

*The Economics of Land Use*



## Public Review Draft Report

# Bickford Ranch Public Facilities Financing Plan

Prepared for:

Placer County

Prepared by:

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# 1. INTRODUCTION AND SUMMARY

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## Introduction

This Public Facilities Financing Plan (Financing Plan) establishes a strategy for financing the Backbone Infrastructure and Public Facilities (as defined herein) required to serve the proposed land uses in the Bickford Ranch Specific Plan Area (BRSP or Project). The BRSP is located on approximately 1,928 acres in the southern portion of Placer County (County), between the City of Lincoln and the Town of Newcastle. The BRSP is bounded on the west by Sierra College Boulevard, State Route 193 is located north of the site, English Colony Way on the south (except for a parcel at the northeast corner of Sierra College Boulevard and Caperton Court), and extends just east of the existing Clark Tunnel Road. The Union Pacific Railroad is located along portions of the BRSP's southern boundary and passes beneath Boulder Ridge in the southeast portion of the property through Clark Tunnel. **Map 1** shows the BRSP in its regional context. **Map 2** illustrates the planned land uses for the BRSP.

Economic & Planning Systems, Inc. (EPS) has prepared this Financing Plan based on the proposed land uses and facilities proposed in the Bickford Ranch Specific Plan amendment document (Specific Plan). The Financing Plan also relies on preliminary engineering cost estimates, provided by MacKay & Soms, as of June 2015. The Sierra College Boulevard widening cost was updated by MacKay & Soms in November 2015. A memorandum reflecting that updated cost is included in **Appendix A** and **Appendix D**. In addition, the Financing Plan incorporates information from discussions with County departments on a variety of issues. The Community Resource Agency will coordinate review of the Financing Plan by several different County departments. All costs are expressed in 2015 dollars.

## Land Use and Phasing Summary

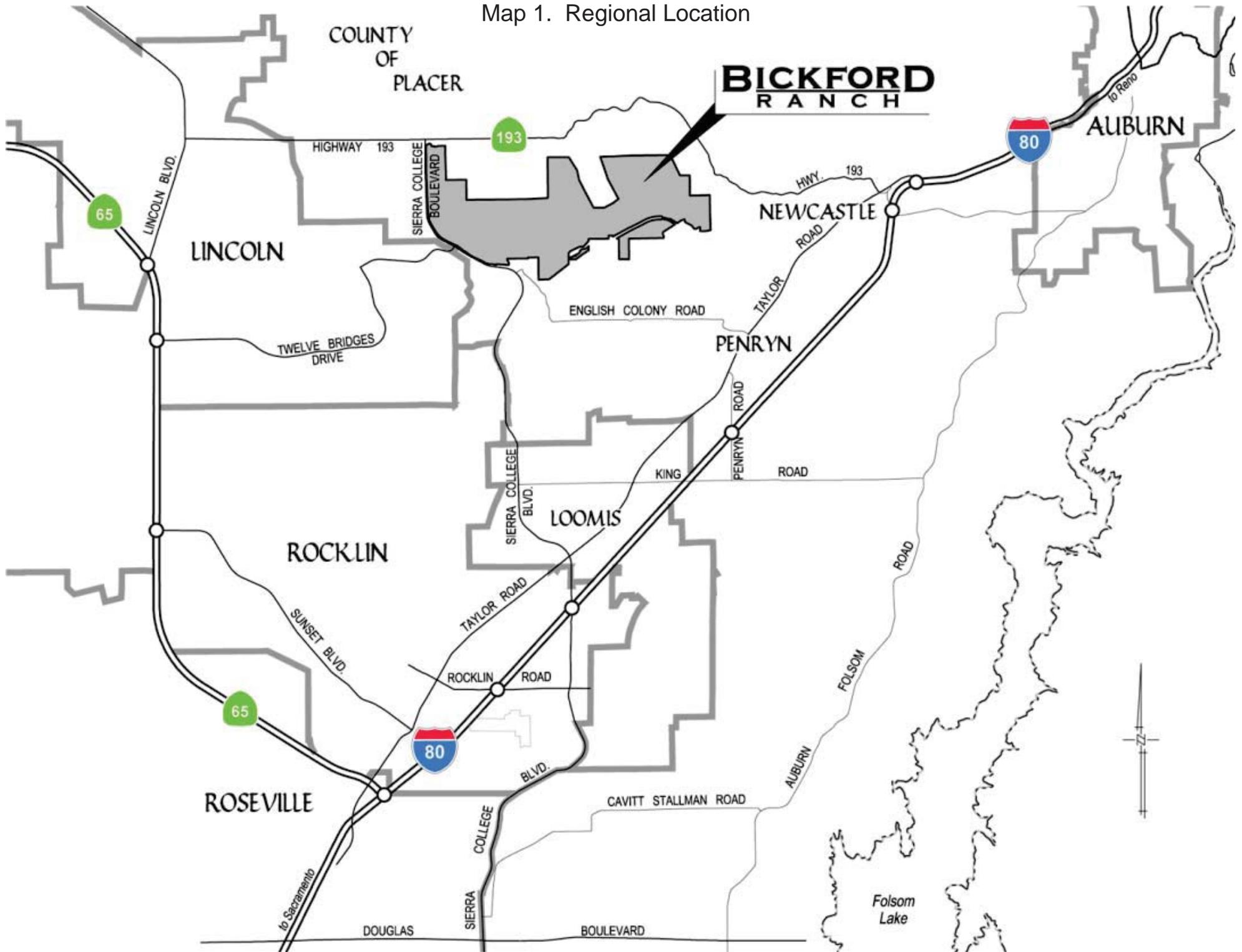
**Table 1** summarizes the land uses projected at buildout of the BRSP. With a total of approximately 1,928 acres, the BRSP includes the potential for 1,890 total units, including 27 rural residential units, 950 low-density residential active-adult units, 848 low-density residential units, and 65 medium-density residential units. As shown in **Table 1**, there also are approximately 15 acres of schools, 23 acres of public parks, 15 acres of privately funded and maintained neighborhood parks, 4 acres of equestrian staging area, 17 acres of recreation centers, 1,071 acres of open space, 13 acres of public facilities, 17 acres of landscape corridors, and 51 acres of right-of-way.

