2.0 PROPOSED ACTION AND ALTERNATIVES

2.1 INTRODUCTION

This chapter describes the Proposed Action which would require a Department of the Army (DA) permit under Section 404 of the Clean Water Act for the discharge of dredged or fill material into waters of the United States. If authorized, the DA permit would enable development of a moderate-scale, mixed-use, mixed-density, master-planned community on a 397-acre (161-hectare) site in the northwestern portion of the City of Roseville, Placer County, California. As noted in **Chapter 1.0**, the U.S. Army Corps of Engineers' (USACE's) permit review and decision making under Section 404 of the Clean Water Act is the federal action analyzed in this EIS. As implementation of the Westbrook project is a reasonably foreseeable outcome of federal permit approval, this EIS analyzes the environmental effects of full buildout of the project site under the Westbrook project, and for brevity, the Westbrook project as proposed by the Applicant is referred to as the *Proposed Action* throughout this EIS.

This chapter 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 decision. The chapter presents the alternatives analyzed in this EIS, summarizes the rationale for selecting those alternatives for analysis, and identifies the alternatives that were not carried forward for detailed analysis, along with the reasons for their dismissal.

2.2 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 CFR § 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; 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 Alternative (40 CFR § 1502.14[d]). In this case "Proposed Action" refers to the DA permit action to allow discharge of dredged or fill material for the development of the site under the Westbrook project. Since some level of development on the project site could conceivably occur without triggering the need for a DA permit, that scenario is considered under the No Action Alternative in this EIS.

2.3 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 purpose and need.

2.3.1 On-Site Alternatives

The USACE identified a total of six on-site alternatives. These included five alternate development scenarios: (1) Reduced Footprint/Increased Density, (2) Reduced Footprint/Same Density, (3) Central Preserve, (4) One Acre Fill, and (5) Half Acre Fill. All of the on-site alternatives were developed with the purpose of reducing the Proposed Action's impact on the waters of the U.S. The two Reduced Footprint alternatives were designed to reduce the area to be developed on the site by 26 percent compared to the Proposed Action. The Central Preserve alternative, which was developed at the request of the U.S. Environmental Protection Agency (USEPA), would also reduce the area to be developed by 25 percent but differs from the two Reduced Footprint alternatives in that it consolidates the open space area in the central portion of the site. The One Acre Fill alternative was designed to avoid the filling of all aquatic resources on the site except the filling of about 1 acre of aquatic resources that would be required to construct the on-site road network. Similarly, the Half Acre Fill alternative was designed to avoid the filling of all aquatic resources except 0.5 acre, again associated with the construction of road crossings of areas containing aquatic resources. The sixth alternative, the No Action Alternative, was designed to avoid all filling of aquatic resources and presents a development scenario that would not require a DA permit.

These six alternatives represent a reasonable range of alternatives as they include on-site development scenarios that have progressively reduced impacts to aquatic resources. Although these alternatives have not yet been evaluated to determine whether they are practicable, all six on-site alternatives are considered feasible under NEPA and have been carried forward for detailed evaluation in this EIS.

2.3.2 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 Applicant but which could be reasonably obtained, utilized, expanded or managed to fulfill the overall project purpose, were considered. The discussion below presents a summary of the off-site alternatives development and screening process and the results of that

analysis. For a more thorough discussion of the alternatives screening process, please see **Appendix 2.0, Technical Memorandum: Alternatives Development and Screening.**

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 defined to include the City of Roseville (City) and all lands within a 1-mile-wide zone adjacent to the Roseville City limits/Sphere of Influence (SOI), as discussed in **Chapter 1.0**. Within this geographic area, based on review of the existing development proposals in the City and western Placer County, and previous off-site alternatives development and screening analysis for the Sierra Vista Specific Plan (SVSP) EIS, the USACE identified seven sites in Roseville and in unincorporated Placer County for further screening. **Figure 2.0-1** presents the seven potential alternate sites along with the site of the Proposed Action.

The USACE evaluated these potential off-site alternatives against screening criteria based on the 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(b)(1), 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. Therefore, the biological resources sensitivity screening criterion excluded alternative sites if they included aquatic resources of greater sensitivity and value than those on the project site (i.e., if an alternative was clearly more damaging than the Proposed Action it was eliminated).

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

- **Criterion 1 – Biological Resources Sensitivity** evaluated the nature, extent, and quality of biological resources on the sites, with a particular focus on aquatic resources and special-status

species. Sites with extensive, high-quality aquatic resources were rated as Not Feasible for this criterion unless those resources are already protected by conservation easements or other land use management mechanisms. Sites with substantial but 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 site reconnaissance and a reconnaissance-based evaluation of relative sensitivity (expressed as a rank, with the most sensitive site ranked "1" and the least sensitive site ranked "7").

- **Criterion 2 – Preliminary Assessment of Availability for Development** evaluated the status of other potentially competing development proposals for the site, since a site could be physically suitable to support an off-site alternative but not available in practice due to prior or pending approval of another project. Sites without prior development proposals, and sites with a prior proposal that has been formally withdrawn, were rated as Feasible under this criterion. To ensure that the outcomes of this criterion were not unreasonably exclusive, sites with prior development proposals that are currently on hold but have not been withdrawn were rated as Conditionally Feasible, and only sites with active development proposals were rated as Not Feasible.

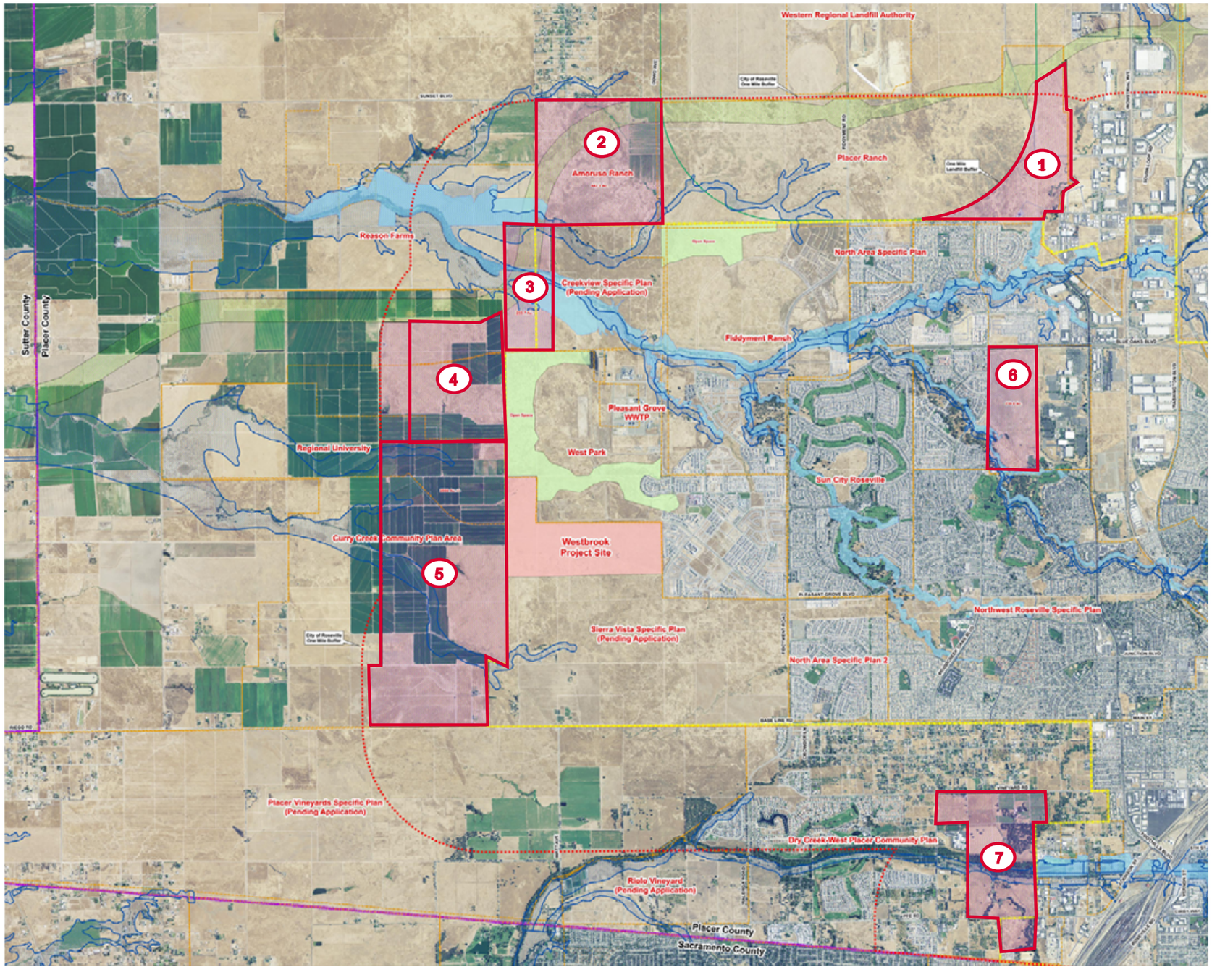
Upon completion of Phase 1 screening, the USACE carried six of the seven sites forward for Phase 2 screening. These sites were then evaluated under a third criterion, which was defined as follows:

- **Criterion 3 – Feasibility of Acquiring Sufficient Acreage** evaluated the feasibility of acquiring title to the property through purchase, land exchange, or another mechanism. Under this criterion, sites were examined for the availability of sufficient contiguous acreage (>220 acres [89 hectares],[1] the minimum acreage determined by the USACE needed to develop a project like Westbrook and whether that acreage was available for acquisition by the Applicant. This was explored by the Applicant through direct landowner inquiries and independently verified by the USACE. Potential sites that could not be acquired by the Applicant were eliminated from further consideration.

At the end of the second screening phase, the USACE found one alternate site to be feasible. This site (Placer Ranch site) is carried forth for detailed evaluation in this EIS.

In summary, in addition to the Proposed Action, this EIS analyzes seven alternatives: the No Action Alternative, five on-site development alternatives, and one off-site development alternative. The following sections describe the Proposed Action (**Subsection 2.4**) and the alternatives carried forward for analysis in this EIS (**Subsection 2.5**). Alternatives eliminated from further consideration are discussed in **Subsection 2.6.**

1 The minimum acreage for an alternative site was determined based on the size of the smallest on-site alternative, which is the Half Acre Fill Alternative. That alternative would develop the proposed moderate scale, mixed-use, mixed-density, master-planned community on 223 acres of the 397-acre project site.



