

CHAPTER 4.0 – PROJECT ALTERNATIVES

4.1 Rationale for Alternative Selection

Section 15126.6(a) of the State CEQA Guidelines requires the discussion of “a reasonable range of alternatives to a project, or the location of a project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project; and evaluate the comparative merits of the alternatives.” The Proposed Project was determined to result in potentially significant and unmitigable direct and/or cumulative impacts related to aesthetics and air quality. The Project was also determined to have significant (or potentially significant) direct, indirect and/or cumulative but mitigated impacts to agricultural resources, biological resources, cultural resources, noise, paleontological resources, transportation/traffic, hazards and hazardous materials, and geology and soils., ~~and utilities. The impact associated with utilities relate to the proposed water reservoir (R-7) included in Rincon MWD’s 2014 Water Master Plan Update and five year capital improvement program which would be utilized by the Proposed Project as well as other existing and proposed developments in the area. The impact would occur under any of the alternatives since the reservoir would be built with or without the Proposed Project. Therefore, utilities are not analyzed under the alternatives analysis.~~

Section 15126.6(f) of the CEQA Guidelines states that “the range of alternatives in an EIR is governed by the ‘rule of reason’ that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice.” The State CEQA Guidelines provide several factors that should be considered in regard to the feasibility of an alternative. Those factors include: (1) site suitability; (2) economic viability; (3) availability of infrastructure; (4) general plan consistency; (5) other plans or regulatory limitations; (6) jurisdictional boundaries; and (7) whether the project applicant can reasonably acquire, control, or otherwise have access to the alternative site (if an off-site alternative is evaluated). The alternatives evaluated in Subchapters 4.2 through 4.6 of this chapter include the following:

- No Project/No Development Alternative
- General Plan Density Alternative
- Reduced Grading Alternative
- Biologically Enhanced Alternative
- Off-site and Combined On-/Off-site Sewer Options Alternative
- Septic Option Alternative

Each of these alternatives was selected in order to avoid or minimize significant impacts associated with the Proposed Project as analyzed in this EIR. Specifically, the following criteria were considered.

The No Project/No Development Alternative was included because it would allow retention of uses similar to those currently existing on site, thereby avoiding both construction-period and long-

term impacts (i.e., to aesthetics, air quality and transportation/traffic) associated with development of the Proposed Project.

The General Plan Density Alternative was included to provide a comparison between the Proposed Project and the current long-term plan for the Project site contained in the County General Plan (adopted in 2011). Potential land use impacts that result in environmental impacts would be reduced and comparable to that found in the County's General Plan EIR. As with all discretionary alternatives, the design would comply with County RPO requirements for steep slopes, wetlands, and wetland buffers.

The Reduced Grading Alternative was included in this analysis in order to reduce the grading in steep slope areas and, therefore, reduce impacts to visual and biological resources. In addition, the Reduced Grading Alternative would reduce the amount of blasting required, thus, reducing impacts associated air quality and noise.

The Biologically Enhanced Alternative was included in this analysis in order to further reduce direct and indirect impacts to sensitive biological resources and provide increased connectivity for local wildlife movement.

The Off-site and Combined On-/Off-site Sewer Options Alternative was included in this analysis in order to eliminate the need for, or reduce the scale of, an on-site WTWRF and, therefore, minimize or reduce impacts associated with potential land use conflicts, noise, and odor. This sewer service alternative includes three potential off-site options in lieu of the proposed on-site WTWRF and related facilities, as well as a combined on-/off-site treatment option. The potential offsite options include: (1) connection to the City of Escondido (City) HARRF, (2) connection to VWD facilities, or (3) connection to the Harmony Grove Treatment Plant, while the combined on-/off-site option involves on-site treatment at a scaled-down WTWRF and off-site solids treatment at the Harmony Grove Treatment Plant.

The Septic Option Alternative was included because it would comply with the Circulation and Mobility Policy (CM-10.2.1) of the Elfin Forest and Harmony Grove Specific Plan that requires developers to use septic systems and because it would reduce potential noise and odor impacts associated with the on-site WTWRF. In addition, it was also requested by a local citizen in the NOP comments (see Appendix A for the full comment).

These six alternatives represent a reasonable range of alternatives, as defined in the State CEQA Guidelines, because they present feasible alternate development patterns that would reduce and/or eliminate significant impacts associated with the Proposed Project. These alternatives are compared to the impacts of the Proposed Project (with an overview of Proposed Project and alternative impacts provided in Table 4-1, *Comparison of Project Alternative Impacts to Proposed Project Impacts*) and are assessed relative to their ability to meet the basic objectives of the Proposed Project. As described in Subchapter 1.1, *Project Objectives*, the Proposed Project includes the following overall objectives:

- Develop a community which complements and responds to the unique topography and character of the Project site and surrounding area.

- Utilize Smart Growth concepts, including a variety of energy-efficient housing types, ranging in size and affordability.
- Provide a variety of lot sizes to meet varied family make up.
- Provide for a range of for sale, market rate, detached housing types to accommodate broad market needs from singles to large families and across age groups.
- Provide a recreation-oriented development with a community pool, parks, and multi-use trails to serve the recreation needs of the future residents.
- Design a community that embraces and preserves the equestrian nature of the surrounding area and provides amenities for the equestrian community.
- Provide a healthy living component including multi-use trail network that connects to other trails adjacent to the Project site to encourage pedestrian and equestrian mobility and outdoor connectivity.
- Provide increased residential density close to the shopping, employment, and transportation centers of Escondido and San Marcos.
- Design an efficient circulation system that is safe for pedestrians and equestrians and that adequately supports the anticipated level of traffic in and around the Project site.

Alternatives Considered but Rejected from Further Study

The following alternative was considered but ultimately rejected for detailed consideration as discussed below.

Alternative Location

In accordance with CEQA Guidelines Section 15126.6(f)(2), an alternative project site location should be considered if development of another site is feasible, and if development of another site would avoid or substantially lessen significant impacts of the Proposed Project. Factors that may be considered when identifying an alternative site location include the size of the site, its location, the General Plan (or Community Plan) land use designations, and availability of infrastructure. CEQA Guidelines Section 15126.6(f)(2)(A) states that a key question in looking at an off-site alternative is "...whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location."

The Project Applicant purchased the approximately 240-acre Project site with the intention of developing a semi-rural residential project generally consistent with the surrounding area and with the overall objectives of the General Plan. As a residential proposal, the Proposed Project would be sited in an area already slated for such development and would offer amenities to the surrounding existing residential uses. The Project site is located in a semi-rural area encompassing a mix of urban development, agriculture, and open space. Nearby urban development includes high-density residential and commercial uses to the north (San Marcos) and east (Escondido), with

nearby areas to the north, west and south encompassing agricultural uses, low- to moderate-density residential development and open space.

No other similar, undeveloped, approximately 240-acre property is known to be available for development in the County that would not result in impacts similar to those identified for the Proposed Project for issues including aesthetics, agriculture, air quality, biological resources, noise, transportation/traffic, and utilities (i.e., due to the similar nature of development on such a large undeveloped parcel).

This alternative was rejected from further consideration because: (1) the property was purchased with the intention of developing the site with a density similar to surrounding properties and (2) it is unlikely that an alternative site in the County would substantially reduce significant environmental effects relative to the Proposed Project given the size of the parcel and type of development.

4.2 Analysis of the No Project/No Development Alternative

In accordance with Section 15126.6(e) of the State CEQA Guidelines, a “no project” alternative shall be evaluated, along with its impact. The No Project/No Development Alternative assumes the proposed development would not occur and the existing conditions at the Project site as of the date that the NOP was published would continue over the long-term.

4.2.1 No Project/No Development Alternative Description and Setting

Under the No Project/No Development Alternative, the Project site would remain in its current condition. The native and non-native habitat throughout the site would remain intact. The site would continue to be used for commercial agriculture, with extensive areas of active (or recently active) avocado orchards, as well as four minor apiary (bee keeping) sites, present on the property. The two existing residential structures and the equestrian center located in the southeastern portion of the site would also remain. Single-family residences could be developed on the 12 existing individual parcels.

The proposed semi-rural residential community would not be constructed (along with supporting infrastructure such as roadways, WTWRF, sewer pump station, and other utilities). In addition, the biological open space preserves, agricultural easements and HOA-maintained landscaped areas (as well as related amenities such as trails and pathways) would not be created.

4.2.2 Comparison of the Effects of the No Project/No Development Alternative to the Proposed Project

The anticipated environmental effects resulting from the No Project/No Development Alternative are described below, along with comparisons of these impacts to the Proposed Project (refer to Table 4-1).

Aesthetics

Under the No Project/No Development Alternative, the Project site would continue to appear as a primarily undeveloped area. Significant and unmitigable short-term adverse visual impacts caused by retaining walls and raw manufactured slopes would be avoided under this alternative.

Air Quality

The only activities associated with the No Project/No Development Alternative that would potentially affect air quality are ongoing vehicle-generated emissions from a small number of trips to and from the equestrian center, occasional agricultural activity support and up to 12 potential future residences (if they are constructed on site). Based on the minimal nature of emissions associated with these activities, no significant impacts to air quality would occur from the No Project/No Development Alternative. Accordingly, this alternative would avoid the significant and unmitigated air quality impacts identified for the Proposed Project.

Agricultural Resources

Negligible grading would take place under the No Project/No Development Alternative, and therefore this alternative would avoid the significant, direct impacts to approximately ~~44.2~~13.1 acres of on-site agricultural resources identified for the Proposed Project. Similarly, this alternative also would avoid the potentially significant cumulative impacts identified for ~~avocado orchards and~~ CDC Prime and Statewide candidate soils that would occur under the Proposed Project (although the Proposed Project contribution to this impact was concluded not to be cumulatively considerable).

Biological Resources

The No Project/No Development Alternative would greatly reduce the significant direct and indirect impacts to biological resources identified for the Proposed Project. Specific biological impacts identified for the Proposed Project, which would be reduced by this alternative include: (1) loss of habitat for raptors (foraging habitat) and grasshopper sparrow; (2) loss of sensitive habitats including southern riparian forest, southern riparian woodland, southern willow scrub, mule fat scrub, herbaceous wetland, disturbed wetland, coast live oak woodland, Diegan coastal sage scrub, granitic southern mixed chaparral, and non-native grassland; (3) loss of USACE, CDFW and County RPO wetlands/waters; and (4) displacement of nesting migratory birds during their breeding season.

Cultural Resources

There is one known CEQA-significant cultural site within the Project site. Under the No Project/No Development Alternative, this cultural site would not have known significant impacts, as it would under the Proposed Project. In addition, since only limited grading activities (which might uncover unknown resources) associated with the 12 potential future residences would occur on the Project site with this alternative, impacts to cultural resources would be potentially less impactful than the Proposed Project, for which the possibility of future (significant but mitigable) impacts to unknown cultural resources was identified.

Noise

Current activities on the site (e.g., agricultural uses) create no discernable noise to off-site sensitive noise receptors. Accordingly, noise effects would be less than significant as a result of the No Project/No Development Alternative. This alternative would therefore avoid the potential noise impacts identified for the Proposed Project, although these impacts were determined to be less than significant with implementation of identified mitigation measures and Project design features.

Paleontological Resources

Under the Proposed Project, significant but mitigable impacts to paleontological resources were identified in association with potential disturbance of the high-sensitivity Santiago Formation (from on-site grading/excavation) and moderate sensitivity terrace deposits (from on-site grading/excavation and off-site roadway improvements). ~~There are no known paleontological resources on-site. There would be negligible earth-moving activities associated with the 12 potential future residences under the No Project/No Development Alternative that would result in the possible unearthing of previously unknown resources. Therefore, paleontology impacts would be less than significant as a result of this alternative. This is potentially would be less impactful than the Proposed Project, for which exhibits the possibility of future significant but mitigable potential impacts to unknown paleontological resources was identified as significant and mitigable as described.~~

Transportation/Traffic

Very minimal traffic is currently generated from the existing on-site uses, including trips to and from the equestrian center, trips associated with up to 12 potential residences (144 ADT), and infrequent activities associated with agricultural operations. Accordingly, transportation/traffic impacts would be less than significant as a result of implementing the No Project/No Development Alternative. This alternative would thus avoid the significant (but mitigable) transportation impacts identified for the Proposed Project, although associated upgrades would also not occur.

Hazards and Hazardous Materials

This alternative would avoid the potentially significant hazards impacts associated with the Proposed Project. Specifically, under the No Project/No Development Alternative, there would be fewer soil-related issues associated with on-site ASTs or issues related to possible ACM and/or LCP presence in on-site structures. The No Project/No Development Alternative would not, however, result in remediation of these potential on-site issues. Nonetheless, impacts associated with hazards under this alternative would be less than the Proposed Project.

The No Project/No Development Alternative would also avoid potentially significant impacts associated with vectors, as this alternative would not include the construction and operation of an equestrian ~~facility~~ staging area, WTWRF or wet weather storage ponds. Therefore, impacts to public health and safety would be less than significant under this alternative.

Geology and Soils

Substantially less grading and construction activities would occur on the Project site with the No Project/No Development Alternative. Accordingly, although significant impacts related to seismically-induced settlement hazards, seismically-induced surface slope instability and rockfall hazards, and expansive soils could potentially occur under this alternative, such impacts would be substantially reduced when compared to the Proposed Project.

Conclusions

The No Project/No Development Alternative would avoid or reduce most significant impacts associated with the Proposed Project, including: (1) significant and unmitigated aesthetics and air quality impacts; and (2) significant and/or potentially significant impacts related to agricultural resources, biological resources, cultural resources, noise, paleontological resources, transportation/traffic, hazards and hazardous materials and geology and soils, all of which would be avoided or reduced to less than significant through identified mitigation measures and/or Project design features. This alternative would, however, fail to meet all of the Proposed Project objectives listed above in Subchapter 4.1.

4.3 Analysis of the General Plan Density Alternative

This alternative was proposed because it would comply with the General Plan and eliminate any conflicts with applicable land use policies related to the proposed land use designation change and rezone.

4.3.1 General Plan Density Alternative Description and Setting

This alternative would result in development of residential uses identified in the General Plan (Figure 4-1, *General Plan Density Alternative*). The General Plan currently shows the Project site as having two Land Use Element designations: Semi-Rural Residential (SR-1), which allows for one du per one, two or four gross acres; and Semi-Rural Residential (SR-2), which allows for one du per two, four or eight gross acres. The maximum density of SR-1 and SR-2 designated lands is based upon the slope of the site; steeper on-site slopes equate to larger lot size requirements. Based on the RPO steep slope and RPO wetland requirements, up to 118 single-family residences could be developed on the Project site under this alternative (refer to Figure 4-1). While there are fewer homes under this alternative, larger lots spread over the entire site would still require an extensive road system and similar infrastructure (e.g., potable water and sewage lines). ~~Although this alternative would be lower in development intensity than the Proposed Project, the same infrastructure (i.e., potable water and sewage lines and on-site roads and focused off-site road improvements) would still be required.~~ Similarly, the WTWRP and associated pump stations discussed in Chapter 1.0 would be required to serve the Project site. Recreational facilities provided by the Proposed Project and largely supported by an HOA would not be provided under this alternative, which could build out as individually built homes.

4.3.2 Comparison of the Effects of the General Plan Density Alternative to the Proposed Project

The anticipated environmental effects resulting from the General Plan Density Alternative are described below. A comparison of the impacts identified for this alternative as compare to the Proposed Project is shown in Table 4-1.

Aesthetics

Similar to the Proposed Project, implementation of the General Plan Density Alternative would restrict additional single-family residential and associated structures to the valley floor and eastern-facing slopes of the hills at the western extent of the Project site. This alternative would result in fewer dwelling units (du) than the Proposed Project (118 versus 326), with a much lower residential density (approximately one du per 2 acres versus one du per 0.7 acre). Similar to the Proposed Project, this alterative would comply with RPO steep slope encroachment thresholds.

Grading would be substantially reduced under this alternative, with the grading footprint being reduced to 56.8 acres and cut areas being reduced from ~~928,000~~920,000 cy to 112,600 cy (a reduction of approximately 88 percent). This would substantially reduce views to cut slopes, with raw soil and broken rock being visible in the short term. Overall, retaining walls would be substantially reduced as well. The Proposed Project would require approximately 27,000 s.f. of retaining walls and this alternative would only require approximately 5,000 s.f.; a reduction of approximately 81 percent. This alternative would be environmentally superior to the Proposed Project for these issues.

Homes would be eliminated from areas where cul-de-sacs in Neighborhood 4 would be located under the Proposed Project, and lots would be larger (Figure 4-1). Where visible, the spacing of homes would be more similar to homes in Eden Valley east of the Project boundary, and where visible, could be perceived as a visual benefit. The location of house pads so close to the eastern Project boundary (in order to completely avoid steep slopes), however, would still require retaining walls to support both the pads and access road, which would be aligned along the eastern property boundary for this alternative. These alternative walls, located beyond buffer vegetation for the Proposed Project, would be assessed with a similar significant (and mitigable) impact as the Proposed Project. Also in Neighborhood 4, eight homes would be located in an area identified for open space dedication (set aside) under the Proposed Project. These homes would remove grove and native habitat, and also would be sited along some ridgetop areas. This would result in skylining of residential structures. Although consistent with some other development in the area, structures would not be skylined for viewers from the west under the Proposed Project. This, together with the incursions of development into areas completely set aside in open space under the Proposed Project result in the alternative being environmentally inferior to the Proposed Project for this specific issue.

Revisions to house pad locations in Neighborhood 3 would place homes further east than shown for the Proposed Project, as well as further west. This is likely to result in retaining walls shown for the Proposed Project on Figure 1-332 not being necessary for the alternative. Similarly, along the southeast border of Neighborhood 3, the removal of lots and the cul-de-sac, resulting in larger

lot sizes, would allow the pad abutting the Project boundary to be moved back on lots 13 and 14 under this alternative, and it is assumed that the retaining wall shown in this area would not be required for the alternative. For this issue, the alternative would be environmentally superior to the Proposed Project.

As shown on Figure 1-4b, the Proposed Project has aligned internal streets (and, therefore, lots) along rights-of-way that more closely follow slope contours than are shown for this alternative, where streets are located along lot boundaries in grid lines. This could result in a slightly more regimented look of homes located up the slopes but is not expected to be very noticeable due to the wider spacing between homes and the distance from most viewers. As shown in the simulation in Figure 2.1-9a the homes would not visually stand out for viewers at any distance to the west and design details would not be readily apparent for most viewers.

The amount of biological open space would be reduced under this alternative, as the alternative would have approximately 15 acres of biological open space, and the Proposed Project would have just over twice that amount, at approximately ~~32~~31.2 acres. Excluding the northern extent of the Project, the lack of this dedicated open space would be visually balanced by decreased density under this alternative, particularly when considering that the area would now be incorporated into private lots. Although some owners may not plant their properties, others would, and (excluding the northern portion of the Project) the amount of “visual open space” would be commensurate with that of the Proposed Project.

Implementation of this alternative would be anticipated to result in significant short-term visual effects related to the construction period and first few years of Project use. The intensity of those adverse effects would be expected to be less than the Proposed Project given the lack of encroachment into steep slopes, and the resulting lack of raw soil or broken rock in these more elevated (and therefore more visible) portions of the Project.