## Phasing

The BRSP provides a comprehensively planned infrastructure system coordinated with each potential increment of development. Land uses in the BRSP are anticipated to develop over multiple years and, depending on market conditions, may evolve in a variety of ways. Generally, construction of the BRSP is anticipated to begin from Sierra College Boulevard and proceed in an easterly direction.

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Map 1. Regional Location

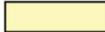
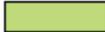
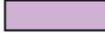


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Map 2. Land Uses



LEGEND

- |  |  |
|--|--|
|  RR - Rural Residential           |  OS - Open Space Preserve |
|  LDR - Low Density Residential    |  OS - Open Space Parkway  |
|  MDR - Medium Density Residential |  PF - Water Facilities    |
|  RC - Recreation Center           |  PF - School              |
|  PR - Parks                       |  PF - Fire Station        |
|  OS - Open Space Transition       |  |



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**Table 1**  
**Bickford Ranch Specific Plan Financing Plan**  
**Summary of Land Uses at Buildout**

Land Use	Density	Buildout	
		Acres	Units/Sq. Ft.
<b>Residential</b>	<i>DU/acre</i>	<i>Acres</i>	<i>Units</i>
Rural Residential	0.25	108.2	27
Low-Density Residential - Active Adult	3.91	242.9	950
Low-Density Residential	2.54	333.7	848
Medium-Density Residential	3.99	16.3	65
<b>Total Residential</b>		<b>701.1</b>	<b>1,890</b>
<b>Non-Developable Acres</b>			
School		15.0	-
PCWA		3.4	-
Fire Station		1.4	-
Water Tank		3.0	-
Public Facilities Site		5.1	-
Open Space Preserve		783.5	-
Open Space Transition		163.5	-
Open Space Parkway		123.8	-
Recreation Center		17.2	-
Community Park (Bickford Ranch Park)		23.4	-
Equestrian Staging Area		4.2	-
Neighborhood Parks		15.2	-
Landscape Corridors		17.1	-
Roads		51.0	-
<b>Total Non-Developable Acres</b>		<b>1,226.8</b>	<b>-</b>
<b>Total</b>		<b>1,927.9</b>	<b>1,890</b>

*lu*

Source: Bickford Ranch Specific Plan, February 2015.

The BRSP provides for construction of improvements to meet County service standards and the requirements of the BRSP. The phases are structured so development in each phase can support the cost of the required improvement. Please refer to the Development Agreement (DA), as well as supporting information provided in the Specific Plan and corresponding facility Master Plans, for additional detail related to timing and policies of BRSP development.

## Purpose of the Financing Plan

The Financing Plan is a companion document to the Specific Plan that will be submitted to the County Board of Supervisors for acceptance. The purpose of the Financing Plan is to describe the financing strategy to fund Backbone Infrastructure and Public Facilities needed to serve the new BRSP development. The Financing Plan accomplishes this strategy by following these steps:

1. Specifying the major Backbone Infrastructure and Public Facilities, or "Facilities" as defined later in this chapter, to be constructed or acquired in association with development of the BRSP. Corresponding costs are based on available engineering data, existing County department data, and other estimates.
2. Identifying funding sources to pay for Backbone Infrastructure and Public Facilities, including any existing and potential future fee programs or financing districts.
3. Providing information regarding timing of Backbone Infrastructure and Public Facilities.
4. Establishing the policy framework to finance required major Backbone Infrastructure improvements.

## Financing Plan Definitions

The Financing Plan will use the following definitions to describe infrastructure improvements and facilities more precisely:

- **Backbone Infrastructure:** This term includes most of the public service-based items that are underground or at ground level and which may be both on site or off site (i.e., within or outside the BRSP boundaries). Backbone Infrastructure is sized to serve the BRSP as a whole, as well as infrastructure providing regional benefit such as the 42" PCWA water line that is part of the Ophir Treatment Plant project. For the BRSP, Backbone Infrastructure includes the following items:
  - Roadways
  - Water Facilities (Raw & Potable)
  - Drainage Facilities
  - Sewer Facilities
  - Off-Site Storm Water Retention
  - Dry Utilities
  - Water Quality/Detention Facilities
- **Public Facilities:** This group of items provides amenities to the BRSP (e.g., schools) or helps to provide facilities for employees providing services to the area (e.g., law enforcement, fire). In many cases, BRSP may not include Public Facilities in the Specific

Plan, and the Project's contribution to such facilities will be through the payment of fees. For the BRSP, Public Facilities include the following items:

- Satellite Offices (contribution)
- Fire Station
- Sheriff Services Center
- General Capital Facilities (fee for items not duplicated above)
- Schools
- Library
- Parks and Trails
- Corporation Yard (contribution)

Public Facilities serving the BRSP shall be funded through the County Capital Facilities Fee (CFF), Project-specific fees, and other fees.

- **Facilities:** This term is used generically in the Financing Plan to refer to Backbone Infrastructure and Public Facilities when a precise breakdown is not required.

## Overview of the Financing Plan

### Financing Plan Goals

The elements of the Financing Plan must work together to provide the optimal balance of fee, bond, and private financing so as not to overburden undeveloped land, while ensuring that necessary facilities are constructed when needed. The Financing Plan articulates the financing strategy such that each property owner/investor can achieve the following goals:

- Ability to achieve final end-use, on-site vertical construction.
- Develop his or her respective property independently without relying on others to proceed (to the greatest extent physically and feasibly possible).
- Maximize available financial resources to optimize development returns, while creating a community with desired County service-level amenities.

The following financing policies are consistent with the aforementioned goals.