Legend:

- County Boundary
- Roseville City Limits
- Plan Areas
- Open Space
- Westbrook Project
- FEMA 100 Year Flood Zone
- City of Roseville Flood Zone
- City of Roseville 1 Mile Buffer
- One Mile Landfill Buffer
- Possible Alternate Site
- 1 Placer Ranch
- 2 Amoruso Ranch
- 3 Reason Farms Panhandle
- 4 Regional University
- 5 Curry Creek Community Plan Area
- 6 Industrial Infill
- 7 Dry Creek - West Placer Community Plan Area

8,000 4,000 0 8,000

APPROXIMATE SCALE IN FEET

SOURCE: Impact Sciences, Inc. – 2011

FIGURE **2.0-1**

Potential Off-Site Alternatives

1122-001•04/13

2.4 PROPOSED ACTION

The Proposed Action would implement the Westbrook project, which is the development of the approximately 397-acre (161-hectare) site with a mix of land uses, predominantly residential use with some retail and office uses, public and quasi-public uses, parks, and open space, and on-site infrastructure improvements to support these uses. With the exception of some improvements to an existing bioswale along the project site's northern boundary, no off-site improvements are needed to develop the project site.

The project site is characterized by gently rolling topography and large, open annual grassland areas. The entire project site has been disked, plowed, and dry farmed. The surface runoff within the project site flows to the north and west with the majority of the site draining to the north into an existing storm drain system that is located within Pleasant Grove Boulevard. The surface runoff on the eastern three-quarters of the site flows through a series of swales to the north to the existing storm drain system. The surface runoff on the western one-quarter of the site flows through a series of swales and an intermittent stream to the west.

Features of the human environment present on the site include a 50-foot- (15-meter)-wide City of Roseville electrical easement that crosses the site in a north-south direction (along the proposed alignment of Westbrook Boulevard). There are no existing structures or current agricultural activities on the site.

The project site is flanked to the north and east by the Westpark portion of the West Roseville Specific Plan (WRSP) area, which is under development, and to the south by the proposed Sierra Vista Specific Plan development, which has been approved by the City of Roseville but is currently under review by the USACE. Lands to the west of the site are located within the Curry Creek Community Plan area, an area for which no development plans have been put forth and the Regional University Specific Plan, an area for which Placer County approved a specific plan in 2009.

2.4.1 Westbrook Land Use Plan

The Proposed Action would develop the project site with a moderate-scale, mixed-use, master-planned community. The community would include about 245 acres (99 hectares) of residential uses, 43 acres (17 hectares) of commercial and office uses, 11 acres (4.5 hectares) of public/quasi-public uses (such as schools), 16 acres (6 hectares) of parks, 36 acres (15 hectares) of open space, and 46 acres (19 hectares) of major roadways, and landscape corridors. **Figure 2.0-2** shows the proposed Westbrook land use plan. The following sections provide additional detail on aspects of the development proposed under the Westbrook project.

Residential Development

At buildout, the Proposed Action would provide a total of 2,029 single- and multi-family residential units. The residential component of the Westbrook project would include low-, medium-, and high-density neighborhoods accommodating a wide range of housing types, as summarized in **Table 2.0-1**. The residential densities are consistent with compact development patterns recommended in the

Sacramento Area Council of Governments (SACOG) Preferred Blueprint Scenario. Based on the City General Plan's assumption of 2.54 persons per household on average, the Proposed Action is expected to generate a residential population of approximately 5,154 persons at buildout.

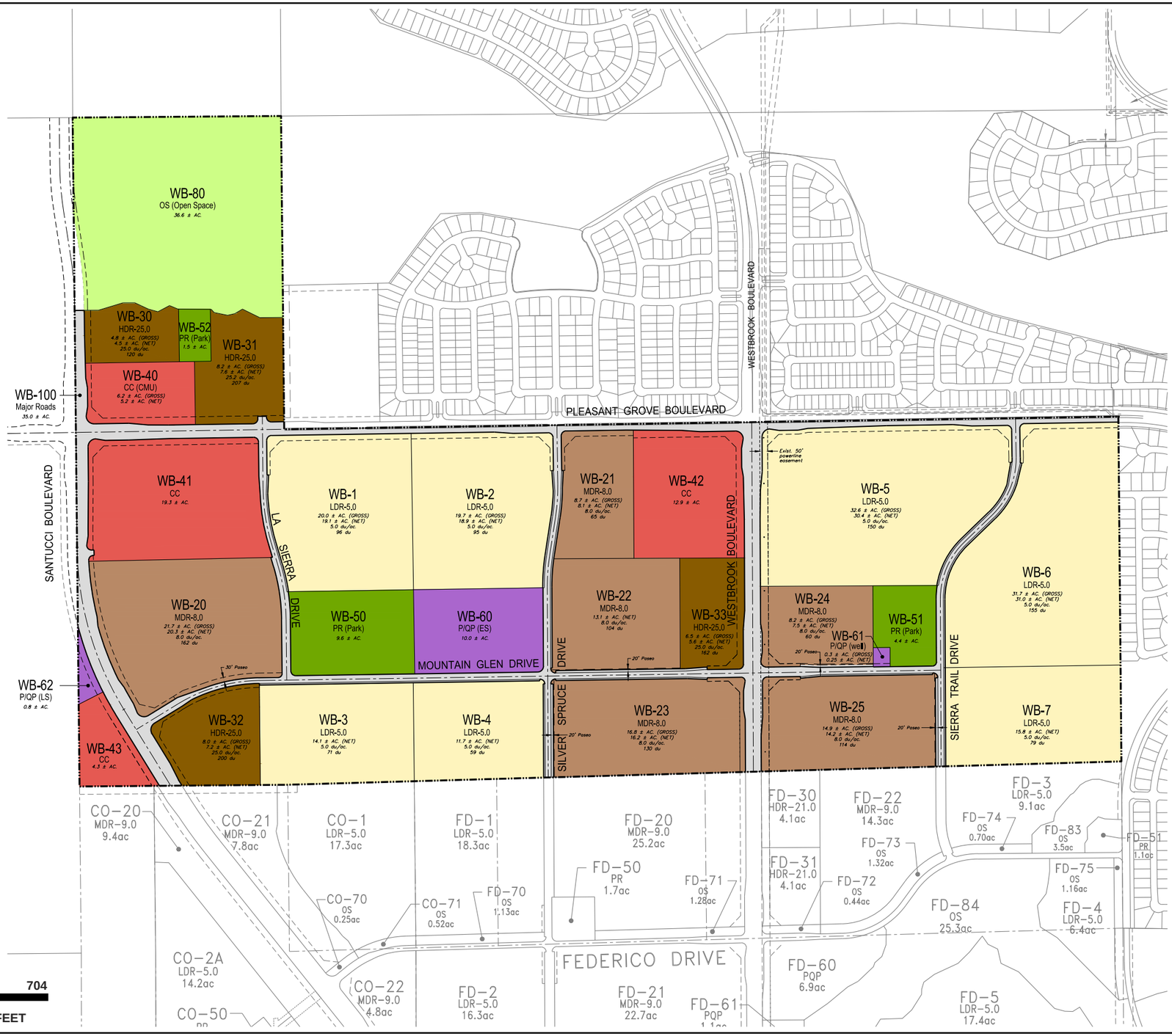
Table 2.0-1
Westbrook Residential Uses

Land Use	Acres	No. of Dwelling Units	Overview
Low Density Residential	141	705	• Distributed in various locations on the project site • Average density of 5 dwelling units per acre (du/ac) • Primarily detached single-family housing on conventional lots (4,500 to 6,000 square feet)
Medium Density Residential	79.4	635	• Primarily clustered around commercial centers and along Mountain Glen Drive and Silver Spruce Drive • Average density of 8 du/ac • Would accommodate a variety of housing types, including detached single-family homes on small lots, cluster housing, zero lot line/zipper lot housing, duet housing, and townhomes
High Density Residential	24.9	689	• Focused around commercial centers • Average density of 25 du/ac • Primarily attached units in multi-family buildings (townhomes, condominiums, and apartments) • Would provide for a mixture of owner-occupied and rental housing.
Total	***245.3***	***2,029***	

du/ac = dwelling units per acre.

Commercial Development

The Westbrook project includes 43 acres (17 hectares) of land that would be designated for commercial and office uses. Based on an assumed floor area ratio (FAR) of 25 percent for retail uses and a FAR of 40 percent for commercial mixed use (retail and office), at buildout, the Proposed Action would provide approximately 513,000 square feet (sf) (47,659 square meters) of leasable commercial and office space. Assuming one job per 450 sf (42 square meters) of commercial/office space, the Proposed Action would support about 1,140 permanent jobs over the long term (City of Roseville 2010). Most retail and office uses would be concentrated along Pleasant Grove Boulevard and Santucci Boulevard to take advantage of the exposure to high-volume traffic along these principal travel corridors.



SOURCE: MacKay & Somps, August 2011

PRELIMINARY STREET GEOMETRY, ACREAGE, and DWELLING UNIT COUNTS

WESTBROOK

Land Use	Acres (gr.)	Acres (net)	D.U.
LDR	145.6	141.0	705 (1)
MDR	83.4	79.4	635 (2)
HDR	27.5	24.9	689 (3)
CC	36.5		
CC(CMU)	6.2		
P/QP (School)	10.0		
P/QP (well site)	0.3		
P/QP (lift station)	0.8		
PARK	15.5		
OPEN SPACE	36.6		
MAJOR ROADS	35.0		
SITE TOTALS	397.4		2029

NOTES:
(1) LDR Dwelling Units based on net acres.
(2) MDR Dwelling Units based on net acres.
(3) HDR Dwelling Units based on gross acres.

SIERRA VISTA LOT NUMBER KEY

LOT NUMBERS	LAND USE
1 - 19	Low Density Residential (LDR)
20 - 29	Medium Density Residential (MDR)
30 - 39	High Density Residential (HDR)
40 - 49	CC/CMU/BP
50 - 59	Park (PR)
60 - 69	Public / Quasi-Public (PQP)
70 - 79	Open Space (OS) - Paseos
80 - 89	Open Space (OS)
90 - 99	Urban Reserve (UR)
100	Major Roads

FIGURE **2.0-2**

Proposed Action

Public and Quasi Public Uses, including Schools

One 10-acre (4-hectare) site is proposed for construction of a school to serve the new residential neighborhoods. As shown on **Figure 2.0-2**, this elementary school would be on Mountain Glen Drive at Silver Spruce Drive. One other 0.3-acre (0.1-hectare) public/quasi-public site would accommodate a groundwater well and a 0.8-acre (0.3-hectare) site would accommodate a lift station.

Parks

Three sites totaling about 15.5 acres (6.3 hectares) are proposed for improved parks, including a 4.4-acre (1.8-hectare) park located along Sierra Trail Drive at Mountain Glen Drive, a 9.6-acre (3.9-hectare) park along Mountain Glen Drive at La Sierra Drive, and a 1.5-acre (0.6-hectare) park just south of the open space area.