The reduction in grading under this alternative would be somewhat compromised by the loss of additional open space set aside by the Proposed Project and loss of the open space in the northern parcel that would be subject to development under this alternative. Although not expected to be highly visible (as explained for the Proposed Project in Subchapter 2.1, *Aesthetics*), the retaining and noise walls would be as just as visible under this alternative as under the Proposed Project. Overall, this alternative would have potentially fewer visual impacts than the Proposed Project.

Air Quality

Short-term construction-related air quality impacts associated with the General Plan Density Alternative would be less than those associated with the Proposed Project, because of the reduced amount of earth movement associated with this alternative due to the reduction in homes and the elimination of the neighborhood park. In addition, it is unlikely that all of the residential lots would be graded and built out at the same time, with smaller daily emissions expected to be stretched over a longer period of time. Accordingly, direct short-term construction impacts would be less than significant. Cumulative short-term construction impacts would also be considerable, but to a lesser degree than the Proposed Project.

In addition, this alternative would require approximately 75,900 cy of soil import to the Project site during earthwork activities, which would equate to approximately 49 truck trips per day (refer to the calculation assumptions under “Transportation/Traffic,” below). This impact would be short term and would likely not result in additional significant impacts to air quality above that determined for the Proposed Project.

Long-term operational impacts associated with the proposed 118 homes under the General Plan Density Alternative would be less than those associated with the Proposed Project due to the reduced generation of vehicle trips per day (1,426 ADT for this alternative [assuming 12 ADT per home and 10 ADT for the WTWRF] versus 3,462 ADT for the Proposed Project). The reduced trip generation would result in a corresponding 58 percent decrease in vehicular emissions of ROG_s, CO, NO_x, and PM₁₀, compared with the Proposed Project. Long-term impacts would be less than significant under this alternative.

Impacts associated with conformance to the RAQS would be reduced for the General Plan Density Alternative compared to the Proposed Project because fewer dwelling units would be developed. The General Plan Density Alternative is based on the 2011 General Plan Update, which included a lower number of dwelling units than the prior General Plan that was accounted for in the RAQS. The General Plan Density Alternative would result in less than significant impacts associated with conformity to the regional air quality strategy.

Overall, impacts to air quality under the General Plan Density Alternative would be reduced compared to the Proposed Project.

Agricultural Resources

Impacts to agricultural resources associated with the General Plan Density Alternative would likely be greater less than those associated with the Proposed Project. Specifically, this alternative would result in approximately 65-64 percent fewer residential pads to be graded than the Proposed Project (118 versus 326), with minimum two-acre lots in areas with Prime or Statewide Important candidate soils (refer to as shown on Figures 2.3-3a/b and 4-1). As a result: (1) a number of individual residential lots under this alternative would likely include opportunities for preservation of agricultural resources; (2) associated impacts to on-site agricultural resources would likely be reduced compared to the Proposed Project; and (3) opportunities for on-site mitigation would be increased. the entire Project site would be divided into residential lots (with the exception of one lot for the WTWRF). In their annual reports, the County Department of AWM states that agriculture is viable on lots of this size (i.e., 1 and 2 acres). With the exception of the areas protected under the RPO, future homeowners would be able to use their properties in any manner they choose including active agriculture, but it is unlikely that all of the homeowners would use their yards for agricultural uses. Without agricultural easements, the entire Project site, with the exception of the RPO protected areas, should be conservatively considered impacted. The General Plan Density Alternative would result in significant effects to approximately 100 acres of Unique Farmland and 27 acres of Farmland of Local Importance. Similar to the Proposed Project, however, all-identified agricultural resources impacts under this alternative would be significant and would require mitigation as described for the Proposed Project. be reduced below a level of significance through a mitigation measure to acquire agricultural easements off site through the County PACE Program. Nonetheless, impacts to agricultural resources are likely to be greater than impacts under

the Proposed Project due to the lack of agricultural easements on-site. While not associated with identified impacts to agricultural resources or related mitigation, it should also be noted that the proposed 35.4-acre on-site agricultural easement included as a Proposed Project Design Consideration would likely not be implemented under this alternative. That is, the General Plan Density Alternative would include a number of residential lots (along with related grading, roads, etc.) within the noted 35.4-acre agricultural easement area included in the Proposed Project design (refer to Figures 2.4-10a and 4-1).

Biological Resources

Impacts to biological resources associated with the General Plan Density Alternative would be greater than those associated with the Proposed Project. As stated previously, although this alternative would result in approximately 65 percent fewer residential pads to be graded than the Proposed Project, as shown on Figure 4-1, the entire Project site would be divided into residential lots (with the exception of one lot for the WTWRP). With the exception of the areas protected under the RPO, future homeowners would be able to remove vegetation on their properties. Therefore, the entire Project site, with the exception of the RPO-protected areas, should be conservatively considered impacted. The General Plan Density Alternative would likely result in significant effects to raptor foraging habitat and grasshopper sparrow habitat, as well as impacts to on-site sensitive habitats. Similar to the Proposed Project, all identified biological impacts under this alternative would be reduced below a level of significance through mitigation measures such as appropriate habitat preservation and/or creation. Nonetheless, impacts to biological resources would be greater than impacts under the Proposed Project.

Cultural Resources

As discussed in detail in Subchapter 2.5, *Cultural Resources*, and summarized in Table 2.5-1, nine archaeological sites, one isolate, and two historic complexes have been identified within the Project area. Of these cultural resources, one site (CA-SDI-17,506) was assessed as a significant resource under CEQA, although it does not meet the criteria for significance under the RPO. Under the General Plan Density Alternative, this CEQA-significant resource would be impacted, similar to the Proposed Project. There also is a potential for significant direct impacts related to undiscovered buried archaeological resources on the Project site. As with the Proposed Project, impacts to cultural resources under this alternative would be reduced below a level of significance through applicable mitigation measures. Impacts to cultural resources under this alternative would be similar to those determined under the Proposed Project.

Noise

Short-term construction-related noise impacts associated with the General Plan Density Alternative would be less than those associated with the Proposed Project, because of the reduced amount of construction activities associated with this alternative due to the reduction in homes and the elimination of the neighborhood park.

In addition, this alternative would require approximately 75,900 cy of soil import to the Project site during earthwork activities, which would equate to approximately 49 truck trips per day (refer

to the calculation assumptions under “Transportation/Traffic,” below). This impact would be short term and would likely not result in significant impacts associated with traffic noise.

Long-term operational impacts associated with the proposed 118 homes under the General Plan Density Alternative would be less than those associated with the Proposed Project due to the reduced generation of vehicle trips per day (1,426 ADT for this alternative [assuming 12 ADT per home and 10 ADT for the WTWRf] versus 3,462 ADT for the Proposed Project). The reduced trip generation would result in a decrease in traffic-related noise impacts. Potential noise impacts under this alternative could be significant but mitigable through the implementation of identified mitigation measures. Accordingly, impacts to noise under the General Plan Density Alternative would be reduced compared to the Proposed Project.

Paleontological Resources

The General Plan Density Alternative would include grading of approximately 57 acres (24 percent of the Project site), whereas the Proposed Project would grade approximately ~~427~~125 acres (or ~~53~~52 percent) of the Project site. Total ~~cut~~ grading requirements under this alternative would be approximately 112,600 cy, which is ~~815,400~~ 807,400 cy (88 percent) less than the Proposed Project. As with the Proposed Project, potential impacts to paleontological resources under this alternative would be reduced below a level of significance through applicable mitigation measures, although ~~the~~ the potential to encounter paleontological resources during grading would be substantially less ~~under the General Plan Density Alternative~~ than the Proposed Project.

Transportation/Traffic

This alternative would require approximately 75,900 cy of soil import to the Project site during earthwork activities. Assuming each truck could carry 12 cy of fill, this would equate to a total of 6,325 one-way truck trips (or 12,650 trips to and from the site) over the earthwork phase of construction. If the General Plan Density Alternative would require one year of grading (or 260 working days; based on substantially fewer residences than the Proposed Project, which was estimated to require two years), a total of approximately 49 truck trips would occur per work day, or 6 truck trips per hour (conservatively; assuming an 8-hour work day). This level of traffic would be less than with the Proposed Project and would likely not result in significant impacts to any roadway or intersection.

Assuming an ADT of 12 trips per du under the General Plan Density Alternative, plus 10 ADT for the WTWRf, this alternative would generate a total of 1,426 ADT, which is 59 percent less than the 3,462 ADT that would be generated by the Proposed Project. Based on these figures, potential transportation/traffic impacts from this alternative are anticipated to be slightly less than, but generally similar to, those identified for the Proposed Project. This alternative would result in fewer ADT than the Proposed Project and lower overall a.m. and p.m. peak period volumes. This alternative, like the Proposed Project, would likely include significant ~~and~~ but mitigable direct and cumulative impacts.

Hazards and Hazardous Materials

Although ~~approximately 55-54~~ percent less grading would occur under the General Plan Density Alternative when compared to the Proposed Project, there is still a possibility that hazardous materials could be encountered during grading activities. In addition, removal of on-site structures that could contain ACM and/or LCP would occur under this alternative. ~~This alternative's the roads that do may not meet fire code. Accordingly, the Fire District could require would not be allowed; there would be a potential that fewer lots, which would not be the described alternative would be approved by the Fire District.~~ Potential impacts related to hazards and hazardous materials under this alternative could be determined to be significant ~~and unmitigated, and alternative.~~ Impacts related to fire code hazards would be greater than the Proposed Project (potentially unmitigated) under this alternative.

The General Plan Density Alternative, similar to the Proposed Project, could potentially result in significant impacts associated with vectors, as this alternative would include the construction and operation of an equestrian ~~facility~~ staging area, WTWRF and wet weather storage ponds. Impacts to public health and safety would be similar to the Proposed Project under this alternative.

Geology and Soils

As stated previously, ~~55~~4 percent less grading would occur under the General Plan Density Alternative when compared to the Proposed Project. Nonetheless, this alternative could still potentially result in significant impacts related to seismically-induced settlement hazards, seismically-induced surface slope instability and rockfall hazards, and expansive soils. All grading and/or construction activities for this alternative would be anticipated to occur in accordance with each of the standards and regulations identified in Subchapter 2.10, *Geology and Soils*. Similar to the Proposed Project, implementation of this alternative would result in the need for application of standard remediation/building mitigative techniques in response to issues related to geology and soils. This alternative would have less impacts than the Proposed Project.

Conclusions

~~The General Plan Density Alternative would be expected to result in impacts generally similar to those described for the Proposed Project, in that this~~ This alternative would include significant or potentially significant impacts related to aesthetics, air quality, agricultural resources, biological resources, cultural resources, noise, paleontological resources, transportation/traffic, hazards and hazardous materials and geology and soils (refer to Table 4-1). Several of these impacts would be less than those identified for the Proposed Project based on considerations such as less grading and fewer residences. Similarly, several of the identified impacts for biological resources and hazards and hazardous materials would be greater under this alternative than those~~at~~ identified for the Proposed Project, based on the provision of less dedicated open space ~~under this alternative, and~~ and the fact that earthwork would not be balanced on site and would require import of substantial amounts of soil. All of these modifications would be relatively minor, however, and would not be expected to alter the overall impact levels or associated need for mitigation. The General Plan Density Alternative would meet Project objectives related to complementing and responding to the unique topography and character of the Project site and surrounding area and embracing and

preserving the equestrian nature of the surrounding area. This alternative would not meet Project objectives related to providing a variety of lot sizes for varied family make up; providing a range of for sale, market rate, detached housing types to accommodate broad market needs from singles to large families and across age groups; and providing an increased density close to the shopping, employment, and transportation centers of Escondido and San Marcos; ~~and providing amenities for the equestrian community.~~ Overall, this alternative would have less impacts than the Proposed Project.

4.4 Analysis of the Reduced Grading Alternative

This alternative was proposed to reduce visual and other grading-associated impacts.

4.4.1 Reduced Grading Alternative Description and Setting

This alternative would reduce grading in Neighborhoods 2, 4 and 5 by eliminating cul-de-sacs within each of the neighborhoods. Specifically, two cul-de-sacs in the southwestern corner of Neighborhood 2 would be eliminated; four cul-de-sacs would be eliminated in Neighborhood 4; and one cul-de-sac along the ridgeline would be eliminated in Neighborhood 5. The overall development footprint would be reduced from approximately ~~127,125~~ acres to approximately 108 acres. The grading quantity would be reduced by approximately ~~166,000~~ 158,000 cy, although approximately 106,000 cy of cut would need to be exported from the Project site during construction. In addition, the areas requiring blasting would be reduced. The unit count would be reduced by 6 lots to 320 units and the lot sizes in Neighborhood 3 would be reduced to 5,000 s.f. Figure 4-2, *Reduced Grading Alternative*, illustrates the configuration of this alternative.

Although this alternative would result in reduced grading quantities compared to the Proposed Project, the same potable water, recycled water, and sewage lines, as well as ~~and~~ on-site roads, with the exception of the eliminated cul-de-sacs (and focused off-site road improvements), would be required to serve and gain access to the residential and recreational uses that would be constructed on site under the Reduced Grading Alternative. Similarly, the WTWRF and associated pump stations discussed in Chapter 1.0 would still be required to serve the development under this alternative.

4.4.2 Comparison of the Effects of the Reduced Grading Alternative to the Proposed Project

The anticipated environmental effects resulting from the Reduced Grading Alternative are described below. A comparison of the impacts identified for this alternative and the Proposed Project is shown in Table 4-1.

Aesthetics

Similar to the Proposed Project, implementation of the Reduced Grading Alternative would introduce additional single-family residential structures on to the valley floor and eastern-facing slopes of the hills at the western extent of the Project. This alternative would result in fewer dwelling units than the Proposed Project (320 versus 326), with an incrementally lower residential density. Although RPO steep slope encroachment for the Proposed Project totaled less than the

amount permitted under the Ordinance for the few parcels with steep slope encroachment, and therefore would comply with the ordinance; this alternative would additionally reduce steep slope encroachment when compared to the Proposed Project. The residential impacts to steep slopes in Neighborhood 4 would be eliminated. In Neighborhood 2, encroachments would still occur in retained lots identified as 61, 62, 94, 96, and 97 on Figure 1-34, and an equally small encroachment would occur at the northernmost extent of the Project associated with the emergency access to Hill Valley Drive. Although the decreases would be small in amount, this alternative would be environmentally superior to the Proposed Project for this issue.

The related amount of excavation into hillsides would also be less. The Proposed Project projects ~~928,000~~ 920,000 cy of cut, whereas this alternative projects a total of 762,000 cy of cut, or approximately ~~18~~ 17 percent less. This would directly translate in retention of additional natural vegetated area, with a commensurate reduction in visible loss of vegetation during the construction period. Related to this, biological open space would increase under this alternative by approximately ~~44~~ 38 percent, as approximately 50.3 acres would be in set aside as opposed to ~~28.2~~ 31.2 acres under the Proposed Project. Finally, the surface area of retaining walls would be reduced when compared to the Proposed Project. Specific walls are further addressed below.

With elimination of hillside lots, lot sizes would decrease and additional lots would be located in Neighborhood 3 adjacent to off-site residential uses. Revisions to house pad locations in Neighborhood 3 would place additional homes along the northern, eastern, and southern boundaries of Neighborhood 3. This is expected to result in retaining walls shown for the Proposed Project on Figure ~~1-32~~ 1-33 still being required and being both slightly longer and taller along the northern lots in Neighborhood 3; however, the walls should not provide a dominant element to the view. It is anticipated that the privacy walls along the eastern and southern portion of Neighborhood 3 identified for the Proposed Project, as well as the increased density of Project landscaping, would result in the same visual shielding of these residences as discussed for the Proposed Project, and therefore would not result in an increase in visual impacts when compared to the Proposed Project.

Based on preliminary grading review for this alternative, grading could be completed without any need for retaining walls along the eastern boundary of Neighborhood 4. Alternatively, some retaining walls could be proposed to further reduce the height of cut slope. Impacts could therefore be less than or generally equal to impacts assessed for the Proposed Project. If built, these alternative walls, located beyond buffer vegetation for the Proposed Project, would be assessed with a similar significant (and mitigable) impact as the Proposed Project. For these retaining walls, the alternative would have similar impacts to, or less impacts than, the Proposed Project.

Implementation of this alternative would be anticipated to result in significant short-term visual effects related to the construction period and first few years of Project operations. The intensity of those adverse effects would be expected to be less than the Proposed Project given the lack of encroachment into steep slopes, and the resulting lack of raw soil or broken rock in some of these more elevated (and therefore more visible) portions of the Project.

This alternative would have ~~lesser~~ fewer impacts overall related to aesthetics than the Proposed Project.

Air Quality

Similar to the Proposed Project, this alternative would result in the construction of more residences than is allowable under current land use designations (326 proposed units versus 118 allowed units). Accordingly, because the Reduced Grading Alternative would result in an increase in housing units beyond what was included for the site in the most recent (2009) version of the RAQS, impacts associated with conformance to regional air quality plans would be potentially significant.

Short-term construction-related air quality impacts associated with the Reduced Grading Alternative would be less than those associated with the Proposed Project because of the reduced amount of earth movement that would occur with this alternative. The soil cut and fill volumes would not balance on site under the Reduced Grading Alternative (whereas the Proposed Project's soil cut and fill volumes would balance on site). Therefore, this alternative would require approximately 106,000 cy of soil export from the Project site during earthwork activities, which would equate to approximately 34 truck trips per day (refer to the calculation assumptions under "Transportation/Traffic," below). This impact would be short term and would likely not result in additional significant impacts to air quality above that determined for the Proposed Project.

Long-term operational impacts associated with the 320 homes proposed under the Reduced Grading Alternative would be slightly less than those associated with the Proposed Project due to the reduced generation of vehicle trips per day (3,210 ADT for this alternative [assuming 10 ADT per home and 10 ADT for the WTWRP] versus 3,462 ADT for the Proposed Project). The 252-trip reduction in daily vehicles would result in a corresponding 11 percent decrease in vehicular emissions of ROG_s, CO, NO_x, and PM₁₀, compared with the Proposed Project. Long-term impacts would be less than significant under this alternative.

Accordingly, impacts to air quality under the Reduced Grading Alternative would be less than the Proposed Project.

Agricultural Resources

Under the Reduced Grading Alternative, the proposed agricultural preservation easement in the northwestern portion of the Project site could be slightly increased. ~~Similar to the Proposed Project, these areas would be preserved within an easement.~~ When compared to the Proposed Project, this alternative would result in similar impacts to agricultural resources encompassing Prime Farmland or Farmland of Statewide Importance candidate soils (approximately 13.1 acres). Under this alternative, significant impacts would be mitigated to below a level of significance, similar to the Proposed Project.

Biological Resources

Under the Reduced Grading Alternative, open space areas within the Project site would be increased. When compared to the Proposed Project, the increase in dedicated open space would result in fewer impacts to biological resources. Similar to the Proposed Project, the Reduced Grading Alternative would have the potential to result in direct and/or indirect impacts to special status plant and wildlife species, riparian habitat, and other sensitive natural communities and wetlands from the development of proposed land uses. The Reduced Grading Alternative would

reduce impacts to sensitive habitats, including foraging habitat for raptors and habitat for the grasshopper sparrow. Similar to the Proposed Project, this alternative would also be required to comply with local, state, and federal policies related to biological resources. Overall, however, when compared to the Proposed Project, the increase in open space preservation under the Reduced Grading Alternative would result in fewer direct and indirect biological resource impacts. All significant impacts would be mitigated to below a level of significance, similar to the Proposed Project.