### Financing Policies

The following objectives and policies should be considered to guide financing of infrastructure and services in the BRSP:

- Clearly identify physical and financial obligations of the BRSP Developer.
- Equitably allocate BRSP Facilities costs to land uses based on proportional benefit received.
- Construct or fund on-site and off-site Facilities when needed to serve the BRSP. Some regionally serving Public Facilities may be funded by regional fee program(s), which may include areas both in and outside the BRSP.
- Maximize the use of existing funding mechanisms and tools.

- Maximize the use of pay-as-you-go funding mechanisms.
- Make appropriate use of one or more public land-secured debt financing mechanisms.
- Effectively leverage available regional, state, and federal funding where possible.
- Include flexibility to accommodate changes in development phasing, sequencing, and land uses in response to market conditions.
- Identify ways to finance construction of Backbone Infrastructure and Public Facilities through the most efficient combination of public and private financing.

## Summary of Costs

The total cost for Backbone Infrastructure and Public Facilities is \$134.7 million at buildout. These costs include \$94.7 million for Infrastructure, \$27.3 million in BRSP Public Facilities costs, and \$12.8 million for other costs. **Table 2** summarizes the total Backbone Infrastructure and Public Facility costs by improvement type that the BRSP Developer will be required to construct. **Table 3** shows the Facilities required and funding sources used to fund Infrastructure, Public Facilities, and other costs required to be constructed or funded by BRSP Developers.

### Backbone Infrastructure

BRSP Infrastructure totals approximately \$94.7 million. These Facilities are either in the BRSP area or outside the BRSP boundaries serving BRSP needs for select roads, water, sewer, and stormwater retention. All Backbone Infrastructure improvement costs include a 20-percent soft-cost estimate, including a 20-percent contingency. **Tables 4** through **6** contain detailed Backbone Infrastructure cost estimates by improvement type for roads, water, and sewer based on estimates prepared by MacKay & Soms as of June 2015.

**Appendix A** contains detailed Backbone Infrastructure cost estimates and exhibits by backbone improvement type based on estimates prepared by MacKay & Soms as of June 2015. As mentioned previously, **Appendix A** also contains a memorandum from MacKay & Soms regarding the updated Sierra College Boulevard widening cost.

### Public Facilities

The cost of Public Facilities needed to serve the BRSP totals approximately \$27.3 million at buildout, as shown in **Table 2**. The specific Public Facilities listed are described in more detail later in this document. The costs of these Public Facilities primarily would be funded by fees paid to the County and various agencies through existing fee programs.

Public Facilities cost estimates were provided by the County, Westpark Communities, or estimated by EPS. Cost estimates shown are based on assumed facilities demand and estimated development absorption from the BRSP as approved by the County and BRSP.

**Table 2**  
**Bickford Ranch Specific Plan Financing Plan**  
**Summary of Financing Plan Costs at Buildout (2015\$)**

Improvement Type	Total at Buildout
<b>BRSP Costs</b>	
<b>BRSP Infrastructure [1] [2]</b>	
<b>Roadways [3]</b>	
Bickford Ranch Road (Segments A - E)	\$35,189,000
School Ranch Road (Segment G)	\$6,683,000
Sierra College Blvd. Widening	\$7,459,800
North/South Clark Tunnel Road and Emergency Access Vehicles (EVA's)	\$473,300
<b>Subtotal Roadways</b>	<b>\$49,805,100</b>
<b>Water</b>	
On-Site Water	\$20,907,400
Off-Site Water	\$120,000
Canal Encasement	\$4,562,400
<b>Subtotal Water</b>	<b>\$25,589,800</b>
Off-Site Sewer	\$1,094,000
Dry Utilities (including backbone streetlights)	\$10,047,000
Mass Grading [4]	\$5,000,000
Water Quality/Detention Facilities [5]	\$2,160,000
Off-Site Stormwater Retention [6]	\$973,000
<b>Subtotal BRSP Infrastructure</b>	<b>\$94,668,900</b>
<b>Public Facilities</b>	
<b>Placer County Capital Facilities Fee [7]</b>	
Satellite Offices	\$2,096,689
Public Works (Corp Yard)	\$324,109
Health and Human Services	\$671,789
Agriculture and Animal Control	\$240,817
Sheriff	\$748,396
Jail and Countywide Public Protection	\$660,003
Justice System	\$777,861
Library	\$817,932
<b>Subtotal Placer County Capital Facilities Fee</b>	<b>\$6,337,596</b>
Public Parks and Trails [7] [8]	\$8,519,246
Fire [8]	\$2,546,235
Schools [7]	\$9,893,610
<b>Subtotal Public Facilities</b>	<b>\$27,296,687</b>
<b>Other Costs</b>	
Affordable Housing [7]	\$7,560,000
Placer County Transportation CIP: Newcastle/Horseshoe Bar/Penryn [7]	\$600,000
Placer County Traffic Fee: Placer Central Benefit District [7]	\$2,448,176
SPRTA Regional Transportation and Air Quality Fee [7]	\$2,166,475
<b>Subtotal Other Costs</b>	<b>\$12,774,651</b>
<b>Total BRSP Costs [9]</b>	<b>\$134,740,238</b>

*cost sum*

Source: MacKay & Soms (June 2015).

- [1] Consists of infrastructure serving the BRSP, including off-site improvements.
- [2] Excludes the \$7,130,000 previously paid to the City of Lincoln for wastewater treatment.
- [3] Cost estimates include streetwork, concrete, drainage, potable water, and sewer. See Table 4 for more detail.
- [4] Only includes backbone grading improvements.
- [5] Water Quality Detention ponds are based on required volumes provided by Civil Engineering Solutions Project Drainage Study Update, dated April 28, 2014. Further detail and analysis will be required to finalize the cost.
- [6] Off-site stormwater retention storage provided per an in-lieu fee to the City of Lincoln at \$13,000 per acre for 52 acres.
- [7] Assumes cost is equal to estimated fee revenue generated.
- [8] Excludes the 3 percent administrative component of the fee.
- [9] Totals may differ from engineering cost estimates because of rounding.