Open Space

Primary and Secondary Preserved Open Space

An approximately 35.8-acre (14.5-hectare) area in the northwest corner of the site is designated as open space on the Westbrook land use plan (**Figure 2.0-3**). This area is contiguous to an existing 345-acre (140-hectare) open space that has been permanently preserved within the West Roseville Specific Plan area. This area would be preserved permanently as open space to protect its wetland resources. The Proposed Action also provides for wetland creation and related improvements within the open space area, as described below.

The open space on the project site would comprise approximately 34.4 acres (13.9 hectares) of primary open space and about 1.4 acres (0.6 hectare) of secondary open space. Primary open space areas are those portions of the 35.8-acre (14.5-hectare) area where minimal grading or land disturbance would occur. The primary open space also includes the areas adjacent to the two intermittent drainages within the open space area. Some grading would occur in these areas to create new compensatory wetlands and a basin to provide a floodplain expansion area. The primary open space areas would be put under conservation easements prior to commencement of construction on the Proposed Action. With respect to the secondary open space, this includes open space that is immediately adjacent to the area to be developed to the south and therefore would be subject to development-related grading and filling. Once these grading and filling activities are completed, the secondary open space area would be placed under conservation easements.

Preserved open space would be managed for conservation consistent with the City of Roseville's Open Space Preserve Overarching Management Plan (O&M Plan) that has been approved by the resource agencies. Open space preservation under the Proposed Action is intended to complement regional conservation strategies such as the proposed Placer County Conservation Plan, and coordination with other agencies and conservation efforts would be a guiding principle of the Westbrook's resource management approach. The resource management approach would also be designed for consistency with the Memorandum of Understanding (MOU) between the City and the U.S. Fish and Wildlife Service (USFWS) with respect to the operation and expansion of the Pleasant Grove Wastewater Treatment Plant (PGWWTP), and, if the USACE issues a DA permit, with the terms and conditions of the permit.

Depending on permit terms and conditions, the Applicant expects to conduct the following types of activities in open space areas consistent with the City of Roseville's O&M Plan: maintenance of a 30-foot (9-meter) fire control strip (on the southern portion of the open space only within the secondary open space), maintenance of the trail, and minimal maintenance of the bio-swale and floodplain detention area.

Floodplain Expansion Area

The Applicant is proposing to make improvements to the proposed open space preserve to increase its capacity for detaining 100-year flood flows. In order to satisfy post-project on-site detention requirements, a total of 98 acre-feet (12 hectare-meters) of water must be detained on site during projected 100-year flood conditions. Under existing (baseline) conditions, approximately 80 acre-feet (10 hectare-meters) of water is detained on-site during a projected 100-year frequency flood event. This detention is a result of a restricted outlet (culvert) at the western property boundary and the existing topography. In order to increase detention, the Applicant is proposing to excavate an existing area of upland grassland to provide the additional 18 acre-feet (2 hectare-meters) of storage.

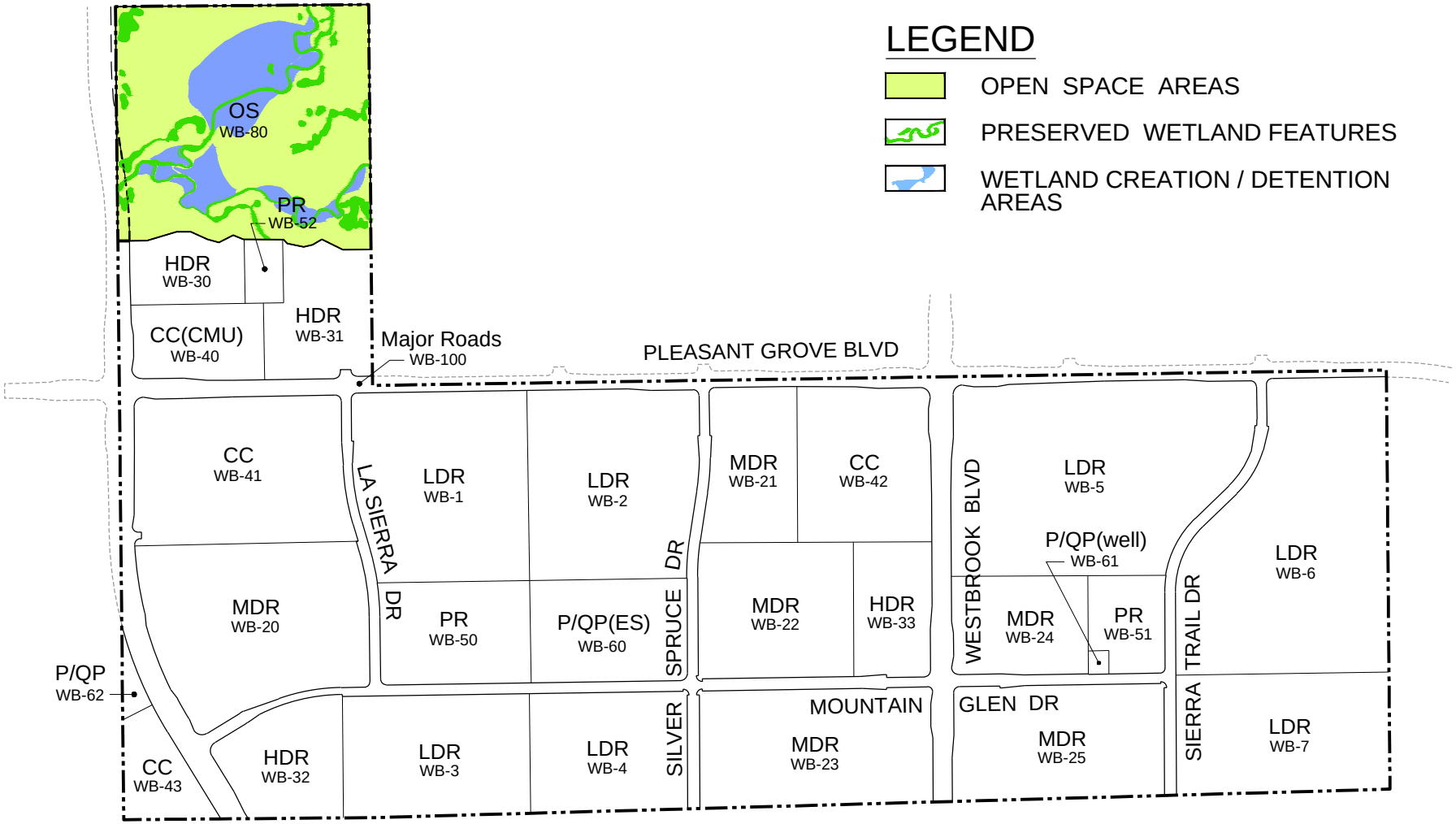
A 3.72-acre (1.28-hectare) area located along the northern side of the existing intermittent stream channel would be excavated 0 to 6 feet (0 to 2 meters), depending on existing topography. This area was selected because it does not contain any existing aquatic resources. The area would be excavated no lower than the existing top of bank of the intermittent channel and would be sloped so that it has positive drainage (i.e., it would not be a concave surface that could act to pond water). The improvements would be conducted concurrently with the wetland mitigation construction. Approximately 4 inches (10 centimeters) of topsoil within the floodplain expansion area would first be salvaged and temporarily stockpiled. The floodplain expansion area would then be excavated to its approximate design depth. Following excavation, the salvaged topsoil would be re-applied and graded to foster restoration of the grasslands. Following completion of the grassland restoration, the floodplain expansion area would be managed by the City along with the other portions of the preserve consistent with the approved City of Roseville O&M Plan. The floodplain expansion area will be designed so that the City of Roseville will not need to conduct ongoing maintenance once the area is built and restored.

Future Extension of Santucci Boulevard

An approximately 1.2-acre (0.5-hectare) area north of Pleasant Grove Boulevard along the western edge of the project site would be set aside as right-of-way for the future extension of Santucci Boulevard. It is assumed that the roadway extension would be built as part of the Regional University Specific Plan project (not a part of this study) and would not be placed under a conservation easement.

2.4.2 Circulation System

The Proposed Action provides for a circulation system that includes a hierarchy of roadways, a pedestrian and bikeway network, and public transit links to existing City and regional transit systems. New public roads would be constructed within the project site to current City of Roseville standards. The on-site arterials (Pleasant Grove Boulevard, Westbrook Boulevard, and Santucci Boulevard) would be aligned east-west or north-south to connect to existing roadways to the north and east of the project site.



NOT TO SCALE

SOURCE: Impact Sciences, Inc. – May 2012

FIGURE **2.0-3**

Proposed Action Open Space Preserve

Arterial roadways would range from four to eight lanes with left turn pockets where appropriate, and would provide landscape medians and corridors with Class IA bikeways or on-street Class II bike lanes. Primary residential streets would include Sierra Trail Drive, Silver Spruce Drive, La Sierra Drive, and Mountain Glen Drive. The primary residential streets would offer two travel lanes in a right-of-way (ROW) up to 63-foot-wide (19-meter-wide) and a 5-foot-wide (2-meter-wide) sidewalks. A system of dedicated pedestrian paths and bikeways would provide off-street connections throughout the community and with the City's existing pedestrian and bikeway facilities to the north and east of the project area. The Proposed Action would also provide approximately 2.1 miles (3.4 kilometers) landscaped corridors intended to facilitate pedestrian and bicycle movement throughout the plan area, and 0.14 mile (0.23 kilometer) of open space trail.

In addition, one new Transit Transfer Station is planned in association with commercial uses at the intersection of Santucci Boulevard and Pleasant Grove Boulevard, and bus turnouts and shelters would be provided along Santucci and Westbrook Boulevards.

2.4.3 Utilities and Public Services

The utility infrastructure, which includes potable water and wastewater service, storm water management and flood protection, would be designed to serve the buildout of the project site and the improvements would be constructed in phases. The City of Roseville would provide water, wastewater services, electricity, and storm water management. Private providers would serve the Proposed Action with natural gas and telecommunications services. **Table 2.0-2** summarizes responsibility for utilities and services to the Proposed Action.

