

2.0 PROPOSED ACTION AND ALTERNATIVES

2.1 INTRODUCTION

This chapter describes the Proposed Action and alternatives evaluated in this EIS. As noted in **Chapter 1.0**, the U.S. Army Corps of Engineers' (USACE's) decision whether or not to issue permits under Section 404 of the Clean Water Act is the proposed federal action. If the USACE decides to issue one or more permits, such permits would enable development in the Placer Vineyards Specific Plan (PVSP) area. For ease of reference, the entire development project is called the *Proposed Action* in this EIS.

As stated in **Chapter 1.0**, the PVSP includes development of a 5,230-acre (2,116-hectare) site with a mix of land uses, predominantly residential use with some commercial and office uses, public and quasi-public uses, parks, and open space, and the infrastructure improvements to support these uses. The USACE has 22 active permit applications to develop up to 3,746 acres (1,516 hectares) of land within the PVSP area and an application for the development of backbone infrastructure. The owners of the remaining properties (comprising 505 acres [204 hectares] within the PVSP area outside of the Special Planning Area (SPA) and 979 acres [396 hectares] within the SPA) are not applying for DA permits at this time. However, for reasons presented in **Chapter 1.0**, for purposes of this EIS, the Proposed Action encompasses the development of the entire PVSP site consistent with the footprint of the County-approved PVSP.

This chapter presents detailed information about the Proposed Action. It also describes the process through which alternatives to the Proposed Action were developed and screened in order to focus the EIS analysis on a set of alternatives that would allow the USACE to make a reasoned choice. The chapter presents the alternatives analyzed in this EIS, summarizing the rationale for selecting those alternatives for analysis, and also identifies the alternatives that were not carried forward for detailed analysis, along with the reasons for their dismissal.

2.2 PROJECT LOCATION

The 5,230-acre (2,116-hectare) PVSP area is located in the southwest portion of unincorporated Placer County, approximately 15 miles (24 kilometers) north of Sacramento, and southwest of the City of Roseville. The project site is characterized by gently rolling topography and large, open tracts of grazing land with a few stands of native and non-native trees. Elevations range from 35 feet (11 meters) above sea level in the western portion to 115 feet (35 meters) in the eastern portion of the site. The site's natural features include Curry Creek, which traverses the northeasterly portion of the site, Dry Creek, which borders it on the southeast, and several minor drainage swales, intermittent creeks and drainages, and scattered vernal pools.

Features of the human environment present on the site include agricultural lands, dirt roads and fencing, residences, and transmission lines. Three power line easement corridors traverse the project site. These easements and facilities are owned by Pacific Gas & Electric (PG&E), Sacramento Municipal Utility District (SMUD), and the Western Area Power Administration (WAPA). A 375-foot-wide (114-meter-

wide) SMUD and WAPA easement traverses the project site in a northeast to southwest alignment located mostly west of 16th Street. The other two PG&E easements are smaller in area and run generally north to south.

2.3 NEPA REQUIREMENTS FOR EVALUATION OF ALTERNATIVES

Under the National Environmental Policy Act (NEPA) Implementing Regulations adopted by the Council on Environmental Quality (CEQ), comparative analysis of the environmental impacts associated with a proposed action and the identified alternatives serves to define the issues and provide decision makers with a clear basis for a “choice among options” (40 CFR § 1502.14). An EIS is therefore required to consider reasonable alternatives that would meet the project’s purpose and need, as discussed in **Chapter 1.0**, and “substantial treatment” or comparable analysis must be devoted to each alternative. Consideration is limited to alternatives that are “reasonable” and meet the purpose and need of the proposed action.

In the document entitled, “Forty Most Asked Questions Concerning CEQ’s National Environmental Policy Act Regulations” (March 23, 1981), CEQ states that “[r]easonable alternatives include those that are practical or feasible from the technical or economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant.” According to the USACE’s NEPA Implementation Procedures for the Regulatory Program (Appendix B to 33 Code of Federal Regulations [CFR]Part 325) “Reasonable alternatives must be those that are feasible and such feasibility must focus on the accomplishment of the underlying purpose and need that would be satisfied by the proposed federal action.” The range (the number and nature) of alternatives to be considered is governed by the rule of reason—that is, an EIS is not required to consider all possible alternatives, only those that are necessary to permit a reasoned choice. However, if alternatives have been identified but eliminated from detailed consideration, the EIS must explain the reasons why they were not carried forward (40 CFR § 1502.14[a]).

Among the alternatives that must be considered in an EIS is No Action (40 CFR § 1502.14[d]). In this case “Proposed Action” refers to the multiple permit decisions by the USACE to allow discharge of dredged or fill material for the development of the site under the PVSP. Since some development on the project site could occur without triggering DA permits, that is the scenario considered under the No Action Alternative in this EIS.

2.4 DEVELOPMENT OF ALTERNATIVES TO PROPOSED ACTION

To establish the range of alternatives for this EIS analysis, the USACE first developed the purpose and need statement for the Proposed Action (see **Chapter 1.0**), and then identified a broad range of potential alternatives both on-site as well as off-site that would achieve the Proposed Action’s purpose and need. The section presents the alternatives analyzed in this EIS, summarizing the rationale for selecting those alternatives for analysis, and also identifies the alternatives that were not carried forward for detailed analysis, along with the reasons for their dismissal. For a more thorough discussion of the alternatives screening process, please see the document titled Technical Memorandum: Alternatives Development and Screening in **Appendix 2.0**.

2.4.1 Off-site Alternatives

The USACE procedures for implementing NEPA require an EIS to discuss geographic alternatives (such as change in location and other site-specific variables) (Appendix B to 33 CFR Part 325). With respect to off-site alternatives, the USACE focused on identifying alternate sites that could accommodate a project that would meet the identified purpose of the Proposed Action. Alternatives that would be located on a property not presently owned by the Applicants but which could be reasonably obtained, utilized, expanded or managed to fulfill the overall project purpose, were considered.

As a first step, the USACE defined the study area for off-site alternatives. Based on the project purpose, the geographic area examined for alternate sites was limited to western Placer County, which as noted in **Chapter 1.0**, is defined as the area bound by Interstate 80 (I-80) and State Route 65 (SR 65) to the east, Sacramento County line to the south, and Sutter County line to the west and the north. This area was examined to identify all land parcels that were known not to be available for development. The USACE excluded (1) parcels that are either existing or proposed mitigation sites, mitigation banks, preserves, or otherwise protected from development; (2) parcels that are proposed for development by other developers/entities for which there are active proposals either with the USACE or with the cities of Roseville or Lincoln, or with Placer County; and (3) parcels for which information was available to the USACE that those parcels are not available for purchase. Upon exclusion of these parcels, the USACE identified five sites in western Placer County for further evaluation. **Figure 2.0-1** presents the five alternative sites along with the site of the Proposed Action.

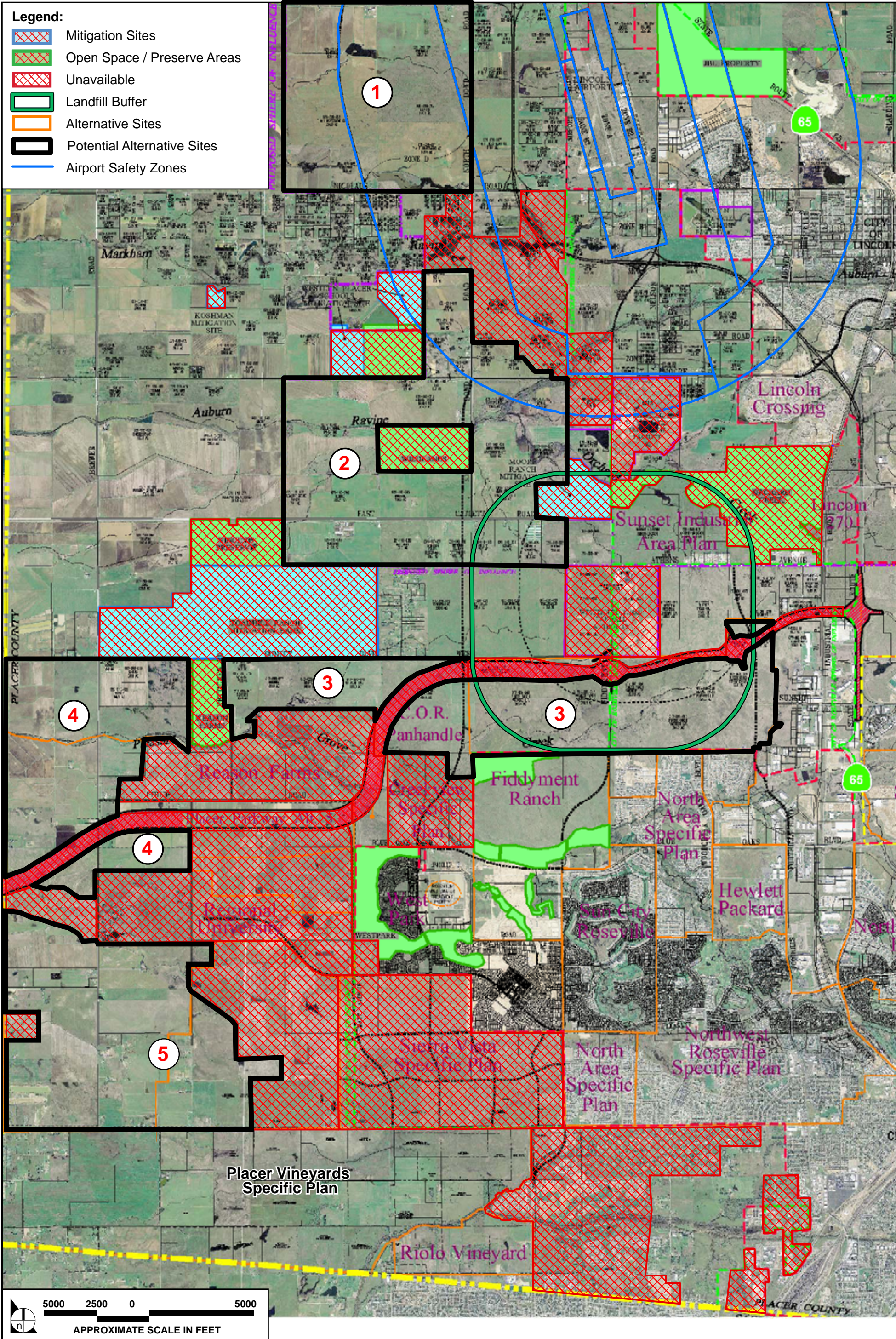
The USACE evaluated these potential alternative sites using screening criteria based on aspects of feasibility identified under NEPA as interpreted by CEQ. Feasibility screening was designed for consistency with criteria used to screen for practicability under CWA Section 404, as defined in the Section 404[b][1] guidelines (40 CFR 230.10, USEPA's *Restrictions on Discharge*; see in particular 40 CFR 230.10[a][2] ["[a]n alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes"]). This ensured that sites would only be screened out of detailed analysis if they were both infeasible under NEPA criteria *and* impracticable under CWA Section 404 criteria, thus ensuring that alternatives with the potential to represent the least environmentally damaging practicable alternative (LEDPA) were not eliminated from analysis for reasons exclusive to NEPA. Screening also employed an *environmental* criterion based on the Clean Water Act and the USACE's implementing regulations. Under 40 CFR § 230.10(a) generally, the USACE may not permit the discharge of dredged or fill material into the waters of the United States "if there is a practicable alternative to the proposed discharge *which would have less adverse impact on the aquatic ecosystem*, so long as the alternative does not have other significant adverse environmental consequences." (Italics added.) The use of an environmental criterion is also consistent with CEQ guidance (Forty Most Asked Questions) which state that "[r]easonable alternatives include those that are practical or feasible from the technical or economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant." Even though "environmental factors" are not specifically listed, common sense would suggest that it is reasonable to consider environmental factors in determining the feasibility of an alternative. The biological resources sensitivity screening

criterion excluded alternative sites if they contained aquatic resources of greater sensitivity and value than those on the project site.

Screening of five alternate sites was completed in two phases. In the first phase, all five sites were evaluated under the following two criteria. For each criterion, sites were evaluated as **Feasible**, **Conditionally Feasible**, or **Not Feasible**. Sites that received a Not Feasible rating for either criterion were eliminated from further consideration.

- **Off-site Alternative Criterion 1 – Biological Resources Sensitivity** evaluated the nature, extent, and quality of biological resources on alternative sites as compared to those of the proposed project site, with a particular focus on aquatic resources and special-status species. Sites with extensive, high-quality aquatic resources were considered Not Feasible for this criterion unless those resources are already protected by conservation easements or other land use management mechanisms. Sites with less extensive or more highly fragmented resources were considered Conditionally Feasible, and sites with resources of lower quality were considered Feasible. Because detailed information (e.g., specific acreage of various sensitive habitat types) was not equally available for all of the potential alternate sites, evaluation under Criterion 1 was conducted in a generalized, non-quantitative manner, based on a reconnaissance-level evaluation of relative sensitivity.
- **Off-site Alternative Criterion 2 – Viability of Commercial Uses at Alternative Site** evaluated the feasibility of developing the regional commercial component of the Proposed Action, or “power center,” at the alternative site. A typical power center is defined as a center dominated by several large anchors, including discount department stores, off-price stores, warehouse clubs, or “category killers,” i.e., stores that offer tremendous selection in a particular merchandise category at low prices (ICSC 1999). The success of businesses in a power center depends on several factors but the minimum requirements are the availability of a minimum number of dwelling units or a minimum population within a reasonable distance of the power center, availability of good access, and the absence of other competing power centers. Trade area information for big box retail stores that anchor power centers indicates that for a discount department store with 100,000 to 120,000 square feet (9,290 to 11,148 square meters) of space to be successful, there should be a population of at least 100,000 persons within its trade area (defined as a 5-mile [8-kilometer] radius or less of the location of the store) and that there should be no existing competitors currently serving the vast majority of this population. For big box retail stores involving specialty goods such as electronics (i.e., a category killer), the trade area for a 36,000-square-foot (3,345-square-meter) store must contain a population of at least 200,000 persons. The USACE determined that an alternate site that includes a commercial center location with at least 100,000 persons within 5 miles (8 kilometers) by 2040 was Feasible under this criterion and a site with less than 100,000 persons within the 5-mile (8-kilometer) radius of the commercial center location by 2040 was Not Feasible.

Table 2.0-1 shows the evaluation of the five potential sites under Criteria 1 and 2.