Cultural Resources

Under the Reduced Grading Alternative, the one CEQA-significant resource (CA-SDI-17,506) within the Project site would be impacted, similar to the Proposed Project. There also is a potential for significant direct impacts related to undiscovered buried archaeological resources on the Project site. As with the Proposed Project, impacts to cultural resources under this alternative would be reduced below a level of significance through applicable mitigation measures. Potential for impacts to cultural resources under this alternative would be less for buried resources as compared to those determined under the Proposed Project.

Noise

The on-site grading for the Reduced Grading Alternative is ~~18~~ 17 percent less than the Proposed Project and, therefore, the Reduced Grading Alternative would generate less short-term (construction) noise impacts as the Proposed Project. This alternative would also be expected to slightly decrease long-term noise impacts (due to the generation of approximately 11 percent fewer ADT as noted below under “Transportation/Traffic,” below). Noise associated with blasting would be reduced as many of the areas requiring blasting would be avoided under this alternative.

In addition, this alternative would require approximately 106,000 cy of soil export from the Project site during earthwork activities, which would equate to less than five truck trips per hour (refer to the calculation assumptions under “Transportation/Traffic,” below). This impact would be short term and would likely not result in significant impacts associated with traffic noise.

Similar to the Proposed Project, potential noise impacts under this alternative are likely to be significant but mitigable through identified mitigation measures.

Paleontological Resources

The grading footprint for the Reduced Grading Alternative would be slightly smaller than the Proposed Project. Specifically, this alternative would result in approximately 108 acres of grading, which would be ~~16~~ 17 acres (~~13~~ 13.6 percent) less than under the Proposed Project. In addition, the Reduced Grading Alternative would require 762,000 cy of cut (which could affect unknown paleontological resources); however, this would be less (~~18~~ 17 percent) than that required under the Proposed Project (~~928,000~~ 920,000 cy). Impacts to paleontological resources would be less than ~~the Proposed Project, but, similar to, those identified for the Proposed Project; impacts would be~~ (i.e., potentially significant ~~and~~ but mitigable).

Transportation/Traffic

This alternative would require approximately 106,000 cy of soil export from the Project site during earthwork activities. Assuming each truck can carry 12 cy of fill, this would equate to 8,834 one-way truck trips (or 17,667 trips to and from the site). If the Reduced Grading Alternative requires two years of grading (or 520 working days; similar to the Proposed Project), a total of approximately 34 truck trips would occur per work day, or less than 5 truck trips per hour (conservatively; during an 8-hour work day). This impact would be short term and would likely not result in significant impacts to roadways or intersections.

The Reduced Grading Alternative would generate a total of 3,210 ADT, assuming an ADT of 10 per du (due to the smaller lot sizes), plus 10 ADT for the WTWRF. Therefore, this alternative would amount to a 252 ADT trip reduction from traffic anticipated for the Proposed Project, including minor reductions during a.m. and p.m. peak hours. Based on these figures, potential transportation/traffic impacts from this alternative are anticipated to be slightly less than those identified for the Proposed Project. This alternative, like the Proposed Project, would include significant ~~and~~ but mitigable direct and cumulative traffic impacts.

Hazards and Hazardous Materials

Potentially significant impacts to hazards and hazardous materials would occur under the Reduced Grading Alternative, similar to those that would occur under the Proposed Project, although this alternative would require approximately ~~15~~ 17 percent less area to be graded than the Proposed Project. It is possible that hazardous materials could be encountered during grading activities under this alternative. In addition, removal of on-site structures that could contain ACM and/or LCP would occur under this alternative. Potential impacts related to hazardous materials under this alternative would be mitigated below a level of significance. Potential impacts would be slightly less than the Proposed Project under this alternative.

The Reduced Grading Alternative, similar to the Proposed Project, could potentially result in significant impacts associated with vectors, as this alternative would include the construction and operation of an equestrian ~~facility~~ staging area, WTWRF and wet weather storage ponds. Impacts to public health and safety would be similar to the Proposed Project under this alternative.

Geology and Soils

As stated previously, ~~18~~ 17 percent less grading would occur under this alternative when compared to the Proposed Project. Nonetheless, this alternative could still potentially result in significant impacts related to seismically-induced settlement hazards, seismically-induced surface slope instability and rockfall hazards, and expansive soils. All grading and/or construction activities for this alternative would be anticipated to occur in accordance with each of the standards and regulations identified in Subchapter 2.10, *Geology and Soils*. Similar to the Proposed Project, implementation of this alternative would result in the need for application of standard remediation/building mitigative techniques in response to issues related to geology and soils.

Conclusions

The Reduced Grading Alternative would be expected to result in impacts ~~generally similar to less than~~ those described for the Proposed Project. ~~However, in that this alternative, like the Proposed Project, would include potentially significant impacts related to aesthetics, and air quality, as well as agricultural resources, biological resources, cultural resources, noise, paleontological resources, transportation/traffic, hazards and hazardous materials, and geology and soils (refer to Table 4-1). Several of these impacts may decrease from those identified for the Proposed Project, based on considerations such as a smaller grading footprint and fewer residences. This alternative also would result in slightly increased impacts to some of the environmental issues due to the fact that earthwork would not be balanced on site and would require export of 106,000 cy of soil. All of these modifications would be relatively minor, however, and would not be expected to alter the overall impact levels or associated need for mitigation. The Reduced Grading Alternative would generally meet most of the identified Project objectives, with the exception that, due to smaller lot sizes, no horses would be allowed to be kept in the development, and this alternative would not be recreation oriented, as no parks would be constructed. In addition, this alternative would not provide as large of a variety of lot sizes as the Proposed Project.~~

4.5 Analysis of the Off-site and Combined On-/Off-site Sewer Options Alternative

This alternative was proposed to reduce service impacts and land use compatibility impacts, as well as air quality, hazards and community character impacts associated with the proposed WTWRF operations.

4.5.1 Off-site and Combined On-/Off-site Sewer Options Alternative Description and Setting

The Off-site and Combined On-/Off-site Sewer Options Alternative includes three potential off-site options for the provision of sewer service, in lieu of the proposed on-site WTWRF and related facilities (as described in Subchapter 1.2, *Project Description*, of this EIR), along with an option to provide combined on- and off-site wastewater treatment. These potential options are summarized below, with the off-site options and shown on Figures 4-3, 4-4a, 4-4b, and 4-5 (and the combined on-/off-site option similar to Figure 4-5 with retention of a modified WTWRF [refer to Figure 1-14a, *WTWRF Layout*]). ~~Under the three off-site~~ all four identified sewer options, the on-site housing development would remain the same with the proposed five neighborhoods containing 326 residential units. The WTWRF (approximately 0.4 acre in size) would not be constructed under the three off-site sewer options, and the site where the WTWRF would have been constructed would be used to expand the proposed equestrian center staging area and public neighborhood park, similar to the previous use. The pump station facilities may also be constructed on the WTWRF site under the three off-site sewer options (within a much smaller footprint), as discussed below. The wet weather storage area (approximately 1.6 acres in size) in the northern portion of Neighborhood 5 would not be constructed under the connection to VWD facilities off-site sewer option, and this area would remain undeveloped and placed in an HOA landscape easement. The other two off-site options (connection to the City of Escondido Hale Avenue Resource Recovery Facility [HARRF] or connection to the Harmony Grove Treatment Plant) would utilize the proposed wet weather storage area for water storage. Under the combined on-

/off-site sewer option, the WTWRF would be constructed at a smaller scale, with the wet weather storage area and all other sewer-related facilities to be the same as those described for the Proposed Project. This option would also include an on-site pump station and force main to convey solids to the Harmony Grove Treatment Plant for additional processing, or would use trucks to transport solids to the Harmony Grove plant.

Connection to the City of Escondido Hale Avenue Resource Recovery Facility (HARRF)

As shown in Figure 4-3, *Connection to City of Escondido Hale Avenue Resource Recovery Facility*, this potential option involves the following off-site facilities/activities: (1) installation of approximately 2,700 linear feet of sewer pipeline from an existing City ~~pump-lift~~ station (LS-12, to be abandoned and replaced with a new LS-12, see Figure 4-3) located just east of Country Club Drive and south of an unnamed street (south of Eden Valley Lane) to an on-site location within Neighborhood 5 just south of the SDG&E easement, with these facilities to be located within existing City /County streets (and approximately 500 feet of this sewer line in Country Club Drive requiring jack-and-bore construction, rather than trenching, to avoid a high point in the roadway, refer to Figure 4-3); (2) installation of a new force main pipeline from Neighborhood 5 to an existing City sewer line, with the new facilities to be located within an existing SDG&E easement; (3) abandonment of approximately 1,600 linear feet of sewer pipeline located in City easement; (4) installation of approximately 200 linear feet of a new recycled water pipeline from an existing pipeline to the Project site, with the new facilities to be located within City streets; and (5) installation of approximately 1,000 linear feet of a new sewer return pipeline from the Project wet weather storage site to new gravity sewer main in Country Club Drive, with the new facilities to be located within existing County streets. The use of HARRF would likely require annexation into the County Sanitation District and approval of an agreement between the County and the City of Escondido Utilities Wastewater Division.

Trending east from the wet weather storage pond in Neighborhood 5, the sewer line would be installed in Country Club Drive to just north of Harmony Heights Road. From here, a new 6- to 8-inch force main would trend east (perpendicularly to Country Club Drive) approximately 1,600 feet, up and over a small hill, in the SDG&E right-of-way to connect to existing sewer in Kauana Loa Drive. The easement is edged on both sides by semi-rural residential uses (a total of approximately 10 homes). The construction period would require excavation and installation within existing disturbed roadbed and transmission easement, followed by re-cover of the pipeline and removal of any excess soil along the pipeline right-of-way.

The City of San Diego has the treatment and disposal rights to 5.0 mgd of sewer capacity at the HARRF to provide sewer service to the north Rancho Bernardo community through an existing sewer agreement. The City of San Diego also has the first rights to an additional 0.3 mgd of treatment capacity at HARRF, if they choose to purchase those rights. The Rancho Bernardo community is essentially built out and existing sewer flows to Escondido are reported to be approximately half of the actual agreement flows on an annual basis. In summary, the City of San Diego has excess sewer capacity at HARRF that could be made available to the County.

There are two potential treatment and disposal scenarios based on the current sewer agreement between the cities of San Diego and Escondido:

- The County could acquire approximately 70,200~~71,500~~ gpd from the City of San Diego via a transportation agreement for treatment and disposal at the HARRF. No change would be made in the City of San Diego's agreement with the City of Escondido.
- The City of San Diego would relinquish first rights on its 0.3 mgd excess capacity back to the City of Escondido, which could then sell this capacity to the County. This would likely require a modification to the City of San Diego agreement with the City of Escondido.

Connection to Vallecitos Water District Facilities

As shown in Figure 4-4a, *On-site Connection to Vallecitos Water District Facilities*, and Figure 4-4b, *Off-site Connection to Vallecitos Water District Facilities*, this potential option requires the annexation to VWD and would involve the installation of approximately 3,400 feet of new force main from the Project site to an existing VWD pipeline. New lines would be located between a pump station located in the southeastern portion of Neighborhood 5, trending northerly to Mt. Whitney Drive, then west to Project streets. From the north end of the Project, the new lines would trend east along Hill Valley Drive to Hill Valley Road. From the point at which Hill Valley Road trends due west, the lines would be installed using one of two routes, on either side of semi-rural residential (four homes) prior to passing along paved roads through the Casitas del Sol Mobile Home Park (past approximately 70 homes, regardless of route) and connecting to existing VWD sewer line in Barham Drive, just south of SR-78. From Barham Drive, the Project would install approximately 500 linear feet of pipeline under SR-78 from Barham Drive to Rancheros Drive (a frontage road between commercial uses and SR-78) in the City of San Marcos.

This alternative also would require four on-site pump stations and back-up power generators. The on-site pump stations would be located along Project roadways within the development. Two would be sited in Neighborhood 3: one (PS 1) on a cul-de-sac in the northeastern portion of the neighborhood between lots 146 and 147, and one (PS 2) along the street leading to Neighborhood 4 south of Lot 122. PS 3 would be sited at the northern extent of Neighborhood 4. The fourth pump station (PS 4) would be located on the WTWRF site in Neighborhood 5.

Connection to the Harmony Grove Treatment Plant

As shown in Figure 4-5, *Connection to the Harmony Grove Treatment Plant*, this potential option involves: (1) the installation of an approximately 0.8-mile-long force main from the Project site to the Harmony Grove WTWRF, 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 Project site. The Project, as proposed, includes annexation into the County Sanitation District. Any agreement to connect to the Harmony Grove WTWRF would also require annexation into the County District, and potential modifications to the Harmony Grove Village entitlements.

A new six-inch force main would be installed from Neighborhood 5, southerly within Country Club Drive, to the Harmony Grove WTWRF currently under construction. The construction period would require excavation and installation within existing roadbed followed by re-cover of the pipeline and removal of any excess soil along the pipeline right-of-way. Impacts would be to a

linear right-of-way, with construction activities moving along the right-of-way (cut, install, cover) as installation occurs.

The new pump station would be located on the Project site, west of Country Club Drive, slightly downslope.

Combined On-/Off-site Wastewater Treatment

In addition to the off-site treatment options discussed above, the Project Sewer Study (Atkins 2015a) identifies a second potential design option involving: (1) construction of an on-site treatment facility to provide wastewater treatment and solids thickening; and (2) conveyance of thickened sludge to the Harmony Grove Treatment Plant for additional processing and disposal. This option would include an on-site facility that would be similar to (although at a slightly smaller scale than) the proposed WTWRF, an on-site wet weather storage facility as described for the Proposed Project, and a small on-site pump station and force main (assumed to be similar to the facilities described above for the full connection to the Harmony Grove Treatment Plant). Alternatively, thickened solids could be collected on site and hauled to the Harmony Grove facility. Under this option, the existing laboratory at the Harmony Grove Treatment Plant would also be utilized by the on-site facility (similar to the Proposed Project).

4.5.2 Comparison of the Effects of the Off-site and Combined On-/Off-site Sewer Options Alternative to the Proposed Project

Aesthetics

Connection to the City of Escondido HARRF

Impacts would be to a linear right-of-way, with construction activities moving along the right-of-way (cut, install, cover) as installation occurs. Construction activities associated with pipeline installation would be visible along different segments of the right-of-way during the installation process. These visual effects would vary from the existing condition but would be temporary in effect along the linear right-of-way. The disturbance would occur within the existing transmission line easement, which contains both rural elements (field-like discing of vegetation) and industrial elements (two adjacent power lines with large-scale metal transmission tower facilities).

The majority of the viewers would view the construction activities from Country Club Drive, either paralleling them on the roadway, or viewing them laterally as the trenching moves up the hill. From Kauana Loa, viewers might see the tie-in location for a few seconds as they head south on Kauana Loa; or, if coming west on Harmony Grove Road toward the intersection with Kauana Loa, they might see the tie-in location, or the new force main as it comes down slope of the small hill between Kauana Loa and Country Club Drive. All of these views would be limited in duration for moving viewers. For stationary viewers, exposure would be longer, but the number of viewers would be fewer. For all viewers, the construction period would be temporary.

The new pump station would be located on the Project site, west of Country Club Drive. Located slightly downslope from Country Club Drive, the facility would be the size of a small outbuilding (such as a shed), common in this area.

Once installed within area roadways and SDG&E easement, there would be no surficial elements associated with the pipelines that would modify area views. Based on (1) the temporary nature of the construction impact; (2) the small footprint of the linear construction right-of-way and permanent pump station; and (3) the lack of permanent visual change associated with the pipelines, less than significant visual impacts would occur under this sewer option.

Connection to VWD Facilities

This route would be sited in proximity to a number of residential uses, as well as requiring construction within or adjacent to a surface street edged by residential and commercial uses that support a substantial amount of traffic. Impacts would be to a linear right-of-way, with construction activities moving along the right-of-way (cut, install, cover) as installation occurs. Construction activities would be visible along different segments of the right-of-way during the installation process. These visual effects would vary from the existing condition but would be temporary in effect along the linear right-of-way. For the mobile home area in particular, the density of these uses would minimize the level of exposure as abutting homes would shield views to the construction zone unless it is very close to the residence. More open views would be available along Rancheros Drive, where construction could be seen from both Rancheros Road itself and from SR-78. Views, however, would be relatively brief (particularly from SR-78) due to the speed of moving traffic.

Once installed within area roadways, there would be no surficial elements that would modify area views relative to pipelines. With regard to the four pump stations, excluding the one at the northern end of the Project site, they would be nestled within other Project development areas and would not be expected to visually differentiate from other Project structures, especially given the Proposed Project landscaping. Although located just north of the Project residential uses, PS 3 would be close to Lot 122. It would be the size of a small outbuilding (such as a shed), common in this area, and is expected to be visually consistent with other existing uses in the vicinity. It also would be at a distance from most viewers, as the northeastern extent of the Project is located west of most viewers in the area.

Based on (1) the temporary nature of the construction impact; (2) the small footprint of the linear construction right-of-way and permanent pump stations; and (3) the lack of permanent visual change associated with the pipelines, less than significant visual impacts would occur under this sewer option.

Connection to the Harmony Grove Treatment Plant

Construction impacts would be to a linear right-of-way. Construction activities would be visible along different segments of the right-of-way during the installation process. These effects would vary from the existing condition but would be temporary in effect along the linear right-of-way.

The new pump station would be located within the Project footprint, west of Country Club Drive. Located slightly downslope from Country Club Drive, the facility would be the size of a small outbuilding (such as a shed), common in this area.

The new line would tie into the planned Harmony Grove WTWRF. As stated in the Final Harmony Grove Village EIR, Section 2.4.3, Analysis of Project Effects and Determination of Significant Impact (the EIR was certified and approved by the Board of Supervisors in 2007), the Harmony Grove facility is sited approximately 35 feet above the intersection of Country Club Drive and Harmony Grove Road. The facility buildings would be placed in an existing flat area, and the water storage pond would be located in a re-graded, existing depression that was created as a result of the quarry operations. The facility would not be readily visible from the roadway due to the scale of the intervening slopes. Where visible, the barn-like character of the buildings would continue the rural quality of the architecture proposed for that entire project. No significant impacts were identified. The Proposed Project would not require structural modifications to the Harmony Grove WTWRF but would be accommodated within the existing plan.

Once installed within Country Club Drive, there would be no surficial elements that would modify area views. Based on (1) the temporary nature of the construction impact; (2) the small footprint of the linear construction right-of-way and permanent pump station; and (3) the lack of permanent visual change associated with the pipelines and tie-in to the Harmony Grove WTWRF, less than significant visual impacts would result.

Combined On-/Off-site Treatment

Construction-related aesthetic impacts under this option would be similar to the Proposed Project but would also include work within a linear right-of-way for the proposed force main (as noted above for the Harmony Grove Treatment option), unless thickened solids are hauled to the Harmony Grove Plant. Construction activities would be visible along different segments of the force main right-of-way during the installation process. These effects would vary from the existing condition but would be temporary in effect along the linear right-of-way. If thickened solids from the WTWRF are hauled to the Harmony Grove Plant, the noted effects from force main construction would not occur, although additional long-term impacts would result as outlined below. Based on the described conditions, construction-related aesthetics impacts under the Combined On-/Off-site Treatment Option would be significant and unmitigable, but short-term, similar to the Proposed Project.