Table 2.0-2
Proposed Action Service and Utilities Providers

Service	Demand	Provider
Potable water	1,095 acre-feet/year (without conservation) 1,017 acre-feet/year (with conservation)	City of Roseville
Recycled water	113.3 acre-feet/year	City of Roseville
Wastewater treatment	0.392 million gallons per day	City of Roseville
Storm water management	18 acre-feet of detention capacity	City of Roseville
Solid waste services	11,306 tons per year	City of Roseville
Electricity	N/A	City of Roseville
Police services	N/A	Roseville Police Department
Fire protection services	N/A	Roseville Fire Department
Schools	N/A	Roseville City School District (K–8), Center Joint Unified School District (K–12) Roseville Joint Union High School District (9–12)
Natural gas	N/A	Pacific Gas and Electric Company
Communications	N/A	SureWest Communications, AT&T, Comcast, WAVE
Transit	N/A	Roseville Transit, Placer County Transit

Water Infrastructure

Improvements to supply water to the Proposed Action include a potable water transmission/distribution system (a looped distribution system that parallels collector and arterial roadways) and an on-site groundwater well. The on-site water system will connect to an existing water main located in Pleasant Grove Boulevard which in turn receives water from the City's Barton Road water treatment plant. A recycled water distribution system would also be located in street ROWs. The on-site system would connect to a recycled water main located in Pleasant Grove Boulevard. Recycled water would be obtained from the PGWWTP and used for irrigation in parks and landscaping along roadways and in commercial centers.

Wastewater Infrastructure

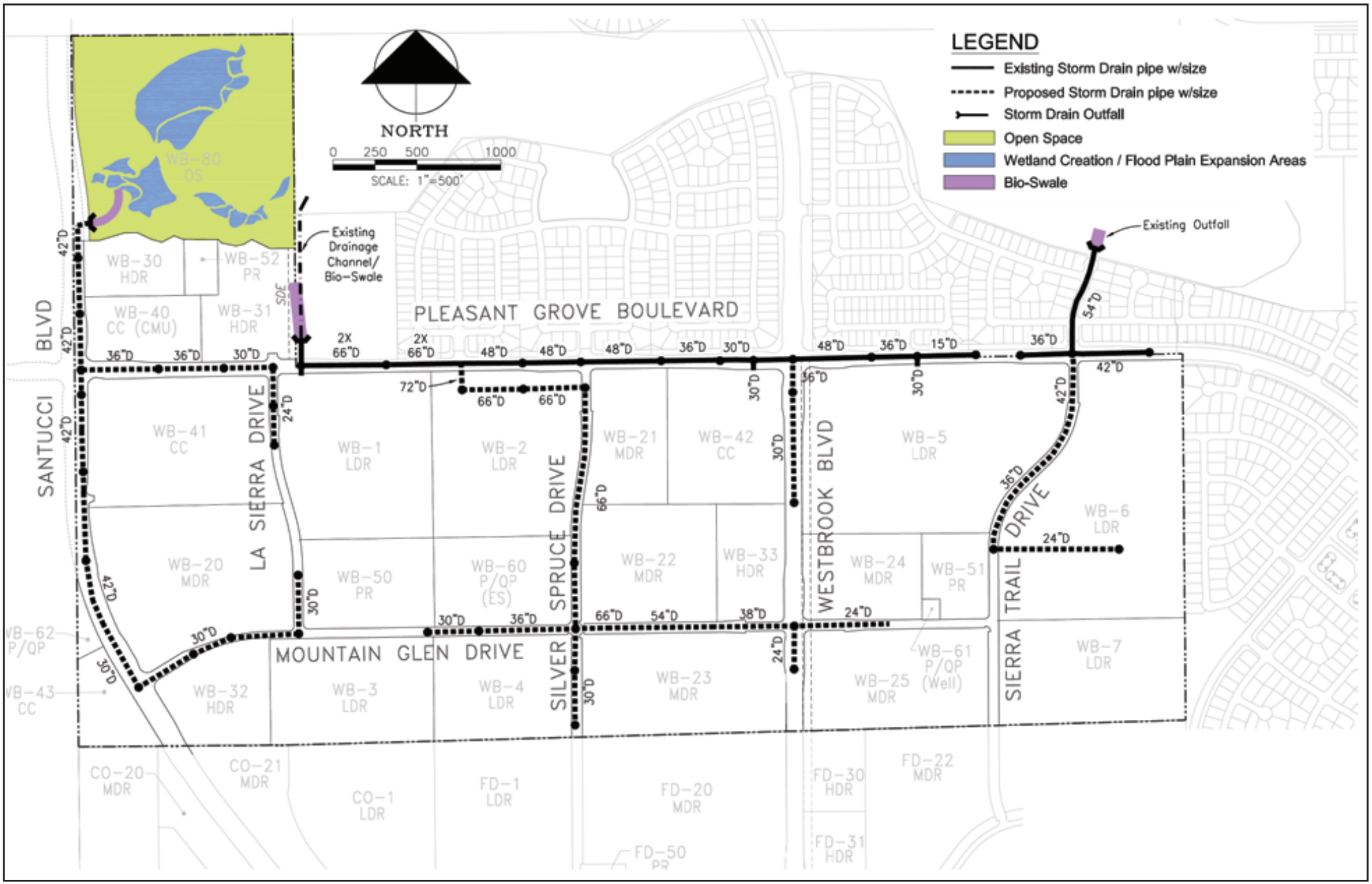
Wastewater collection and transmission pipelines would be installed on-site within street ROWs. The on-site collection pipelines would connect to an existing wastewater main located in Pleasant Grove Boulevard, which would convey the wastewater to the PGWWTP for treatment and disposal.

Storm Water Drainage

Storm water drainage facilities, including conventional subsurface storm drains and culverts would be constructed. Low impact development (LID) features, grassy swales, vegetated channels, mechanical filtration systems in commercial areas, and other water quality best management practices (BMPs) are also included in the Proposed Action.

Storm water from the eastern one-quarter of the site would drain into a storm drain located in Sierra Trail Drive which would drain to the north into an existing 54-inch (137-centimeter) storm drain located in the Westpark residential area. That storm drain would convey the runoff into the Westpark open space area to the north. Runoff from the central portion of the site would be conveyed by subsurface storm drains into an existing storm drain in Pleasant Grove Boulevard along the northern boundary of the project site. As shown in **Figure 2.0-4**, that storm drain currently discharges into an existing unlined bioswale that flows north between the Westbrook site and the adjacent Westpark residential development. The southern portion of the bioswale would be widened (**Figure 2.0-5**) and a low berm would be installed within the bioswale to detain and slowly release the flows, which would then be conveyed to the north and discharged into an intermittent stream that would carry the runoff into the Westbrook open space area. Runoff from the western one-quarter of the site would be discharged into a storm drain located in Santucci Boulevard and conveyed north to discharge into a bioswale located within the open space area.

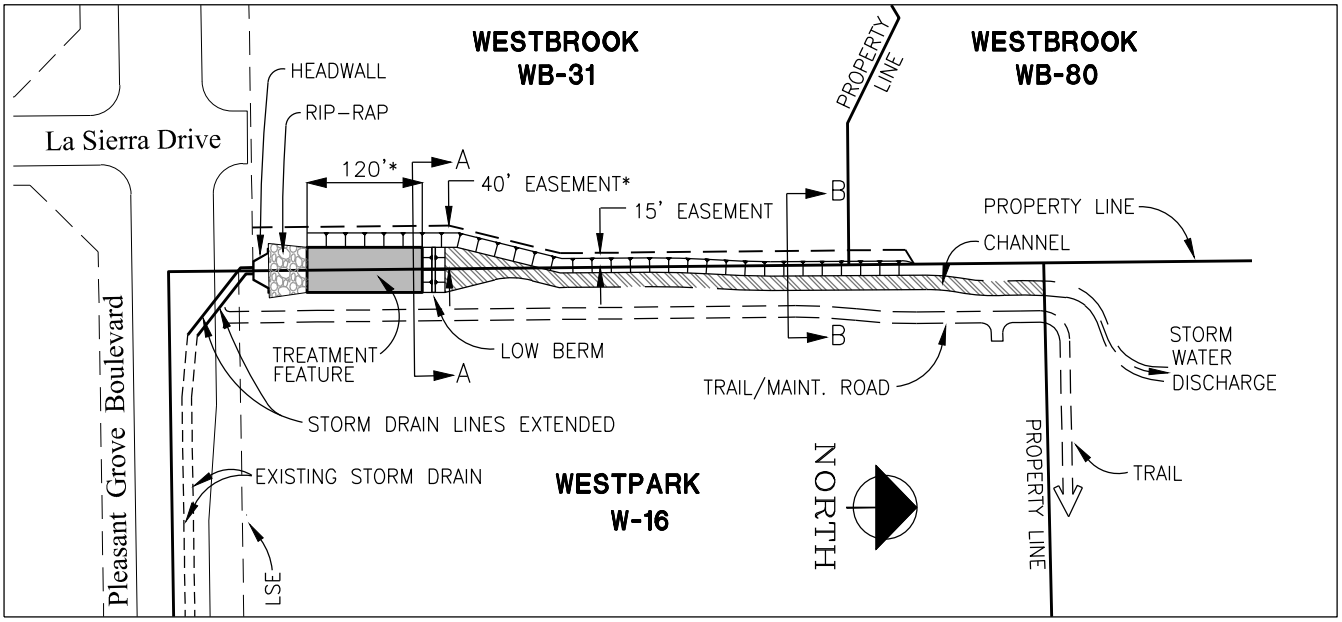
To comply with the requirements of the City of Roseville with respect to storm water detention and flood control, based on the proposed development plan, approximately 18 acre-feet (2 hectare-meters) of storm water detention capacity would be needed. This would be provided in the northwestern open space area in the form of created wetlands and a floodplain expansion area. These wetlands and floodplain expansion area would be located adjacent to the two intermittent streams that traverse the open space area and would be created by excavating shallow depressions. The Applicant proposes to use the created wetlands to partially mitigate the Proposed Action's impacts on waters of the U.S.