SOURCE: MacKay & Soms – August 2010, Impact Sciences, Inc. – December 2010

FIGURE 2.0-1

Potential Alternative Sites

**Table 2.0-1
Screening-Level Comparison of Alternate Sites**

Site	Off-site Alternative Criterion 1 <i>Biological Resources Sensitivity</i>	Off-site Alternative Criterion 2 <i>Viability of Commercial Uses at Alternate Site</i>
Lincoln Village 4 2,598 acres	<p>This site is mostly open pasture with a large number of vernal pools/seasonal wetlands scattered over most of the property. Much of this area is in an existing vernal pool preserve and encumbered by a conservation easement. The wetlands are of high quality and are known to support listed vernal pool crustaceans. Trees are very sparse. The southern portion of the site contains a drainage that supports open water, marsh, and limited riparian habitat.</p> <p>Given the extensiveness and high quality of aquatic resources, as compared to the Proposed Action, the site is not feasible for further consideration.</p> <p>Conclusion: Not Feasible</p>	<p>The population data for the area surrounding this site has not been calculated as of June 13, 2011. Conservatively, the site is considered feasible with respect to this criterion.</p> <p>Conclusion: Feasible</p>
Lincoln Villages 5-6 3,025 acres	<p>The majority of this site is rice lands but there are substantial areas of vernal pool grasslands. Vernal pool/seasonal wetlands are of moderate quality and listed crustaceans are likely. The wetlands are of moderate quality. Trees are abundant along Auburn Ravine, which flows through the northern portion. The most biologically valuable habitat is already protected within a conservation easement (Wildlands).</p> <p>The site would be feasible because the highest quality aquatic resources are already preserved and much of the remainder is in rice.</p> <p>Conclusion: Feasible</p>	<p>The population data for the area surrounding this site has not been calculated as of June 13, 2011. Conservatively, the site is considered feasible with respect to this criterion.</p> <p>Conclusion: Feasible</p>
Placer Ranch - Northeast 3,056 acres	<p>The Placer Ranch portion of the site is entirely annual grassland. It is mostly in a fallow state and there are very few structures or current uses. Vernal pools/seasonal wetlands are scattered throughout the site, more commonly associated with drainage ways. These are of moderate quality. Listed crustaceans are likely. There is almost no woody vegetation. A tributary (lacking riparian vegetation) to Pleasant Grove Creek flows through the site. The resources on this portion of the site are generally similar to the Proposed Action.</p> <p>The Brookfield portion of the site is entirely annual grassland. A wetland swale system arcs through the site from east to west, flowing out of an irrigated pasture. It is impounded, forming a narrow stock pond. The swale conveys irrigation runoff during the summer months. The property contains a considerable amount of vernal pools and seasonal wetlands, primarily associated with the drainage in the northern half and the clayey soils near the southern portion. These wetland habitats may support listed crustaceans.</p> <p>The western portion of the site is also primarily</p>	<p>The population of the area within 5 mile radius of Placer Ranch (113,546 persons) is currently adequate to support one power center and two centers by 2040. However, a power center at this site is not considered feasible for a number of reasons. First, the Placer Ranch site is located within 5 miles of two highly developed established commercial areas in the Cities of Lincoln and Roseville where numerous power centers are already developed that would cut into the trade area of the Placer Ranch power center. Second, the Placer Parkway has yet to be developed. In the absence of a major thoroughfare, businesses within the power center(s) at the Placer Ranch -Northeast site would not receive any drive-by trips. Lastly, should a portion of the Placer Parkway be developed as part of the Placer Ranch alternative, power center businesses will choose to locate at its intersection/interchange with Route 65 than on the Placer Ranch-Northeast site because there will be more drive-by traffic and population to serve at that location. For all of these reasons, a power center would not be viable at this site until such time that additional residential uses establish to the west of the site.</p>

Site	Off-site Alternative Criterion 1 <i>Biological Resources Sensitivity</i>	Off-site Alternative Criterion 2 <i>Viability of Commercial Uses at Alternate Site</i>
	<p>annual grassland with some areas of irrigated pasture. Vernal pools/seasonal wetlands are prevalent and scattered throughout most of the property. Most of the wetlands are of high quality and are relatively undisturbed. Listed crustaceans are known to occur in some areas of this site. Native trees occur along the drainages but are very sparse in the open areas. Pleasant Grove Creek flows through the southern portion of the site and supports an oak riparian woodland.</p> <p>This large grassland unit is less disturbed and the landform and its aquatic resources are of higher quality as compared to the Proposed Action. The site is therefore considered not feasible.</p> <p>Conclusion: Not Feasible</p>	<p>Conclusion: Not Feasible</p>
<p>Northwest 2,416 acres</p>	<p>This site is approximately half rice lands. The remaining area is mostly dry pasture, including some that has been historically leveled but is currently fallow. The northeast portion of this site was in contour rice farmed but is currently fallow. Wetlands are forming behind the checks. The non-rice areas of this site (about half of the site) contain a high percentage of vernal pools/seasonal wetlands and wetland swales. Listed crustaceans are likely. Trees are confined to a few residences and the Pleasant Grove riparian corridor.</p> <p>The site would be feasible because aquatic resources are limited due to extensive agricultural land conversion and lack of a large natural resource component as compared to the Proposed Action site.</p> <p>Conclusion: Conditionally Feasible</p>	<p>The population within a 5-mile radius of the Northwest site was approximately 4,576 in 2009. This population is expected to increase to approximately 39,776 persons by 2025 and 41,327 persons by 2040, including the population associated with the Proposed Action. This population would at best support two grocery stores. It would not be large enough to support a power center within the Proposed Action's timeframe.</p> <p>Conclusion: Not Feasible</p>
<p>Southwest 2,400 acres</p>	<p>This site contains a high diversity of habitats and land uses. Rice lands, row crops, and various disking practices account for a variable landscape. There are numerous residences, including one with two water-ski lakes, which fragment the landscape. Fallow areas support a substantial amount of moderate quality vernal pool/seasonal wetlands. Listed crustaceans are likely. Trees are confined to residential areas and drainage ways. Curry Creek flows through the fallow and active contour rice in the northern area.</p> <p>The site would be feasible because the property is quite fragmented with variable land uses. The aquatic resources and watersheds are compromised compared to the Proposed Action site.</p> <p>Conclusion: Conditionally Feasible</p>	<p>The population within a 5-mile radius of the Southwest site was approximately 39,409 in 2009. This population is expected to increase to approximately 92,881 persons by 2025 and 106,236 persons by 2040, including the population associated with the Proposed Action. This population would be adequate to support a power center.</p> <p>Conclusion: Feasible</p>

Upon completion of Phase 1 screening, the USACE carried two of the five sites (Lincoln Villages 5-6 and the Southwest sites) forward for Phase 2 screening. These sites were then evaluated under a third criterion, which was defined as follows:

- **Off-site Alternative Criterion 3 – Feasibility of Acquiring Sufficient Acreage** evaluated the feasibility of acquiring title to the property through purchase, land exchange, or another mechanism. This was explored by the Applicants through direct landowner inquiries and independently verified by the USACE. Sites where sufficient contiguous acreage (approximately 2,400 acres (971 hectares), the minimum size to support a project like the PVSP) could not be acquired by the Applicants were eliminated from further consideration.

Based on inquiries made by the Applicants (subject to USACE verification), there are approximately 1,676 acres (678 hectares) of land available for purchase on the Lincoln Villages 5-6 site. This acreage is less than 2,400 acres (971 hectares) which is the minimum acreage needed to develop a regional residential community similar to the Proposed Action. Furthermore, the land that is available on the site is fragmented such that the development of a large-scale regional residential community would not be feasible, and the commercial component of the PVSP would also not be viable at this site. Similarly, with respect to the Southwest site, inquiries made by the Applicants revealed that there are about 1,470 acres (595 hectares) of land available for purchase on the Southwest site. This acreage is less than the minimum acreage (2,400 acres or 971 hectares) necessary to develop a regional residential community. Furthermore, a large-scale mixed-use residential development would not be feasible at this site for a number of reasons, including fragmentation and infeasibility of the commercial component of the Proposed Action. The USACE found that neither of the two alternative sites was feasible and no off-site alternatives were carried forth for detailed evaluation in this EIS (see Technical Memorandum: Alternatives Development and Screening in **Appendix 2.0**).

2.4.2 On-Site Alternatives

As a first step, the USACE considered on-site alternatives that were developed by Placer County for the PVSP EIR. The PVSP EIR evaluated a total of six on-site alternatives, including five alternate development plans and a No Project (no development) alternative (County of Placer 2007). The USACE determined that with the exception of the Blueprint alternative, none of the EIR alternatives were feasible alternatives for inclusion in the EIS because they would not meet the Proposed Action's basic purpose and need or they have been superseded by alternatives proposed by the USACE that avoid or preserve higher-value wetland resources (see Technical Memorandum: Alternatives Development and Screening in **Appendix 2.0**). Although the USACE is not evaluating a separate Blueprint alternative in this EIS, the land uses and densities reflected in the County's Blueprint alternative are evaluated as the upper end of the density range incorporated into the Proposed Action.

The USACE also reviewed the on-site alternatives put forth by the Applicants in their Section 404(b)(1) alternatives submittal for the proposed project. Seven alternatives were identified by the Applicants in consultation with the USACE and other federal agencies, including two alternatives that were identified based on Notice of Intent (NOI) comments from the United States Environmental Protection Agency (USEPA). The seven alternatives include:

- **Alternative A**, which would preserve listed aquatic invertebrate habitat with a 250-foot buffer;
- **Alternative B**, which would preserve aquatic invertebrate habitat predominantly in western and northeastern portions of project site;
- **Alternative C**, which would avoid 85 percent of vernal pool resources;
- **Alternative D**, which would avoid all development activities in jurisdictional waters of the U.S. (same as No Action Alternative in this Draft EIS);
- **Alternative E**, which would involve no development of the project site;
- **Alternative F**, which would focus avoidance of impacts to aquatic resources located predominantly in the western and northeastern portions of the site; and
- **Alternative G**, which consists of avoidance of aquatic resources located predominantly in the southern and northeastern portions of the project site.

Based on a review of these alternatives, the USACE eliminated Alternative E, the No Development alternative, because a “no-development” alternative would not meet the Proposed Action’s basic purpose and need. In addition, because NEPA mandates the evaluation of a No Action alternative, the No Action alternative that was identified in the Section 404(b)(1) alternatives analysis will be carried forward into the EIS and therefore was not put through the screening process.

Alternatives F and G, above, which were put forth by the Applicants in response to USEPA comments, substantially reduce the acreage available for development on the site and do not consider the variable condition of wetland resources on the site. The USACE, in consultation with USEPA, replaced Alternatives F and G with the focused avoidance alternatives (Alternatives 1 through 5). These alternatives, like Alternatives F and G, reduce the project footprint, and increase the preserve area, but unlike Alternatives F and G, these alternatives focus preservation on locations with higher densities of aquatic resources, and on aquatic resources of greater quality relative to the aquatic resources on the site as whole, as measured by the California Rapid Assessment Method (see California Rapid Assessment Method for Placer Vineyards in **Appendix 2.0**). These alternatives are an improvement over Alternatives F and G because they were developed based on consideration of the value of specific wetland complexes. This information was not available when Alternatives F and G were first proposed by the Applicants (see Technical Memorandum: Alternatives Development and Screening in **Appendix 2.0**).

Three of the seven alternatives put forth in Applicants’ 404(b)(1) alternatives submittal were carried forward for screening. The three alternatives included: Alternative A, which would preserve listed aquatic invertebrate habitat with a 250-foot (76-meter) buffer; Alternative B, which would preserve aquatic invertebrate habitat predominantly in western and northeastern portions of the project site; and Alternative C, which would avoid 85 percent of vernal pool resources.

The USACE screened these three potential alternatives based on criteria derived from the project purpose and need and the ability of an alternative to avoid or reduce the impacts of the Proposed Action on wetland resources (feasibility). For each criterion used in screening, the three on-site alternatives were evaluated as **Feasible**, **Conditionally Feasible**, or **Not Feasible**. Alternatives that received a Not Feasible rating for any criterion were eliminated from further consideration. The following criteria were developed to screen on-site alternatives:

- **On-site Alternatives Criterion 1 – Functionally-Integrated Mixed-Use Residential Project** evaluated the ability for an alternative to develop a functionally integrated, large-scale, regional mixed-use residential community. This means that the alternative would need to meet basic planning principles for developing residential uses that are supported by and accessible to neighborhood retail, commercial, and public/quasi-public land uses, and that these uses are reasonably contiguous to provide a sense of community. In order to meet the basic project purpose which is to develop a “regional” residential community, the alternative would need to provide sites for developing viable commercial uses, including a power center and a town center for specialty retailers. In addition, the residential community would need to be of a sufficient size to support a town center and other public/quasi-public uses. For reasons presented in **Chapter 1.0**, the minimum size of the developed area would need to be approximately 2,400 acres (971 hectares).
- **On-site Alternatives Criterion 2 – Aquatic Resources** evaluated whether impacts on on-site wetlands would be greater or less than the wetland impacts of the Proposed Action. Alternatives that would result in fewer direct and indirect impacts on aquatic resources when compared to the Proposed Action and would preserve contiguous areas of habitat were considered Feasible. Alternatives that would have greater direct and indirect effects on aquatic resources than the Proposed Action or would result in a fragmented pattern of preservation were rated as Not Feasible.

Alternative A is not feasible under Criterion 1. The configuration of Alternative A would preclude development on many of the parcels because the developable areas on each of the parcels would be substantially reduced and fragmented. Consequently, the residential community would consist of disconnected and fragmented pockets of development, and Alternative A would not result in a large-scale, mixed-use functionally integrated community. Alternative A is not feasible under Criterion 2 because it would preserve aquatic resources in fragmented, non-contiguous patches throughout the site.

Alternatives B and C are not feasible under Criterion 1. Under Alternatives B and C, the total development area would be substantially reduced (about 1,736 acres [702 hectares]) which is much below the minimum area of 2,400 acres (971 hectares) required for a large-scale regional community, and there would be only a limited amount of developable land available along Baseline Road which would be occupied by commercial uses (one or more power centers), forcing the Town Center to be located at a site further in the interior of the project site and distant from arterials. This would reduce the economic viability of the Town Center. Therefore, all three alternatives were eliminated from further consideration.

The USACE in consultation with USEPA determined that additional on-site alternatives should be developed that would avoid impacts to aquatic resources in those portions of the project site where the resource is most valuable. In addition, the USACE determined that additional alternatives should be identified that may be considered practicable in accordance with Section 404(b)(1).

The USACE conducted a California Rapid Assessment Method (CRAM) analysis of the wetland resources on the project site to identify areas where avoidance of wetlands would be most beneficial. Based on the results of the CRAM analysis, the USACE in consultation with USEPA identified five areas on the project site where the potential for further avoidance of wetlands should be further evaluated. From these areas, five focused avoidance alternatives were defined which included the development of the rest of the project site per the PVSP and additional avoidance of wetland resources in each of the five avoidance areas.

In summary, upon completion of the alternatives screening process, the USACE identified six alternatives for further evaluation in this EIS: five focused avoidance alternatives (Alternatives 1 through 5), and the No Action Alternative. The following sections describe the Proposed Action and the six alternatives carried forward for analysis in this EIS.

2.5 PROPOSED ACTION

This section presents details of the Proposed Action, which is the development of the 5,230-acre (2,117-hectare) site under the PVSP footprint, which could accommodate a range of land use densities. The site includes 3,781 acres (1,530 hectares) of property for which DA permit applications have been submitted, and 1,449 acres of property for which there are no permit applications.

This section presents two scenarios for the Proposed Action that represent the potential low-end and high-end of the range of densities that could be developed: the “Base Plan” and “Blueprint.” The Proposed Action – Base Plan scenario, which is the specific plan that was approved by Placer County, would allow for the development of approximately 14,132 residential units. The Proposed Action – Blueprint scenario, which was also considered by the County but was not eventually adopted, would develop the project site at a higher density consistent with the Sacramento Area Council of Governments (SACOG) Blueprint and provide for up to 21,631 residential units (**Table 2.0-2, Proposed Action Components**). The development footprint within these scenarios would be the same, though the land use designations and acreages would differ. This EIS evaluates the environmental effects from development under both scenarios in order to provide the range of impacts within the same footprint. The actual development ultimately achieved within the plan area could be anywhere between these two bookends, and any development within the bookends would be considered consistent with this EIS and any permits issued by the USACE for the Proposed Action. Land use decision-making within these bookends would be under the County’s jurisdiction over the life of the plan. Under both scenarios, 979 acres (396 hectares) of land in the western portion of the PVSP site are designated as a Special Planning Area (SPA) and would continue to be used for large lot rural residential development under the PVSP. For purposes of this analysis, under both Proposed Action scenarios, the SPA has been allocated 411 dwelling units, including 150 existing dwelling units.

**Table 2.0-2
Proposed Action Components**

	Acres	Residential Units Base Plan	Residential Units Blueprint
Development of Properties with Active DA permit applications	3,781	11,585	17,916
Development of Properties with no Active DA permit applications*	1,449	2,547	3,715
Total	5,230	14,132	21,631

*Includes the 979-acre Special Planning Area and 411 units that are allocated to this area.

Including a range of densities in the Proposed Action allows for thorough NEPA review of potential impacts of the Proposed Action while also respecting that land use regulation—including the ultimate determination of the density at which the Plan area should be developed—is a local government function.

2.5.1 Placer Vineyards Development Plan - Base Plan and Blueprint Scenarios

Under the Proposed Action - Base Plan scenario, the community would include about 3,361 acres (1,360 hectares) of residential uses, 309 acres (125 hectares) of commercial and office uses, 309 acres (125 hectares) of public/quasi-public uses (such as schools), 211 acres (85 hectares) of parks, 709 acres (287 hectares) of open space, and 331.5 acres (134 hectares) of major roadways (see **Table 2.0-3, Proposed Action – Proposed Range of Land Uses**). **Figure 2.0-2** shows the proposed land use plan under the Proposed Action Base Plan scenario.

Under the Proposed Action - Blueprint scenario, the community would include about 3,220 acres (1,303 hectares) of residential uses, 342 acres (138 hectares) of commercial and office uses, 366 acres (148 hectares) of public/quasi-public uses (such as schools), 273 acres (110 hectares) of parks, 709 acres (287 hectares) of open space, and 321 acres (130 hectares) of major roadways (see **Table 2.0-3**). The land use plan of the Proposed Action under the Blueprint scenario is shown in **Figure 2.0-3**. As shown, the development footprint would be substantially the same for the densities ranging between the Base Plan and Blueprint scenarios. However, within the area to be developed, some of the land uses could differ.

