.

The following measure would be implemented in order to avoid indirect impacts from construction noise to raptors during project implementation:

No grubbing, clearing, or grading within 300 feet of an active raptor nest during the raptor-breeding season (February 1 to July 15) will occur. As such, all grading permits, improvement plans, and the final map will state the same. If grubbing, clearing, or grading is proposed during the raptor breeding season, a pre-grading survey will be conducted within 3 days prior to clearing to determine if raptors occur within the areas directly impacted by grading or indirectly impacted by noise. If there are no raptors nesting (includes nest building or other breeding/nesting behavior) within this area, development will be allowed to proceed upon approval of the Director of PDS with concurrence from USFWS and CDFW. However, if raptors are observed nesting or displaying breeding/nesting behavior within the area, construction will be postponed until (1) all nesting (or breeding/nesting behavior) has ceased or until after July 15; or (2) a temporary noise barrier or berm will be constructed at the edge of the development footprint to reduce noise levels below 60 dB $L_{eq}$ or ambient (if ambient is greater than 60 dB $L_{eq}$), to the satisfaction of the Director of PDS with concurrence from USFWS and CDFW. Alternatively, if approved by the Director of PDS with concurrence from USFWS and CDFW, the duration of construction equipment operation could be controlled to keep noise levels below 60 dB $L_{eq}$ or ambient in lieu of or in concert with a wall or other sound attenuation barrier.

With implementation of the above measure, potential impacts to biological resources from any of the off-site sewer option alternatives would be mitigated to less than significant.

**REFERENCES**

American Ornithologists' Union (AOU). 2014. List of the 2,046 Bird Species (with Scientific and English Names) Known from the AOU Check-list Area. URL: http://www.aou.org/checklist/index.php3.

Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, editors. 2012. The Jepson Manual: Vascular Plants of California, second edition. University of California Press, Berkeley.

California Department of Fish and Wildlife. 2014. California Natural Diversity Database. RareFind Version 5. https://map.dfg.ca.gov/rarefind/view/RareFind.aspx

County of San Diego. 2010. Report Format and Content Requirements – Biological Resources. Land Use and Environmental Group, Department of Planning and Land Use and Department of Public Works. Fourth Revision. September 15.

Holland, R.F. 1986. Preliminary descriptions of the terrestrial natural communities of California. State of California, The Resources Agency.

Oberbauer, Thomas. 2008. Terrestrial Vegetation Communities in San Diego County Based on Holland's Descriptions. Revised from 1996 and 2005. July.

San Diego Natural History Museum (SDNHM). 2014. San Diego County Plant Atlas. URL: http://www.sdplantatlas.org/