SOURCE: MacKay & Somps – July 2012

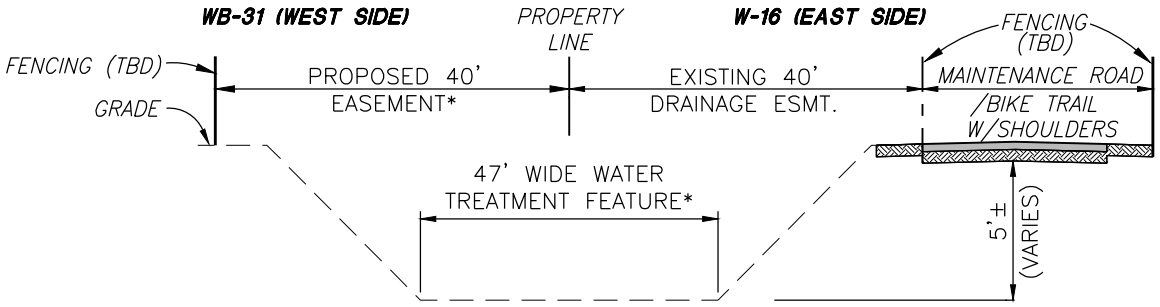
FIGURE **2.0-4**

Proposed Drainage Improvements



PLAN VIEW: WB-31 WATER QUALITY TREATMENT CHANNEL

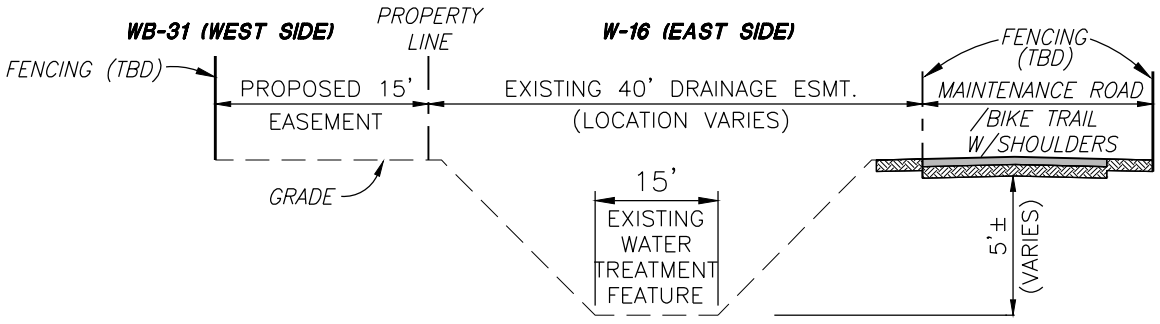
* ACTUAL WIDTH TO BE DETERMINED WITH FINAL DESIGN



SECTION A-A

NTS

* ACTUAL WIDTH TO BE DETERMINED WITH FINAL DESIGN



SECTION B-B

NTS

SOURCE: McKay & Somps, July 2012

FIGURE **2.0-5**

Storm Water Channel Plan

Other Infrastructure

Other improvements include:

- Electrical infrastructure improvements include 12 kV on-site distribution lines that would be placed underground within street ROWs.
- On-site natural gas infrastructure that would connect to the existing or future PG&E natural gas mains within Pleasant Grove Boulevard.
- One elementary school on-site to serve the project's demand for school services.

All of the utility connections that would serve the project site are located within Pleasant Grove Boulevard and either have adequate capacity or additional capacity has already been approved as part of other projects and, therefore, no off-site improvements would be necessary as part of the Proposed Action. The one off-site improvement that is proposed as part of the Proposed Action involves widening of the existing bioswale described above.

2.4.4 Project Implementation

The USACE anticipates initial development occurring at or near existing infrastructure located immediately to the northeast in the developing Westpark area and then proceeding west and south, due to logistical and cost considerations inherent in extending infrastructure and services. Infrastructure and utilities improvements would be constructed as part of each development phase consistent with the City of Roseville standards.

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 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. 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 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.

Construction activities in the open space area proposed for wetland creation and floodplain storage would focus on grading to create the appropriate elevations for wetland inundation and floodplain storage, followed by reestablishment of grassland vegetation.

Development of the master planned community envisioned under the Westbrook project would be a long-term undertaking. If authorized, construction would begin in 2013 and, depending on market conditions, would be completed by about 2035.

2.4.5 Measures Adopted by the City of Roseville

Mitigation measures and conditions of approval were originally identified in the SVSP Environmental Impact Report (EIR) as environmentally proactive measures that would be incorporated into development of the SVSP, including the Urban Reserve (which includes the site of the Westbrook project). These measures were imposed by the City on the Westbrook project and will be monitored as part of the Mitigation Monitoring and Reporting Program adopted by the City of Roseville. In some instances, measures originally identified for the Urban Reserve were not adopted verbatim, but were adopted with changes or were not adopted but were replaced by measures originally written for the overall SVSP area. All of these measures previously imposed on the proposed development by the City, as they apply to the impacts of the federal action, are incorporated into and a part of the Proposed Action. The USACE is not imposing these measures as conditions of a DA permit, as it is certain that they will be implemented as they are already binding on the Applicant due to the actions taken by the City of Roseville. However, for clarity, the impacts are presented as they would result without the benefit of these measures and the mitigation measures imposed by the City are reiterated in this EIS. Although NEPA requires that the EIS identify mitigation measures necessary to reduce impacts, for most of the impact categories addressed in this EIS, the USACE lacks regulatory authority to require the implementation of the mitigation measures to address the topics already subject to City-imposed mitigation.

In addition to City-imposed mitigation measures and conditions of approval, there are other City requirements which are part of the Westbrook project, as well as other state laws that the Proposed Action (or an alternative) would comply with. These include, but are not limited to, the California Building Code requirements, City's building permit requirements, Roseville City Design Guidelines, City of Roseville Water Conservation and Drought Mitigation Ordinance, State Bill 50 related to payment of school impact fees, and National Pollutant Discharge Elimination System (NPDES) requirements related to construction-phase and operational urban runoff. All of these requirements, which are required by law, are considered a part of the Proposed Action (or an alternative) in the assessment of effects in this EIS.

2.4.6 Required Permits and Approvals

Permits and approvals that are or may be 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 permit from the USACE (see **Section 3.4, Biological Resources,** and **Section 3.10, Hydrology and Water Quality**).
- Endangered Species Act, Section 7 consultation and authorization from USFWS (see **Section 3.4, Biological 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**).
- Clean Water Act, Section 402 coverage under NPDES Construction General Permit from CVRWQCB (see **Section 3.10, Hydrology and Water Quality**).
- 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**).
- 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**).
- California Fish and Game Code Section 1602 Streambed Alteration Agreement from the CDFW (see **Section 3.4, Biological Resources**, and **Section 3.10, Hydrology and Water Quality**).
- California Education Code Section 17210 (see **Section 3.9, Hazards and Hazardous Materials**).

Local Approvals

- Miscellaneous approvals by the City of Roseville (see **Section 3.11, Land Use and Planning**).
- Actions by the City of Roseville to modify the approved Westbrook Specific Plan Amendment if the USACE adopts an alternative other than the Proposed Action.

2.5 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 alternatives and one off-site alternative, 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. These alternatives are briefly described below.

2.5.1 No Action Alternative

Under the No Action Alternative, the project site would be developed in a manner that completely avoids activities in jurisdictional waters of the U.S., including wetlands, thereby avoiding the need for the USACE approvals under Section 404 of the Clean Water Act. The filling of all of the project site jurisdictional waters (12.55 acres) would be avoided. State and/or local approvals may still be required. The No Action Alternative may require authorization from the USFWS under the federal Endangered Species Act because of the potential for incidental take of federally listed species.

The No Action Alternative would involve development of portions of the approximately 397-acre (161-hectare) site, resulting in a reduced extent of residential and commercial uses. Avoidance of Section 404 triggers would reduce the total development footprint to 275 acres, comprising 177 acres of residential uses (1,505 residential units at buildout), 30 acres of commercial and office uses, a 10-acre school site, 2 acres of other public uses, 14 acres of parks, and 44 acres of roads. About 122 acres would be preserved as open space. With the exception of Mountain Glen Drive, which would be curved to minimize open space crossings, roadway layout under this alternative would be substantially similar to

the roadway layout under the Proposed Action. **Figure 2.0-6** presents the proposed land use plan for the No Action Alternative.

As a result of the reduction in community size, the utility demand of this alternative would be lower. **Table 2.0-3** presents the estimated utility demand for this and other alternatives discussed below. As with the Proposed Action, additional storm water detention capacity would be required (about 14 acre-feet under the No Action alternative compared to 18 acre-feet for the Proposed Action) which would require the construction of a floodplain expansion area near the project site creeks. As with the Proposed Action, no off-site improvements other than the widening of the existing bioswale would be required.

Table 2.0-3
Utility Demand –Proposed Action and Alternatives

Alternative	Water Demand (acre-feet/ year)	Recycled Water (acre-feet/year)	Wastewater (million gallons per day)	Storm Water Detention (acre-feet)
No Action	799	99.4	0.281	13.8
Reduced Footprint/Increased Density	813	124.6	0.324	13.4
Reduced Footprint/Same Density	784	106.3	0.268	13.4
Central Preserve	798	105.0	0.269	13.5
One Acre Fill	677	106.7	0.237	11.8
Half Acre Fill	706	106.5	0.221	11.1
Off-Site Alternative	1,001	136.2	0.327	15.8
Proposed Action	1,095	113.3	0.392	18.0

2.5.2 Reduced Footprint/Increased Density Alternative

This alternative would also develop the 397-acre (161-hectare) project site but would reduce the footprint of development within the site by increasing the acreage designated as open space, with the additional open space focused in areas that contain the greatest concentrations of sensitive habitat (vernal pools and/or drainages). The additional open space would be concentrated in the central portion of the site, east of La Sierra Drive and west of Westbrook Boulevard, and the eastern portion of the site, north of Mountain Glen Drive and west of Sierra Trail Drive. Based on its design, this alternative would fill about 3.1 acres (1.3 hectares) and preserve 9.47 acres (3.83 hectares) of aquatic resources on the project site.

Under this alternative, total acreage to be developed would be reduced by 26 percent to 267 acres (108 hectares), compared to 361 acres (146 hectares) under the Proposed Action, and open space would increase to 130 acres (53 hectares), compared to 36 acres (15 hectares) under the Proposed Action. The residential development footprint would decrease to 153 acres (62 hectares), versus 245 acres (99 hectares) under the Proposed Action. However, residential densities would increase to accommodate a similar number of residential units (1,890 residential units under this alternative, compared to 2,029 units under the Proposed Action).

LAND USE SUMMARY TABLE

LAND USE		ACRES	DENSITY (du/ac.)	DU
Residential				
LDR	Low Density Residential	92.6	5.0	460
MDR	Medium Density Residential	61.7	8.0	490
HDR	High Density Residential	22.3	25.0	555
sub-total		176.6		
Commercial				
CC	Community Commercial	29.8		
sub-total		29.8		
Public Quasi Public - PQP				
	Elementary School	10.0		
	Well Site	0.8		
	Lift Station Site	0.8		
sub-total		11.6		
PR	Park (4)	13.5		
OS	Open Space	121.6		
	Landscape Corridor/Paseo	8.5		
	Major Roads	35.8		
sub-total		179.4		
Total Project Area		397.4±		1505 du

Ⓐ Denotes Affordable Housing Site

Denotes Span or Causeway

NORTH

0 300 600 600

SOURCE: MacKay & Somps – November 2011

FIGURE **2.0-6**

No Action Alternative

1122-001•08/12

Acreage designated for commercial uses would be reduced slightly under this alternative and school acreage would remain the same. The location of roadways and commercial land uses would be largely similar to the Proposed Action, with Mountain Glen Drive and Sierra Trail Drive somewhat more curved to avoid open space areas. **Figure 2.0-7** presents the proposed land use plan for this alternative. **Table 2.0-3** presents the estimated utility demand for this alternative. As with the Proposed Action, additional storm water detention capacity would be required (about 13 acre-feet [1.6 hectare-meters] under this alternative compared to 18 acre-feet [2.2 hectare-meters] for the Proposed Action) which would require the construction of a floodplain expansion area near the project site creeks. As with the Proposed Action and all the other on-site alternatives, no off-site improvements other than the widening of the existing bioswale would be required.