**Table 2.0-3
Proposed Action – Proposed Range of Land Uses**

Land Use	Base Plan*		Blueprint**	
	Acres	Units	Acres	Units
Low Density Residential	1,001	3,519	729	3,647
Medium Density Residential	1,176	6,474	1,170	9,873
High Density Residential	205	3,092	342	6,244
Special Planning Area	979	411	979	411
<i>Residential Subtotal</i>	3,361	13,496	3,220	20,175
Commercial Mixed Use	51	636	95	1,456
Commercial	34	--	34	--
Town Center Commercial	43	--	43	--
Business Park/Power Center	150	--	142	--
Office	33	--	29	--
<i>Commercial Subtotal</i>	309	636	342	1,456
Public Uses	51	--	51	--
Schools	167	--	199	--
Religious Facilities	91	--	116	--
<i>Public Uses Subtotal</i>	309	0	366	0
Open Space	709	--	709	--
Park	211	--	273	--
Roads	332	--	321	--
<i>Park, Roads and Open Space Subtotal</i>	1,252	--	1,303	--
Total	5,230	14,132	5,230	21,631

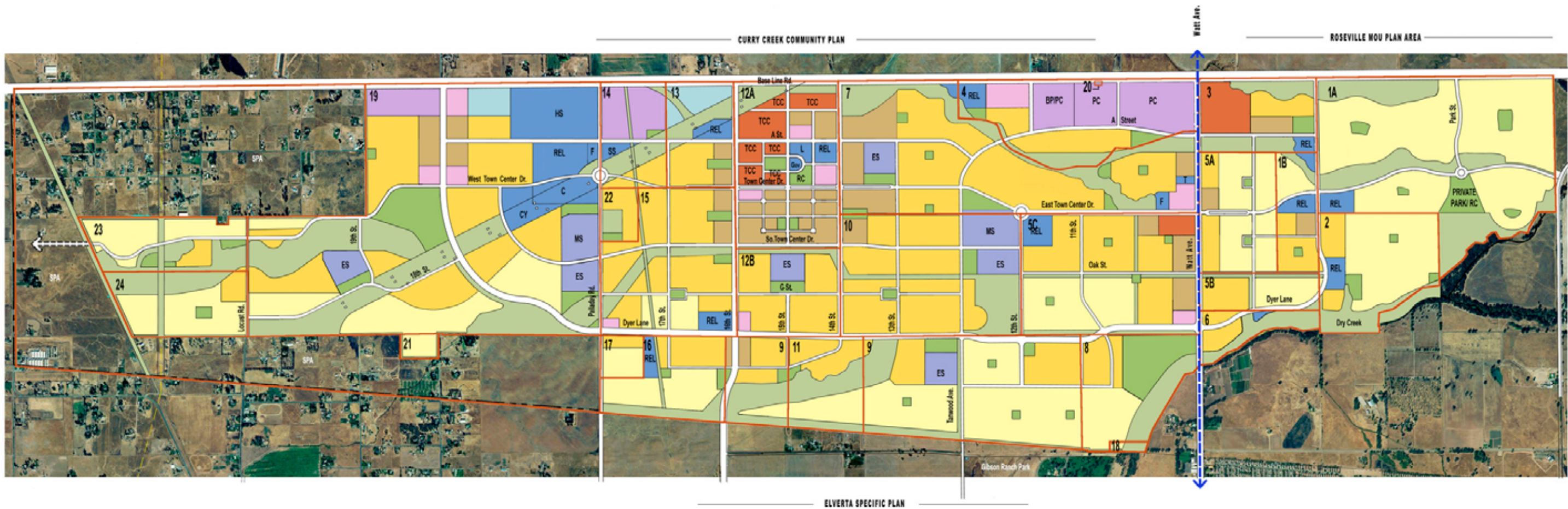
Source: Placer Vineyards Specific Plan – July 2007; Placer Vineyards Specific Plan – Blueprint – July 2–7

* Based on Table 3-3, Land Use Property Summary, from the Placer Vineyards Specific Plan – Errata to the Placer Vineyards “Base Plan” Specific Plan - July 16, 2007

** Based on Table 3-3, Land Use Property Summary, from the Placer Vineyards Blueprint Specific Plan - July 2007

Residential Development

Under the Proposed Action – Base Plan scenario, the Proposed Action would provide a total of 14,132 single- and multi-family residential units. Under the Proposed Action – Blueprint scenario, the Proposed Action would provide a total of 21,631 single- and multi-family residential units. The residential component of the PVSP would include low-, medium-, and high-density neighborhoods accommodating a wide range of housing types. **Table 2.0-3** shows residential acres and units within the range of the Proposed Action scenarios.



LEGEND

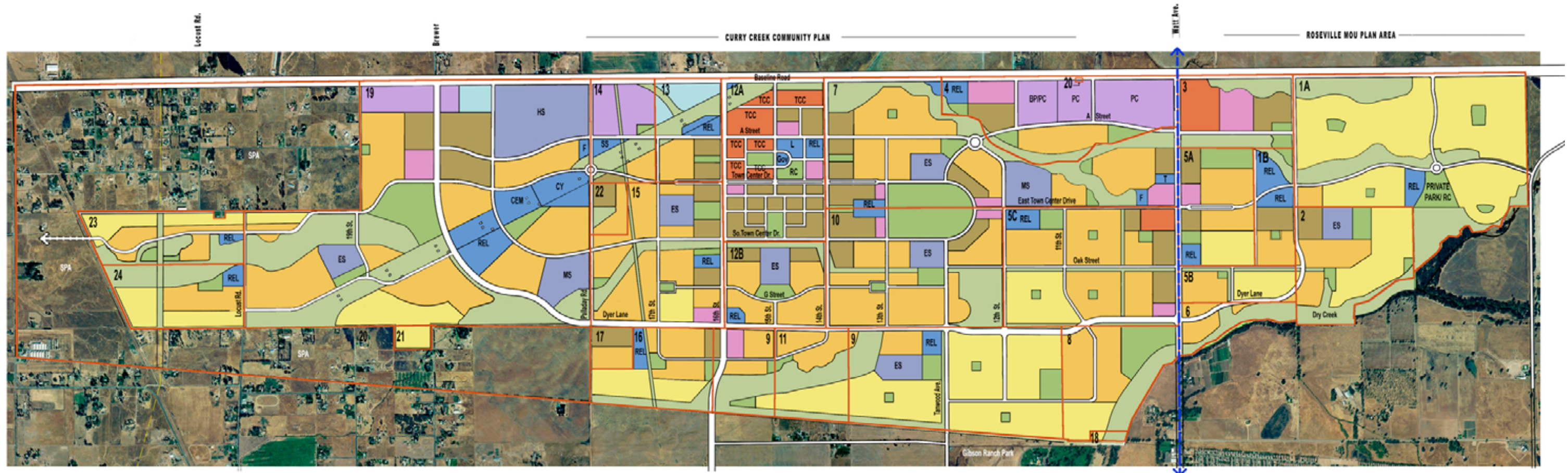
C/MU COMMERCIAL/ MIXED USE	SPA SPECIAL PLANNING AREA	ES ELEMENTARY SCHOOL	REL RELIGIOUS FACILITY	CY CORPORATE YARD	OS OPEN SPACE
CON COMMERCIAL	LDR LOW DENSITY RESIDENTIAL	MS MIDDLE SCHOOL	F FIRE	SS SUBSTATION	P PARK
PC POWER CENTER	MDR MEDIUM DENSITY RESIDENTIAL	HS HIGH SCHOOL	Gov GOVERNMENT	T TRANSIT	RC RECREATION CENTER
BP BUSINESS PARK	HDR HIGH DENSITY RESIDENTIAL		L LIBRARY	C CEMETERY	
O OFFICE			Pd POLICE		↔ BRT LINE



SOURCE: County of Placer – 2007

FIGURE 2.0-2

Proposed Action – Base Plan Scenario Land Use Plan



LEGEND

 C/MU	COMMERCIAL MIXED USE	 SPA	SPECIAL PLANNING AREA	 ES	ELEMENTARY SCHOOL	 REL	RELIGIOUS FACILITY	 OS	OPEN SPACE
 COW	COMMERCIAL	 LDR	LOW DENSITY RESIDENTIAL	 MS	MIDDLE SCHOOL	 F	FIRE	 P	PARK
 PC	POWER CENTER	 MDR	MEDIUM DENSITY RESIDENTIAL	 HS	HIGH SCHOOL	 Gov	GOVERNMENT	 RC	RECREATION CENTER
 BP	BUSINESS PARK	 HDR	HIGH DENSITY RESIDENTIAL			 L	LIBRARY		
 O	OFFICE					 Po	POLICE		
						 CY	CORPORATE YARD		
						 SS	SUBSTATION		
						 T	TRANSIT		
						 C	CEMETERY		
								↔	BRT LINE



SOURCE: County of Placer – 2007

FIGURE 2.0-3

Proposed Action – Blueprint Scenario Land Use Plan

Commercial Development

At buildout, the Proposed Action - Base Plan scenario would provide approximately 309 acres (125 hectares) and 3.6 million square feet (334,450 square meters) of commercial and retail uses. Under the Proposed Action - Blueprint scenario, the Proposed Action would develop 342 acres (138 hectares) and 3.55 million square feet (329, 806 square meters) of commercial and employment uses.

Most commercial and employment uses—including conventional commercial, commercial mixed-use, business professional mixed-use, and community commercial—would be concentrated along Baseline Road, Watt Avenue, and other arterial roadways to take advantage of the exposure to high-volume traffic along these principal commute corridors. Some of the commercial uses would be concentrated in a Town Center, to encourage a variety of office, retail stores, and entertainment uses. Smaller commercial centers would serve adjacent residential neighborhoods and are planned to include at least some mixed-use areas offering retail goods and services in conjunction with higher-density housing.

Public and Quasi Public Uses

The Proposed Action would develop a broad range of public and quasi-public uses, including schools, fire stations, government offices, a library, police station, fire station, a corporation yard, a substation, a transit center, a cemetery, and religious facilities. Acres assigned to these uses under both scenarios are reported in **Table 2.0-4, Proposed Action – Public and Quasi-Public Uses**.

**Table 2.0-4
Proposed Action – Public and Quasi-Public Uses**

Land Use	Proposed Action – Base Plan (Acres)	Proposed Action – Blueprint (Acres)
Public Facilities and Services ¹	51	51
Religious Facilities	91	116
Schools		
Elementary Schools (6 schools)	72	84
Middle Schools (2 schools)	45	45
High Schools (1 school)	50	70
Total	309	366

Source: Placer Vineyards Specific Plan – July 2007 and Placer Vineyards Blueprint Specific Plan – July 2007

¹ Includes Fire – F, Government Offices – Gov, Substation – SS, Library – L, Utility Substation – SS, Corporate Yard – CY, Transit – T, Cemetery – C

Government Offices and Facilities

General County services and facilities provided to residents of Placer County include County administration, the court system, health and welfare services, clerk/recorder, elections, assessor, tax

collector, public works and engineering, planning, and building inspection. In order to adequately serve the proposed residential community with general services, several satellite County facilities would need to be located within the project site. An administration services office building and a corporation/maintenance yard and a community building associated with recreation services would be located within the Town Center. The corporation yard would be located on property designated "CY" with adequate separation from adjacent residential property. In addition, a small parks equipment and maintenance facility would be located in each of the two proposed community parks.

Fire Protection

A total of two Placer County Fire Department stations and an administrative center would be located on the project site. One station would serve the eastern portion of the site, located adjacent to the intersection of Watt Avenue and Town Center Drive. The other would serve the western portion of the site, and would be located off of Palladay Road and A Street. In addition, a fire administrative center would be co-located with other County administrative offices within the Town Center south of Baseline Road and east of 16th Street.

Law Enforcement

Under the Proposed Action, a Placer County Sheriff's Department substation would be co-located with other County administrative offices within the Town Center south of Baseline Road and east of 16th Street.

Libraries

Under the Proposed Action, a new community library, approximately 13,905 square feet (1,292 square meters) in size, would be constructed in or near the Town Center.

Utility Substation

Utility substations, including electrical substations, pumping stations, pressure regulation stations, or similar facilities would be located throughout the project site.

Transit Station

A multi-modal transit station/terminal would be located off of Watt Avenue. The station would serve to distribute information on local transit options and serve as a passenger terminal and transfer station for public mass transit systems including future, potential Bus Rapid Transit (BRT) services along Watt Avenue.

Cemetery

Land designated Cemetery would be used for cemeteries, full service funeral parlors, and animal cemeteries.

Schools

The project site is within three school districts: Center Unified School District in the eastern portion, and the Elverta Joint Elementary School District and Grant Joint Union High School District in the western portion. The Proposed Action would shift the boundary line between the districts to provide what is

characterized as a more logical boundary between neighborhoods, prevent adjacent neighbors from attending different schools, and equitably divide the land area and projected number of units between the districts. The boundary line would be shifted to align with the centerline of 16th Street up to the intersection with Dyer Lane, then turn west and follow the centerline of West Dyer Lane to where it connects with Brewer Road.

The Proposed Action provides for six elementary schools, two middle schools, and one high school that would comprise 167 acres (68 hectares) under the Base Plan scenario and 199 acres (81 hectares) under the Blueprint scenario. According to the Proposed Action, schools would be sized and located according to Center Unified School District and state standards, and are proposed to be located within the residential communities so that no home is farther than a mile from a school. Schools would be located near open space corridors to allow for off-street pedestrian and bicycle access, and parks are proposed to be located in conjunction with most schools to allow for joint use.

Religious Facilities

Religious sites would comprise 91 acres (37 hectares) in 12 sites under the Proposed Action – Base Plan scenario and 116 acres (47 hectares) in 16 sites under the Proposed Action – Blueprint scenario. Religious sites are designated for houses of worship, defined as religious organization facilities operated for worship or promotion of religious activities, including churches, synagogues, temples, and also includes religious accessory uses on the same site, including, but not limited to, living quarters for staff, child daycare facilities where authorized by the same type of land use permit required for the house of worship itself.

Parks

Multiple sites are proposed for improved parks and recreation facilities, including neighborhood parks, community parks, mini parks (or “pocket” parks), and a recreation center. Development under the Proposed Action – Base Plan scenario would provide 211 acres (85 hectares) of parkland; development under the Proposed Action – Blueprint scenario would provide 284 acres (115 hectares) of park.

Open Space

The Proposed Action would preserve approximately 709 acres (287 hectares) of open space in perpetuity as open space under both the Base Plan and Blueprint scenarios. Open spaces would include flood control and drainage channels, properties within power line easements and special setback areas, such as setbacks along the Placer County line. Some open space areas may have compatible uses, including trails, landscape nurseries and storage, and other active and passive recreational uses and their associated parking lots.

Roads

The Proposed Action – Base Plan scenario includes approximately 332 acres (134 hectares) under roads, and the Proposed Action – Blueprint scenario includes approximately 321 acres (130 hectares) under roads.