**Table 3**  
**Bickford Ranch Specific Plan Financing Plan**  
**Sources and Uses: BRSP Infrastructure and Public Facilities at Buildout**

	Funding Sources											Total Funding
	Existing City, County, Other Fee/Funding Programs											
	Placer County					BRSP Fee		Other Agencies			Private/	
	Total Costs	Newcastle/ Horseshoe Bar/ Penryn Transportation Fee	Placer Central Road Fee	Office of Emergency Services	Capital Facility Fee	Public Park Fee [1]	Sierra College Blvd. (SCB) Widening Fee [2]	PCWA	School Fees	SPRTA Fee	Mello-Roos CFD	
<b>BRSP Costs</b>												
<b>BRSP Infrastructure [3] [4]</b>												
<b>Roadways [5]</b>												
Bickford Ranch Road (Segments A - E)	\$35,189,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$35,189,000	\$35,189,000
School Ranch Road (Segment G)	\$6,683,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,683,000	\$6,683,000
Sierra College Blvd. Widening [6]	\$7,459,800	\$0	\$0	\$0	\$0	\$5,761,440	\$0	\$0	\$0	\$0	\$1,698,360	\$7,459,800
North/South Clark Tunnel Road and EVA's	\$473,300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$473,300	\$473,300
<b>Subtotal Roadways</b>	<b>\$49,805,100</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,761,440</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$44,043,660</b>	<b>\$49,805,100</b>
<b>Water</b>												
On-Site Water	\$20,907,400	\$0	\$0	\$0	\$0	\$0	\$14,787,400	\$0	\$0	\$0	\$6,120,000	\$20,907,400
Off-Site Water	\$120,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$120,000	\$120,000
Canal Encasement	\$4,562,400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,562,400	\$4,562,400
<b>Subtotal Water</b>	<b>\$25,589,800</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$14,787,400</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$10,802,400</b>	<b>\$25,589,800</b>
Off-Site Sewer	\$1,094,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,094,000	\$1,094,000
Dry Utilities (including backbone streetlights)	\$10,047,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,047,000	\$10,047,000
Mass Grading [7]	\$5,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000,000	\$5,000,000
Water Quality/Detention Facilities	\$2,160,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,160,000	\$2,160,000
Off-Site Stormwater Retention	\$973,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$973,000	\$973,000
<b>Subtotal BRSP Infrastructure</b>	<b>\$94,668,900</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,761,440</b>	<b>\$14,787,400</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$74,120,060</b>	<b>\$94,668,900</b>
<b>Public Facilities</b>												
<b>Placer County Capital Facilities Fee [8]</b>												
Satellite Offices	\$2,096,689	\$0	\$0	\$0	\$2,096,689	\$0	\$0	\$0	\$0	\$0	\$0	\$2,096,689
Public Works (Corp Yard)	\$324,109	\$0	\$0	\$0	\$324,109	\$0	\$0	\$0	\$0	\$0	\$0	\$324,109
Health and Human Services	\$671,789	\$0	\$0	\$0	\$671,789	\$0	\$0	\$0	\$0	\$0	\$0	\$671,789
Agriculture and Animal Control	\$240,817	\$0	\$0	\$0	\$240,817	\$0	\$0	\$0	\$0	\$0	\$0	\$240,817
Sheriff	\$748,396	\$0	\$0	\$0	\$748,396	\$0	\$0	\$0	\$0	\$0	\$0	\$748,396
Jail and Countywide Public Protection	\$660,003	\$0	\$0	\$0	\$660,003	\$0	\$0	\$0	\$0	\$0	\$0	\$660,003
Justice System	\$777,861	\$0	\$0	\$0	\$777,861	\$0	\$0	\$0	\$0	\$0	\$0	\$777,861
Library	\$817,932	\$0	\$0	\$0	\$817,932	\$0	\$0	\$0	\$0	\$0	\$0	\$817,932
<b>Subtotal Placer County Capital Facilities Fee</b>	<b>\$6,337,596</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$6,337,596</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$6,337,596</b>
Parks and Trails [8] [9]	\$8,519,246	\$0	\$0	\$0	\$0	\$8,519,246	\$0	\$0	\$0	\$0	\$0	\$8,519,246
Fire [9]	\$2,546,235	\$0	\$0	\$2,546,235	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,546,235
Schools [8]	\$9,893,610	\$0	\$0	\$0	\$0	\$0	\$0	\$9,893,610	\$0	\$0	\$0	\$9,893,610
<b>Subtotal Public Facilities</b>	<b>\$27,296,687</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,546,235</b>	<b>\$6,337,596</b>	<b>\$8,519,246</b>	<b>\$0</b>	<b>\$9,893,610</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$27,296,687</b>
<b>Other Costs</b>												
Affordable Housing [8]	\$7,560,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,560,000	\$7,560,000
County Transp. CIP: Newcastle/Horseshoe Bar/Penryn [8]	\$600,000	\$600,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$600,000
County Traffic Fee: Placer Central Benefit District [8]	\$2,448,176	\$0	\$2,448,176	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,448,176
SPRTA Regional Transportation and Air Quality Fee [8]	\$2,166,475	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,166,475	\$0	\$0	\$2,166,475
<b>Subtotal Other Costs</b>	<b>\$12,774,651</b>	<b>\$600,000</b>	<b>\$2,448,176</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,166,475</b>	<b>\$0</b>	<b>\$7,560,000</b>	<b>\$12,774,651</b>
<b>Total BRSP Costs</b>	<b>\$134,740,238</b>	<b>\$600,000</b>	<b>\$2,448,176</b>	<b>\$2,546,235</b>	<b>\$6,337,596</b>	<b>\$8,519,246</b>	<b>\$5,761,440</b>	<b>\$14,787,400</b>	<b>\$9,893,610</b>	<b>\$2,166,475</b>	<b>\$81,680,060</b>	<b>\$134,740,238</b>

Source: MacKay & Soms (June 2015).