2.5.3 Reduced Footprint/Same Density Alternative

The Reduced Footprint/Same Density Alternative would have the same reduced development footprint as the Reduced Footprint/Increased Density Alternative described above, and this alternative would also fill about 3.1 acres (1.3 hectares) and preserve 9.47 acres (3.83 hectares) of aquatic resources on the project site.

However, unlike the alternative described above, under this alternative, residential areas would be developed at the same densities as the Proposed Action. As a result, this alternative would provide 1,405 residential units, compared to 2,029 units under the Proposed Action. Acreage designated for commercial uses would be reduced slightly under this alternative by comparison with the Proposed Action and school acreage would remain the same. The location of roadways and commercial land uses would be largely similar to the Proposed Action, with Mountain Glen Drive and Sierra Trail Drive somewhat more curved to avoid open space areas. **Figure 2.0-8** presents the proposed land use plan for this alternative. **Table 2.0-3** presents the estimated utility demand for this alternative. As with the Proposed Action additional storm water detention capacity would be required (about 13 acre-feet [1.6 hectare-meters] under this alternative compared to 18 acre-feet [2.2 hectare-meters] for the Proposed Action) which would require the construction of the floodplain expansion area near the project site creeks. As with the Proposed Action and all the other on-site alternatives, no off-site improvements other than the widening of the existing bioswale would be required.

2.5.4 Central Preserve Alternative

This alternative would reduce the footprint of development within the site by concentrating additional open space in a contiguous area that runs roughly north-south through the center of the site and expands the open space area in the northwest portion of the site. Based on its design, this alternative would fill about 5.05 acres (2.04 hectares) and preserve 7.52 acres (3.04 hectares) of aquatic resources on the project site. Under this alternative, total acreage to be developed would be reduced 25 percent to 271 acres (110 hectares), compared to 361 acres (146 hectares) under the Proposed Action, and open space would increase to 126 acres (51 hectares), compared to 36 acres (15 hectares) under the Proposed Action. The residential development footprint would decrease to 162 acres (66 hectares), compared to 245 acres (99 hectares) under the Proposed Action. As residential densities would remain similar to the Proposed

Action, the total number of residential units under this alternative would be about 1,415. Acreage designated for commercial and school uses would be similar to the Proposed Action under this alternative. The location of roadways and commercial land uses would be largely similar to the Proposed Action, with Mountain Glen Drive and Sierra Trail Drive somewhat more curved to avoid open space areas. **Figure 2.0-9** presents the proposed land use plan for this alternative. **Table 2.0-3** presents the estimated utility demand for this alternative. As with the Proposed Action, additional storm water detention capacity would be required (about 14 acre-feet [1.7 hectare-meters] under this alternative compared to 18 acre-feet [2.2 hectare-meters] for the Proposed Action) which would require the construction of a floodplain expansion area near the project site creeks. As with the Proposed Action and all the other on-site alternatives, no off-site improvements other than the widening of the existing bioswale would be required.

2.5.5 One Acre Fill Alternative

Under the One Acre Fill Alternative, areas on the project site containing waters of the U.S. would be preserved as open space such that no more than 1 acre (0.4 hectare) of jurisdictional waters would be filled to build the land development under this alternative and the vast majority of the project site aquatic resources (11.63 acres [4.71 hectares]) would not be filled. This would reduce the development footprint to about 236 acres (96 hectares), compared to 361 acres (146 hectares) under the Proposed Action. The proposed residential densities under this alternative are greater than the densities included in the Proposed Action. However, due to the reduced footprint of development, the total residential development would be reduced to 1,340 dwelling units, compared to 2,029 units under the Proposed Action. Land designated for commercial uses would be about 23 acres (9 hectares) compared to 43 acres (17 hectares) under the Proposed Action. School acreage would remain the same as under the Proposed Action. Open space acreage would increase from about 36 acres (15 hectares) under the Proposed Action to about 161 acres (65 hectares) under this alternative. The alignments of Mountain Glen Drive, Silver Spruce Drive, and Sierra Trail Drive would be substantially different from the alignments of these roadways under the Proposed Action. This alternative would also include a bridge along a portion of Silver Spruce Drive. **Figure 2.0-10** presents the proposed land use plan for this alternative. **Table 2.0-3** presents the estimated utility demand for this alternative. As with the Proposed Action, additional storm water detention capacity would be required (about 12 acre-feet [1.5 hectare-meters] under this alternative compared to 18 acre-feet [2.2 hectare-meters] for the Proposed Action) which would require the construction of a floodplain expansion area near the project site creeks. As with the Proposed Action and all the other on-site alternatives, no off-site improvements other than the widening of the existing bioswale would be required.

AREA & FOOTPRINT TABLE

	ACRES
Project area	397.4 ± ac
Existing Open Space	-36.2 ± ac
Project Footprint	361.2 ± ac
25% Project Footprint (additional Open Space)	90.3 ± ac
"Reduced Footprint"	270.9 ± ac

LAND USE SUMMARY TABLE

LAND USE		ACRES	DENSITY (du/ac.)	DU
Residential				
LDR	Low Density Residential	47.5	5.0	235
MDR	Medium Density Residential	58.1	8.0	460
HDR	High Density Residential	47.8	25.0	1195
sub-total		153.4		
Commercial				
CC	Community Commercial	39.9		
sub-total		39.9		
Public Quasi Public - PQP				
	Elementary School	10.0		
	Well Site	1.0		
	Lift Station	0.9		
sub-total		11.9		
PR	Park (4)	15.7		
OS	Open Space	129.8		
	Landscape Corridor/Paseo	12.1		
	Major Roads	34.6		
sub-total		192.2		
Total Project Area		397.4±		1890 du

Ⓐ Denotes Affordable Housing Site

NORTH

0 300 600 1200

SOURCE: MacKay & Somps – June 2012

FIGURE **2.0-7**

Reduced Footprint / Increased Density Alternative

AREA & FOOTPRINT TABLE

	ACRES
Project area	397.4 ± ac
Existing Open Space	-36.2 ± ac
Project Footprint	361.2 ± ac
25% Project Footprint (additional Open Space)	90.3 ± ac
"Reduced Footprint"	270.9 ± ac

LAND USE SUMMARY TABLE

LAND USE		ACRES	DENSITY (du/ac.)	DU
Residential				
LDR	Low Density Residential	87.9	5.0	440
MDR	Medium Density Residential	46.3	8.0	370
HDR	High Density Residential	23.7	25.0	595
sub-total		157.9		
Commercial				
CC	Community Commercial	39.9		
sub-total		39.9		
Public Quasi Public - PQP				
	Elementary School	10.0		
	Well Site	1.0		
	Lift Station	0.9		
sub-total		11.9		
PR	Park (3)	11.2		
OS	Open Space	129.8		
	Landscape Corridor/Paseo	12.1		
	Major Roads	34.6		
sub-total		187.7		
Total Project Area		397.4±		1405 du

Ⓐ Denotes Affordable Housing Site

NORTH

0 300 600 600

SOURCE: MacKay & Somps – November 2011

FIGURE **2.0-8**

Reduced Footprint/Same Density Alternative

AREA & FOOTPRINT TABLE

	ACRES
Project area	397.4 ± ac
Existing Open Space	-36.2 ± ac
Project Footprint	361.2 ± ac
25% Project Footprint (additional Open Space)	90.1 ± ac
"Reduced Footprint"	271.1 ± ac

LAND USE SUMMARY TABLE

LAND USE		ACRES	DENSITY (du/ac.)	DU
Residential				
LDR	Low Density Residential	97.5	5.0	485
MDR	Medium Density Residential	40.2	8.0	320
HDR	High Density Residential	24.4	25.0	610
sub-total		162.1		
Commercial				
CC	Community Commercial	39.9		
sub-total		39.9		
Public Quasi Public - PQP				
	Elementary School	10.0		
	Well Site	0.5		
	Lift Station	0.9		
sub-total		11.4		
PR	Park (3)	11.5		
OS	Open Space	126.3		
	Landscape Corridor/Paseo	11.6		
	Major Roads	34.6		
sub-total		184.0		
Total Project Area		397.4±		1415 du

Ⓐ Denotes Affordable Housing Site

NORTH

0 300 600 1200

SOURCE: MacKay & Somps – September 2012

FIGURE **2.0-9**

Central Preserve Alternative

1122-001•10/12

LAND USE SUMMARY TABLE

LAND USE		ACRES	DENSITY (du/ac.)	DU
Residential				
LDR	Low Density Residential	79.5	5.0	397
MDR	Medium Density Residential	33.9	8.0	270
HDR	High Density Residential	26.9	25.0	673
sub-total		140.3		
Commercial				
CC	Community Commercial	22.8		
sub-total		22.8		
Public Quasi Public - PQP				
	Elementary School	10.0		
	Well Site	1.0		
	Pump Station	1.0		
sub-total		12.0		
PR	Park (4)	12.8		
OS	Open Space	161.0		
	Landscape Corridor/Paseo	16.8		
	Major Roads	31.8		
sub-total		222.4		
Total Project Area		397.4±		1340 du

Ⓐ Denotes Affordable Housing Site

Denotes Span or Causeway

NORTH

0 300 600 1200

SOURCE: MacKay & Somps – June 2012

FIGURE **2.0-10**

One Acre Fill Alternative

1122-001•08/12

2.5.6 Half Acre Fill Alternative

Under the Half Acre Fill Alternative, areas on the project site containing wetland resources would be preserved as open space such that no more than 0.5 acre (0.2 hectare) of jurisdictional waters would be filled to build the planned community under this alternative. Based on its design, this alternative would fill about 0.47 acre (0.19 hectare) and preserve 12.08 acres (4.89 hectares) of aquatic resources on the project site.