2.5.2 Circulation System

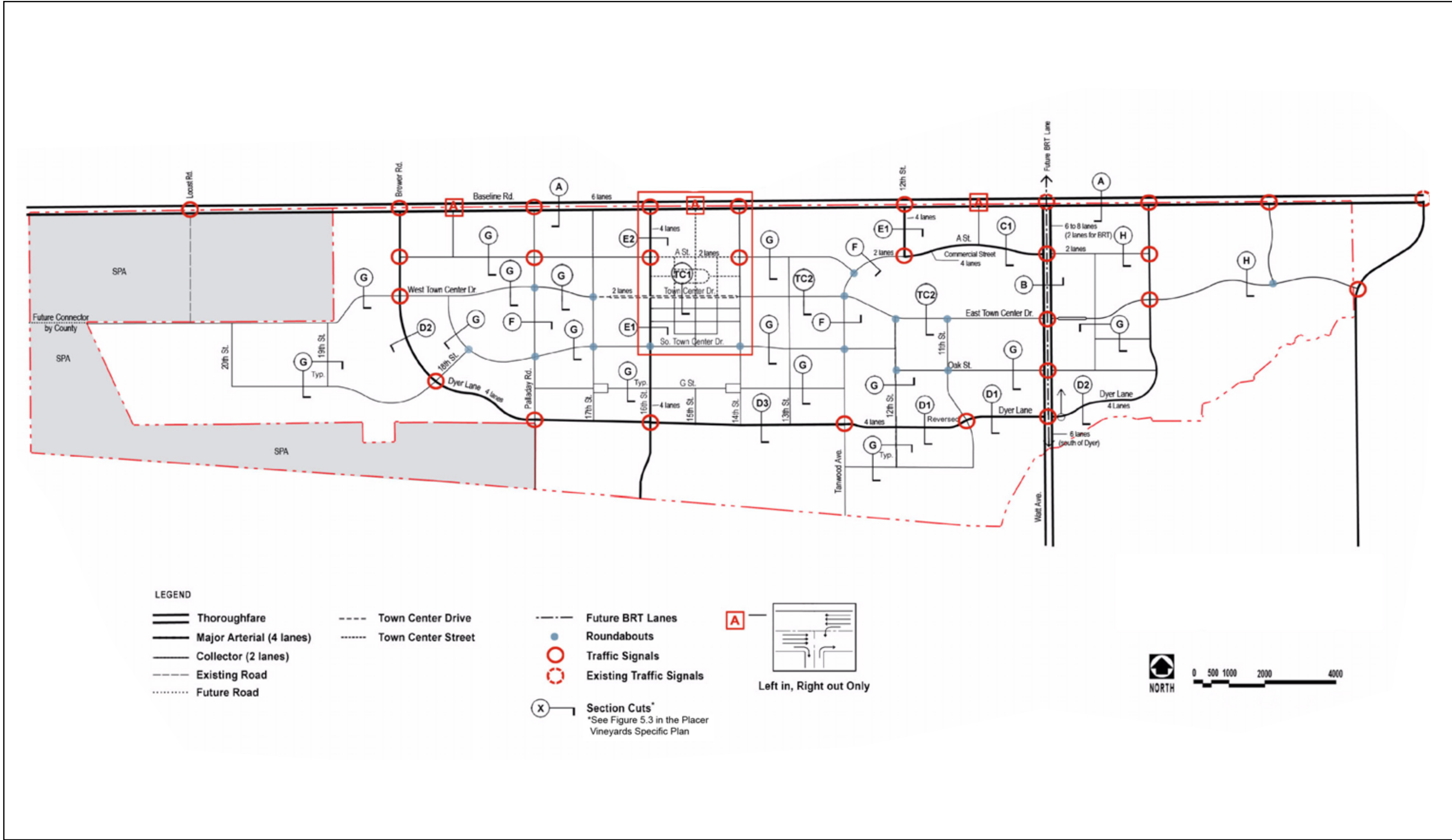
The Proposed Action provides for a circulation system to serve all transportation modes. The proposed circulation system is presented in **Figure 2.0-4, Circulation Diagram**. The project site would be served by a network of public streets organized in a hierarchy of functional classifications. The Proposed Action would also include a system and facilities to promote public transportation use consisting of one transit center, bus turnouts, and incentives to use public transit. A lane for a future streetcar route is reserved along Town Center Drive. It is anticipated that a Transportation System Management (TSM) plan would be prepared and adopted for each group of developments under the Proposed Action at the time of building permit issuance. A TSM plan may include ridesharing/carpooling/vanpooling, preferred parking for carpooling, preferred transit access, transit use incentives, and telecommuting/satellite work centers. The Proposed Action would also provide a system of on-street bikeways, off-street bicycle/pedestrian trails, equestrian linkages, and street side pedestrian walkways.

In addition, the following off-site roadways improvements are also planned as part of the Proposed Action.

- **Baseline Road**, the existing arterial roadway that forms the northern boundary of the project site, would be improved in phases, with an ultimate buildout of six travel lanes (typically equivalent to a 100-foot-wide (30-meter) ROW). Baseline Road improvements would include roadway widening on the south side of the existing roadway, east of the Sutter County line and west of Walerga/Fiddymont Road. Five intersections along Baseline/Riego Road would also be improved.
- **Watt Avenue**, the existing north-south arterial roadway that crosses through the central-eastern portion of the project site, would be improved in phases. Watt Avenue would be widened to six lanes from Baseline Road on the north to approximately 1,000 feet (300 meters) south of the Sacramento County line. In some areas, the road would be widened to eight lanes with two lanes dedicated for bus transit right-of-way. The right-of-way for widening Watt Avenue would be acquired on both sides of the existing roadway.

2.5.3 Utility Infrastructure

Utility infrastructure required for the proposed development includes sewer, water, storm drainage, electricity, natural gas, telephone, and cable television service. In general the utility infrastructure would be designed and phased to meet the anticipated growth within the entire PVSP site. **Table 2.0-5, Proposed Action – Utility Providers**, lists the entities that would provide utilities to the Proposed Action.



SOURCE: County of Placer – 2007

FIGURE 2.0-4

Circulation Diagram

**Table 2.0-5
Proposed Action – Utility Providers**

Service	Provider
Potable and irrigation water supply	Placer County Water Agency (PCWA)
Wastewater treatment	Placer County (South Placer Wastewater Authority)
Storm water management	Placer County Flood Control and Water Conservation District
Electricity	Pacific Gas and Electric Company and Sacramento Municipal Utility District
Natural Gas	Pacific Gas and Electric Company
Communications ¹	SureWest Communications and AT&T Inc.

¹ Provider subject to change since deregulation has eliminated franchise area boundaries.

The following utility and public facility improvements would be constructed to serve the Proposed Action.

Water Supply and Distribution Facilities

The project site is within the service area of the Placer County Water Agency (PCWA). The project site is proposed to receive water service from various sources on an initial and long-term basis. PCWA has determined that it has sufficient water rights to meet the projected demand of projects likely to develop in western Placer County through 2030, including the Proposed Action. PCWA contracts with PG&E for water from the Yuba and Bear rivers to serve its Zones 1 and 3 areas, has water rights through its Middle Fork Project (MFP), and also has a contract with the U.S. Bureau of Reclamation (BoR) for Central Valley Project (CVP) water. However, PCWA currently has constructed only a portion of the peak season treated surface water delivery infrastructure capable of serving the southwestern portion of Placer County, where the project site is located. To use these water supplies, development of new infrastructure by PCWA will be necessary. All of the water supply infrastructure improvements that are described below would be proposed by PCWA and constructed upon completion of appropriate environmental review by that agency. As they would not be constructed by the Applicants, these improvements are not part of the Proposed Action. However, because these are required in order to develop the PVSP, the environmental effects from these water supply improvements are analyzed and reported in the Draft EIS as potential indirect effects of the Proposed Action (and alternatives).

Long-term Surface Water Supply Improvements

The long-term surface water supply is proposed to be drawn from the Sacramento River at a new multi-party pump station, treatment plant, and transmission pipeline. As shown in **Figure 2.0-5a, Water Connections**, the long-term transmission pipeline would extend from the Sacramento River to the project site along Elverta Road, Pleasant Grove Road, and Baseline Road.

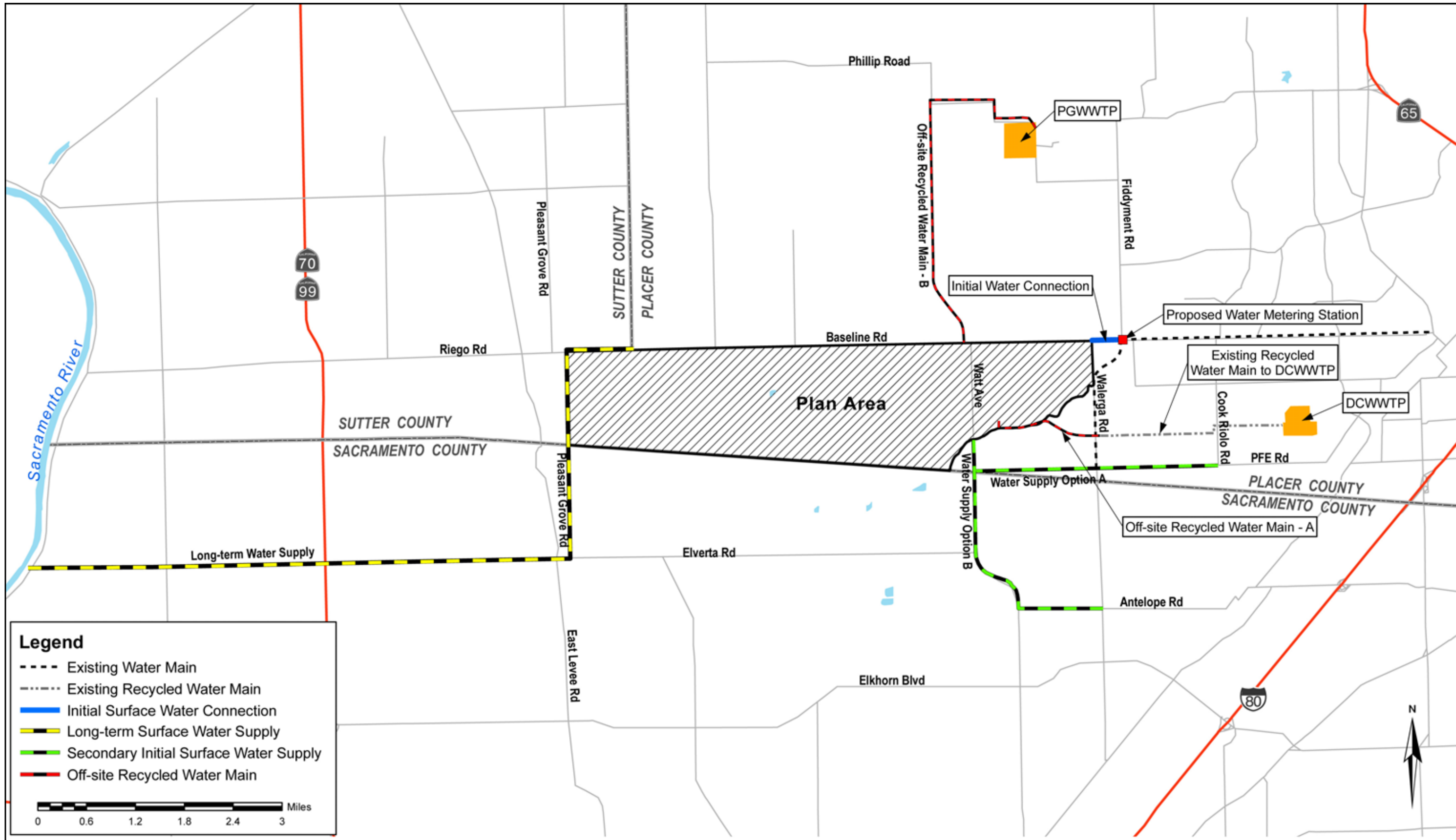
Initial Surface Water Supply Improvements

Because significant capital costs and long lead times for permit processing and construction¹ are involved to implement the long-term surface water supply from the Sacramento River, PCWA proposes to develop an initial surface water supply from the American River to serve the first phases of PVSP development. Water from the American River Middle Fork Project would be diverted at PCWA's American River Pump Station (ARPS), conveyed to and treated at the Foothill Water Treatment Plant, and delivered through existing transmission pipelines to the vicinity of Industrial Avenue. An existing booster pump and storage tank would allow PCWA to introduce this water into the City of Roseville pipeline system. Under an existing agreement with the City of Roseville, PCWA can convey 10 million gallons per day (mgd) (38 million liters per day [mld]) through the City's pipeline system to a location near Baseline Road and Fiddymont Road. Extension of a proposed 24-inch (61-centimeter) diameter pipeline westerly in Baseline Road would deliver the initial surface water supply to the project site, as shown in **Figure 2.0-5a**.

An additional, complementary scenario for conveying PCWA's ARPS water that would avoid the 10 mgd (38 mld) limitation on the Roseville-owned pipeline would deliver the water via a pipeline from the future Ophir Water Treatment Plant (**Figure 2.0-5b, Alternate Water Supply Infrastructure**). The water pipelines would be installed generally from the Ophir Water Treatment Plant along Ophir Road, which becomes Taylor Road, connecting to the transmission main from the Foothill Water Treatment Plant at Penryn Road. The proposed transmission system includes a water pipeline branching to the northwest before the Penryn connection, and running through the Bickford Ranch planned development. After Bickford Ranch, the water pipelines would connect to the existing PCWA Zone 1 system just north of the Sunset Water Treatment Plant in Rocklin. The proposed water pipelines would then be constructed through the existing Whitney Ranch development within existing road right-of-ways. Beyond Whitney Ranch, the water pipelines would cross under SR 65, and extend westerly through a mixture of industrial and open space, crossing Industrial Avenue. From that point, a water pipeline would be constructed through agricultural land, continuing to the south and connecting to the Regional University planned development project. The water pipeline would be constructed further south through agricultural land, eventually ending at the intersection of Baseline Road and Watt Avenue, abutting the project site.²

¹ For more information on the current status of all of the water supply improvement projects described here, please see the document titled Status of Water Supply Improvement Projects in **Appendix 2.0**.

² These improvements are not part of the Proposed Action for which DA permits are being sought, but are described in this document for disclosure purposes.



SOURCE: County of Placer – 2007






FIGURE 2.0-5a

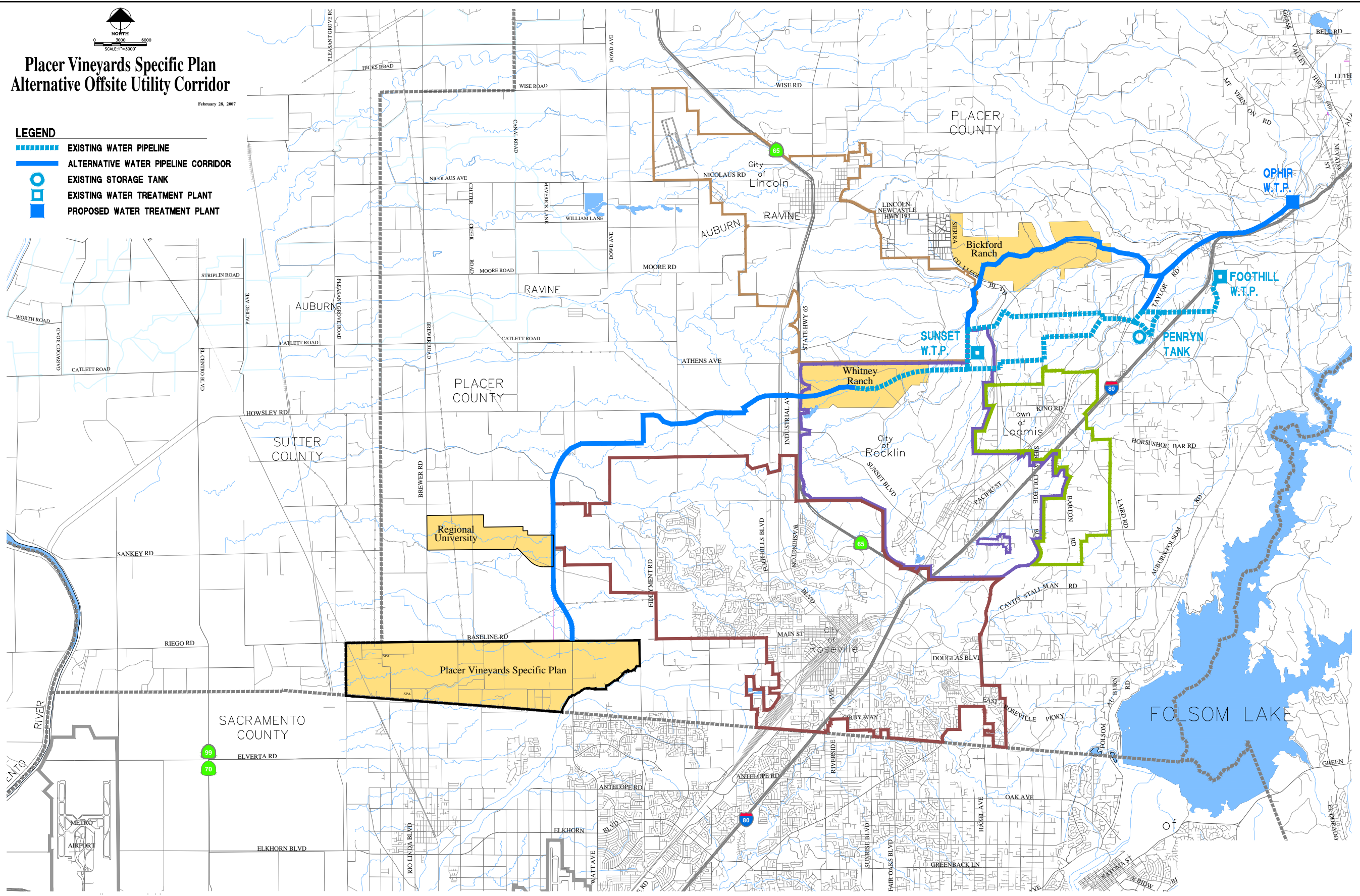
Water Connections

Placer Vineyards Specific Plan Alternative Offsite Utility Corridor

February 28, 2007

LEGEND

-  EXISTING WATER PIPELINE
-  ALTERNATIVE WATER PIPELINE CORRIDOR
-  EXISTING STORAGE TANK
-  EXISTING WATER TREATMENT PLANT
-  PROPOSED WATER TREATMENT PLANT



SOURCE: County of Placer – 2007

FIGURE 2.0-5b

Alternate Water Supply Infrastructure

Secondary Initial Water Supply Improvements

In the event that the long-term water supply facilities are not in place when the initial ARPS supply from the two points of delivery has been fully used, a second initial surface water supply project would be constructed. It would consist of use of Middle Fork American River water currently contracted by PCWA to Sacramento Suburban Water District (SSWD). The supply would be diverted from Folsom Lake, treated at Sidney N. Peterson Water Treatment Plant (owned and operated by the San Juan Water District), and conveyed to the project site via a new pipeline extending from the Cooperative Transmission Pipeline that currently ends near Antelope and Walerga Roads, as shown on **Figure 2.0-5a**. This pipeline would be extended westerly along Antelope Road to Watt Avenue and then north to the project site. Alternatively, this supply could be conveyed in a proposed 16-inch diameter pipeline constructed in PFE Road from Cook Riolo Road to Watt Avenue and northerly to the project site.³

On-site Water Supply System Improvements

The on-site water supply system would be made up of a transmission main located in Baseline Road which would provide water to the entire project site. A grid of 12-inch (30-centimeter) and 16-inch (41-centimeter) mains located alongside the arterial and collector road system would be connected to the transmission main in Baseline Road and would distribute water to the proposed developments. A total of 15 million gallons (57 million liters) of storage is proposed to be provided by five water storage reservoirs and booster pump station sites, located throughout the project site.