S/U

[1] The parks and trails may be an authorized facility for the Mello-Roos CFD as well.  
 [2] The Sierra College Blvd. Widening fee will be collected by the County. The fee will be charged to the first two phases of development, which includes 1,480 units. The fee will fund the estimated costs of construction for segments 3 and 4 of widening Sierra College Blvd. Segments 3 and 4 are shown on Exhibit D-1 in Appendix D. Excludes the 3 percent administrative component of the BRSP SCB Widening Fee.  
 [3] Consists of infrastructure serving the BRSP, including off-site improvements.  
 [4] Does not include the \$7,130,000 previously paid to the City of Lincoln for wastewater treatment.  
 [5] Cost estimates include streetwork, concrete, drainage, potable water, and sewer. See Table 4 for more information regarding the cost for roadways.  
 [6] Based on current negotiations between the Developer and County regarding phasing of the required frontage improvements on Sierra College Boulevard, this analysis assumes the Developer will build two lanes on the northern portion of Sierra College Boulevard from State Route 193 to Twelve Bridges Drive. Everything south of Twelve Bridges Drive will be funded by SPRTA, will be constructed by others, and is not a requirement of the Project. The cost of constructing segments 3 and 4 of Sierra College Blvd. will be funded by the SCB Widening fee to be imposed on Phase 1 and Phase 2 residential building permits and the Developer will be reimbursed by the County for construction of segments 3 and 4.  
 [7] Only includes backbone grading improvements.  
 [8] Assumes cost is equal to estimated fee revenue generated.  
 [9] Excludes the 3 percent administrative component of the fee.

**Table 4**  
**Bickford Ranch Specific Plan Financing Plan**  
**Detail of Roadway Costs and Funding Sources (Rounded)**

Item	Total Cost	Estimated Funding Sources		
		Placer Central Road Fee [1]	Sierra College Blvd. Widening Fee [1] [2]	BRSP Funding
<b>Bickford Ranch Road</b>				
<b>Segment A</b>				
Streetwork	\$1,770,500	\$0	\$0	\$1,770,500
Concrete	\$398,600	\$0	\$0	\$398,600
Storm Drain	\$265,750	\$0	\$0	\$265,750
Potable Water	\$199,060	\$0	\$0	\$199,060
Sanitary Sewer	\$288,300	\$0	\$0	\$288,300
<b>Total Segment A</b>	<b>\$2,922,200</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,922,200</b>
<b>Segment B</b>				
Streetwork	\$5,723,500	\$0	\$0	\$5,723,500
Concrete	\$742,600	\$0	\$0	\$742,600
Storm Drain	\$263,640	\$0	\$0	\$263,640
Potable Water	\$340,600	\$0	\$0	\$340,600
Sanitary Sewer	\$452,360	\$0	\$0	\$452,360
<b>Total Segment B</b>	<b>\$7,522,700</b>	<b>\$0</b>	<b>\$0</b>	<b>\$7,522,700</b>
<b>Segment C</b>				
Streetwork	\$1,684,388	\$0	\$0	\$1,684,388
Concrete	\$418,600	\$0	\$0	\$418,600
Storm Drain	\$314,340	\$0	\$0	\$314,340
Potable Water	\$226,600	\$0	\$0	\$226,600
Sanitary Sewer	\$210,780	\$0	\$0	\$210,780
<b>Total Segment C</b>	<b>\$2,854,700</b>	<b>\$0</b>	<b>\$0</b>	<b>\$2,854,700</b>
<b>Segment D</b>				
Streetwork	\$2,838,700	\$0	\$0	\$2,838,700
Concrete	\$423,000	\$0	\$0	\$423,000
Storm Drain	\$383,700	\$0	\$0	\$383,700
Potable Water	\$439,400	\$0	\$0	\$439,400
Sanitary Sewer	\$450,640	\$0	\$0	\$450,640
<b>Total Segment D</b>	<b>\$4,535,440</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4,535,440</b>
<b>Segment E</b>				
Streetwork	\$3,815,500	\$0	\$0	\$3,815,500
Concrete	\$688,500	\$0	\$0	\$688,500
Storm Drain	\$724,460	\$0	\$0	\$724,460
Potable Water	\$699,500	\$0	\$0	\$699,500
Sanitary Sewer	\$673,700	\$0	\$0	\$673,700
<b>Total Segment E</b>	<b>\$6,601,660</b>	<b>\$0</b>	<b>\$0</b>	<b>\$6,601,660</b>
<b>Subtotal Bickford Ranch Road</b>	<b>\$24,437,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$24,436,718</b>
20% Contingency	\$4,887,400	\$0	\$0	\$4,887,300
<b>Construction Subtotal</b>	<b>\$29,324,400</b>	<b>\$0</b>	<b>\$0</b>	<b>\$29,324,018</b>
20% Soft Costs	\$5,864,900	\$0	\$0	\$5,864,800
<b>Total Bickford Ranch Road [3]</b>	<b>\$35,189,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$35,189,000</b>

**Table 4**  
**Bickford Ranch Specific Plan Financing Plan**  
**Detail of Roadway Costs and Funding Sources (Rounded)**