Long-term visibility and related effects from the treatment facility and wet weather storage pond under this design option would be similar to the proposed WTWRF (although at a slightly smaller scale), with these impacts identified as significant but mitigable for the Proposed Project. The new pump station under this option would be located within the Project footprint west of Country Club Drive, similar to the Harmony Grove Treatment option, with the new force main line also similar to the Harmony Grove Treatment option. The Proposed Project would not require structural modifications to the Harmony Grove Plant, but would be accommodated within the existing plan, while under this alternative option minor structural modifications to the Harmony Grove Plant could be required. This option could also involve a small number of truck trips to haul thickened solids to the Harmony Grove Plant (i.e., in lieu of the pump station/force main, as previously

described), with no associated significant aesthetic impacts anticipated. Based on the noted conditions, long-term aesthetics impacts under the Combined On-/Off-site Treatment Option would be significant but mitigable, similar to the Proposed Project.

Air Quality

Connection to the City of Escondido HARRF

Table 4-2, *Estimated 2015 Worst-case Construction Emissions by Overlapping Construction Activities – Off-site Sewer Options*, provides a summary of the maximum daily construction emission estimates during each construction activity overlap for construction year 2015 for the three off-site sewer options. This table shows the impacts related to development of the entire Proposed Project, with the exception that, instead of the WTWRF, an off-site pipeline would be constructed. It was assumed that dust control measures (watering a minimum of two times daily) would be employed to reduce emissions of fugitive dust during site grading. The maximum daily emissions are compared to the daily emission thresholds to determine significance. As shown in Table 4-2, with construction of the off-site sewer pipeline to connect to the HARRF, instead of WTWRF construction, the 2015 worst-case daily construction emissions would be under the significance thresholds, similar to the Proposed Project. Moreover, construction impacts under this sewer option would be less than that of the Proposed Project. Because emissions of all criteria pollutants during construction would be below the daily thresholds, construction of this option would, therefore, not conflict with the NAAQS or CAAQS, and the construction impact would be less than significant.

Construction of cumulative projects would occur in the general vicinity of the Project site, and these projects would result in a cumulatively considerable net increase in VOC, NO_x, PM₁₀ and PM_{2.5}. Impacts would remain significant even with Project design considerations to reduce fugitive dust during construction. Construction under this alternative would therefore result in an unavoidable significant, but temporary, cumulative impact to ambient air quality, similar to the Proposed Project.

The potential of odors generated by the on-site WTWRF, although identified as less than significant under the Proposed Project, would be eliminated under this sewer option since the WTWRF would not be constructed.

Connection to VWD Facilities

Impacts associated with air quality under this option would be the same as impacts under the Connection to the City of Escondido HARRF Option. As shown in Table 4-2, with construction of the off-site sewer pipeline to connect to VWD facilities, instead of WTWRF construction, the 2015 worst-case daily construction emissions would be under the significance thresholds, similar to the Proposed Project. Moreover, construction impacts under this sewer option would be less than that of the Proposed Project. Because emissions of all criteria pollutants during construction would be below the daily thresholds, construction of this option would, therefore, not conflict with the NAAQS or CAAQS, and the construction impact would be less than significant.

Construction of cumulative projects would occur in the general vicinity of the Project site, and these projects would result in a cumulatively considerable net increase in VOC, NO_x, PM₁₀ and PM_{2.5}. Impacts would remain significant even with Project design considerations to reduce fugitive dust during construction. Construction under this alternative would therefore result in an unavoidable significant, but temporary, cumulative impact to ambient air quality, similar to the Proposed Project.

The potential of odors generated by the on-site WTWRF, although identified as less than significant under the Proposed Project, would be eliminated under this sewer option since the WTWRF would not be constructed.

Connection to the Harmony Grove Treatment Plant

Impacts associated with air quality under this option would be the same as impacts under the Connection to the City of Escondido HARRF Option. As shown in Table 4-2, with construction of the off-site sewer pipeline to connect to the Harmony Grove WTWRF, instead of construction of the Project WTWRF, the 2015 worst-case daily construction emissions would be under the significance thresholds, similar to the Proposed Project. Moreover, construction impacts under this sewer option would be less than that of the Proposed Project. Because emissions of all criteria pollutants during construction would be below the daily thresholds, construction of this option would, therefore, not conflict with the NAAQS or CAAQS, and the construction impact would be less than significant.

Construction of cumulative projects would occur in the general vicinity of the Project site, and these projects would result in a cumulatively considerable net increase in VOC, NO_x, PM₁₀ and PM_{2.5}. Impacts would remain significant even with Project design considerations to reduce fugitive dust during construction. Construction under this alternative would therefore result in an unavoidable significant, but temporary, cumulative impact to ambient air quality, similar to the Proposed Project.

The potential of odors generated by the on-site WTWRF, although identified as less than significant under the Proposed Project, would be eliminated under this sewer option since the WTWRF would not be constructed.

Combined On-/Off-site Treatment

Under this option, both direct and cumulative (construction) air quality-related impacts would be significant and unmitigated, similar to the Proposed Project, due to the similar nature and scale of associated construction and operation characteristics.

Agricultural Resources

Connection to the City of Escondido HARRF

The infrastructure required to construct this sewer option would be located completely within existing City/County roadways, an SDG&E easement between Country Club Drive and Kauana

Loa Drive, and the Proposed Project WTWRF site (which is included in the Project site impacts). Accordingly, this sewer option would not result in additional impacts (over the Proposed Project) to CDC candidate soils and no associated impacts would result from the additional off-site facilities. Therefore, under this option, impacts would be significant but mitigable, similar to the Proposed Project.

Connection to VWD Facilities

This option would include approximately 100 linear feet of pipeline that would extend through an area of CDC candidate soils (i.e., Visalia sandy loam, two to five percent slopes) within the eastern route segment extending between Hill Valley Drive and the Casitas del Sol Mobile Home Park. Based on a proposed 12-inch diameter pipeline, a conservative disturbance width of 20 feet is assumed for this segment, resulting in an impact of 0.05 acre (2,000 s.f.) within the noted CDC candidate soils. If this segment of the VWD off-site sewer option is ultimately implemented, this additional 0.05 acre of impact to CDC candidate soils would be significant and would require mitigation. Therefore, an additional 0.05 acre of mitigation would be required in addition to the ~~12.97~~13.14 acres of described mitigation for on-site impacts identified for the Proposed Project (rounded to 13.0 in this EIR text), for a total mitigation requirement of ~~13.02~~13.19 acres. This additional mitigation could be implemented either through the PACE Program or a combination of PACE mitigation credits and establishment of on-site LBZ easements as described in Subchapter 2.3, *Agricultural Resources*.

Connection to the Harmony Grove Treatment Plant

The infrastructure required to construct this sewer option would be located completely within existing City/County roadways and the Proposed Project WTWRF site (which is included in the Project site impacts). Accordingly, this sewer option would not result in additional impacts (over the Proposed Project) to CDC candidate soils and no associated impacts would result from the additional off-site facilities. Therefore, under this option, impacts would be significant but mitigable, similar to the Proposed Project.

Combined On-/Off-site Treatment

Potential impacts to agricultural resources under this option would be essentially the same as the Proposed Project (significant but mitigable), based on the following considerations: (1) the disturbance footprint for the on-site treatment plant would be similar to the proposed WTWRF; and (2) the force main (or hauling operations) would be confined to previously developed/disturbed areas, with no associated impacts to agricultural resources.

Biological Resources

Connection to the City of Escondido HARRF

This option would include installation of approximately 1,600 linear feet of force main that would extend through an area of other developed lands and no associated impacts would result as a result from the additional off-site facilities (refer to Appendix H of the Biological Technical Report [EIR Appendix E]). Therefore, under this option, impacts would be similar to the Proposed Project.

Connection to VWD Facilities

The infrastructure required to construct this sewer option would be located completely within existing City/County roadways, other developed lands, and the Proposed Project WTWRF site (which is included in the Project site impacts; refer to Appendix H of the Biological Technical Report [EIR Appendix E]). Accordingly, this sewer option would not result in additional impacts (over the Proposed Project) to biological resources and no associated impacts would result as a result from the additional off-site facilities. Therefore, under this option, impacts would be similar to the Proposed Project.

Connection to the Harmony Grove Treatment Plant

The infrastructure required to construct this sewer option would be located completely within existing City/County roadways and the Proposed Project WTWRF site (which is included in the Project site impacts; refer to Appendix H of the Biological Technical Report [EIR Appendix E]). Accordingly, this sewer option would not result in additional impacts (over the Proposed Project) to biological resources and no associated impacts would result as a result from the additional off-site facilities. Therefore, under this option, impacts would be similar to the Proposed Project.

Combined On-/Off-site Treatment

Under this option, potential impacts to biological resources would be essentially the same as the Proposed Project (significant but mitigable), based on the following considerations: (1) the disturbance footprint for the on-site treatment plant would be similar to the proposed WTWRF; and (2) the force main (or hauling operations) would be confined to previously developed/disturbed areas, with no associated impacts to biological resources.

Cultural Resources

Connection to the City of Escondido HARRF

The infrastructure required to construct this sewer option would be located completely within existing City/County roadways, other developed lands, or the Proposed Project WTWRF site (which is included in the Project site impacts); however, two cultural sites have been recorded in the area of this off-site pipeline connection (refer to Appendix F). One of the sites, CA-SDI-17,839, was determined not to be a significant resource under CEQA or RPO. No mitigation measures would be required for this site. The other site, CA-SDI-17,838, was assessed as a significant resource under CEQA, but it does not meet the requirements for significance under RPO. If the sewer alignment is implemented as part of this Project, the site would be subject to direct impacts. Impacts to this cultural site would represent significant environmental effects, which would need to be mitigated through implementation of a research design and data recovery program. In addition, undiscovered buried archaeological resources could be located beneath the pipeline alignment. Impacts to buried resources would also represent significant environmental effects. Accordingly, this sewer option would slightly increase impacts (over the Proposed Project) to cultural resources.

Connection to VWD Facilities

The infrastructure required to construct this sewer option would be located completely within existing City/County roadways, other developed lands, and the Proposed Project WTWRF site (which is included in the Project site impacts). No previously recorded sites are located within the proposed alignment, nor were any cultural sites discovered during a survey of this alignment in 2014 (refer to Appendix F). Nonetheless, undiscovered buried archaeological resources could be located beneath the pipeline alignment. Impacts to such resources would represent significant environmental effects; accordingly, this sewer option would slightly increase potential impacts (over the Proposed Project) to cultural resources.

Connection to the Harmony Grove Treatment Plant

The infrastructure required to construct this sewer option would be located completely within existing City/County roadways, other developed lands, or the Proposed Project WTWRF site (which is included in the Project site impacts). No previously recorded sites are located within the proposed alignment, nor were any new cultural sites discovered during a survey of this alignment in 2014 (refer to Appendix F). Nonetheless, undiscovered buried archaeological resources could be located beneath these areas. Impacts to these resources would represent significant environmental effects; accordingly, this sewer option would slightly increase potential impacts (over the Proposed Project) to cultural resources.

Combined On-/Off-site Treatment

Potential impacts to cultural resources under this alternative would be slightly greater than those identified for the Proposed Project, as undiscovered archaeological resources could be located beneath the off-site force main corridor. As identified for the Proposed Project, however, these potential impacts would be significant but mitigable.

Noise

Connection to the City of Escondido HARRF

Construction of this sewer option would not result in additional noise impacts when compared to the Proposed Project. Specifically, noise levels from construction activities for this sewer option would not be in excess of the allowed levels. Because the Proposed Project WTWRF would not be constructed, noise associated with the WTWRF would not occur under this sewer option. In addition, during operation under this sewer option, no additional pump stations would be required beyond those analyzed for the Proposed Project. Therefore, this sewer option would not result in operational noises levels in excess of thresholds, and impacts would be less than significant. Noise impacts associated with this sewer option would be slightly less than under the Proposed Project.

Connection to VWD Facilities

Construction of this sewer option would not result in additional noise impacts when compared to the Proposed Project. Specifically, noise levels from construction activities for this sewer option would not be in excess of the allowed levels. Because the Proposed Project WTWRF would not be constructed, noise associated with the WTWRF would not occur under this sewer option. However, noise associated with the additional pump station necessary under this sewer option (including its backup diesel generator) would potentially be significant. Therefore, mitigation at this pump station location would be necessary, and would be similar to the mitigation required at the other pump stations analyzed under the Proposed Project. Noise impacts associated with this sewer option would be slightly less than under the Proposed Project.

Connection to the Harmony Grove Treatment Plant

Construction of this sewer option would not result in additional noise impacts when compared to the Proposed Project. Specifically, noise levels from construction activities for this sewer option would not be in excess of the allowed levels. Because the Proposed Project WTWRF would not be constructed, noise associated with the WTWRF would not occur under this sewer option. However, noise associated with the additional pump station necessary under this sewer option (including its backup diesel generator) would potentially be significant. Therefore, mitigation at this pump station location would be necessary, and would be similar to the mitigation required at the other pump stations analyzed under the Proposed Project. Noise impacts associated with this sewer option would be slightly less than under the Proposed Project.

Combined On-/Off-site Treatment

Potential noise-related impacts under this option would be slightly greater than those identified for the Proposed Project, based on the following considerations: (1) construction and operational activities for the on-site treatment plant would be similar to the proposed WTWRF; (2) this option would require an additional (albeit small-scale) on-site pump station; and (3) this option would require either additional off-site construction for the force main, or additional vehicle trips for solids hauling. As identified for the Proposed Project, however, these potential impacts would be significant but mitigable.

Paleontological Resources

Connection to the City of Escondido HARRF

The infrastructure required to construct this sewer option would be located completely within existing City/County roadways, other developed lands, or the Proposed Project WTWRF site (which is included in the Project site impacts). Based on Figure 2, *Paleontological Resources Potential and Sensitivity*, contained in the County's Guidelines for Determining Significance for Paleontological Resources, this sewer option alignment is located in an area rated as "marginal" or "no potential" for paleontological resources. Nonetheless, undiscovered paleontological resources could be located beneath these areas. Impacts to these resources would represent

significant environmental effects; accordingly, this sewer option would increase the potential for impacts (over the Proposed Project) to paleontological resources.

Connection to VWD Facilities

The infrastructure required to construct this sewer option would be located completely within existing City/County roadways, other developed lands, and the Proposed Project WTWRF site (which is included in the Project site impacts). Based on Figure 2, *Paleontological Resources Potential and Sensitivity*, contained in the County's Guidelines for Determining Significance for Paleontological Resources, this sewer option alignment is located in an area rated as "marginal" or "no potential" for paleontological resources. Nonetheless, undiscovered paleontological resources could be located beneath these areas. Impacts to such resources would represent significant environmental effects; accordingly, this sewer option would increase the potential for impacts (over the Proposed Project) to paleontological resources.

Connection to the Harmony Grove Treatment Plant

The infrastructure required to construct this sewer option would be located completely within existing City/County roadways, other developed lands, or the Proposed Project WTWRF site (which is included in the Project site impacts). Based on Figure 2, *Paleontological Resources Potential and Sensitivity*, contained in the County's Guidelines for Determining Significance for Paleontological Resources, this sewer option alignment is located in an area rated as "marginal" or "no potential" for paleontological resources. Nonetheless, paleontological resources could be located beneath these areas. Impacts to these resources would represent significant environmental effects; accordingly, this sewer option would increase the potential for impacts (over the Proposed Project) to paleontological resources.

Combined On-/Off-site Treatment

Potential impacts to paleontological resources under this alternative would be slightly greater than those identified for the Proposed Project, as undiscovered fossils could be located beneath the off-site force main corridor. As identified for the Proposed Project, however, these potential impacts would be significant but mitigable.

Transportation/Traffic

Connection to the City of Escondido HARRF

Construction and operation of additional off-site facilities (i.e., pipelines and pump stations) would not contribute additional ADT to analyzed roadways and intersections above the ADT calculated for the Proposed Project but could cause additional temporary traffic congestion along Mt. Whitney Road and Country Club Drive due to possible reduced road capacity during pipeline installation. Accordingly, impacts associated with transportation/traffic under this sewer option would result in an increase in temporary construction traffic and require implementation of a traffic control plan for mitigation of this potential for increased traffic impact during construction of the pipeline and associated facilities.

Connection to VWD Facilities

Construction and operation of additional off-site facilities (i.e., pipelines and pump stations) would not contribute additional ADT to analyzed roadways and intersections above the ADT calculated for the Proposed Project but could cause additional temporary traffic congestion along Mt. Whitney Road, Hill Valley Drive, and Hill Valley Road due to possible temporarily reduced road capacity during pipeline installation. Accordingly, impacts associated with transportation/traffic under this sewer option would result in an increase in temporary construction traffic and require implementation of a traffic control plan for mitigation of this potential for increased traffic impact during construction of the pipeline and associated facilities.

Connection to the Harmony Grove Treatment Plant

Construction and operation of additional off-site facilities (i.e., pipelines and pump stations) would not contribute additional ADT to analyzed roadways and intersections above the ADT calculated for the Proposed Project but could cause additional traffic congestion along Country Club Drive due to temporarily reduced road capacity during pipeline installation. Accordingly, impacts associated with transportation/traffic under this sewer option would result in an increase in construction traffic and require implementation of a traffic control plan for mitigation of this increased traffic impact during construction of the pipeline and associated facilities.

Combined On-/Off-site Treatment

Potential impacts to traffic under this alternative would be slightly greater than those identified for the Proposed Project, based on the following considerations: (1) additional construction traffic would occur along Country Club Drive during construction of the force main (as noted above for the Harmony Grove Connection option); and (2) additional operational traffic would occur along Country Club Drive if thickened solids are conveyed to the Harmony Grove Treatment Plant by hauling. As identified for the Proposed Project, however, these potential impacts would be significant but mitigable.

Hazards and Hazardous Materials

Connection to the City of Escondido HARRF

The infrastructure required to construct this sewer option would be located completely within existing City/County roadways, other developed lands, or the Proposed Project WTWRF site (which is included in the Project site impacts). Based on a review of the Phase 1 Environmental Site Assessment (ESA) report prepared for the Proposed Project which included a data base search within a one-mile radius of the site, there are no recognized environmental conditions (RECs) along the proposed pipeline alignment or associated facilities (Geocon 2012c, 2013b, and 2014). Accordingly, this sewer option would not result in additional impacts (over the Proposed Project) associated with hazards and hazardous materials and no potential significant impacts would result as a result from the additional off-site facilities. Therefore, under this option, there would be similar significant but mitigable impacts.

This sewer option would avoid potentially significant impacts associated with vectors related to the WTWRF and wet weather storage ponds, as neither would be constructed under this option. However, this sewer option would still result in the construction and operation of an equestrian ~~facility~~ staging area, which could potentially lead to a potentially significant vector-related impact. Therefore, impacts to public health and safety could be significant under this alternative, similar to the Proposed Project; however, vector impacts would be less than the Proposed Project.

Connection to VWD Facilities

This option would include approximately 100 linear feet of pipeline that would extend through an area within the eastern route segment extending between Hill Valley Drive and the Casitas del Sol Mobile Home Park. Based on the information provided in the Phase I ESA for northernmost area of the Project site (Geocon 2012c, 2013b and 2014), there are no recorded hazards in this eastern route segment. Accordingly, this sewer option would not result in additional impacts (over the Proposed Project) associated with hazards and hazardous materials and no potential significant impacts would result as a result from the additional off-site facilities. Therefore, under this option, there would be similar significant but mitigable impacts.