Recycled Water

Development under the Proposed Action would have recycled water provisions for use in parks, schools, publicly landscaped areas, and the landscaping associated with commercial, business professional, light industrial, and multi-family uses. It is anticipated that recycled water would be delivered from the Dry Creek Wastewater Treatment Plant (DCWWTP), and ultimately the Pleasant Grove Wastewater Treatment Plant (PGWWTP). Recycled water would only be available to the project if the wastewater from the project site is treated at the DCWWTP and PGWWTP. Use of recycled water is not anticipated under the second option for wastewater treatment at the Sacramento Regional County Sanitation District (SRCSD) (see **Wastewater**, below) because it would not be feasible.

Initially, a connection would be made to an existing 24-inch (61-centimeter) gravity recycled water line that currently terminates south of Dry Creek on the east side of Walerga Road. The pipeline would be extended from the south of Dry Creek, in a northerly direction along Walerga Road to Baseline Road where it would turn west to the project site (see **Figure 2.0-5a**).

In the future, as the west Placer County area builds out, it is anticipated a recycled water line would be constructed from the PGWWTP to serve the project site and surrounding areas. The future recycled water line would extend westward from PGWWTP along Phillip Road to the alignment of Watt Avenue, and

³ These improvements are not part of the Proposed Action for which DA permits are being sought, but are described in this document for disclosure purposes.

then south to Baseline Road where it would tie into other recycled water infrastructure. The PGWWTP supply will supplement and/or ultimately replace the DCWWTP supply (see **Figure 2.0-5a**).

Storage and pumping facilities would also be required within the project site, along with a backbone of dedicated recycled water lines within street rights-of-way ranging in size from 6 to 24 inches (15 to 61 centimeters) in diameter. A proposed 3 million gallon (11 million liter) recycled water storage tank would be located near the intersection of 16th Street and Dyer Lane. The tank would be similar to those for potable water supply and would be circular and either 130 feet (40 meters) in diameter and 30 feet (9 meters) in height, or 150 feet (46 meters) in diameter and 24 feet (7 meters) in height.

Wastewater

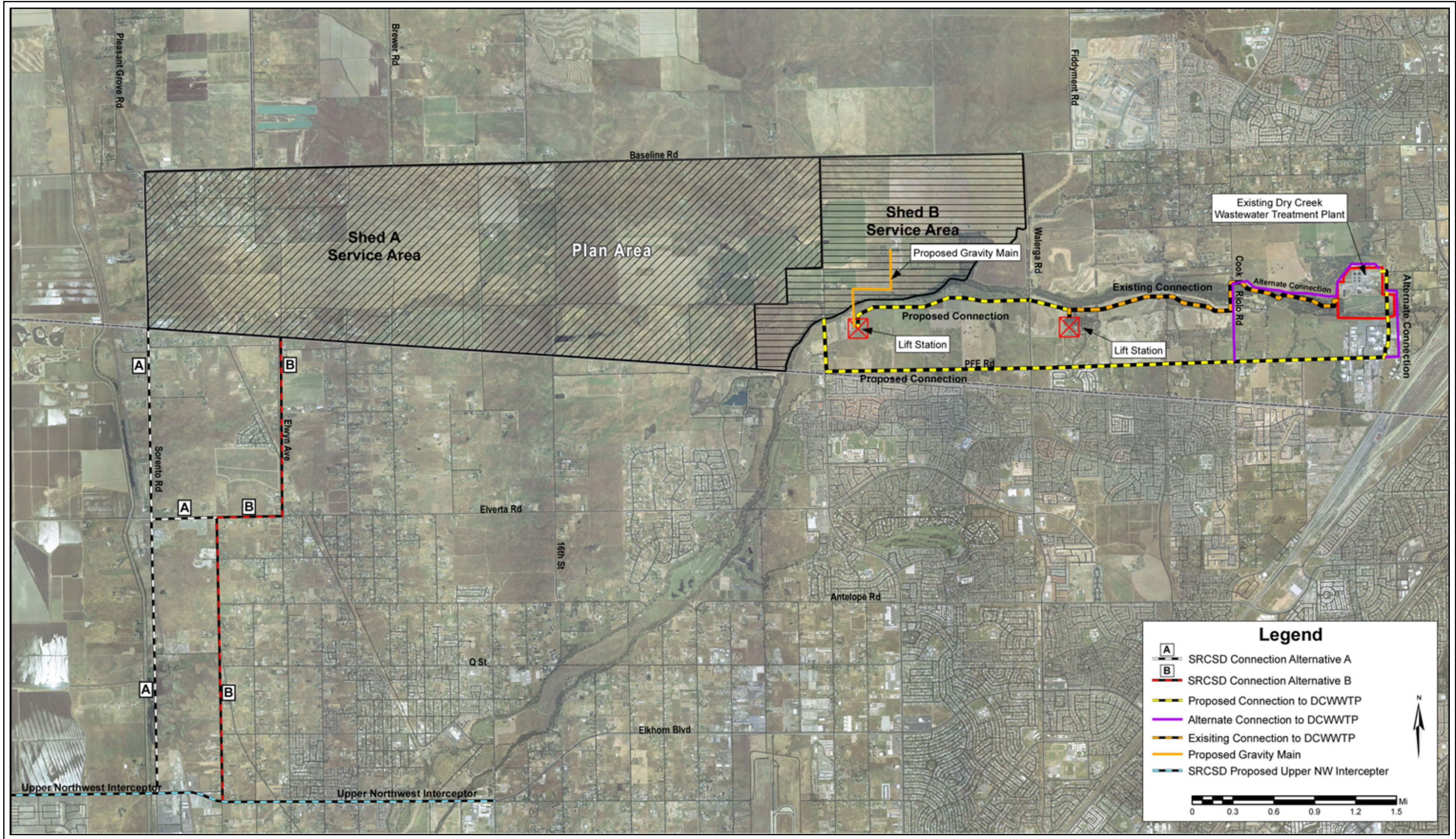
The Proposed Action includes two options for the provision of long-term wastewater service to the project site. The first option would direct wastewater for the entire project site to the Dry Creek Wastewater Treatment Plant (DCWWTP) for treatment and disposal. Under the second option, wastewater from the western 4,340 acres (1,756 hectares) of the project site would be treated at the Sacramento Regional Wastewater Treatment Plant (SRWWTP), operated by the SRCSD.

DCWWTP Option

Under this option, wastewater from the western 4,340 acres (1,756 hectares) (Shed A) of the site would be directed to DCWWTP by way of two 16 to 20 inch (41 to 51 centimeter) diameter force main pipelines located in the same utility corridor. This corridor would extend from the project site southerly along the alignment of Watt Avenue, then easterly along the alignment of PFE Road and northerly to the plant by way of one of two proposed alignments. The first alignment would proceed northerly on the easterly segment of Hilltop Circle through the Roseville Corporation Yard, or just east of it. The second alternative alignment would leave PFE Road at Cook Riolo Road, turning easterly to the DCWWTP just north of Dry Creek (see **Figure 2.0-6, Sewer Connections**).

On-site improvements to handle the wastewater from Shed A would include construction of a gravity system delivering wastewater to the western end of the project site, a lift station with adequate emergency storage, and a force main to pump wastewater easterly to the DCWWTP.

The majority of flows from the easterly 890 acres (360 hectares) (Shed B) would discharge to an off-site trunk sewer line connection point at the project site's southerly boundary, and then cross Dry Creek (using jack and bore construction methods) and be carried by a gravity sewer trunk line to a lift station. From the lift station, wastewater flows would be carried in a 12-inch (30-centimeter) diameter force main, to be installed along the south side of Dry Creek, to an existing force main located approximately 1,400 feet (427 meters) east of Walerga Road (see **Figure 2.0-6**). Because this corridor does not follow existing public right-of-ways, it would be necessary to acquire a right-of-way as a condition of other future project entitlements, or through use of eminent domain.



SOURCE: County of Placer – 2007

FIGURE 2.0-6

Sewer Connections

Conveyance facilities to the DCWWTP for Shed B were constructed in part with the first phase of the Dry Creek/Western Placer Community Facilities District #1 (CFD) project. A pump station and force main 1,400 feet (427 meters) east of Walerga Road and north of PFE Road have been designed to accept flows from a portion of the project site for conveyance to the DCWWTP. A force main (12 to 16 inches [30 to 41 centimeters] in diameter) would be constructed from the existing lift station west to a proposed lift station where gravity flows would be received from Shed B. An existing gravity sewer pipeline in Walerga Road was designed to provide capacity to serve approximately 315 of the Shed B dwelling units that are adjacent to Walerga Road.

SRCSO Option

As a second option, flows from Shed A could be discharged to the SRWWTP, operated by SRCSD. In this event, the utility corridor would extend from the project site to the south, following the alignment of Sorrento Road to the SRCSD Upper Northwest Interceptor at a point in Elkhorn Boulevard (see **Figure 2.0-6**). An alternative corridor has also been identified for the proposed connection to SRCSD. This alternative corridor would extend south from the Specific Plan area following the alignment of Elwyn Avenue, west along Elverta Road and finally south along the alignment of West 6th Street to the SRCSD Upper Northwest Interceptor at a point in Elkhorn Boulevard (see **Figure 2.0-6**).

An on-site wastewater storage tank would be installed if SRCSD becomes the wastewater treatment provider for Shed A. The tank would be located at the same location where the sewer lift station is proposed under the DCWWTP Option.

Drainage and Flood Control

The drainage system for the Proposed Action has been designed to accommodate peak flow rates resulting from additional impervious surfaces and proposed drainage modifications. Development of the Proposed Action would require additional attenuation at several locations, including within the existing floodplain and flood control channels upstream of proposed culvert facilities. Detention and water quality treatment basins would be provided to meet water quality maintenance objectives. In addition to providing detention storage to mitigate the increased rate of runoff, an additional storage component would be added in the detention areas to provide retention of flow volumes for a period of time to allow downstream volumes to drain from the shed. The Proposed Action includes open space corridors to convey stormwater flows, and all development is proposed to occur outside of these and outside of the 100-year floodplain.

Electrical Service

The project site is located within the service areas of both the Sacramento Municipal Utility District (SMUD) and Pacific Gas & Electric Company (PG&E). Both SMUD and PG&E own existing facilities within their respective service areas that could be extended to serve the proposed development. At such time as development exceeds existing load capacity, new 12 kV or 21 kV lines would be extended along existing roadways from existing, expanded, or new substations, including a new substation to be constructed on the project site.

Natural Gas Service

PG&E would provide natural gas service to the proposed development, as shown in **Figure 2.0-7**. Service would be obtained by constructing off-site gas transmission facilities to serve the project site. A 12-inch (30-centimeter) high-pressure transmission main is located east of the intersection of Cook Riolo Road and Baseline Road, approximately 2 miles (3 kilometers) east of the project site. Initial service to 3,000+ dwelling units would be provided by extending a 6-inch (15-centimeter) distribution main along Baseline Road and a 4-inch (10-centimeter) transmission main along PFE Road. This would require construction of a pressure regulation station at the point of connection. A smaller main would then be extended to the project site. Extension of 2-inch (5-centimeter) and 6-inch (15-centimeter) gas mains to individual project sites would then be required.

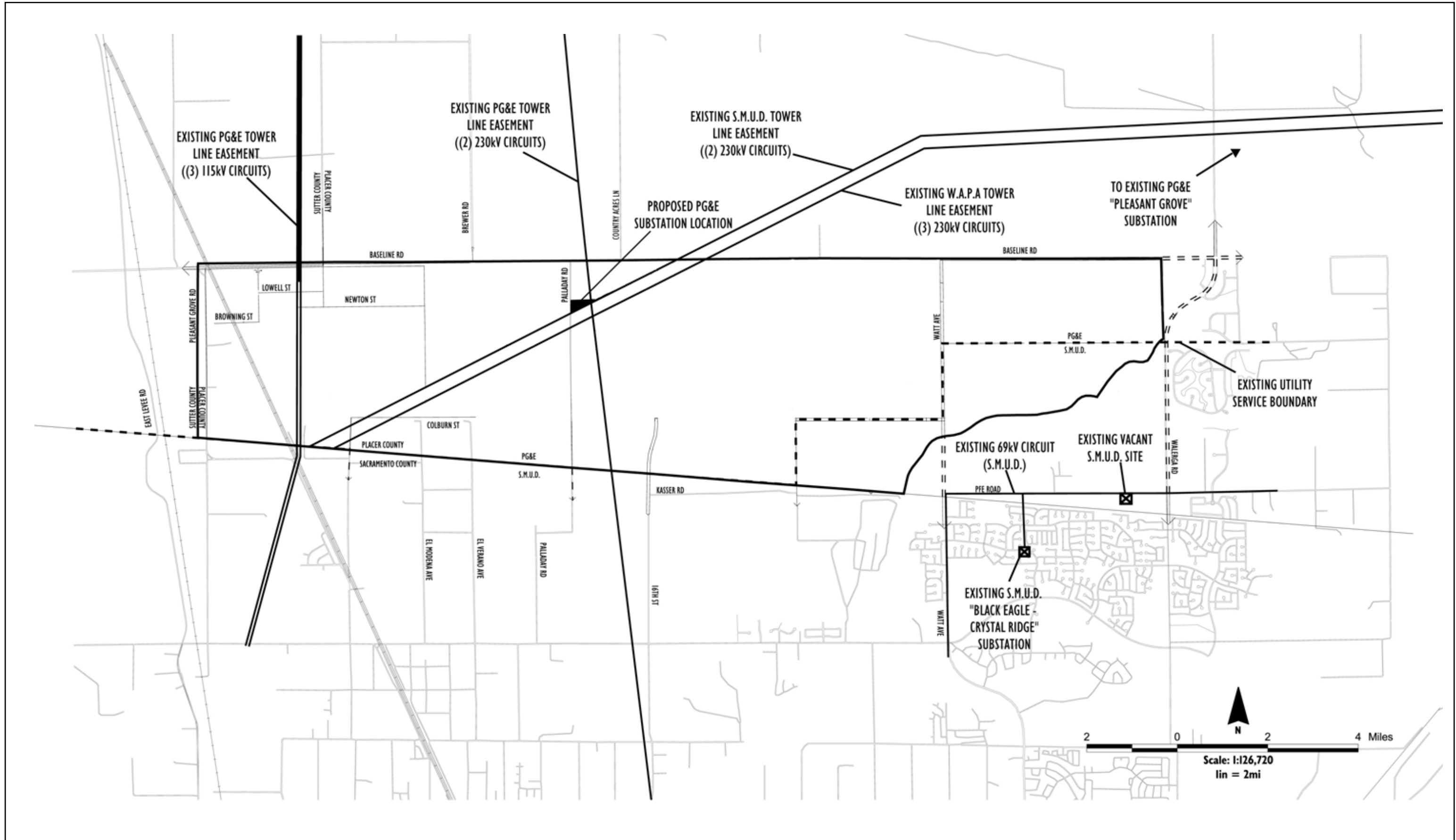
2.5.4 Public Services

Specific services required by the proposed development include solid waste disposal, library, parks, fire protection, law enforcement, schools, and general County services. **Table 2.0-6, Proposed Action – Service Providers**, lists the entities that would provide public services to the Proposed Action.