Item	Total Cost	Estimated Funding Sources		
		Placer Central Road Fee [1]	Sierra College Blvd. Widening Fee [1] [2]	BRSP Funding
<b>School Ranch Road (Segment G)</b>				
Streetwork	\$2,378,600	\$0	\$0	\$2,378,600
Concrete	\$815,300	\$0	\$0	\$815,300
Storm Drain	\$773,300	\$0	\$0	\$773,300
Potable Water	\$368,800	\$0	\$0	\$368,800
Sanitary Sewer	\$305,200	\$0	\$0	\$305,200
<b>Subtotal School Ranch Road (Segment G)</b>	<b>\$4,641,200</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4,641,200</b>
20% Contingency	\$928,200	\$0	\$0	\$928,200
<b>Construction Subtotal</b>	<b>\$5,569,400</b>	<b>\$0</b>	<b>\$0</b>	<b>\$5,569,400</b>
20% Soft Costs	\$1,113,900	\$0	\$0	\$1,113,900
<b>Total School Ranch Road (Segment G) [3]</b>	<b>\$6,683,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$6,683,000</b>
<b>Sierra College Blvd. Widening [4]</b>				
	\$5,180,500	\$0	\$4,001,000	\$1,179,500
20% Contingency	\$1,036,000	\$0	\$800,200	\$235,800
<b>Construction Subtotal</b>	<b>\$6,216,500</b>	<b>\$0</b>	<b>\$4,801,200</b>	<b>\$1,415,300</b>
20% Soft Costs	\$1,243,300	\$0	\$960,240	\$283,060
<b>Total Sierra College Blvd. Widening [3]</b>	<b>\$7,459,800</b>	<b>\$0</b>	<b>\$5,761,440</b>	<b>\$1,698,360</b>
<b>North/South Clark Tunnel Road and EVA's</b>				
North Clark Tunnel (3,950 LF)	\$255,120	\$0	\$0	\$255,120
South Clark Tunnel Road (350 LF)	\$52,550	\$0	\$0	\$52,550
Woodsdale Court Emergency Vehicle Access (EVA) (250 LF)	\$20,950	\$0	\$0	\$20,950
<b>Subtotal North/South Clark Tunnel Road and EVA's</b>	<b>\$328,620</b>	<b>\$0</b>	<b>\$0</b>	<b>\$328,620</b>
20% Contingency	\$65,724	\$0	\$0	\$65,724
<b>Construction Subtotal</b>	<b>\$394,344</b>	<b>\$0</b>	<b>\$0</b>	<b>\$394,344</b>
20% Soft Costs	\$78,870	\$0	\$0	\$78,870
<b>Total North/South Clark Tunnel Road and EVA's [3]</b>	<b>\$473,300</b>	<b>\$0</b>	<b>\$0</b>	<b>\$473,300</b>
<hr/>				
<b>Total Roads [3]</b>	<b>\$49,805,100</b>	<b>\$0</b>	<b>\$5,761,440</b>	<b>\$44,043,660</b>

*roads*

Source: MacKay & Somps.

- [1] This analysis assumes the Developer will build two lanes on the northern portion of Sierra College Boulevard from approximately Highway 193 to Twelve Bridges Drive. The roadway lane improvements south of Twelve Bridges Drive will be constructed by others.
- [2] This fee will fund the estimated costs of construction for segments 3 and 4 of widening Sierra College Blvd.
- [3] Totals may differ from engineering cost estimates because of rounding.
- [4] Includes the cost for traffic signals at the Sierra College Blvd./Highway 193 and Sierra College Blvd./School Ranch Road intersections. The cost for Sierra College Blvd. widening was updated in November 2015. **Appendix E** includes the amended cost.

**Table 5**  
**Bickford Ranch Specific Plan Financing Plan**  
**Detail of Water Costs and Funding Sources**

Item	Total Cost	Estimated Funding Sources	
		PCWA [1]	BRSP Funding
<b><u>On-Site Water</u></b>			
<b>42" Water Line</b>			
42" Water Transmission Main, DIP CL 50	\$7,560,000	\$7,560,000	\$0
6" Fire Hydrant Blow-off	\$144,000	\$144,000	\$0
2" ARV Assembly	\$60,000	\$60,000	\$0
Flush Mounted Test Station	\$30,000	\$30,000	\$0
Pressure Reducing Stations	\$1,875,000	\$1,875,000	\$0
42" Butterfly Valve	\$600,000	\$600,000	\$0
<b>Subtotal 42" Water Line</b>	<b>\$10,269,000</b>	<b>\$10,269,000</b>	<b>\$0</b>
20% Contingency	\$2,053,800	\$2,053,800	\$0
<b>Construction Subtotal</b>	<b>\$12,322,800</b>	<b>\$12,322,800</b>	<b>\$0</b>
20% Soft Costs	\$2,464,560	\$2,464,560	\$0
<b>Total 42" Water Line (Rounded)</b>	<b>\$14,787,400</b>	<b>\$14,787,400</b>	<b>\$0</b>
<b>Water Tank #1</b>			
1.3 MG Water Storage Tank #1	\$1,250,000	\$0	\$1,250,000
Pump Station #1	\$2,500,000	\$0	\$2,500,000
Water Tank Site #1 Grading	\$500,000	\$0	\$500,000
<b>Subtotal Water Tank</b>	<b>\$4,250,000</b>	<b>\$0</b>	<b>\$4,250,000</b>
20% Contingency	\$850,000	\$0	\$850,000
<b>Construction Subtotal</b>	<b>\$5,100,000</b>	<b>\$0</b>	<b>\$5,100,000</b>
20% Soft Costs	\$1,020,000	\$0	\$1,020,000
<b>Total Water Tank #1 (Rounded)</b>	<b>\$6,120,000</b>	<b>\$0</b>	<b>\$6,120,000</b>
<b>Total On-Site Water (Rounded)</b>	<b>\$20,907,400</b>	<b>\$14,787,400</b>	<b>\$6,120,000</b>
<b><u>Off-Site Water</u></b>			
Connect to Existing Potable Water Main	\$4,500	\$0	\$4,500
6" Water Distribution Main, PVC C900	\$58,000	\$0	\$58,000
6" Fire Hydrant Blow-off	\$6,000	\$0	\$6,000
6" Gate Valve	\$6,000	\$0	\$6,000
2" Blow-Off Assembly	\$9,000	\$0	\$9,000
<b>Subtotal Off-Site Water</b>	<b>\$83,500</b>	<b>\$0</b>	<b>\$83,500</b>
20% Contingency	\$16,700	\$0	\$16,700
<b>Construction Subtotal</b>	<b>\$100,200</b>	<b>\$0</b>	<b>\$100,200</b>
20% Soft Costs	\$20,040	\$0	\$20,040
<b>Total Off-Site Water (Rounded)</b>	<b>\$120,000</b>	<b>\$0</b>	<b>\$120,000</b>