This alternative would reduce the development footprint to about 223 acres (90 hectares), compared to 361 acres (146 hectares) under the Proposed Action. As with the One Acre Fill Alternative above, the proposed residential densities under this alternative are greater than the densities included in the Proposed Action. However, due to the reduced footprint of development, the total number of residential units would be reduced to 1,256 dwelling units, compared to 2,029 units under the Proposed Action. Land designated for commercial uses would be about 19 acres (8 hectares) compared to 43 acres (17 hectares) under the Proposed Action. Acreage for school uses would be largely the same as under the Proposed Action. Open space acreage would increase from about 36 acres (15 hectares) under the Proposed Action to about 174 acres (70 hectares) under this alternative. The alignments of Mountain Glen Drive, Silver Spruce Drive, and Sierra Trail Drive would be substantially different from the alignments of these roadways under the Proposed Action. This alternative would also include a bridge along a portion of Silver Spruce Drive. **Figure 2.0-11** presents the proposed land use plan for this alternative. **Table 2.0-3** presents the estimated utility demand for this alternative. As with the Proposed Action, additional storm water detention capacity would be required (about 11 acre-feet [1.4 hectare-meters] under this alternative compared to 18 acre-feet [2.2 hectare-meters] for the Proposed Action) which would require the construction of a floodplain expansion area near the project site creeks. As with the Proposed Action and all the other on-site alternatives, no off-site improvements other than the widening of the existing bioswale would be required.

2.5.7 Off-Site Alternative (Placer Ranch Site)

This is an off-site alternative that would construct the Westbrook project on an approximately 406-acre (164-hectare) portion of the Placer Ranch Specific Plan site located approximately 3.5 miles (5.6 kilometers) to the northwest of the project site within unincorporated Placer County. Under the Off-Site Alternative, approximately 6.2 acres (2.5 hectares) of jurisdictional waters would be filled and 3 acres (1.2 hectares) of aquatic resources on the alternative site would be preserved.

The Placer Ranch site is bounded by the Roseville City limit to the south, and is located west of light industrial uses along Industrial Avenue. The alternate site is primarily outside of the 1-mile (1.6-kilometer) County-defined Western Regional Landfill buffer area within which development is restricted to non-residential uses. The total development footprint of 346 acres (140 hectares) would comprise 179 acres (72 hectares) of residential uses (1,560 units at buildout), 35 acres (14 hectares) of commercial and office uses, 45 acres (18 hectares) of industrial uses, 10 acres (4 hectares) of schools, 14 acres (6 hectares) of parks, and 43 acres (17 hectares) of roads. **Figure 2.0-12** presents the proposed land use plan for this alternative. The industrial uses would be located in the southern portion of the site in an

area where other land uses cannot be placed due to the presence of a peaking power plant. About 60 acres (24 hectares) would be preserved as open space. As shown in the figure, due to its location in an industrial area, this alternative includes a 100-foot (30-meter) buffer along the northern and eastern boundary to separate the on-site residential uses from the adjacent industrial uses. **Figure 2.0-13** presents the storm drainage infrastructure corridor for this alternative and **Figure 2.0-14** presents the wastewater infrastructure corridor for this alternative.

Table 2.0-3 presents the estimated utility demand for this alternative. A number of off-site utility improvements will be necessary to construct the proposed master planned community at this site. These include two storm drains and storm water detention basins in the area to the west of the alternative site; a 24-inch (61-centimeter) and an 18-inch (46-centimeter) wastewater lines that would extend off-site to the west and connect to a new 36-inch (91-centimeter) main that would carry wastewater into an existing 48-inch (122-centimeter) main that would convey the wastewater to the PGWWTP. With respect to potable and recycled water, service to the site would be provided via two new 16-inch (41-centimeter) water lines and recycled water lines that would connect to existing water and recycled water lines to the east and south of the alternative site. The entire 2,250-acre (910-hectare) Placer Ranch Specific Plan site has previously been proposed for development of 6,793 residential dwelling units, 527 acres (213 hectares) of business park and light industrial uses, 150 acres (61 hectares) of office uses, 99 acres (40 hectares) of commercial uses, and a 300-acre (121-hectare) branch campus for the California State University, Sacramento. The Placer Ranch SP project was originally proposed in the County. A development application was submitted to the City of Roseville in 2007, but the project has been on hold since early 2008 and is no longer being pursued.

2.6 ALTERNATIVES CONSIDERED BUT REJECTED

As discussed above, CEQ's NEPA implementing regulations require an EIS to consider a reasonable range of alternatives that could accomplish the purpose of the agency's proposed action. However, an EIS is not required to consider all possible alternatives—only a reasonable range of alternatives that (1) are feasible, and (2) would satisfy the project purpose and need. Under the Clean Water Act regulations adopted by the USACE, moreover, the USACE may reject consideration of alternative sites that, if developed along the lines proposed by a permit Applicant, would lead to a greater level of environmental impact on aquatic resources than would occur under a proposed action. The following sections briefly describe the six off-site alternatives that the USACE eliminated from detailed analysis, along with the reasons for their dismissal.

LAND USE SUMMARY TABLE

LAND USE		ACRES	DENSITY (du/ac.)	DU
Residential				
LDR	Low Density Residential	74.1	5.0	395
MDR	Medium Density Residential	30.5	8.0	244
HDR	High Density Residential	24.7	25.0	617
sub-total		129.3		
Commercial				
CC	Community Commercial	18.7		
sub-total		18.7		
Public Quasi Public - PQP				
	Elementary School	10.0		
	Well Site	1.0		
	Pump Station	2.4		
sub-total		12.4		
PR	Park (4)	12.5		
OS	Open Space	174.3		
	Landscape Corridor/Paseo	18.3		
	Major Roads	31.8		
sub-total		236.9		
Total Project Area		397.4±		1256 du

Ⓐ Denotes Affordable Housing Site

Denotes Span or Causeway

NORTH

0 300 600 1200

SOURCE: MacKay & Somps – June 2012

FIGURE **2.0-11**

Half Acre Fill Alternative

1122-001•08/12

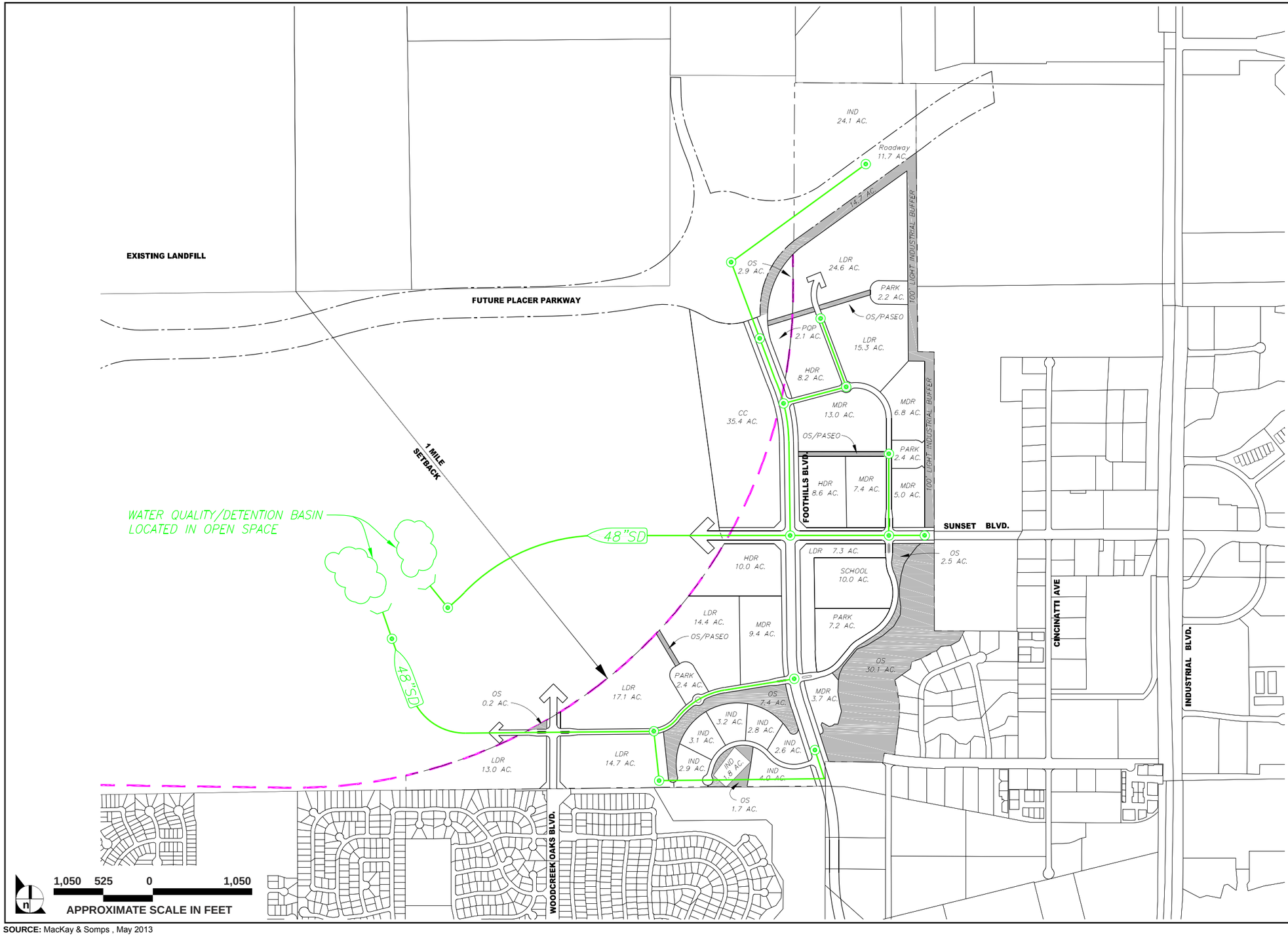
LAND USE SUMMARY TABLE

LAND USE		ACRES	DENSITY (du/ac.)	DU
Residential				
LDR	Low Density Residential	106.3	5.0	530
MDR	Medium Density Residential	45.4	8.0	360
HDR	High Density Residential	26.9	25.0	670
sub-total		178.6		
Commercial				
CC	Community Commercial	35.4		
IND	Industrial	44.5		
sub-total		79.9		
Public Quasi Public - PQP				
	School	10.0		
	PQP	2.1		
sub-total		12.1		
PR	Park (4)	14.2		
OS	Open Space	59.5		
	Landscape Corridor/Paseo	18.2		
	Major Roads	43.2		
sub-total		135.1		
Total Project Area		405.7±		1560 du