**Table 2.0-6
Proposed Action – Service Providers**

Service	Provider
Solid waste services	Auburn-Placer Disposal Service
Police services	Placer County Sherriff's Department
Fire protection services	Placer County Fire Department and Sacramento Metropolitan Fire District
Schools	Roseville City School District (K–8), Center Joint Unified School District (K-12), Roseville Joint Union High School District (9–12)
Library	Auburn-Placer County Library Department
Transit	Roseville Transit, Placer County Transit

¹ Provider subject to change since deregulation has eliminated franchise area boundaries



SOURCE: County of Placer - 2003

FIGURE 2.0-7

Transmission and Distribution Line Easements and Substations

2.5.5 Project Implementation

Project Phasing

If DA permits are issued, development under the Proposed Action could begin in 2013. Development would proceed in accordance with a phasing plan that coordinates the provision of backbone roadways, infrastructure, and utilities to ensure that County standards are met at all stages.

Initial development would be accompanied by a significant amount of infrastructure, including construction of major roadways as well as construction of water supply, sewer, and recycled water facilities. Infrastructure and utilities improvements would be phased over time in a pattern to be authorized under the DA permit. Because some infrastructure would serve more than one portion of the Proposed Action area, once development begins, infrastructure needs for subsequent phases could be reduced if improvements have been provided in an earlier developed phase. Conversely, any parcel could potentially move ahead with development as long as the infrastructure needed to serve it consistent with County standards is in place. Thus, there may be some potential for flexibility in development phasing.

Construction Activities

The following paragraphs summarize the activities required to construct the proposed development. To reduce haulage and disposal needs, grading is proposed to balance within each landowner's holdings and within the project site as a whole. In general, grading for building pads, recreational facilities, roads, and infrastructure would require average cuts and fills over the site of approximately 1 to 2 feet (0.3 to 0.6 meter). Limited portions of the site would have cuts and fills up to approximately 6 or more feet (2 meters). Backbone utilities within the roads would have trenches that range in depth from 3 to 25 feet (1 to 8 meters) from future finished grades.

Construction activities for residential and commercial uses would be similar to those required for any large, long-term development project. They would include site preparation (vegetation removal), grading (excavation and fill placement to create building pads), foundation construction, construction of structures, roofing, finishing, paving, and landscaping. A variety of heavy equipment—such as excavators, graders, scrapers, concrete trucks, and forklifts—would be required, as well as power and hand tools.

The construction of the Proposed Action would depend on market conditions. Given the size of the proposed development, it is anticipated that buildout would occur by 2025 under a fast growth scenario and by 2040 under a slow growth scenario.

2.5.6 Mitigation Measures adopted by Placer County

Mitigation measures were originally identified in the PVSP EIR as environmentally proactive measures that would be incorporated into development of the PVSP. These measures were approved by the County and will be monitored as part of the Mitigation Monitoring and Reporting Program adopted by Placer County. Therefore, these measures – as they apply to the impacts of the federal action – are incorporated

into and a part of the Proposed Action. However, for clarity, the impacts are presented as they would result without the benefit of these measures and the mitigation measures adopted by the Placer County are reiterated in this EIS. For most of the impact categories addressed in this EIS, the USACE lacks regulatory jurisdiction to impose its own mitigation measures to address the topics already subject to County-imposed mitigation. The full text of the PVSP EIR mitigation measures is presented in **Appendix 3.0**.

2.5.7 Placer Vineyards Mitigation Strategy

The Applicants have proposed a mitigation plan to mitigate for a variety of impacts, including wetland impacts, species habitat impacts, and impacts to agricultural lands. The Applicants state that the plan was developed in consultation with Placer County, SACOG, the Sierra Club, and the Audubon Society to mitigate for the impacts of the development of individual properties within the Plan Area in a manner that will be cumulatively effective and supportive of long-term conservation planning goals. The goal of the plan is to contribute to a regionally important expanse of contiguous private and public land that will continue to support important aquatic functions, meet species needs in the long term and aid recovery objectives for a broad variety of species. This approach to mitigation is holistic and is intended by the Applicants to address regulatory no-net-loss requirements while also valuing affected resources as an ecosystem, rather than as isolated features. The Applicants suggest that this approach is also consistent with the watershed approach to compensatory mitigation set forth in the USACE compensatory mitigation requirements, 33 CFR Part 332. The watershed approach uses a “landscape perspective... to identify the types and locations of compensatory mitigation projects that will benefit the watershed and offset losses of aquatic resource functions and services caused by activities authorized by [USACE] permits.” 33 CFR § 332.2. The watershed approach is designed to encourage mitigation that “support[s] the improvement of aquatic resources in a watershed.”

The Applicants assert that their mitigation plan is based on the best available scientific information regarding mitigation of wetland impacts in southwest Placer County, including biological information and conservation strategies developed in conjunction with the proposed Placer County Conservation Plan (PCCP). The mitigation obligations in the plan are intended to meet all regulatory requirements while also advancing effective long-term conservation planning, and the approach used in the plan, according to the Applicants, is strongly encouraged by the responsible local planning agencies and environmental stakeholders. This plan titled Placer Vineyards Mitigation Strategy includes three key elements: Site-Specific Avoidance and Minimization, Land Cover Mitigation, and Wetland Mitigation (see the Placer Vineyards Mitigation Strategy in **Appendix 2.0** for the complete text). Each of these elements is summarized below.

Site Specific Avoidance and Minimization

The PVSP incorporates measures for preserving and enhancing aquatic resources on the project site. The Specific Plan Area designates about 709 acres of open space areas along drainages with the intent of preserving aquatic habitat present within the designated open space, providing for historic habitat linkages, and maintaining the connectivity and integrity of drainage corridors from east to west through

the Specific Plan Area. Through this component of the Mitigation Strategy, the Applicants propose, that large contiguous areas that provide quality habitat will be preserved with adequate buffers to protect aquatic functions, and areas with degraded habitat value will be enhanced. The Specific Plan also incorporates minimization and low impact development strategies to minimize long-term habitat degradation within avoided open space areas.

Land Cover Mitigation

Most of the natural communities represented in the PVSP site require large, continuous, and intact habitat to retain maximum biological function. For this reason, the Applicants' Mitigation Strategy proposes to mitigate for irreversible land conversion through permanent conservation of large tracts of land with similar land cover, habitat, and agricultural value located off-site in the "Reserve Acquisition Area" (RAA) which is targeted for conservation by Placer County in the Draft PCCP. The Mitigation Strategy provides that for each acre converted to urban use by development, 1.35 acres of land would be conserved, consistent with the regional planning goals. Impacts to annual grassland, vernal pool grassland, and pasturelands would be mitigated on existing or restorable grassland. For the purpose of establishing mitigation for PVSP, this will include those dry-framed, fallow and irrigated pasture lands designated as agriculture. All of the land cover impacts would be mitigated on existing or restorable grassland. Vernal pool grassland will be mitigated by conservation of any (restorable) grassland, without regard to existing wetted area density, and including wetted acres. Mitigation sites for vernal pool grasslands will be a minimum of 200 acres in size, unless located adjacent to other conservation properties (thereby increasing the effective size of the regional preserve system) or the "Stream System," or unless otherwise specifically approved by the County due to especially high resource value or strategic value to the County's overall conservation strategy. In some cases, this may include mitigation sites outside of Placer County.

As the vast majority of land targeted for conservation in the RAA is suitable for agriculture and continued agricultural use would be encouraged by the conservation easements proposed pursuant to this mitigation, no additional agricultural mitigation is proposed beyond the 1.0 to 1.35 proposed for land cover. The Applicants assert that the land cover mitigation would also provide suitable foraging habitat mitigation for Swainson's hawk. No additional land mitigation is proposed by the Applicants beyond the 1.0 to 1.35 proposed for land cover.

Wetland Mitigation

Mitigation for wetlands would be accounted for separately in the Mitigation Strategy through mitigation ratios requiring preservation and/or restoration of a set number of wetlands calculated as a proportion of wetland loss. These acres of wetland mitigation, along with any upland area that is conserved in association with the wetlands, would be fully credited towards the required land cover mitigation. The Applicants propose that all of the wetland mitigation count towards land cover mitigation requirements, and all wetted acres contained within land cover mitigation count towards wetland mitigation.

Restored, enhanced, and created wetland habitat can help expand and link existing high quality vernal pool complexes that have become fragmented across the landscape, and have therefore lost some of their

natural community value. As a result, the Mitigation Strategy includes not only a wetlands preservation requirement, but also emphasizes wetland restoration, creation, and enhancement. The Applicants' Mitigation Strategy proposes that the "take/conversion" of each acre of wetted vernal pool habitat will be mitigated by the preservation of an acre of vernal pool. For each acre of vernal pool take/conversion, 1.25 acres of compensatory wetlands will be restored, enhanced, or created, including a minimum of 0.75 acre of vernal pool and no more than 0.50 acre of other wetlands. For take/conversion of each wetted acre of other wetland types, 1 acre of wetland (of any type) would be preserved, along with the restoration, enhancement, or creation of 1.25 acre of any wetland type, without regard for "in-kind" mitigation. The Applicants suggest that certain wetland types are not easily distinguished in the field and may intergrade. They propose to minimize the effect of field interpretation on the value and effectiveness of wetland mitigation, by applying the same mitigation ratios for all wetland types and allowing broad latitude for out-of-kind mitigation. In addition, in some circumstances, enhancement of existing wetland habitat may add greater wetland function and value to the aquatic system and conserved natural communities than restoration of previously existing or degraded features or creation of new wetland habitat. Similarly, take/conversion of each acre of open water would require the preservation of an acre of open water or any type of wetland; along with the restoration, enhancement, or creation of 1.25 acre of open water or any type of wetland.

2.5.8 Required Permits and Approvals

Permits and approvals required to construct and operate the Proposed Action are summarized below. The text below also identifies the sections of the EIS where additional information regarding these permits and approvals can be found.

Federal Approvals

- Clean Water Act Section 404 permits, including 22 individual permits and a Regional General Permit for the infrastructure improvements, from the USACE (see **Section 3.4, Biological Resources** and **3.10, Hydrology and Water Quality**).
- Endangered Species Act, Section 7 consultation and authorization from the U.S. Fish and Wildlife Service (USFWS) (see **Section 3.4, Biological Resources**).
- National Historic Preservation Act, Section 106 compliance and concurrence by the State Historic Preservation Office (SHPO) (see **Section 3.6, Cultural Resources**).

State Approvals

- Clean Water Act, Section 401 Water Quality Certification from the Central Valley Regional Water Quality Control Board (CVRWQCB) (see **Section 3.10, Hydrology and Water Quality**).
- A Clean Water Act, Section 402 National Pollutant Discharge Elimination System (NPDES) permit from CVRWQCB (see **Section 3.10, Hydrology and Water Quality**).
- A Master Reclamation permit for recycled water delivery and use from CVRWQCB (see **Section 3.13, Public Services**, and **Section 3.15, Utilities and Service Systems**).
- A California Endangered Species Act/California Fish and Game Code Section 2081 take authorization from the California Department of Fish and Wildlife (CDFW) (see **Section 3.4, Biological Resources**).

- A California Fish and Game Code Section 1602 Streambed Alteration Agreement from CDFW (see **Section 3.4, Biological Resources**, and **Section 3.10, Hydrology and Water Quality**).

Local Approvals

- Reorganization (Annexation/Detachments) for service area boundary adjustments and/or service contracts by Placer County Local Agency Formation Commission (LAFCO) and Placer County Sewer Maintenance District (see **Section 3.15, Utilities and Service Systems** and **Section 3.11, Land Use and Planning**).
- Approval of school district boundary changes by Grant Joint High School District, Center Unified School District, Elverta Joint School District, and Placer County Board of Education (see **Section 3.13, Public Services**).

2.6 ALTERNATIVES ANALYZED IN THE EIS

As discussed earlier in the section, based on their ability to meet the purpose and need of the Proposed Action and their feasibility as determined by the application of screening criteria, five on-site “focused avoidance” alternatives were determined to be reasonable alternatives to the Proposed Action and were carried forward in the EIS for detailed evaluation along with the No Action Alternative. The location of each of the avoidance alternative is shown in **Figure 2.0-8, Location of Alternatives 1 through 5**. Since the USACE is reviewing permits for individual properties, each alternative focuses avoidance within an individual property. The alternatives are briefly described below.

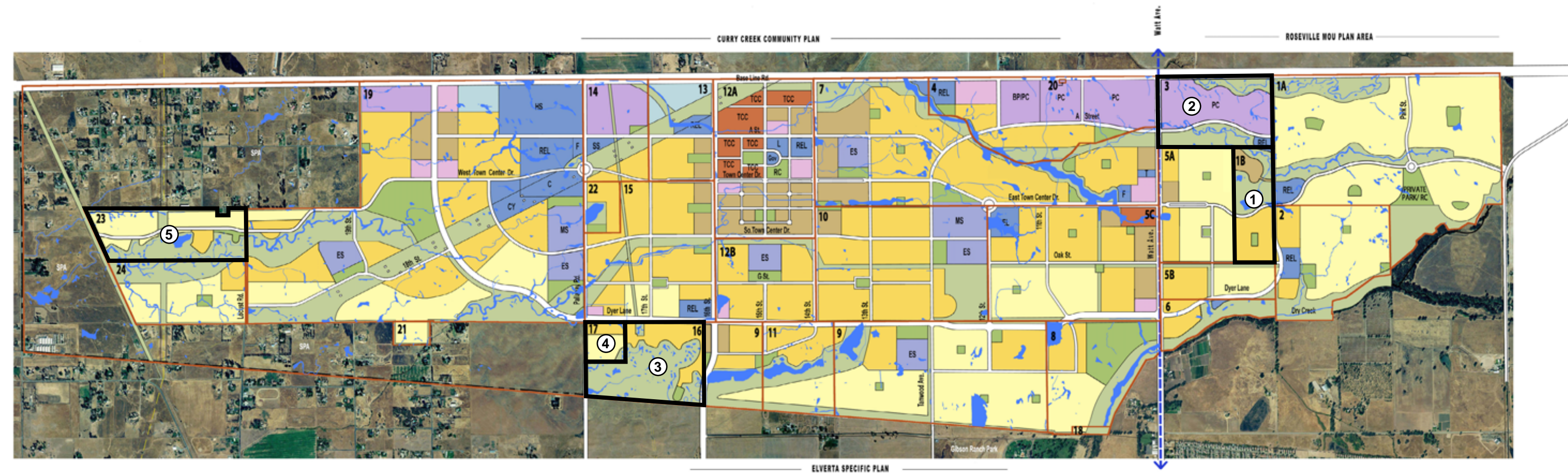
2.6.1 No Action Alternative

Under the No Action Alternative, the project site would be developed in a manner that avoids activities in jurisdictional waters of the United States, including wetlands, thereby avoiding the need for the USACE approvals under Section 404 of the Clean Water Act. However, local approvals from the County and the state would still be required. The No Action Alternative may require authorization from the USFWS under the federal Endangered Species Act because avoidance of jurisdictional waters may not completely avoid impacts to federally listed species.

The No Action Alternative would involve development of portions of the approximately 5,230-acre (2,117-hectare) project site, resulting in a reduced extent of residential and commercial uses. Avoidance of Section 404 triggers would reduce the total development footprint to approximately 3,297 acres (1,334 hectares), comprising approximately 2,410 acres (975 hectares) of residential uses (with an estimated 8,030 units at buildout), 221 acres (89 hectares) of commercial and office uses, 211 acres (85 hectares) of public and quasi-public uses, 124 acres (50 hectares) of parks, and 332 acres (134 hectares) of roads. About 1,933 acres (782 hectares) would be preserved as open space. The proposed land uses under the No Action Alternative are shown in **Figure 2.0-9** and **Table 2.0-7**, below. Even though, compared to the Proposed Action, the demand for water, sewer, and other utilities would be reduced under the No Action Alternative, all of the off-site infrastructure improvements would still be required.