**Table 5**  
**Bickford Ranch Specific Plan Financing Plan**  
**Detail of Water Costs and Funding Sources**

Item	Total Cost	Estimated Funding Sources	
		PCWA [1]	BRSP Funding
<b><u>Canal Encasement</u></b>			
<b>Caperton Canal</b>			
Clearing and Grubbing	\$13,600	\$0	\$13,600
Erosion Control	\$68,000	\$0	\$68,000
Chain Link Fencing	\$1,520,000	\$0	\$1,520,000
Temporary Silt Barrier	\$475,000	\$0	\$475,000
Interceptor Ditch	\$80,000	\$0	\$80,000
36" RCP CL III Canal Encasement	\$183,600	\$0	\$183,600
30" RCP CL III Canal Encasement	\$405,000	\$0	\$405,000
24" RCP CL III Canal Encasement	\$187,980	\$0	\$187,980
Canal Mainline Inlet Structure	\$80,000	\$0	\$80,000
Exist Canal Mainline Outlet Structure Improvements	\$10,000	\$0	\$10,000
8" Float Valve Distribution Box for 6 Services	\$30,000	\$0	\$30,000
4" Float Valve Distribution Box for 3 Services	\$10,000	\$0	\$10,000
4" Float Valve Distribution Box for 5 Services	\$30,000	\$0	\$30,000
Pressure Sustaining Valve Station	\$75,000	\$0	\$75,000
<b>Subtotal Raw Water</b>	<b>\$3,168,000</b>	<b>\$0</b>	<b>\$3,168,180</b>
20% Contingency	\$634,000	\$0	\$633,636
<b>Construction Subtotal</b>	<b>\$3,802,000</b>	<b>\$0</b>	<b>\$3,801,816</b>
20% Soft Costs	\$760,400	\$0	\$760,363
<b>Total Canal Encasement (Rounded)</b>	<b>\$4,562,400</b>	<b>\$0</b>	<b>\$4,562,200</b>
<b>Total Water (Rounded)</b>	<b>\$25,589,800</b>	<b>\$14,787,400</b>	<b>\$10,802,200</b>

*water*

Source: MacKay & Somps (June 2015).

[1] According to MacKay & Somps, the 42" water line will be fully creditable from PCWA.

**Table 6**  
**Bickford Ranch Specific Plan Financing Plan**  
**Detail of Off-Site Sewer Costs and Funding Sources**

Item	Total Cost	BRSP Funding
<b>Off-Site Sewer</b>		
60" Standard Sanitary Sewer Manhole	\$129,600	\$129,600
18" Sanitary Sewer, VCP	\$628,800	\$628,800
Connect to Existing Sanitary Sewer Main	\$1,500	\$1,500
<b>Subtotal Off-Site Sewer</b>	<b>\$759,900</b>	<b>\$759,900</b>
20% Contingency	\$151,980	\$151,980
<b>Construction Subtotal</b>	<b>\$911,880</b>	<b>\$911,880</b>
20% Soft Costs	\$182,376	\$182,376
<b>Total Off-Site Sewer (Rounded)</b>	<b>\$1,094,000</b>	<b>\$1,094,000</b>

*off sewer*

Source: MacKay & Soms (June 2015).

## Other Costs

### *Affordable Housing*

As stated in the DA, the Developer shall provide for 189 units of affordable housing, or 10 percent of the total number of residential units approved in the Project. Because of the Project's location and lack of proximate services or planned public transit service, the Project may not provide the best location for housing affordable to lower income levels. Therefore, in lieu of constructing affordable housing on site, the Developer shall pay an in-lieu fee to the County equal to \$4,000 per residential unit. As shown on **Table 2**, this amounts to approximately \$7.6 million.

### *Traffic/Transportation Fee Programs*

The Project will participate in the following regional traffic/transportation fee programs for a total cost of approximately \$5.2 million:

- County Transportation Capital Improvement Program (CIP): Newcastle/Horseshoe Bar/Penryn (contribution of \$600,000)
- County Traffic Fee: Placer Central Benefit District
- South Placer Regional Transportation Authority (SPRTA) Regional Transportation and Air Quality Fee

## Financing Strategy and Implementation

### **Upfront Funding and Construction**

The BRSP Developer will be responsible for funding and constructing all or a portion of the Facilities, as identified in the DA between the County and the BRSP Developer.

The County may agree to a limited amount of construction responsibility by the County for specific Public Facilities only after (1) it is proven the County will have adequate funding to construct the Facilities on the required schedule defined in the Financing Plan or in one of the Facilities Master Plan documents, or (2) if construction of the Facility will be the responsibility of another developer in another plan area. The County will not assume any risk for construction cost increases or timing of available funding as a result of assuming responsibility for construction of the specified Facilities.

### **Use of Mello-Roos Community Facilities Districts and Assessment Districts**

**Countywide and urban services will have priority over special taxes and assessments available to fund Infrastructure.** After there are adequate assurances that public services are funded, then special taxes or special assessments may be used to fund Facilities, as long as such funding is consistent with the County's Land-Secured Debt-Financing policies or County Bond Committee rules and procedures.

The amount of funding available in the early years—from public debt financing through implementation of one or more Mello-Roos Community Facilities Districts (CFDs) or through creation of Assessment Districts—may be limited because of the services tax burden on the Project. Therefore, any land-secured financing district that will be used likely will be an Acquisition District: after construction of an eligible improvement project, the County will accept and acquire the improvement(s) with bond proceeds as those proceeds become available, reimbursing the Project developer(s) to the extent possible.

The limits on public land-secured financing are influenced by value-to-lien considerations, absorption of residential land, maximum special tax rates, and annual tax levies on undeveloped property, among other things (e.g., interest rates).