This sewer option would avoid potentially significant impacts associated with vectors related to the WTWRF and wet weather storage ponds, as neither would be constructed under this option. However, this sewer option would still result in the construction and operation of an equestrian ~~facility~~ staging area, which could potentially lead to a potentially significant vector-related impact. Therefore, impacts to public health and safety could be significant under this alternative, similar to the Proposed Project; however, vector impacts would be less than the Proposed Project.

Connection to the Harmony Grove Treatment Plant

The infrastructure required to construct this sewer option would be located completely within existing City/County roadways, other developed lands, or the Proposed Project WTWRF site (which is included in the Project site impacts). Based on a review of the Phase I ESA prepared for the Proposed Project which included a data base search within a one-mile radius of the site, there are no recognized environmental conditions (RECs) along the proposed pipeline alignment or associated facilities (Geocon 2012c, 2013b, and 2014). Accordingly, this sewer option would not result in additional impacts (over the Proposed Project) associated with hazards and hazardous materials and no potential significant impacts would result as a result from the additional off-site facilities. Therefore, under this option, there would be similar significant but mitigable impacts.

This sewer option would avoid potentially significant impacts associated with vectors related to the WTWRF and wet weather storage ponds, as neither would be constructed under this option. However, this sewer option would still result in the construction and operation of an equestrian ~~facility~~ staging area which could potentially lead to a potentially significant vector-related impact. Therefore, impacts to public health and safety could be significant under this alternative, similar to the Proposed Project; however, vector impacts would be less than the Proposed Project.

Combined On-/Off-site Treatment

Potential impacts related to hazards and hazardous materials under this option would be slightly greater than those identified for the Proposed Project, based on the following considerations: (1) construction and operational activities for the on-site treatment plant would be similar to the proposed WTWRF; (2) this option would require an additional (albeit small-scale) on-site pump station; and (3) no recognized environmental conditions (RECs) have been identified along the force main corridor (as noted above for the Harmony Grove Connection option). As identified for the Proposed Project, however, these potential impacts would be significant but mitigable.

Geology and Soils

Connection to the City of Escondido HARRF

The infrastructure required to construct this sewer option would be located completely within existing City/County roadways, an existing SDG&E Easement and other developed lands or the Proposed Project WTWRF site (which is included in the Project site impacts). Therefore, slightly more grading would be required under this sewer option (compared to the Proposed Project). Based on a review of Figures 4 and 5 (*Potential Liquefaction Areas and County Landslide Susceptibility Areas*, respectively) contained in the County's Guidelines for Determining Significance for Geologic Hazards, this sewer option alignment is not located in a potential liquefaction area or a geohazard area for landslides or slope prone formations. Based on a review of Figure 6, *Potential Expansive Soil Area*, contained in the County's Guidelines for Determining Significance for Geologic Hazards, this sewer option alignment is located in a potential liquefaction area. Impacts related to seismically-induced settlement hazards, seismically-induced surface slope instability and rockfall hazards, and expansive soils would represent significant environmental effects; accordingly, this sewer option would increase the potential for impacts (over the Proposed Project) to geology and soils. A site-specific geological analysis would be required if this off-site sewer alignment is selected.

Connection to VWD Facilities

The infrastructure required to construct this sewer option would be located completely within existing City/County roadways, other developed lands, or the Proposed Project WTWRF site (which is included in the Project site impacts). Therefore, slightly more grading would be required under this sewer option (compared to the Proposed Project). Based on a review of Figures 4 and 5 (*Potential Liquefaction Areas and County Landslide Susceptibility Area*, respectively) contained in the County's Guidelines for Determining Significance for Geologic Hazards, this sewer option alignment is not located in a potential liquefaction area or a geohazard area for landslides or slope prone formations. Based on a review of Figure 6, *Potential Expansive Soil Area*, contained in the County's Guidelines for Determining Significance for Geologic Hazards, this sewer option alignment is located in a potential liquefaction area. Impacts related to seismically-induced settlement hazards, seismically-induced surface slope instability and rockfall hazards, and expansive soils would represent significant environmental effects; accordingly, this sewer option would increase the potential for impacts (over the Proposed Project) to geology and soils. A site-specific geological analysis would be required if this off-site sewer alignment is selected.

Connection to the Harmony Grove Treatment Plant

The infrastructure required to construct this sewer option would be located completely within existing City/County roadways, other developed lands, or the Proposed Project WTWRF site (which is included in the Project site impacts). Therefore, slightly more grading would be required under this sewer option (compared to the Proposed Project). Based on a review of Figures 4 and 5 (*Potential Liquefaction Areas and County Landslide Susceptibility Area*, respectively) contained in the County's Guidelines for Determining Significance for Geologic Hazards, this sewer option alignment is not located in a potential liquefaction area or a geohazard area for landslides or slope prone formations. Based on a review of Figure 6, *Potential Expansive Soil Area*, contained in the County's Guidelines for Determining Significance for Geologic Hazards, however, this sewer option alignment is located in a potential ~~liquefaction~~ expansive soil area. ~~As a result, potential geology and soils impacts related to seismically induced settlement hazards, seismically induced surface slope instability and rockfall hazards, and expansive soils would represent significant environmental effects; accordingly, under this sewer option would be slightly greater than those identified for would increase the potential for impacts (over the Proposed Project.) As identified for the Proposed Project, however, these potential impacts would be significant but mitigable to geology and soils. A site-specific geological analysis would be required if this off-site sewer alignment is selected.~~

Combined On-/Off-site Treatment

Potential impacts related to geology and soils under this option would be slightly greater than those identified for the Proposed Project, based on the following considerations: (1) construction and operational activities for the on-site treatment plant would be similar to the proposed WTWRF; (2) this option would require an additional (albeit small-scale) on-site pump station; and (3) the proposed force main corridor is located within an area of potential expansive soil occurrence (as noted above for the Harmony Grove Connection option). As identified for the Proposed Project, however, these potential impacts would be significant but mitigable.

Growth Inducement

Connection to the City of Escondido HARRF

This option would result in the construction of a sewer pipeline off site that would connect to the HARRF. This option would not result in growth inducement because this pipeline would be sized to accommodate sewage flow only from the Proposed Project and therefore, would not eliminate an obstacle to growth. In addition, the proposed sewer and sewer return pipelines would be located within existing City/County streets including Country Club Drive and Mt. Whitney Road and an existing SDG&E easement, and are not adjacent to any large undeveloped parcels of property (with the exception of the Proposed Project site) that may be encouraged to subdivide as a result of installation of new sewer lines. Although this option could allow for additional future projects to use this sewer line, future projects would be required to conform with the density within the County's General Plan or to obtain a GPA. Regardless, future projects would be required to complete additional studies regarding impacts to the environment, including growth inducement.

Connection to VWD Facilities

This option would result in the construction of a sewer pipeline off site that would connect to the existing VWD facilities. This option would not result in growth inducement because this pipeline would be sized to accommodate sewage flow only from the Proposed Project and, therefore, would not eliminate an obstacle to growth. However, a portion of the proposed sewer pipeline alignment along Hill Valley Road within the City of Escondido is adjacent to a large parcel of undeveloped property. Although this option could allow for additional future projects to use this sewer line, future projects would be required to conform with the density within the City's General Plan or to obtain a GPA. Regardless, future projects would be required to complete additional studies regarding impacts to the environment, including growth inducement.

Connection to the Harmony Grove Treatment Plant

This option would result in the construction of a sewer pipeline off site that would connect to the Harmony Grove Treatment Plant. This option would not result in growth inducement because this pipeline would be sized to accommodate sewage flow only from the Proposed Project and therefore, would not eliminate an obstacle to growth. In addition, the proposed sewer pipeline would be located within Country Club Drive and is not adjacent to any large undeveloped parcels of property (with the exception of the Proposed Project site and the Harmony Grove site which is currently under construction) that may be encouraged to subdivide as a result of installation of the new sewer line. Although this option could allow for additional future projects to use this sewer line, future projects would be required to conform with the density within the County's General Plan or to obtain a GPA. Regardless, future projects would be required to complete additional studies regarding impacts to the environment, including growth inducement.

Combined On-/Off-site Treatment

This option would not result in growth inducement for similar reasons as noted above for the Harmony Grove Connection option.

Conclusions

The three off-site sewer options, which would replace the on-site WTWRF, as well as the combined on-/off-site option, would be expected to result in generally similar impacts to those described for the Proposed Project. Specifically, this would include potentially significant and unmitigable impacts related to aesthetics and air quality, as well as significant (or potentially significant) but mitigated impacts for the issues of agricultural resources, biological resources, cultural resources, noise, paleontology, transportation/traffic, hazards and hazardous materials and geology and soils. A number of these impacts may vary slightly from those identified for the Proposed Project; however, these variations would be relatively minor and would not be expected to alter the overall impact levels or associated need for mitigation. Potential impacts identified for noise and air quality associated with operation of the WTWRF would be eliminated ~~under~~ for the off-site options included under this alternative but would remain for the combined on-/off-site option. In addition, none of the off-site sewer options identified for this alternative would not be

growth inducing, because they would not eliminate an obstacle to growth. ~~The~~ All of the three off-site sewer options identified under this alternative would meet the identified Project objectives.

4.6 Analysis of the Biologically Enhanced Alternative

This alternative was proposed because it would provide increased connectivity for local wildlife movement.

4.6.1 Biologically Enhanced Alternative Description and Setting

This alternative would reduce the amount of areas to be graded within the Project site by eliminating some residential lots in the vicinity of a local wildlife corridor. Specifically, with the exception of Neighborhood 2, unit counts would be reduced under this alternative (264 versus 326). In addition, the minimum lots sizes in Neighborhoods 1 and 3 would be reduced to 4,640 s.f. and 5,000 s.f., respectively. These changes would create larger areas of open space to provide for wildlife movement throughout the proposed development. The overall development footprint would be reduced from approximately ~~165–125~~ acres to 119 acres. Figure 4-6, *Biologically Enhanced Alternative*, illustrates the configuration of this alternative.

Although this alternative would result in a slightly reduced grading footprint compared to the Proposed Project, the same potable water and sewage lines and on-site roads with the exception of an eliminated cul-de-sac in Neighborhood 3 would be required to serve and gain access to the residential and recreational uses that would be constructed on site under the Biologically Enhanced Alternative. Similarly, the WTWRF and associated pump stations discussed in Chapter 1.0 would still be required to serve the development under this alternative.

4.6.2 Comparison of the Effects of the Biologically Enhanced Alternative to the Proposed Project

The anticipated environmental effects resulting from the Biologically Enhanced Alternative are described below. A comparison of the impacts identified for this alternative and the Proposed Project is shown in Table 4-1.

Aesthetics

Similar to the Proposed Project, implementation of the Biologically Enhanced Alternative would introduce additional single-family residential structures on to the valley floor and eastern-facing slopes of the hills at the western extent of the Project. This alternative would result in fewer dwelling units than the Proposed Project (264 versus 326), with an incrementally lower residential density. RPO steep slope encroachment for this alternative would be similar as to the Proposed Project; encroachment would total less than the amount permitted under the RPO for the few parcels with steep slope encroachment (and therefore would comply with the RPO).

This alternative would directly translate into retention of additional vegetated area, with a commensurate reduction in visible loss of vegetation during the construction period. Related to this, on-site undeveloped areas would increase under this alternative by the six acres of the reduced

~~footprint. approximately 15 percent, as~~ Based on the elimination of six acres of development, approximately ~~124~~ 155.4 acres would be set aside as visible open space as opposed to approximately ~~146.5~~ 149.4 acres under the Proposed Project.

Similar to the Proposed Project, implementation of this alternative would be anticipated to result in significant short-term visual effects related to the construction period and first few years of Project operations. This alternative would have fewer impacts to visual quality overall than the Proposed Project.

Air Quality

Similar to the Proposed Project, this alternative would result in the construction of more residences than is allowable under current land use designations. Accordingly, because the Biologically Enhanced Alternative would result in an increase in housing units beyond what was included for the site in the most recent (2009) version of the RAQS, impacts associated with conformance to regional air quality plans would be potentially significant.

Short-term construction-related air quality impacts associated with the Biologically Enhanced Alternative would be less than those associated with the Proposed Project because of the slight reduction in the amount of earth movement that would occur with this alternative. The soil cut and fill volumes would not balance on site under the Biologically Enhanced Alternative (whereas the Proposed Project's soil cut and fill volumes would balance on site). Therefore, this alternative would require approximately 107,000 cy of soil import to the Project site during earthwork activities, which would equate to approximately 35 truck trips per day (refer to the calculation assumptions under "Transportation/Traffic," below). This impact would be short term and would likely not result in additional significant impacts to air quality above that determined for the Proposed Project.

Long-term operational impacts associated with the 264 homes proposed under the Biologically Enhanced Alternative would be slightly less than those associated with the Proposed Project due to the reduced generation of vehicle trips per day (2,650 ADT for this alternative [assuming 10 ADT per home and 10 ADT for the WTWRF] versus 3,462 ADT for the Proposed Project). The 812 vehicle daily trip reduction would result in a corresponding 23 percent decrease in vehicular emissions of ROGs, CO, NO_x, and PM₁₀, compared with the Proposed Project. Long-term impacts would be less than significant under this alternative.

Accordingly, impacts to air quality under the Biologically Enhanced Alternative would be less than the Proposed Project.

Agricultural Resources

~~Under the Biologically Enhanced Alternative, agricultural preservation in the northwestern portion of the Project site could be slightly increased. Similar to the Proposed Project, these areas would be preserved within an easement. When compared to the Proposed Project, this alternative would result in fewer impacts to on-site agricultural resources that encompass Prime Farmland or Farmland of Statewide Importance candidate soils would be (reduced compared to the Proposed Project (i.e., from 12.97~~ 13.1 to 11.89 acres). Identified agricultural resource impacts under this

alternative would remain significant, however, and would require similar mitigation as described for the Proposed Project of on-site agricultural resources that encompass Prime Farmland or Farmland of Statewide Importance candidate soils). Under this alternative, significant impacts would be mitigated to below a level of significance, similar to the Proposed Project. While not associated with identified impacts to agricultural resources or related mitigation, it should also be noted that the proposed 35.4 -acre on-site agricultural easement included as a Proposed Project Design Consideration could be slightly increased under this alternative.

Biological Resources

Under the Biologically Enhanced Alternative, open space areas within the Project site would be increased. When compared to the Proposed Project, the increase in dedicated open space would result in fewer impacts to biological resources. Similar to the Proposed Project, the Biologically Enhanced would have the potential to result in direct and/or indirect impacts to special status plant and wildlife species, riparian habitat, and other sensitive natural communities and wetlands from the development of proposed land uses. The Biologically Enhanced Alternative would reduce impacts to sensitive habitats, including foraging habitat for raptors and habitat for the grasshopper sparrow, as well as local wildlife movement. Similar to the Proposed Project, this alternative would also be required to comply with local, state, and federal policies related to biological resources. Overall, however, when compared to the Proposed Project, the increase in open space dedication under the Biologically Enhanced Alternative would result in fewer direct and indirect biological resource impacts. All significant impacts would be mitigated to below a level of significance, similar to the Proposed Project.

Cultural Resources

Under the Biologically Enhanced Alternative, the one CEQA-significant resource (CA-SDI-17,506) within the Project site would be impacted, similar to the Proposed Project. There also is a potential for significant direct impacts related to undiscovered buried archaeological resources on the Project site. As with the Proposed Project, impacts to cultural resources under this alternative would be reduced below a level of significance through applicable mitigation measures. Potential for impacts to cultural resources under this alternative would be less for buried resources as compared to those determined under the Proposed Project.

Noise

The on-site grading for the Biologically Enhanced Alternative would be one percent less than the Proposed Project (by volume) and therefore, this alternative would generate essentially the same short-term (construction) noise impacts as the Proposed Project. This alternative would be expected to slightly decrease long-term noise impacts (due to the generation of approximately 23 percent fewer ADT as noted below under “Transportation/Traffic,” below).

In addition, this alternative would require approximately 107,000 cy of soil import to the Project site during earthwork activities, which would equate to approximately less than five truck trips per hour (refer to the calculation assumptions under “Transportation/Traffic,” below). This impact would be short term, and would likely not result in significant impacts associated with traffic noise.

Similar to the Proposed Project, potential noise impacts under this alternative are likely to be significant but mitigable through identified mitigation measures.

Paleontological Resources

The grading footprint for the Biologically Enhanced Alternative would be slightly smaller than the Proposed Project. Specifically, this alternative would result in approximately 119 acres of grading, which would be 6 acres (5 percent) less than under the Proposed Project. ~~In addition~~ Similarly, the Biologically Enhanced Alternative would require 919,000 cy of cut (which could affect unknown paleontological resources), which would be essentially the same as; ~~however, this would be slightly less (1 percent) than that required under the Proposed Project (i.e., 928,000-920,000 cy).~~ ~~Accordingly, impacts to paleontological resources would be slightly less similar to than those identified for the Proposed Project, but impacts would be potentially (i.e., significant and but mitigable) similar to the Proposed Project.~~

Transportation/Traffic

This alternative would require approximately 107,000 cy of soil import to the Project site during earthwork activities. Assuming each truck can carry 12 cy of fill, this would equate to a total of 8,917 one-way truck trips (or 17,834 trips to and from the site) over the grading phase of the Project. If the Reduced Grading Alternative requires two years of grading (or 520 working days; similar to the Proposed Project), a total of approximately 35 truck trips would be produced each work day, or less than 5 truck trips per hour (conservatively; during an 8-hour work day). This impact would be short term and would likely not result in significant impacts to roadways or intersections.

The Reduced Grading Alternative would generate a total of 2,650 ADT, assuming an ADT of 10 per du, plus 10 ADT for the WTWRF. Therefore, this alternative would amount to an 812 ADT trip reduction from traffic anticipated for the Proposed Project, including minor reductions during a.m. and p.m. peak hours. Based on these figures, potential transportation/ traffic impacts from this alternative are anticipated to be slightly less, but generally similar to, those identified for the Proposed Project. This alternative, like the Proposed Project, would include significant ~~and but~~ mitigable direct and cumulative traffic impacts.

Hazards and Hazardous Materials

Potentially significant impacts to hazards and hazardous materials would occur under the Biologically Enhanced Alternative, similar to those that would occur under the Proposed Project, although this alternative would require slightly (approximately 28-5 percent) less area to be graded area than the Proposed Project. It is possible that hazardous materials could be encountered during grading activities under this alternative. In addition, removal of on-site structures that could contain ACM and/or LCP would occur under this alternative. Potential impacts related to fire hazards and hazardous materials under this alternative would be mitigated below a level of significance. Potential impacts would be slightly less than the Proposed Project under this alternative due to the reduction in units interfacing with fire-prone areas.

The Biologically Enhanced Alternative, similar to the Proposed Project, could potentially result in significant impacts associated with vectors, as this alternative would include the construction and operation of ~~the an equestrian facility~~, WTWRF and wet weather storage ponds. Impacts to public health and safety would be similar to the Proposed Project under this alternative.

Geology and Soils

As stated previously, ~~one percent slightly less area would be grading~~ ~~would occur~~ under this alternative ~~when~~ compared to the Proposed Project ~~and cut and fill volume would be reduced by approximately five percent~~. Nonetheless, this alternative could ~~still~~ potentially result in significant impacts related to seismically-induced settlement hazards, seismically-induced surface slope instability and rockfall hazards, and expansive soils. All grading and/or construction activities for this alternative would be anticipated to occur in accordance with each of the standards and regulations identified in Subchapter 2.10, *Geology and Soils*. Similar to the Proposed Project, implementation of this alternative would result in the need for application of standard remediation/building mitigative techniques in response to issues related to geology and soils.