**Table 2.0-7
No Action Alternative – Land Use Summary (in acres and units)**

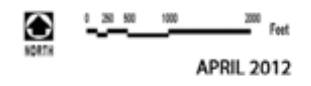
Land Use	Proposed Action – Base Plan Scenario		Proposed Action – Blueprint Scenario		No Action Alternative	
	Acres	Units	Acres	Units	Acres	Units
Low Density Residential	1,001	3,519	729	3,647	590	2,064
Medium Density Residential	1,176	6,474	1,170	9,873	721	3,819
High Density Residential	205	3,092	342	6,244	121	1,814
Special Planning Area	979	411	979	411	979	411
<i>Residential Subtotal</i>	3,361	13,496	3,220	20,175	2,410	8,108
Commercial Mixed Use	51	636	95	1,456	27	333
Commercial	34	--	34	--	56	--
Town Center Commercial	43	--	43	--	--	--
Business Park/Power Center	150	--	142	--	109	--
Office	33	--	29	--	31	--
<i>Commercial Subtotal</i>	309	636	342	1,456	221	333
Public Uses	51	--	51	--	42	--
Schools	167	--	199	--	118	--
Religious Facilities	91	--	116	--	52	--
<i>Public Uses Subtotal</i>	309	0	366	0	211	0
Open Space	709	--	709	--	1,933	--
Park	211	--	273	--	124	--
Roads	332	--	321	--	332	--
<i>Park, Roads and Open Space Subtotal</i>	1,252	0	1,303	0	2,388	0
Total	5,230	14,132	5,230	21,631	5,230	8,441



NOTE: THIS EXHIBIT SHOWS THE APPROVED PLACER VINEYARDS SPECIFIC PLAN LAND USE PLAN WITH ALTERNATIVE LAND USE STUDY PLANS ON PROPERTIES 18, 3, 16, 17, & 23.

LEGEND

C/MU COMMERCIAL/ MIXED USE	SPA SPECIAL PLANNING AREA	ES ELEMENTARY SCHOOL	REL RELIGIOUS FACILITY	OS OPEN SPACE
COM COMMERCIAL	LDR LOW DENSITY RESIDENTIAL	MS MIDDLE SCHOOL	F FIRE	P PARK
PC POWER CENTER	MDR MEDIUM DENSITY RESIDENTIAL	HS HIGH SCHOOL	Gov GOVERNMENT	RC RECREATION CENTER
BP BUSINESS PARK	HDR HIGH DENSITY RESIDENTIAL		L LIBRARY	
O OFFICE			Po POLICE	
			CY CORPORATE YARD	
			SS SUBSTATION	
			T TRANSIT	
			C CEMETERY	
				↔ BRT LINE
				① ALTERNATIVE

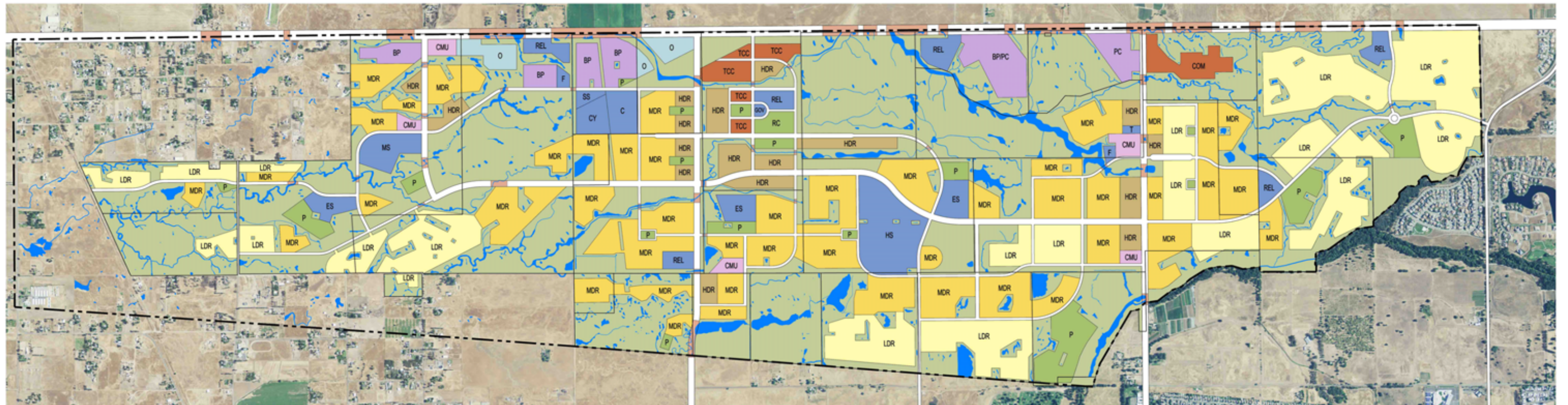


APRIL 2012

SOURCE: Mackay & Soms – April 2012

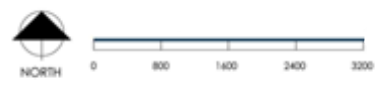
FIGURE 2.0-8

Locations of Alternatives 1 through 5



LEGEND

■ COMMERCIAL MIXED USE	■ SPECIAL PLANNING AREA	■ ELEMENTARY SCHOOL	■ PUBLIC BUILDING-PUBLIC USES	■ OPEN SPACE
■ COMMERCIAL	■ LOW DENSITY RESIDENTIAL	■ MIDDLE SCHOOL	■ RELIGIOUS FACILITY	■ PARK
■ POWER CENTER	■ MEDIUM DENSITY RESIDENTIAL	■ HIGH SCHOOL	■ CORPORATE YARD	■ RECREATION CENTER
■ BUSINESS PARK	■ HIGH DENSITY RESIDENTIAL		■ FIRE	
■ OFFICE			■ GOVERNMENT	
			■ LIBRARY	
			■ POLICE	
			■ SUBSTATION	
			■ TRANSIT	
			■ CEMETERY	
			↔ BRT LINE	



SOURCE: Mackay & Soms – November 2011

FIGURE 2.0-9

No Action Alternative

2.6.2 Alternative 1

Alternative 1 involves an alternative land use plan that would avoid wetlands on Property 1B, a 56-acre (23-hectare) property located in the eastern portion of the project site. The alternate land use plan for this property would avoid a group of three large vernal pools (totaling approximately 2 acres [0.8 hectare] of jurisdictional wetlands) and the drainage swale that crosses the northeast corner of the site. The alternate site plan designates the area around the three pools, including a 100-foot (30-meter) buffer, as open space. The alternative also shifts the proposed East Town Center Drive to the south in order to avoid bisecting the group of vernal pools. As a result, approximately 21 acres (8 hectares) of the property would remain in open space compared to 4 acres (2 hectares) under the Proposed Action (both scenarios). The acreage assigned to religious facilities would decrease from between 9 and 17 acres (4 and 7 hectares) under the Proposed Action scenarios to just 1 acre (0.4 hectare) under this alternative and the acreage for residential development would decrease from 34 acres (14 hectares) under the Proposed Action to 30 acres (12 hectares) under this alternative. The total number of housing units that would be constructed on the property under the alternate land use plan would however remain the same as the Proposed Action. This would be achieved by developing other portions of the project site at a higher density. The land uses for Property 1B under Alternative 1 are shown in **Figure 2.0-10** and **Table 2.0-8**, below.

Table 2.0-8
Alternative 1 – Property 1B Site Land Use Summary (in acres)

Land Use	Proposed Action- Base Plan	Proposed Action - Blueprint	Alternative 1
Low Density Residential	10	0	0
Medium Density Residential	18	14	22
High Density Residential	6	11	8
<i>Residential Subtotal</i>	34	25	30
Commercial	0	0	0
Religious Facilities	9	17	1
<i>Public Uses Subtotal</i>	9	17	1
Open Space	4	4	21
Park	2	4	1
Roads	7	7	4
<i>Park, Roads and Open Space Subtotal</i>	13	14	26
Total	56	56	56

2.6.3 Alternative 2

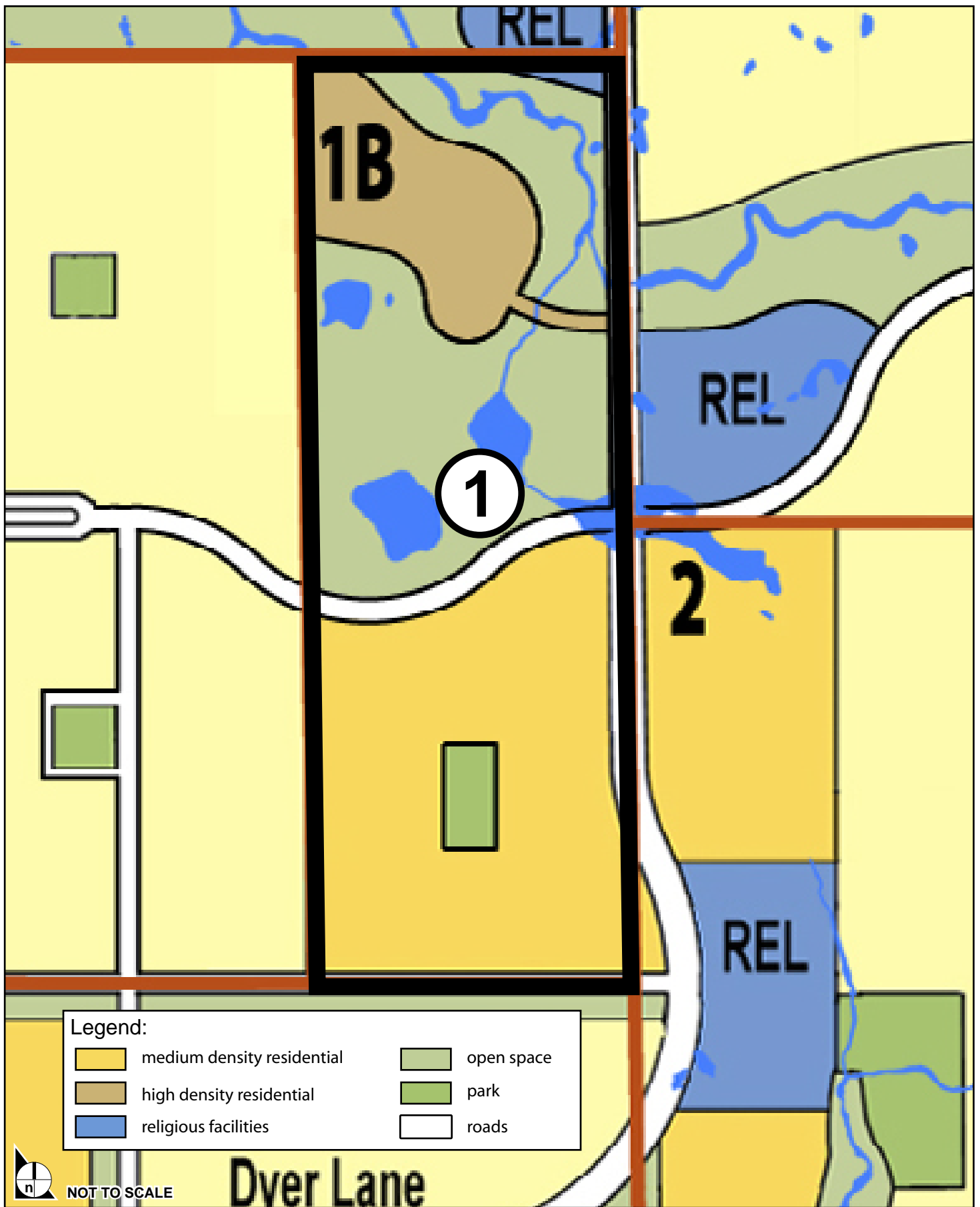
Alternative 2 involves an alternative land use plan that would modify the proposed land uses and provide additional avoidance of wetlands on the 101-acre (41-hectare) Property 3 which is located in the northeastern portion of the project site.

The land use plan for Property 3 under the Proposed Action (both scenarios) would avoid the complex of wetlands in the northeastern portion of the property but would make alterations to a swale complex located along the property's southern boundary. This swale complex involves approximately 2 acres (0.8 hectare) of wetlands. Alternative 2 would shift the proposed A Street to the north in order to provide a 100-foot (30-meter) buffer between the southerly swales and adjacent development.

Compared to the Proposed Action, Alternative 2 designates over half the parcel for commercial uses and eliminates all residential uses from the property. The proposed land uses for Property 3 under Alternative 2 are shown in **Figure 2.0-11** and **Table 2.0-9**, below.

Table 2.0-9
Alternative 2 – Property 3 Site Land Use Summary (in acres)

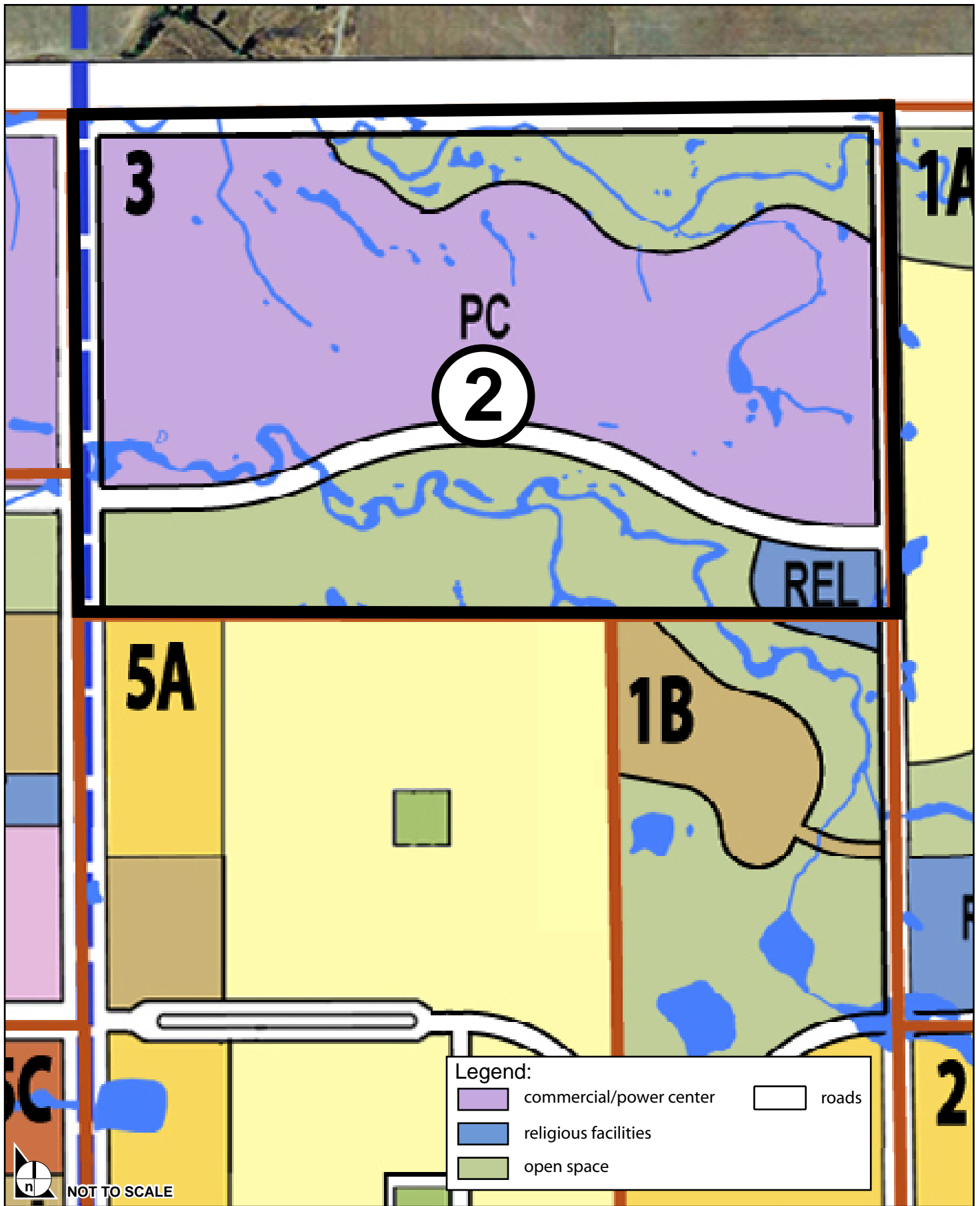
Land Use	Proposed Action - Base Plan	Proposed Action - Blueprint	Alternative 2
Medium Density Residential	27	0	0
High Density Residential	7	17	0
<i>Residential Subtotal</i>	34	17	0
Commercial Mixed Use	0	18	0
Commercial	25	25	56
<i>Commercial Subtotal</i>	25	43	56
Religious Facilities	4	0	2
<i>Public Uses Subtotal</i>	4	0	2
Open Space	26	27	31
Park	4	6	0
Roads	8	8	11
<i>Park, Roads and Open Space Subtotal</i>	38	41	42
Total	101	101	101



SOURCE: MacKay & Soms – April 2012

FIGURE 2.0-10

Alternative 1



SOURCE: MacKay & Soms – April 2012

FIGURE 2.0-11

Alternative 2

2.6.4 Alternative 3

Alternative 3 involves an alternative land use plan that would avoid a large cluster of wetlands (totaling approximately 4 acres [2 hectares] of jurisdictional wetlands) on Property 16, a 94-acre (38-hectare) property located in the southwestern portion of the project site. The alternate land use plan for this property would increase the acres of open space to 63 acres (25 hectares) and would provide a 100-foot (30-meter) buffer between the development area and the wetlands to be avoided. The residential acreage under the alternative would be reduced by about 40 acres (16 hectares) and acreage for religious facilities would be eliminated. Even though the acreage for residential uses would be substantially reduced under Alternative 3, this EIS assumes that the total number of residential units would be the same as the Proposed Action Base Plan scenario. This would be achieved by building the residential units at a higher density in other portions of the project site. The proposed land uses for Property 16 under Alternative 3 are shown in **Figure 2.0-12** and **Table 2.0-10**, below.