SOURCE: MacKay & Somps – August 2012

FIGURE **2.0-12**

Placer Ranch Off-Site Alternative



LAND USE SUMMARY TABLE

LAND USE		ACRES	DENSITY (du/ac.)	DU
Residential				
LDR	Low Density Residential	106.3	5.0	530
MDR	Medium Density Residential	45.4	8.0	360
HDR	High Density Residential	26.9	25.0	670
sub-total		178.6		
Commercial				
CC	Community Commercial	35.4		
IND	Industrial	44.5		
sub-total		79.9		
Public Quasi Public - PQP				
	School	10.0		
	PQP	2.1		
sub-total		12.1		
PR	Park (4)	14.2		
OS	Open Space	59.5		
	Landscape Corridor/Paseo	18.2		
	Major Roads	43.2		
sub-total		135.1		
Total Project Area		405.7±		1560 du

LEGEND

- 8"SD — EXISTING UTILITY
- 8"SD — PROPOSED UTILITY

SOURCE: MacKay & Somps , May 2013

FIGURE **2.0-13**

Off-Site Alternative Storm Drainage Infrastructure

LAND USE SUMMARY TABLE

LAND USE		ACRES	DENSITY (du/ac.)	DU
Residential				
LDR	Low Density Residential	106.3	5.0	530
MDR	Medium Density Residential	45.4	8.0	360
HDR	High Density Residential	26.9	25.0	670
sub-total		178.6		
Commercial				
CC	Community Commercial	35.4		
IND	Industrial	44.5		
sub-total		79.9		
Public Quasi Public - PQP				
	School	10.0		
	PQP	2.1		
sub-total		12.1		
PR	Park (4)	14.2		
OS	Open Space	59.5		
	Landscape Corridor/Paseo	18.2		
	Major Roads	43.2		
sub-total		135.1		
Total Project Area		405.7±		1560 du

LEGEND

- 8"S — EXISTING UTILITY
- 8"S — PROPOSED UTILITY

FUTURE LANDFILL
EXISTING LANDFILL
FUTURE PLACER PARKWAY
WESTBROOK DRIVE
FOOTHILL ROAD
1 MILE SETBACK
FOOTHILLS BLVD.
SUNSET BLVD.
CROCKETT AVE
INDUSTRIAL BLVD.
WOODCREEK OAKS BLVD.
OPEN SPACE
PLEASANT GROVE WASTEWATER TREATMENT PLANT
12"S
15"S
24"S
36"S
18"S
42"S
48"S
72"S

2,100 1,050 0 2,100
APPROXIMATE SCALE IN FEET

SOURCE: MacKay & Somps , May 2013

FIGURE **2.0-14**

Off-Site Alternative Wastewater Infrastructure

2.6.1 Amoruso Ranch

The 674-acre Amoruso Ranch SP area is located on the south side of West Sunset Boulevard approximately 1.5 miles west of Fiddyment Road. The Creekview SP area is located to the south and Reason Farms is located to the west of the Amoruso Ranch SP area. The site is located in unincorporated Placer County, but is within the City's SOI.

The City of Roseville received a Specific Plan application for the property in May 2011. The developer is proposing a land plan that includes 2,785 residential units in a mix of low, medium, and high density; two commercial parcels totaling 55.5 acres (22.5 hectares); a 7-acre (3-hectare) elementary school site; six neighborhood parks; a 6.9-acre (2.8-hectare) fire station/public facilities site; and a 140-acre (57-hectare) open space preserve.

This site is primarily fallow grassland with a large area of irrigated pasture along the eastern boundary. Based on a preliminary assessment using aerial photographs, the Amoruso Ranch site contains approximately 38.63 acres of aquatic resources. Two large wetland areas are present: a swale/vernal pool system in the northwest quadrant, and a seasonal wetland/vernal pool complex along the southern boundary. The vernal pool component is of relatively high quality because the property has not been highly modified in the past. The entire site is within the fairy shrimp Core Recovery Area.

Basis for Eliminating this Site

The USACE eliminated this site based on Screening Criterion 1, Biological Resources Sensitivity, and Criterion 2, Preliminary Assessment of Availability. The biological resources on this site are of better quality than the resources on the project site. Vernal pools/seasonal wetlands are prevalent and scattered throughout most of the property. Most of the aquatic resources are of high quality and are relatively undisturbed. Listed crustaceans are known to occur in some areas of this site. By comparison, the project site has only about 12 acres (5 hectares) of aquatic resources and most of the aquatic resources on the site are degraded due to past disturbances associated with disking, grazing, and cultivation. There is also an active proposal for development of the Amoruso Ranch site.

2.6.2 Reason Farms Panhandle

In May 2003, the City of Roseville approved the acquisition of two parcels of land, the Reason Farms and Warnick properties, totaling approximately 1,700 acres (688 hectares) along Pleasant Grove Creek. This property was acquired by the City for the purpose of constructing storm water retention basins, but would also provide open space and recreation opportunities for the City. Development of the retention basins is currently in the design process.

The "panhandle" is a 234-acre (95-hectare) area located in the southeastern corner of the Reason Farms property northwest of the West Roseville Specific Plan area. This area is potentially a suitable alternative site for the Proposed Action because the City does not plan to use this area for storm water detention facilities.

Basis for Eliminating this Site

The USACE eliminated this site based on Criterion 3, Feasibility of Acquiring Sufficient Acreage. The City indicated that the property is not available for sale at this time.

2.6.3 Regional University

The Regional University SP area comprises approximately 1,158 acres (469 hectares) and is located south of Pleasant Grove Creek between Brewer Road and the western boundary of the City of Roseville, approximately 1.6 miles (2.6 kilometers) north of Baseline Road. The Placer County Board of Supervisors considered the proposed Regional University SP in 2008.

The Regional University SP area is located adjacent to the existing Roseville City limits. Although an alternative site could be located anywhere within the 1-mile (1.6-kilometer) zone, for purposes of analysis, a 400-acre (462-hectare) site immediately adjacent to the West Roseville SP area was selected as a potentially suitable alternative site for the Proposed Action as this site would be close to the westerly edge of development within the West Roseville SP area and easily accessible via a short extension of the Blue Oaks Boulevard.

Bases for Eliminating this Site

The USACE eliminated this site based on Criterion 3, Feasibility of Acquiring Sufficient Acreage. The primary landowners of the site indicated that the property is not available for sale at this time.

2.6.4 Curry Creek

The Curry Creek Community Plan (CP) area comprises approximately 2,113 acres (855 hectares) bounded by the proposed Regional University SP Area to the north, Baseline Road to the south, the proposed Westbrook site to the east, and undeveloped land to the west. The County Board of Supervisors directed staff to proceed with studying the area for future development in 2003, but at this time there is no specific plan or formal development application for the site.

The eastern half of the Curry Creek CP area is within 1 mile (1.6 kilometers) of the City's SOI. As an alternative site could be located anywhere within the 1-mile (1.6-kilometer) zone, the entire eastern half of the Curry Creek CP area (approximately 1,000 acres [405 hectares]) was evaluated to determine if any portion of the area could serve as a potentially suitable alternative site for the Proposed Action.

Basis for Eliminating this Site

The USACE eliminated this site based on Criterion 3, Feasibility of Acquiring Sufficient Acreage. The primary landowners of the site indicated that the property is not available for sale at this time.

2.6.5 Industrial Infill

The 240-acre (97-hectare) Industrial Infill site is located on the south side of Blue Oaks Boulevard to the west of the Hewlett Packard campus. The City processed a specific plan for the site in 2005–2006, but the Applicant withdrew the application prior to approval in 2007. At this time there is no specific plan or formal development application for the site.

Basis for Eliminating this Site

The USACE eliminated this site based on Criterion 3, Feasibility of Acquiring Sufficient Acreage. The primary landowners of the site indicated that the property is not available for sale at this time.

2.6.6 Dry Creek – West Placer

The Dry Creek – West Placer CP area is located to the southeast of the proposed Westbrook project site, south of Baseline Road and east of the Placer Vineyards SP area. The County approved the CP in 1990, and the plan was subsequently revised in 2007 as part of the Placer Vineyards project approvals. This site currently supports areas of suburban development as well as numerous rural residences. An approximately 450-acre (182-hectare) site within the CP area south of Vineyard Road is currently undeveloped and was selected as a potentially suitable alternative site for the Proposed Action.

Basis for Eliminating this Site

The USACE eliminated this site based on Criterion 3, Feasibility of Acquiring Sufficient Acreage. Two owners of parcels totaling 261 acres (106 hectares) within the 450-acre (182-hectare) site indicated that they have no interest in selling their land at this time; as a result there is not enough available acreage for this to be a viable alternative site.

2.7 SUMMARY COMPARISON OF PROPOSED ACTION AND ALTERNATIVES

Table 2.0-4 compares key features of the Proposed Action, No Action Alternative, and the six on- and off-site alternatives.

2.8 REFERENCES

City of Roseville. 2010. *Sierra Vista Specific Plan Final Environmental Report*.

Table 2.0-4
Proposed Action and Alternatives – Acreages by Land Use and Aquatic Resource Impacts

Alternative	Development Footprint	Residential Acreage	Residential Units at Buildout	Other Development Acreage		Open Space Acreage	Potential Direct Impacts on Aquatic Resources[1]
Proposed Action	361	245	2,029	Commercial	43	36	9.61 (2.98 acres preserved)
				Public/Quasi-Public	11		
				Parks	16		
				Roads[2]	46		
No Action	275	177	1,505	Commercial	30	122	0 (12.55 acres preserved)
				Public/Quasi-Public	12		
				Parks	14		
				Roads[2]	44		
Reduced Footprint/ Increased Density	267	153	1,890	Commercial	40	130	3.10 (9.47 acres preserved)
				Public/Quasi-Public	12		
				Parks	16		
				Roads[2]	47		
Reduced Footprint/Same Density	267	158	1,405	Commercial	40	130	3.10 (9.47 acres preserved)
				Public/Quasi-Public	12		
				Parks	11		
				Roads[2]	47		
Central Preserve	271	162	1,415	Commercial	40	126	5.05 (7.52 acres preserved)
				Public/Quasi-Public	11		
				Parks	12		
				Roads[2]	46		
One Acre Fill	236	140	1,340	Commercial	23	161	0.94 (11.63 acres preserved)
				Public/Quasi-Public	12		
				Parks	13		
				Roads[2]	49		
Half Acre Fill	223	129	1,256	Commercial	19	174	0.47 (12.08 acres preserved)
				Public/Quasi-Public	13		
				Parks	13		
				Roads[2]	50		
Off-Site	346	179	1,560	Commercial/Industrial	80	60	11.92 (3.9 acres preserved)
				Public/Quasi-Public	12		
				Parks	14		
				Roads[2]	43		

[1] *Preliminary estimate based on land use plans and existing information on wetlands and other jurisdictional waters on the project site. Acres of aquatic resources preserved under the alternative are reported in parentheses.*

[2] *Includes the area of major roads and landscape corridors.*