Conclusions

The Biologically Enhanced Alternative would be expected to result in less impacts generally similar to than those described for the Proposed Project; however, in that this alternative would include potentially significant impacts related to aesthetics and air quality, as well as agricultural resources, biological resources, cultural resources, noise, paleontological resources, transportation/traffic, hazards and hazardous materials and geology and soils (refer to Table 4-1). Several of these impacts may decrease from those identified for the Proposed Project, based on considerations such as a slightly smaller grading footprint and fewer residences. This alternative also would result in slightly increased impacts to some of the environmental issues due to the fact that earthwork would not be balanced on site and would require import of 107,000 cy of soil. All of these modifications would be relatively minor, however, and would not be expected to alter the overall impact levels or associated need for mitigation. The Biologically Enhanced Alternative would generally meet ~~most of~~ the identified Project objectives, with the exception that it would not ~~provide the amenities for the~~ embrace the equestrian nature of the surrounding community (due to smaller lot sizes, no horses would be allowed to be kept in the development). It would not provide the trail or staging area amenities for the equestrian community; and the neighborhood park, as well as private recreational facilities, would not be built.

4.7 Analysis of the Septic Option Alternative

This alternative was proposed to reduce air quality, hazard and community character impacts related to WTWRF operations. The Septic Option Alternative was originally based on the assumption that "...each house could have five bedrooms and each lot could be at least five acres in size to accommodate septic systems." Pursuant to the *Final County Local Agency Management Program (LAMP) for Onsite Wastewater Treatment Systems* (County 2015b), however, this assumption has been changed to allow minimum two-acre lots (with the number of potential bedrooms per house to remain unchanged). Specifically, the referenced LAMP, which post-dates the Proposed Project NOP, identifies an allowable density of two acres per single-family dwelling

in areas with an average annual precipitation level of between 15 and 20 inches. As outlined in Subchapters 2.2, Air Quality and 2.3, the Project site vicinity exhibits an average annual precipitation level of between approximately 15 and 16 inches, with the minimum 2-acre lot size therefore appropriate. Accordingly, the following analysis is based on two-acre minimum lots and up to five bedrooms per unit, with a preliminary lot layout provided in Figure 4-7, Septic Option Alternative.

4.7.1 Septic Option Alternative Description and Setting

Theis Septic Option aAlternative would result in the construction of 35-58 single-family residences distributed across the Project site (Figure 4-7, Septic Option Alternative). Under thisAs previously noted, this alternative, it was assumed that each house would have up to five bedrooms and each lot would be at least five-two acres in size to accommodate septic systems. The Septic Option Alternative would eliminate the need for the WTWRP and associated pump stations, as well as sewer lines, although potable water lines and related facilities would be required to serve the houses developed under this alternative58 residential units. In addition, access roads/driveways would be required throughout the development to gain access to the houses, as depicted on Figure 4.7. This alternative would eliminate the parks included in the Proposed Project, although steep slope and biological easements would be placed over approximately 185 acres of the Project site. The Septic Option is aAlternative would require approximately 98,000144,700 cy of cut to fill, with approximately 71,00034,700 cy of excess ~~needing~~ material to be exported from the Project site during construction. Existing agricultural and equestrian activities on the site would continue under this alternative (albeit at a reduced level), although as noted in Subchapter 2.3, portions of the active (or recently active) agricultural uses within the site (avocado orchards) were destroyed during the 2014 wildfire event.

Based on the previously described LAMP, related amendments to the San Diego County Code of Regulatory Ordinances (Division 8 of Title 6), and comments received during the EIR public review process, the Septic Option Alternative has been expanded to include consideration of both conventional and alternative on-site wastewater treatment system (OWTS) designs. Specifically, a conventional OWTS design includes a septic tank and a subsurface disposal system for dispersal of the septic tank effluent, and while some treatment occurs in the septic tank, the majority of the treatment occurs in the unsaturated soil below the disposal field (with associated requirements related to soil/groundwater depths, percolation rates, etc.). An alternative OWTS includes advanced (in addition to primary) treatment in the septic tank, and is typically used to overcome site-specific constraints related to high groundwater or shallow soils (with the additional septic tank treatment largely replacing treatment in the soil provided under conventional systems as noted).

The potential use of either a conventional or alternative OWTS design was evaluated for the Project site, based on factors including geologic and soil conditions, slopes, and percolation/absorption values (Geocon 2015). This analysis notes that on-site lots "...are expected to be underlain by shallow granitic bedrock with extremely low permeability or compacted rock/soil fill derived from onsite sources..." and identifies "...a higher anticipation of system failure without remedy or alternative solution..." due to "...the lack of absorption qualities of the underlying soil." Based on the described conditions and observations, the study concludes that the

Project site could accommodate a maximum of approximately 66 residential units under either OWTS design (Geocon 2015). As previously noted, the Septic Option Alternative includes 58 single-family lots with a minimum area of two acres (and up to five bedrooms per unit), based on the noted Geocon study and site-specific conditions including biological and steep slope constraints. Pursuant to the above discussion, this alternative design would be applicable to the use of either a conventional or alternative OWTS.

4.7.2 Comparison of the Effects of the Septic Option Alternative to the Proposed Project

The anticipated environmental effects resulting from the Septic Option Alternative, including the use of either conventional or alternative OWTS design as noted, are described below. A comparison of the impacts identified for this alternative and the Proposed Project is shown in Table 4-1.

Aesthetics

Under the Septic Option Alternative, the Project site would continue to appear as a primarily undeveloped or semi-rural area. This would be most applicable to the areas identified as Neighborhoods 1, 2 and 4 under the Proposed Project design, where densities would be lowest under this alternative. Significant and unmitigable short-term adverse visual impacts would be avoided under this alternative. In addition, significant aesthetic impacts related to retaining walls and manufactured slopes would not occur.

Air Quality

~~The only a~~Activities associated with the Septic Option Alternative that would potentially affect air quality include are ongoing equipment and/or vehicle-generated emissions from construction operations, a small number of vehicle trips for associated with the 35-58 residences, and minor vehicle trips to and from the equestrian-center staging area and agricultural operations. This alternative would be expected to avoid the significant and unmitigated air quality impacts identified for the Proposed Project, ~~based on the following considerations: (1) the construction of 58 single-family residential units on the Project site would be below the allowable General Plan density of 118 units, and would therefore be consistent with associated assumptions in the RAQS and SIP; and (2) due to the low number of units and minimal nature of emissions-associated levels of construction and operational emissions, with these activities, no significant direct or cumulative impacts related to air quality exceeding criteria pollutant thresholds would be anticipated to occur from under this alternative. Accordingly, this alternative would avoid the significant and unmitigated air quality impacts identified for the Proposed Project.~~

Agricultural Resources

Impacts to agricultural resources associated with the Septic Option Alternative would likely be somewhat less than those associated with the Proposed Project. Specifically, this alternative would result in over 80 percent fewer residential pads to be graded than the Proposed Project (58 versus 326), with minimum two-acre lots in areas with Prime or Statewide Important candidate soils (refer to Figures 2.3-3a/b and 4-7). As a result, associated impacts to on-site agricultural resources would likely be reduced compared to the Proposed Project, a number of individual residential lots under

this design would likely include opportunities for preservation of agricultural resources, and opportunities for on-site mitigation would be increased. Identified agricultural resource impacts under this alternative would likely remain significant, however, and would require mitigation through similar means as described for the Proposed Project. While not associated with identified impacts to agricultural resources or related mitigation, it should also be noted that the Proposed Project Design Consideration to establish an on-site 35.4-acre agricultural easement would likely not be implemented under this alternative. That is, the Septic Option Alternative would include a number of residential lots (along with related grading, roads, leach lines/fields, etc.) within the noted 35.4-acre agricultural easement area included in the Proposed Project design. agricultural preservation in the northwestern portion of the Project site would not occur. Therefore, when compared to the Proposed Project, the potential increase in agricultural easements would result in fewer direct impacts to agricultural resources. Under this alternative, all significant impacts would be mitigated to below a level of significance, similar to the Proposed Project.

Biological Resources

The Septic Option Alternative would greatly reduce the significant impacts to biological resources identified for the Proposed Project. Specific biological impacts identified for the Proposed Project, which would be reduced by this alternative include: (1) loss of habitat for raptors (foraging habitat) and grasshopper sparrow; (2) loss of sensitive habitats including southern riparian forest, southern riparian woodland, southern willow scrub, mule fat scrub, herbaceous wetland, disturbed wetland, coast live oak woodland, Diegan coastal sage scrub, granitic southern mixed chaparral, and non-native grassland; (3) loss of USACE, CDFW and County RPO wetlands/waters; and (4) displacement of nesting migratory birds during their breeding season. Despite the noted reductions, however, impacts to biological resources under this alternative would remain significant but mitigable, similar to the Proposed Project.

Cultural Resources

There is one known CEQA-significant cultural site within the Project site, which would be subject to direct impacts from development of the Proposed Project. Under the Septic Option Alternative, this cultural site would not be within the associated development footprint and associated have known potential significant impacts would be avoided, as it would under the Proposed Project. In addition, since While only limited grading activities (which might could potentially uncover encounter currently unknown cultural resources) would be substantially reduced under this alternative, associated potential impacts would remain significant but mitigable, as identified for the Proposed Project. occur on the Project site with this alternative, impacts to cultural resources would be potentially less impactful than the Proposed Project, for which the possibility of future impacts to unknown cultural resources was identified.

Noise

Current activities on the site (e.g., agricultural and equestrian uses) create no discernable noise to off-site sensitive noise receptors. Under the Proposed Project, significant but mitigable noise impacts were identified in association with: (1) construction-related rock breaking, ripping and blasting; (2) operational traffic and HVAC units; and (3) pump and/or generator noise associated

with the WTWRF and water/wastewater pump stations. The Septic Option Alternative would eliminate potential noise impacts from the WTWRF and wastewater pump stations (as these facilities would not be built) and would be expected to reduce noise impacts below a level of significance from operational traffic, HVAC units, and the water pump station (due to the substantial reduction of on-site development density). Potential impacts from construction-related rock breaking, ripping and blasting would likely remain significant (but mitigable) under this alternative, although some opportunities to avoid or reduce these impacts could occur on individual lots due to their larger size (minimum two-acres) and the lower overall development density. Based on the described considerations, the Septic Option Alternative would result in an overall reduction of noise impacts compared to the Proposed Project, although potential impacts from construction-related rock breaking, ripping and blasting would likely remain significant but mitigable (similar to the Proposed Project). Accordingly, noise effects would be less than significant as a result of the Septic Option Alternative. This alternative would therefore reduce the potential noise impacts identified for the Proposed Project, although these impacts were determined to be less than significant with implementation of identified mitigation measures and design features.

Paleontological Resources

Under the Proposed Project, significant but mitigable impacts to paleontological resources were identified in association with potential disturbance of the high-sensitivity Santiago Formation (from on-site grading/excavation) and moderate sensitivity terrace deposits (from on-site grading/excavation and off-site roadway improvements). The Septic Option Alternative would eliminate potential off-site impacts to paleontological resources as no associated roadway improvements would occur. The potential for impacts related to on-site paleontological resources under this alternative are anticipated to be substantially reduced due to the lower development density, although significant but mitigable impacts could still potentially occur (similar to the Proposed Project), depending on site-specific grading/excavation parameters. There are no known paleontological resources on site. There would be negligible earth moving activities associated with the Septic Option Alternative that would result in the possible unearthing of previously unknown resources. Therefore, paleontology impacts would be less than significant as a result of this alternative. This is potentially less impactful than the Proposed Project, for which the possibility of future impacts to unknown paleontological resources was identified.

Transportation/Traffic

Very minimal traffic is currently generated from the existing on-site uses, including trips to and from the equestrian center, trips associated with up to 35 residences (420 ADT versus 3,462 ADT for the Proposed Project), and infrequent activities associated with agricultural operations. Under the Proposed Project, significant but mitigable direct and/or cumulative impacts were identified for segments of Country Club Drive in the County and City of Escondido, and two intersections along Auto Park Way (Mission Road and Country Club Drive) in the City of Escondido. Because the Septic Option Alternative would result in substantial reductions in development density and associated traffic levels (i.e., 420 ADT versus 3,462 ADT for the Proposed Project), the significant (but mitigable) transportation impacts identified for the Proposed Project would be avoided under this alternative (although associated transportation upgrades under the Proposed Project would also not occur).

Accordingly, transportation/traffic impacts would be less than significant as a result of implementing the Septic Option Alternative. This alternative would thus avoid the significant (but mitigable) transportation impacts identified for the Proposed Project, although associated upgrades would also not occur.

Hazards and Hazardous Materials

Identified significant but mitigable impacts related to hazards and hazardous materials from implementation of the Proposed Project include: (1) the potential to encounter hydrocarbon-contaminated soils associated with previous above-ground storage tanks (ASTs) in the northern portion of Neighborhood 1 and the south-central portion of Neighborhood 5; (2) the potential to encounter hazardous materials (asbestos insulation and lead-based paint) during demolition of existing on-site structures; and (3) potential vector-related public health hazards associated with the WTRF and wet weather storage pond. This alternative would avoid the potentially significant hazards impacts associated with the Proposed Project. Specifically, under the Septic Option Alternative, there would be fewer soil-related issues associated with on-site ASTs or issues related to possible ACM and/or LCP presence in on-site structures. The Septic Option Alternative would not, however, result in remediation of these potential on-site issues. Nonetheless, impacts associated with hazards under this alternative would be less than the Proposed Project. The Septic Option Alternative would also avoid potentially significant impacts associated with vectors, as this alternative would not include the construction and operation of an equestrian facility, the WTRF or wet weather storage ponds. While grading and development activities would be substantially reduced under this alternative, potential impacts associated with soil contamination and demolition-related hazardous materials would remain significant but mitigable, as identified for the Proposed Project. Specifically, the Septic Option Alternative would include proposed development in the vicinity of identified AST-related soil contamination, as well as demolition of existing on-site structures potentially containing hazardous materials. Therefore, impacts to public health and safety would be less than significant under this alternative.

Geology and Soils

Under the Proposed Project, potentially significant but mitigable geologic and soil impacts were identified in association with seismically-induced settlement and slope stability/rockfall hazards, as well as expansive soils. While the Septic Option Alternative would result in substantially less grading and construction activities would occur on the Project site with the Septic Option Alternative due to the reduced development density, Accordingly, although significant (but mitigable) impacts similar to those identified for the Proposed Project related to seismically-induced settlement hazards, seismically induced surface slope instability and rockfall hazards, and expansive soils could potentially occur under this alternative, depending on site-specific grading/excavation parameters (although the extent of such potential impacts would be reduced when compared to the Proposed Project).

Conclusions

The Septic Option Alternative is identified as the environmentally superior alternative and would: (1) avoid or reduce most significant impacts associated with the Proposed Project, including: (1)

significant and unmitigated aesthetics and air quality impacts identified for the Proposed Project; ~~and (2) avoid significant but mitigable aesthetic and transportation/traffic impacts identified for the Proposed Project; and (3) avoid or reduce significant but mitigable impacts identified for the Proposed Project related to agricultural resources, and/or potentially significant impacts related to biological resources, cultural resources, noise, paleontological resources, transportation/traffic, hazards and hazardous materials, and geology and soils; (although at least one impact category under all of these issue areas would remain significant but mitigable, similar to the Proposed Project).~~ all of which would be avoided or reduced to less than significant through identified mitigation measures and/or design features.

The Septic Option Alternative would meet Project objectives related to complementing and responding to the unique topography and character of the Project site and surrounding area and embracing and preserving the equestrian nature of the surrounding area as grading would be substantially reduced and the lots would be large enough to support market rate animals/horses. ~~This alternative would, however, fail to meet all of the remaining Proposed Project objectives listed above in Subchapter 4.1.~~

4.8 Environmentally Superior Alternative

Although the No Project alternative would result in minimal to substantially reduced environmental impacts, Section 15126.6(e)(2) of the State CEQA Guidelines requires identification of an alternative other than the No Project as the environmentally superior alternative.

Based on the above CEQA requirement, the Septic Reduced Grading Option Alternative is identified as the environmentally superior alternative. This is the result of ~~eliminating~~ of 19 ~~17~~ acres of grading (i.e., 108 acres versus 125 acres for the Proposed Project), which would result in ~~37-18~~ percent less ~~grading cut and fill~~ (i.e., 762,000 cy versus 920,000 cy for the Proposed Project), ~~and as well as an increase in biological open space and (potentially) the agricultural easements; (as described above in Section 4.4.2), above.~~ Overall there would be less impacts to agricultural resources, biological resources, cultural resources, noise, paleontological resources, transportation/traffic, hazards and hazardous materials and geology and soils under this environmentally superior alternative.

4.9 Summary of Alternatives

Table 4-1, below, summarizes the potential impacts identified for alternatives in comparison with those identified for the Proposed Project.