Table 2.0-10
Alternative 3 – Property 16 Site Land Use Summary (in acres)

Land Use	Proposed Action - Base Plan	Proposed Action - Blueprint	Alternative 3
Low Density Residential	43	26.5	0
Medium Density Residential	20	32.5	23.6
High Density Residential	0	4.5	0
<i>Residential Subtotal</i>	63	63.5	23.6
<i>Commercial Subtotal</i>	0	0	0
Religious Facilities	5.5	5.5	0
<i>Public Uses Subtotal</i>	5.5	5.5	0
Open Space	16	16	63.4
Park	4	4.5	1.5
Roads	5.5	4.5	5.5
<i>Park, Roads and Open Space Subtotal</i>	25.5	25	70.4
Total	94	94	94

2.6.5 Alternative 4

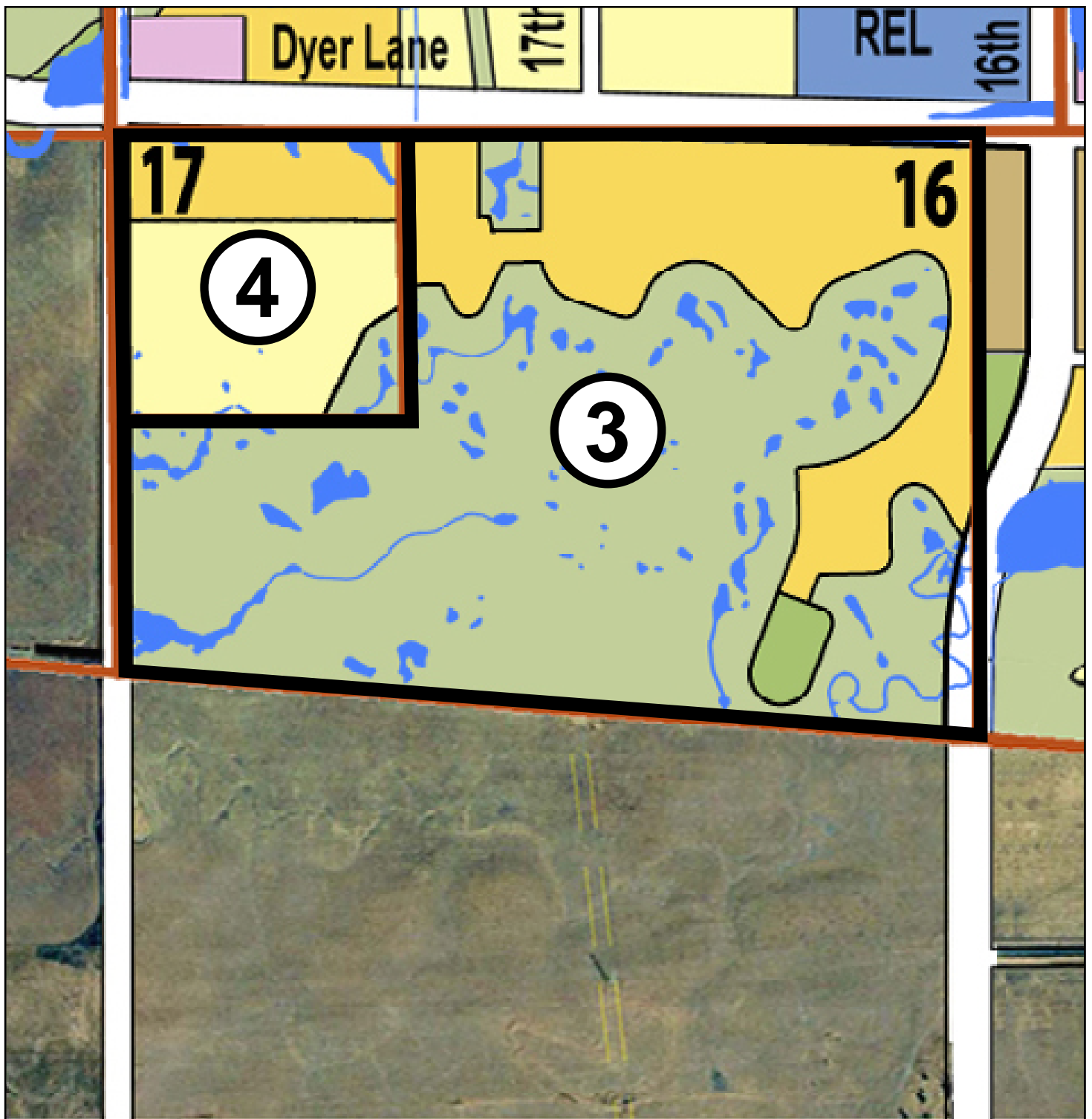
Alternative 4 would modify the land use plan to provide additional wetland avoidance (totaling 0.13 acre [0.05 hectare] of jurisdictional wetlands) on Property 17, a 20-acre (8-hectare) property in the southwestern portion of the project site. The wetlands avoided under Alternative 4 would be a continuation of the avoidance area under Alternative 3, and therefore it is anticipated that Alternative 4 would not be implemented in the event that Alternative 3 is not approved for implementation. The proposed land uses for Property 17 under Alternative 4 are shown in **Figure 2.0-12** and **Table 2.0-11**, below.

Table 2.0-11
Alternative 4 – Property 17 Site Land Use Summary (in acres)






Land Use	Proposed Action-Base Plan	Proposed Action - Blueprint	Alternative 4
Low Density Residential	12		10.7
Medium Density Residential	7.5	11.5	7.5
High Density Residential	0	8	0
<i>Residential Subtotal</i>	19.5	19.5	18.2
Open Space	0	0	1.3
Park	0	0	0
Roads	0	0	0
<i>Park, Roads and Open Space Subtotal</i>	0	0	1.3
Total	19.5	19.5	19.5

2.6.6 Alternative 5

Alternative 5 involves an alternative land use plan that would avoid a large cluster of wetlands totaling approximately 4.5 acres (1.8 hectares) on Property 23, a 93-acre (38-acre) property located in the western portion of the project site. The alternate land use plan for this property would increase the acres of open space from about 35 acres (14 hectares) to 50 acres (20 hectares) in order to avoid additional wetlands and provide adequate buffer between development and avoidance areas. The residential area under the alternative would be reduced to 43 acres (17 hectares), although the number of residential units would remain the same as the Proposed Action. The proposed land uses for Property 23 under Alternative 5 are shown in **Figure 2.0-13** and **Table 2.0-12**, below.



Legend:

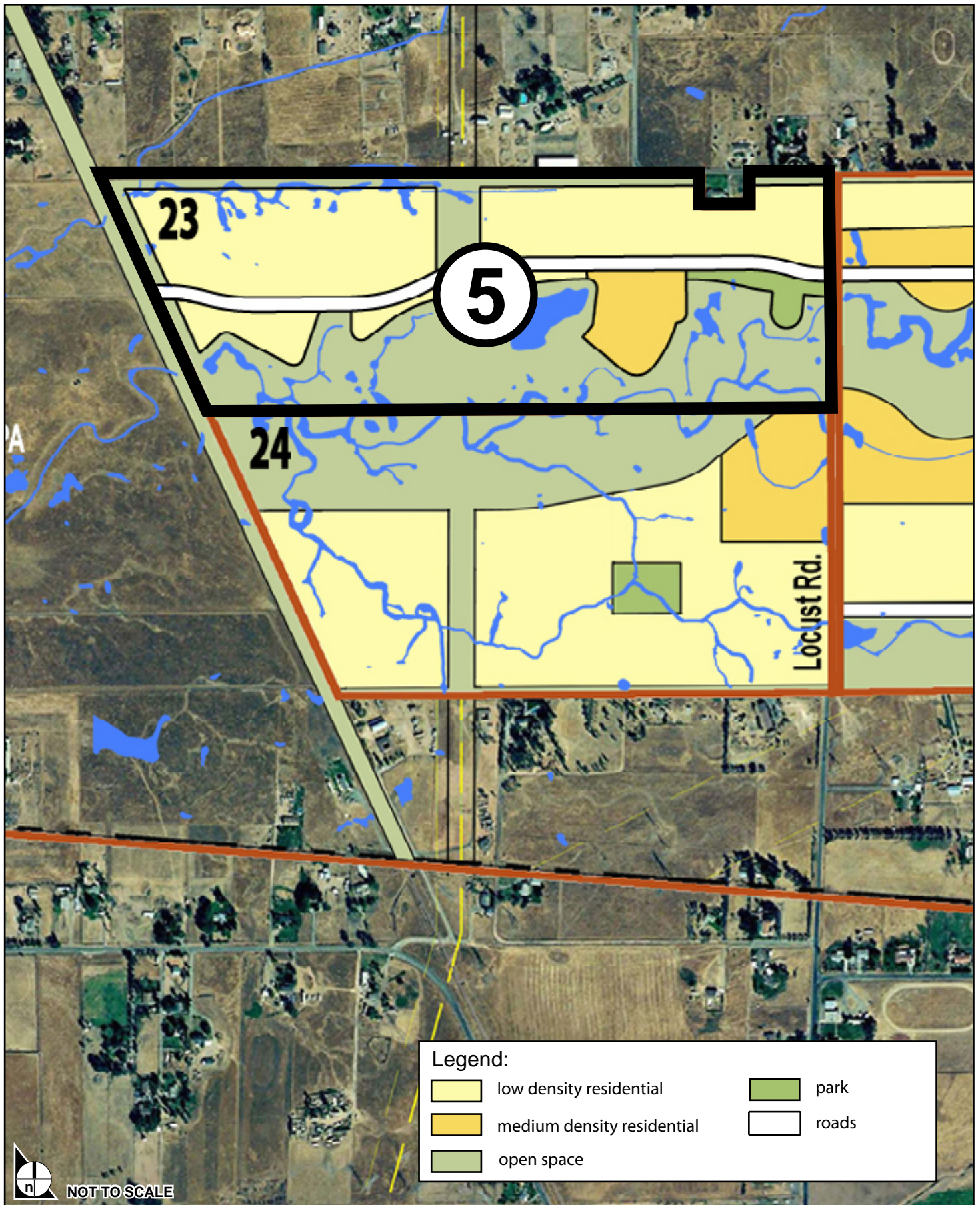
 low density residential	 park
 medium density residential	 roads
 open space	

 NOT TO SCALE

SOURCE: MacKay & Soms – November 2011

FIGURE 2.0-12

Alternatives 3 and 4



SOURCE: MacKay & Soms – April 2012

FIGURE 2.0-13

Alternative 5

Table 2.0-12
Alternative 5 – Property 23 Site Land Use Summary (in acres)

Land Use	Proposed Action- Base Plan	Proposed Action - Blueprint	Alternative 5
Low Density Residential	49.5	23.5	37.6
Medium Density Residential	8.5	31.5	4.9
High Density Residential	0	0	0
<i>Residential Subtotal</i>	<i>58</i>	<i>55</i>	<i>42.5</i>
Public Uses	0	0	0
Schools	0	0	0
Religious Facilities	0	4	0
<i>Public Uses Subtotal</i>	<i>0</i>	<i>4</i>	<i>0</i>
Open Space	22.5	22.5	41.9
Park	5	4.5	1.9
Roads	7	6.5	6.2
<i>Park, Roads and Open Space Subtotal</i>	<i>34.5</i>	<i>33.5</i>	<i>50</i>
Total	92.5	92.5	92.5

2.6.7 Combined Alternatives 1 through 5

Combined Alternatives 1 through 5 would involve a land use plan that would be the same as the Proposed Action for all properties that make up the site except Properties 1B, 3, 16, 17, and 23 where the land use plans presented under Alternatives 1 through 5 would be implemented. As a result filling of an additional 9.2 acres (3.7 hectares) of wetlands on Properties 1B, 3, 16, 17, and 23 would be avoided.

2.7 SUMMARY COMPARISON OF PROPOSED ACTION AND ALTERNATIVES

Table 2.0-13 compares key features of the Proposed Action, the five on-site alternatives (including Alternatives 1 through 5 combined), and the No Action Alternative.

**Table 2.0-13
Proposed Action and Alternatives – Acreages by Land Use**

Alternative	Development Footprint (in acres)	Residential Development (in acres)	Residential Units at Buildout	Other Development (in acres)	Open Space (in acres)	Potential Direct Impacts on Aquatic Resources¹
Proposed Action – Base Plan	4,522	3,361	14,132	Commercial – 309	709	119.3
				Public Uses – 309		
				Parks – 211		
				Roads – 332		
Proposed Action - Blueprint	4,522	3,220	21,634	Commercial – 342	709	119.3
				Public Uses – 366		
				Parks – 273		
				Roads – 321		
No Action Alternative	3,297	2,410	8,441	Commercial – 221	1,933	0
				Public Uses – 211		
				Parks – 124		
				Roads – 332		
Combined Alternatives 1 through 5	4,431	3,267	14,132***	Commercial – 340	799	106.4
				Public Uses – 293		
				Parks – 200		
				Roads – 330		
Alternative 1	4,504	3,357	14,132***	Commercial – 310	726	115.1
				Public Uses – 301		
				Parks – 210		
				Roads – 329		
Alternative 2	4,516	3,328	14,132***	Commercial – 340	714	116.4
				Public Uses – 307		
				Parks – 207		
				Roads – 335		
Alternative 3	4,473	3,322	14,132***	Commercial – 309	757	114.3
				Public Uses – 304		
				Parks – 208		
				Roads – 332		
Alternative 4**	4,520	3,361	14,132***	Commercial – 309	711	119.1
				Public Uses – 309		
				Parks – 211		
				Roads – 332		

2.0 Proposed Action and Alternatives

Alternative	Development Footprint (in acres)	Residential Development (in acres)	Residential Units at Buildout	Other Development (in acres)	Open Space (in acres)	Potential Direct Impacts on Aquatic Resources ¹
Alternative 5	4,502	3,345	14,132***	Commercial – 309	728	117.2
				Public Uses – 309		
				Parks – 208		
				Roads – 331		

* Direct impacts from all development on properties with active DA permit applications and within the Special Planning Area. An estimated 4.12 acres of direct impact expected to result from off-site infrastructure development is included in the reported values.

** Implementation of Alternative 4 would be contingent upon implementation of Alternative 3. Therefore, impact value reported for Alternative 4 is inclusive of impact value reported for Alternative 3, above.

*** The number of units that would be built under Alternatives 1 through 5 would be the same as the Proposed Action. This is because to the extent that the number of units to be built on a property is reduced due to the revised footprint, the same number of units would be built on another property by increasing the density, so that the total number of units for the PVSP as a whole would still remain 14,132 (or 21,634 units if Alternatives 1 through 5 are combined with the Blueprint scenario).