**Table 4-1
COMPARISON OF PROJECT ALTERNATIVE IMPACTS TO PROPOSED PROJECT IMPACTS**

Environmental Issue	Proposed Project (326 SFR)	Alternatives								
		No Project/ No Development (12 SFR)	General Plan Density (118 SFR)	Reduced Grading (320 SFR)	Off-site/Combined On-/Off-site Sewer Options with the Proposed Residential Project (WTWRF removed ¹)				Biologically Enhanced (264 SFR)	Septic Option (35-58 SFR)
					Connection to the City of Escondido HARRF	Connection to VWD Facilities	Connection to the Harmony Grove Treatment Plant	Combined On-/Off-site Treatment ¹		
Aesthetics	Short-term direct: SU; Long-term direct: SM	Less; LS	Less; SM	Less; SM	Less; Short-term direct: SU; Long-term direct: SM	Less; Short-term direct: SU; Long-term direct: SM	Less; Short-term direct: SU; Long-term direct: SM	Similar: Short-term direct: SU; Long-term direct: SM	Less; Short-term direct: SU; Long-term direct: Less; SM	Less; LS
Air Quality	Direct: SMSU; Cumulative (construction): SU	Less; LS	Less; Direct: LSSM; Cumulative (construction): SULSSU	Less; Direct: SMSU; Cumulative (construction): SU	Similar; Direct: SM; Cumulative (construction): SU	Similar; Direct: SM; Cumulative (construction): SU	Similar; Direct: SM; Cumulative (construction): SU	Similar; Direct: SU; Cumulative (construction): SU	Less; Direct: SMSU; Cumulative (construction): SU	Less; LS
Agricultural Resources	SM	Less; LS	Greater; Less; SM	Similar; SM	Similar; SM	Slightly Greater; SM	Similar; SM	Similar; SM	Slightly greater; Less; SM	Less; SM
Biological Resources	SM	Less; SM	Greater; SM	Less; SM	Similar; SM	Similar; SM	Similar; SM	Similar; SM	Less; SM	Less; SM
Cultural Resources	SM	Less; SM	Similar; SM	Less; SM	Slightly greater; SM	Slightly greater; SM	Slightly greater; SM	Slightly greater; SM	Less; SM	Less; SM
Noise	SM	Less; LS	Less; SM	Less; SM	Slightly less; SM	Slightly less; SM	Slightly less; SM	Slightly greater; SM	Less; SM	Less; LSSM
Paleontological Resources	SM	Less; LS	Less; SM	Less; SM	Slightly greater; SM	Slightly greater; SM	Slightly greater; SM	Slightly greater; SM	Similar; Slightly less; SM	Less; LSSM
Transportation/Traffic	SM	Less; LS	Slightly less; SM	Slightly less; SM	Slightly greater; SM	Slightly greater; SM	Slightly greater; SM	Slightly greater; SM	Slightly less; SM	Less; LS
Hazards and Hazardous Materials	SM	Less; SM	Greater; SMSU	Slightly less; SM	Similar; SM	Similar; SM	Similar; SM	Slightly greater; SM	Slightly less; SM	Less; SM

**Table 4-1 (cont.)
COMPARISON OF PROJECT ALTERNATIVE IMPACTS TO PROPOSED PROJECT IMPACTS**

Environmental Issue	Proposed Project (326 SFR)	Alternatives								
		No Project/ No Development (12 SFR)	General Plan Density (118 SFR)	Reduced Grading (320 SFR)	Off-site/Combined On-/Off-site Sewer Options with the Proposed Residential Project (WTWRF removed ¹)				Biologically Enhanced (264 SFR)	Septic Option (35-58 SFR)
					Connection to the City of Escondido HARRF	Connection to VWD Facilities	Connection to the Harmony Grove Treatment Plant	Combined On-/Off-site Treatment ¹		
Geology and Soils	SM	Less; SM	Less; SM	Less; SM	Slightly greater; SM	Slightly greater; SM	Slightly greater; SM	Slightly greater; SM	Slightly less Similar; SM	Less; SM

LS = less than significant; SFR = single-family residences; SM = significant but mitigable; SU = significant and unmitigable

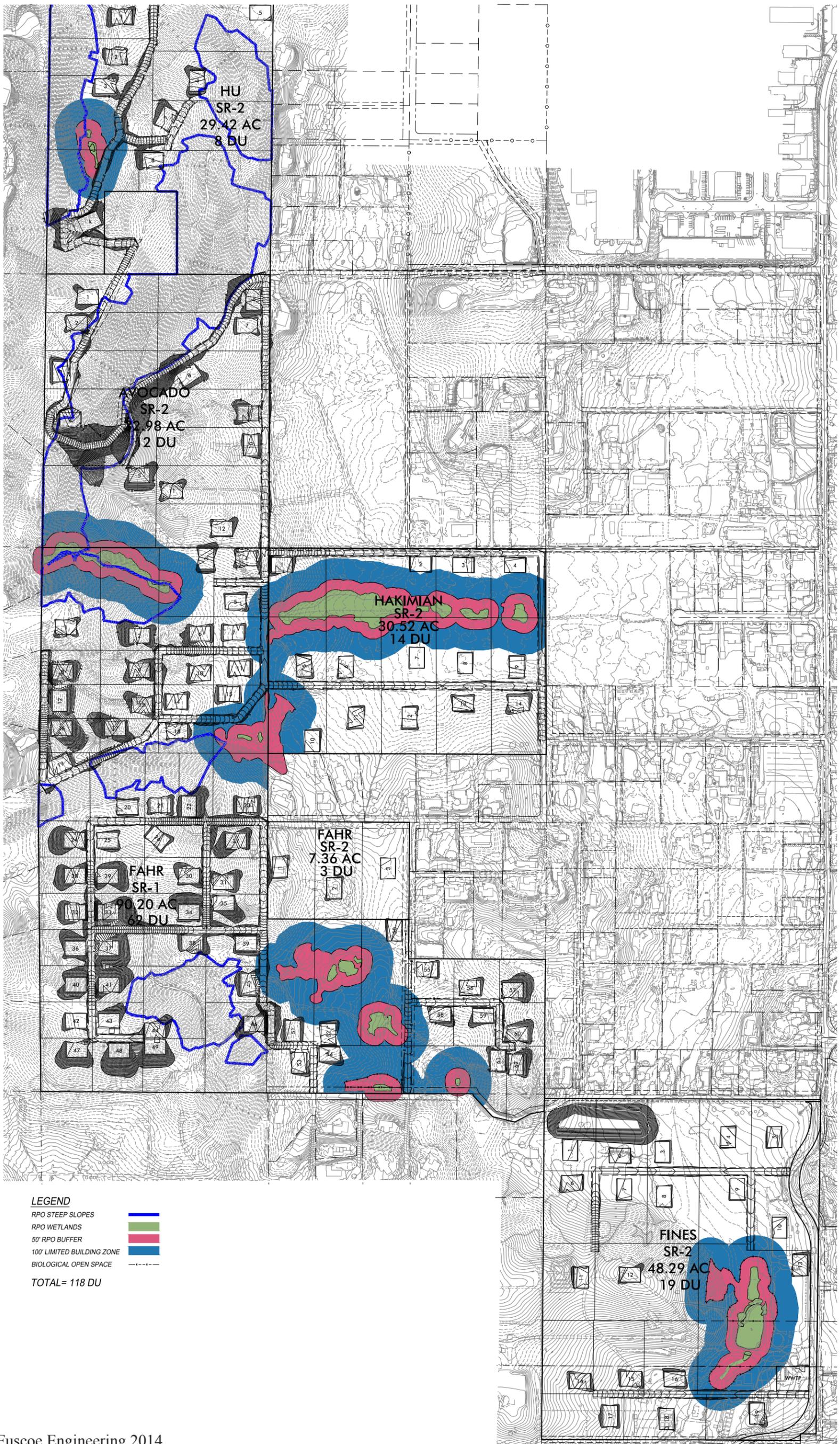
¹ The WTWRF would remain under the Combined On-/Off-site Sewer Option, although the level of on-site treatment would be reduced compared to the Proposed Project.

Table 4-2 ESTIMATED 2016 WORST-CASE CONSTRUCTION EMISSIONS BY OVERLAPPING CONSTRUCTION ACTIVITIES – OFF-SITE SEWER OPTIONS						
Overlapping Construction Activities	VOC	NO_x	CO	SO₂	PM₁₀	PM_{2.5}
	lbs/day					
Overlap 1						
Grading (N 1 & 2)	0.84	2.89	35.77	0.06	8.31	4.54
Drilling and Blasting (N 1 & 2)	0.00	21.25	83.75	2.50	2.24	0.38
Daily Maximum Total	0.84	24.14	119.52	2.56	10.55	4.92
Overlap 2						
Grading (N 3)	0.84	2.89	35.77	0.06	8.31	4.54
Drilling and Blasting (N 3)	0.00	21.25	83.75	2.50	2.24	0.38
Backbone Infrastructure (N 1 & 2)	0.55	1.89	23.03	0.04	0.16	0.07
Off-site Sewer Pipeline Construction	11.30	114.80	53.80	0.00	6.70	5.60
Daily Maximum Total	12.69	140.83	196.35	2.60	17.41	10.59
Overlap 3						
Backbone Infrastructure (N 1 & 2)	0.55	1.89	23.03	0.04	0.16	0.07
Off-site Sewer Pipeline Construction	11.30	114.80	53.80	0.00	6.70	5.60
Daily Maximum Total	11.85	116.69	76.83	0.04	6.86	5.67
Overlap 4						
Off-site Sewer Pipeline Construction	11.30	114.80	53.80	0.00	6.70	5.60
Vertical Building (N 1 & 2)	1.94	9.83	77.32	0.12	1.02	0.36
Daily Maximum Total	13.24	124.63	131.12	0.12	7.72	5.96
Significant Thresholds	75	250	550	250	100	55
Exceedance?	No	No	No	No	No	No

Source: HELIX 2015b

Notes:

1. Emissions were calculated for both summer and winter months, and the highest value is shown here.
2. EPA Tier 4 off-Road equipment and diesel particulate filters were assumed to be utilized.
3. Fugitive dust measures were applied to control PM₁₀ and PM_{2.5} dust emissions.
4. N = Neighborhood

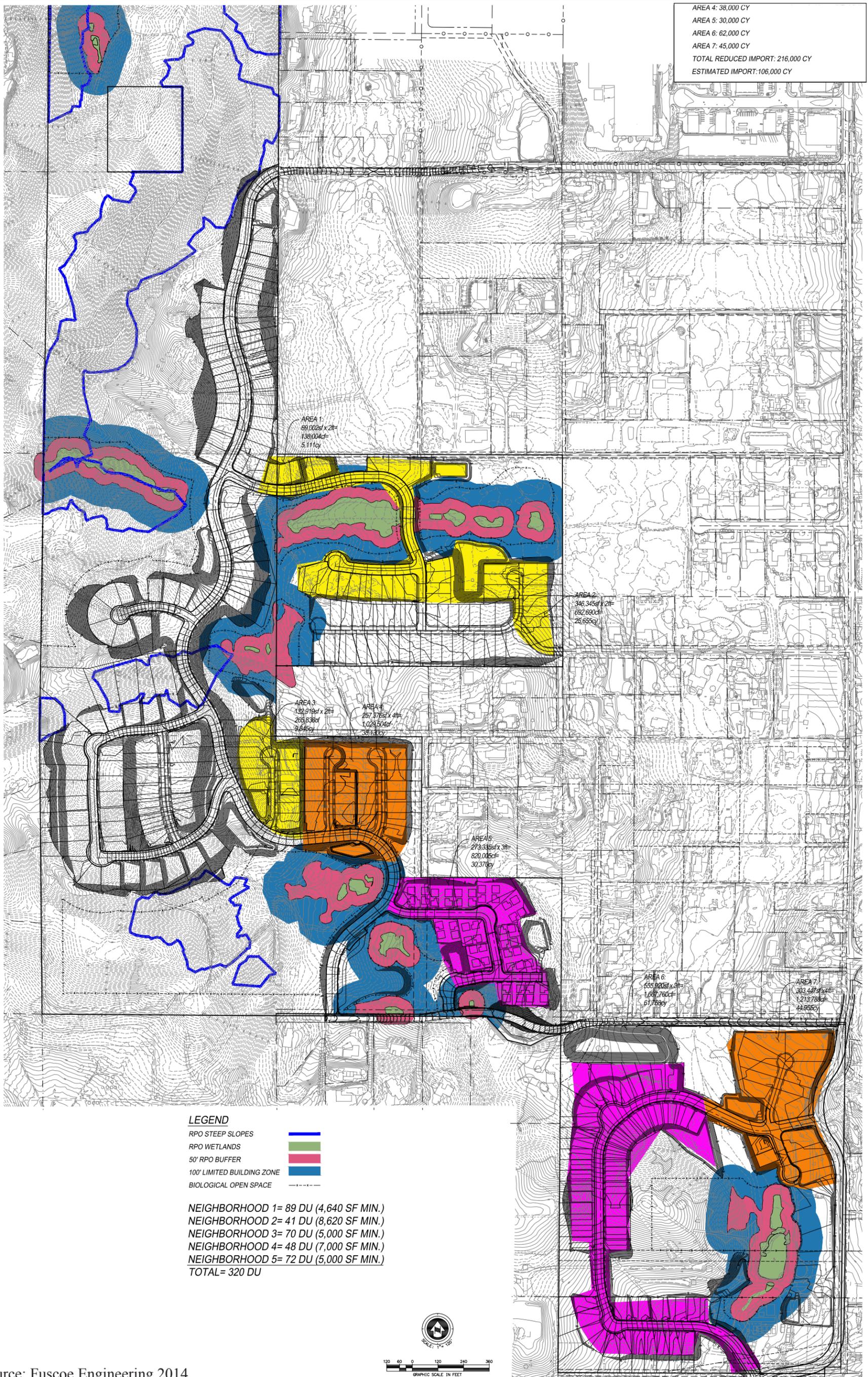


Source: Fuscoe Engineering 2014

General Plan Density Alternative

VALIANO

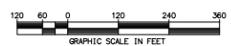
AREA 4: 38,000 CY
 AREA 5: 30,000 CY
 AREA 6: 62,000 CY
 AREA 7: 45,000 CY
 TOTAL REDUCED IMPORT: 216,000 CY
 ESTIMATED IMPORT: 106,000 CY



LEGEND

- RPO STEEP SLOPES —
- RPO WETLANDS —
- 50' RPO BUFFER —
- 100' LIMITED BUILDING ZONE —
- BIOLOGICAL OPEN SPACE - - - -

NEIGHBORHOOD 1= 89 DU (4,640 SF MIN.)
 NEIGHBORHOOD 2= 41 DU (8,620 SF MIN.)
 NEIGHBORHOOD 3= 70 DU (5,000 SF MIN.)
 NEIGHBORHOOD 4= 48 DU (7,000 SF MIN.)
 NEIGHBORHOOD 5= 72 DU (5,000 SF MIN.)
 TOTAL= 320 DU

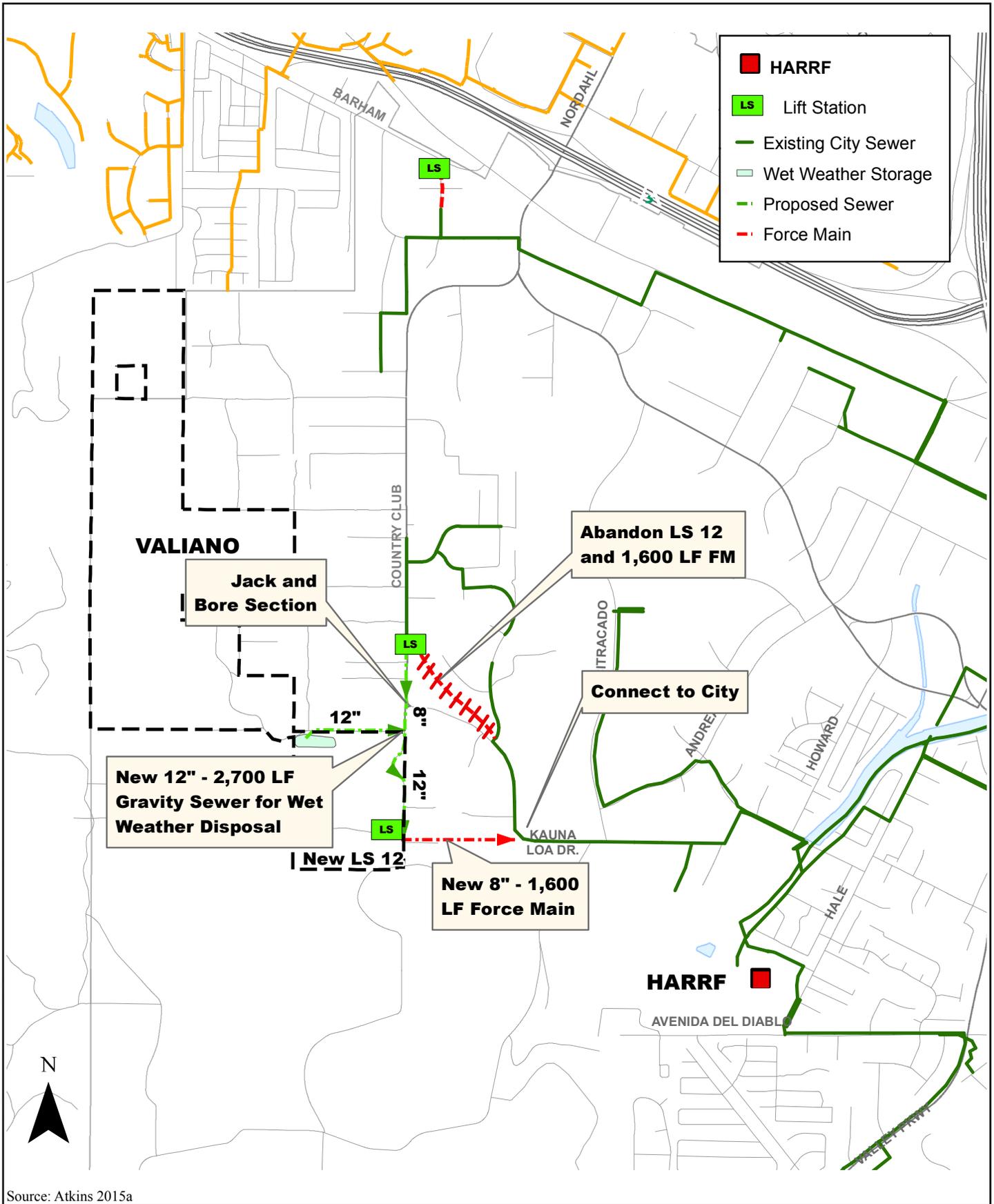


Source: Fuscoe Engineering 2014

Reduced Grading Alternative

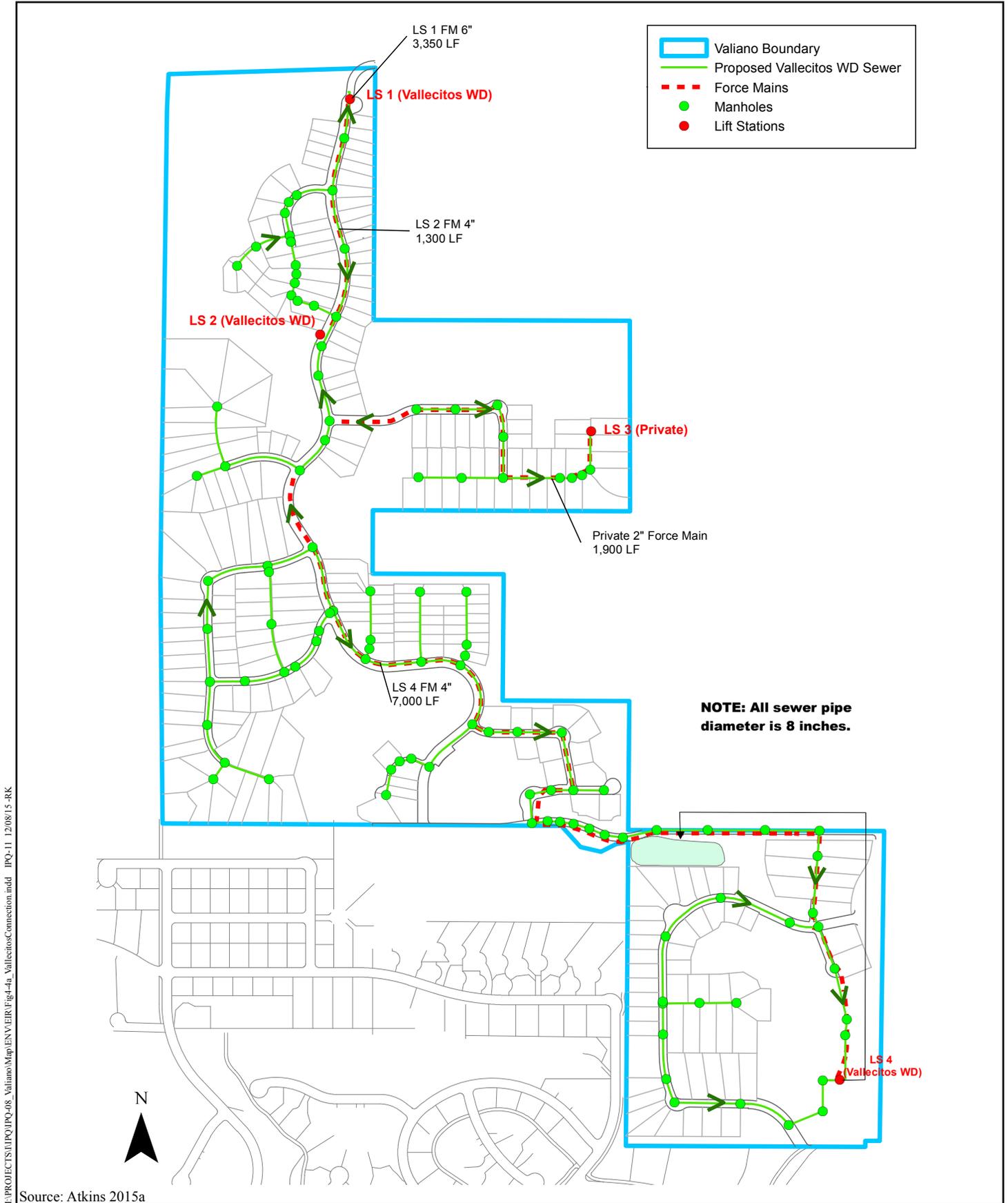
VALIANO

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Connection to City of Escondido Hale Avenue Resource Recovery Facility

VALIANO
Figure 4-3



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Source: Atkins 2015a

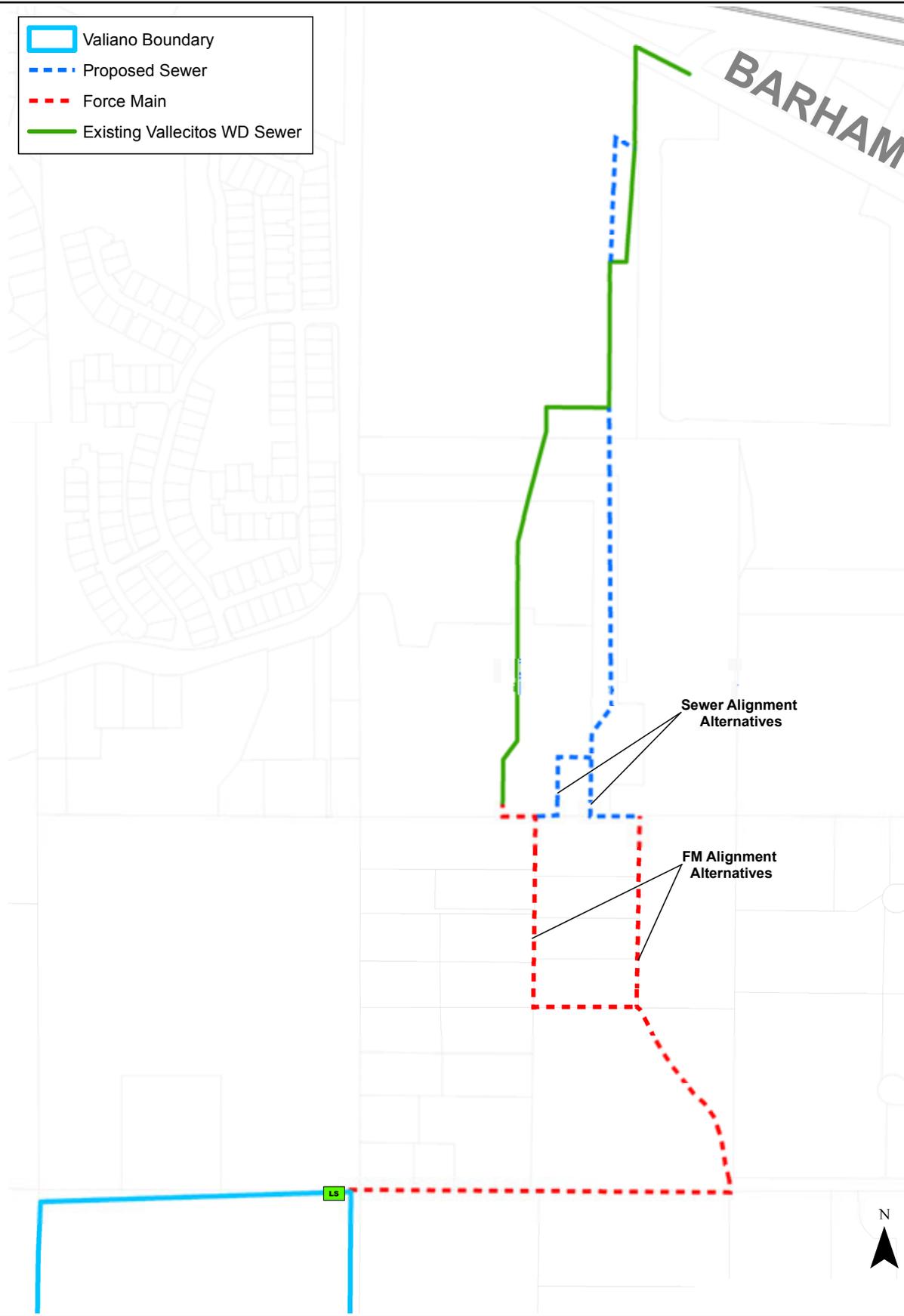
On-site Connection to Vallecitos Water District Facilities

VALIANO

Figure 4-4a

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-  Valiano Boundary
-  Proposed Sewer
-  Force Main
-  Existing Vallecitos WD Sewer

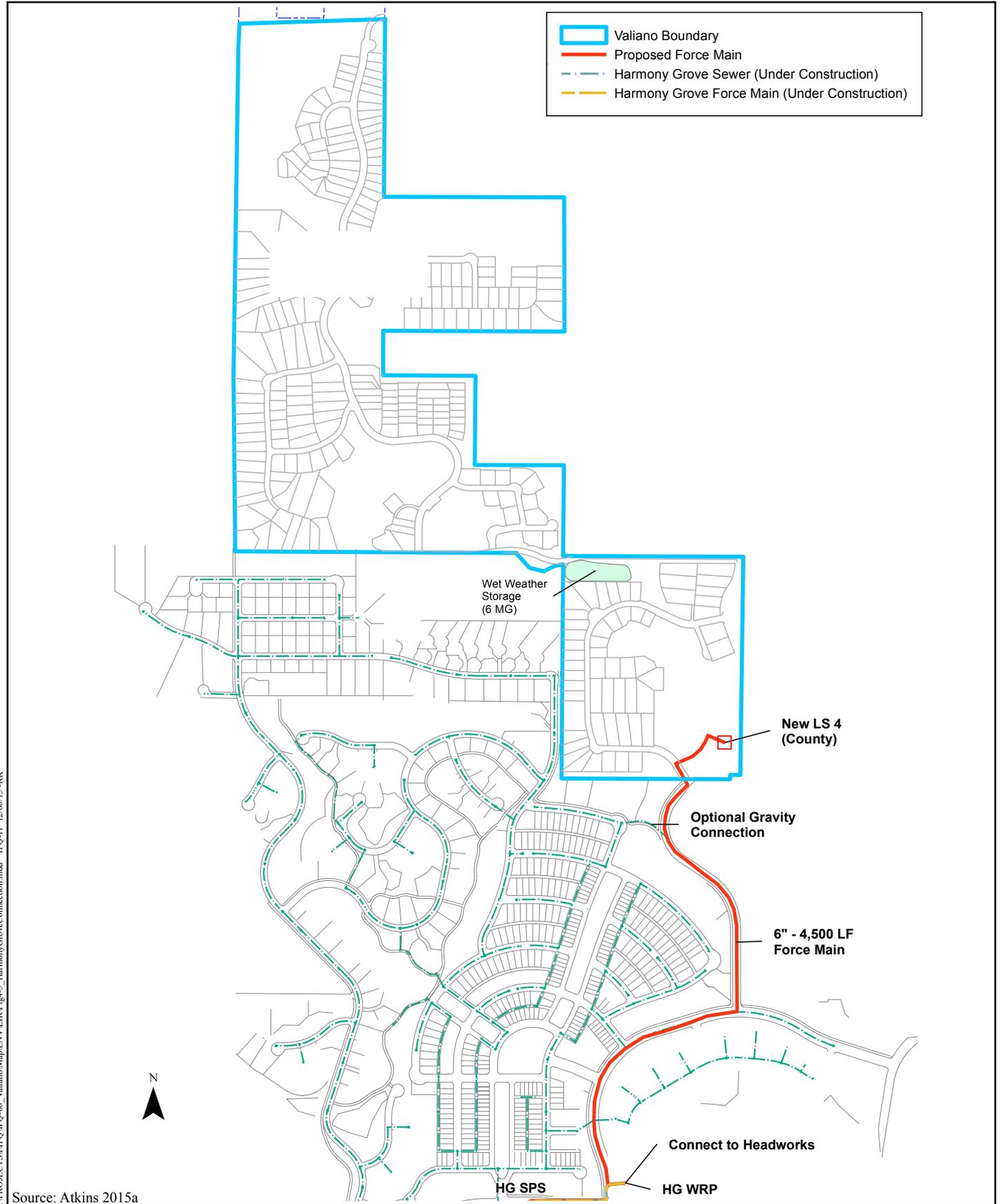


Source: Atkins 2015a

Off-site Connection to Vallecitos Water District Facilities

VALIANO

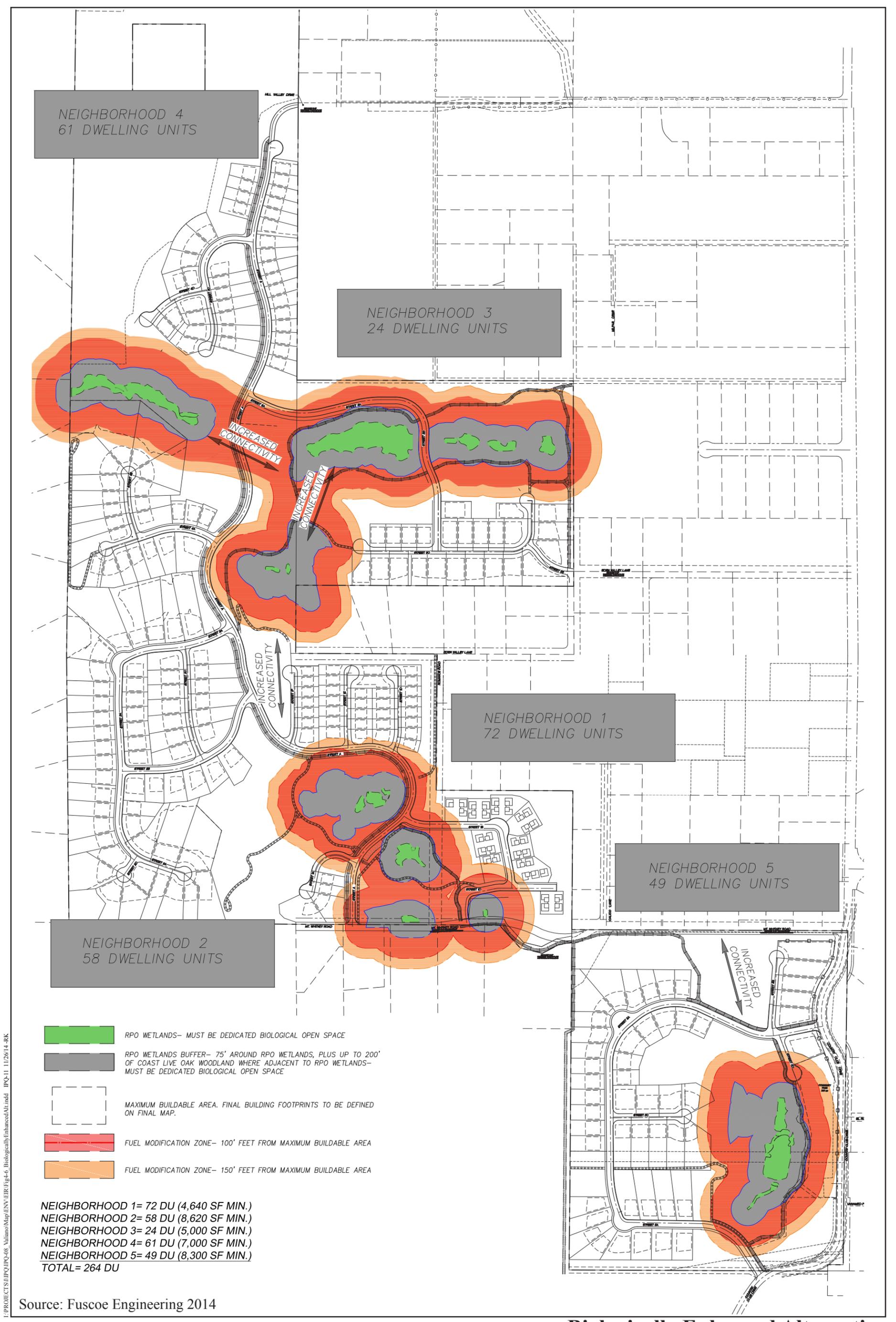
Figure 4-4b



Connection to the Harmony Grove Treatment Plant

VALIANO

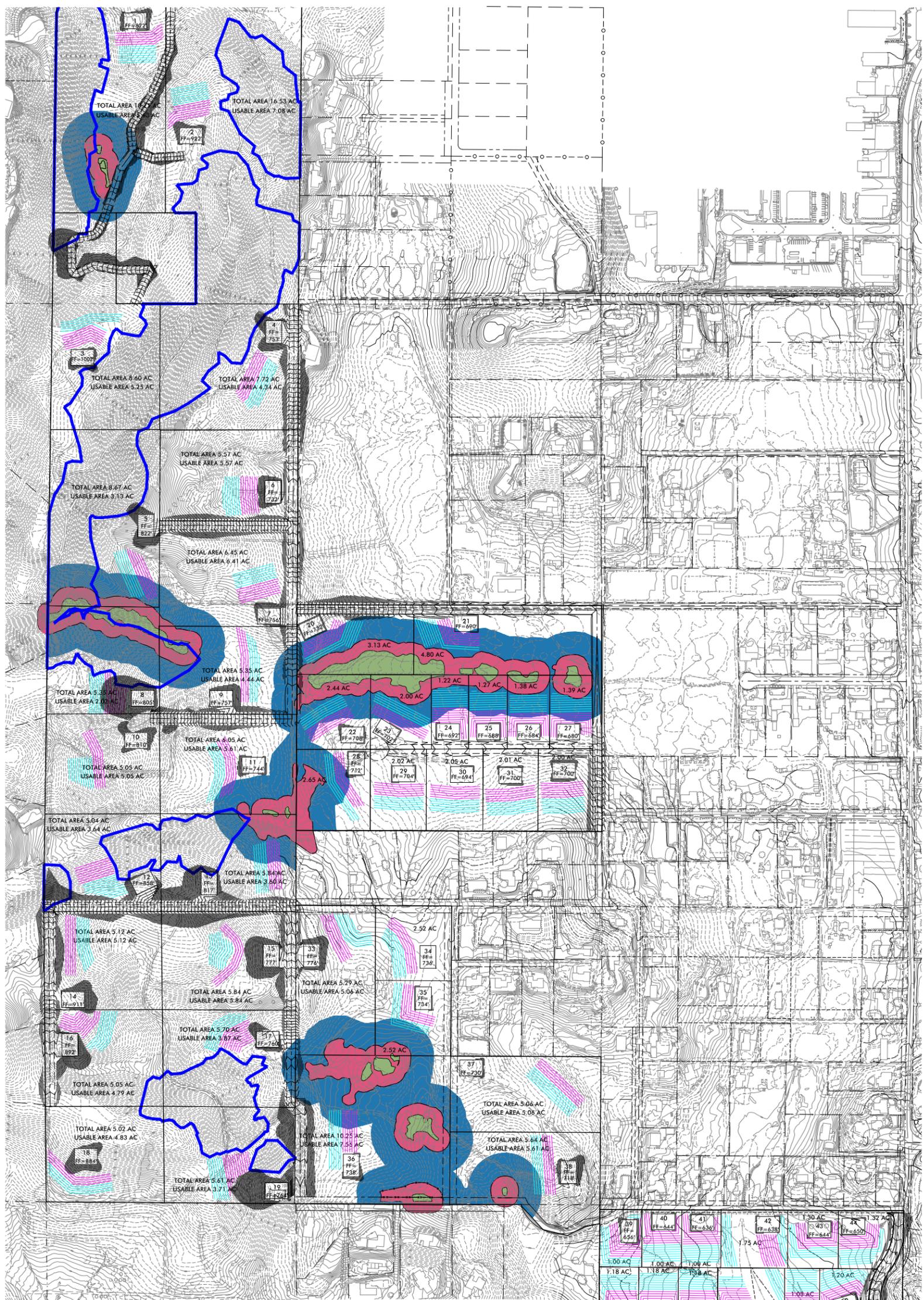
Figure 4-5



Biologically Enhanced Alternative

VALIANO

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LEGEND

- RPO STEEP SLOPES █
- RPO WETLANDS █
- 50' RPO BUFFER █
- 100' LIMITED BUILDING ZONE █
- LOT BOUNDARY —
- PRIMARY LEACH LINES —
- SECONDARY LEACH LINES —

SETBACKS

- LEACH LINES TO STRUCTURE = 8 FEET
- LEACH LINES TO PROPERTY LINE = 5 FEET
- LEACH LINES TO DRAINAGE COURSE = 50 FT
- LEACH LINES TO POND = 100 FT FROM SPILLWAY
- LEACH LINES TO WATERLINES = 25 FT

ASSUMPTIONS

1. # OF BEDROOMS PER HOUSE = 3-5
2. MINIMUM 5' UNSATURATED SOIL INTERVAL EXISTS BETWEEN BOTTOM OF SYSTEM & SHALLOWEST IMPERVIOUS LAYER
3. PERCOLATION RATE OF 120 MINUTES/INCH

SEPTIC SYSTEM CONSTRAINTS

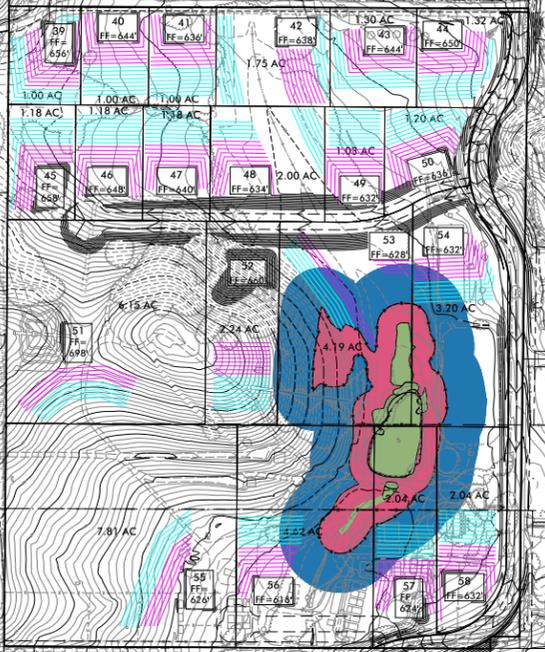
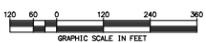
PER COUNTY OF SAN DIEGO DEPARTMENT OF ENVIRONMENTAL HEALTH "LOCAL AGENCY MANAGEMENT PLAN FOR ONSITE WASTEWATER TREATMENT SYSTEMS" DATED FEBRUARY 2015.

1. ALLOWABLE DENSITY 2.0 AC/SFD
2. PRIMARY LEACH LINES PER LOT = 1,300-1,420 LF
3. 100% LEACH LINE RESERVE AREA
4. LEACH LINE FIELD LESS THAN 25% SLOPE

TOTAL LOT COUNT = 58

TOTAL GRADED AREA = 74.9 ACRES

PLDO REQUIREMENT = 0.50 ACRES



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Source: Fuscoe Engineering 2015

Septic Option Alternative

VALIANO