### **Credits and Reimbursements**

Subject to the County's fee credit and reimbursement policies and DA, and provisions related thereto, some or all of the private funding may be reimbursed to the Project developer(s) over time as the County is able to issue public debt through CFD(s), issue credits due for the Project developers' proportionate share of fees, and collect reimbursement for infrastructure from subsequent projects or other benefiting projects/agencies. The time frame for reimbursement is unknown and could be a considerable period, depending on market conditions and the actual absorption of BRSP development projects.

## **Sources of Financing**

Several different financing sources will be used to fund Backbone Infrastructure and Public Facilities and to mitigate impacts on surrounding developments.

### **Summary of BRSP Costs and Funding Sources at Buildout**

**Figure 1** describes the different funding sources proposed for the BRSP. **Table 3** shows the Facilities required and funding sources used to fund Infrastructure, Public Facilities, and other costs required to be constructed or funded by BRSP Developers.

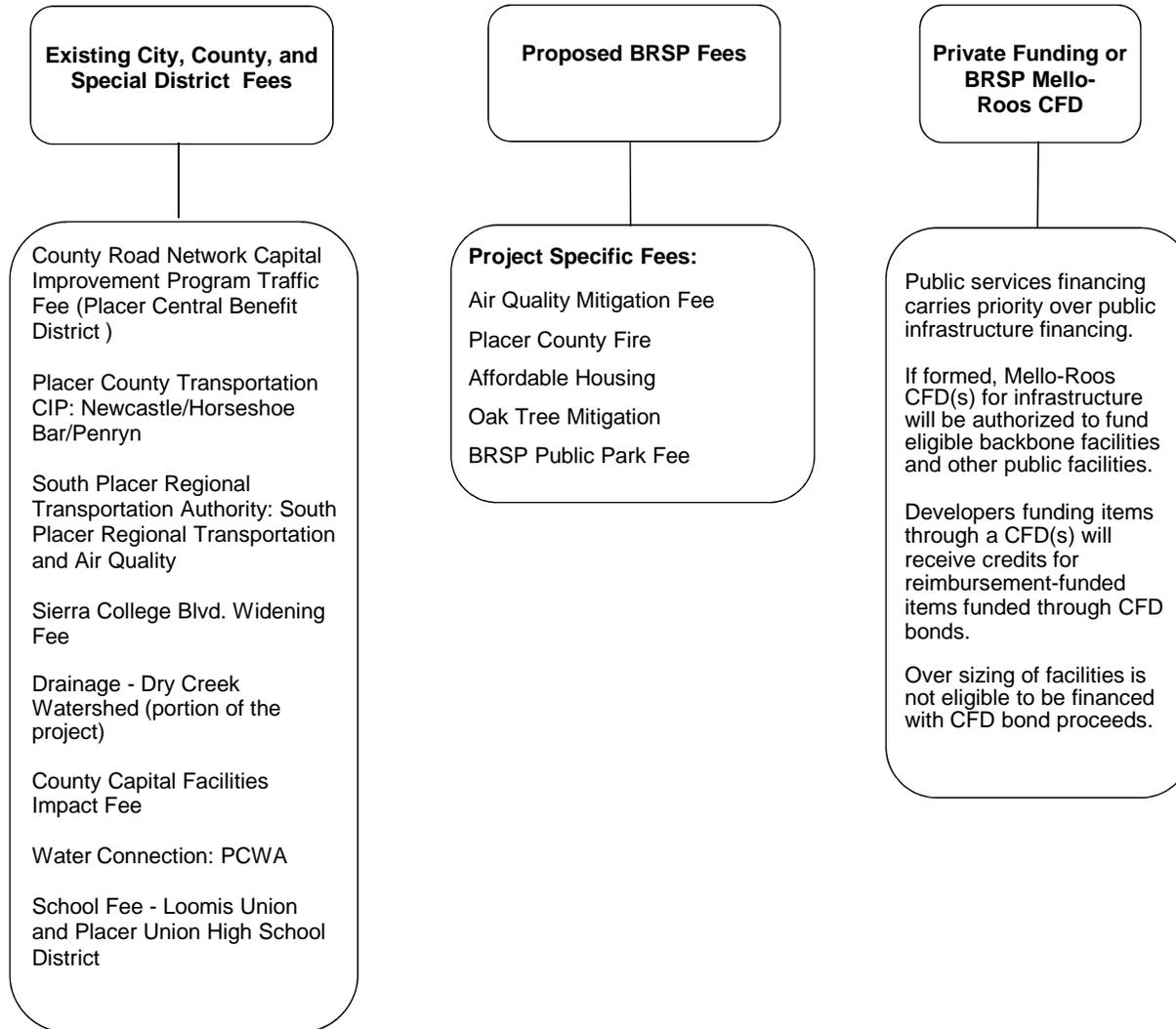
### **Existing and Future Fee Programs**

Existing and potential future fee programs are discussed in detail in **Chapter 6**. Because of the size of the BRSP and other large proposed development projects in the County, it is possible that some existing fee programs may be modified, or new fee programs may be created.

The County and other special districts have several existing and planned fee programs:

- Waste Water Treatment: City of Lincoln.
- Water Connection: Placer County Water Agency (PCWA).

**Figure 1**  
**Bickford Ranch Specific Plan Financing Plan**  
**Proposed Funding Sources**



- County Transportation Capital Improvement Program Traffic Fee: Newcastle/Horseshoe Bar/Penryn (contribution of \$600,000).
- County Road Network Capital Improvement Program (CIP) Traffic Fee (Placer Central District).
- SPRTA.
- BRSP Sierra College Boulevard Widening Fee (for only the first two phases of development).
- Drainage—Dry Creek Watershed (for only a portion of the units).
- County Air Quality Mitigation.
- County Fire.
- County Affordable Housing.
- County Oak Tree Mitigation.
- BRSP Public Park Fee.
- County CFF.
- Loomis Union School District and Placer Union High School District Level II Fees.

## **Potential or Proposed Fee Programs/Funding Sources**

### ***Mello-Roos CFD Bond Financing***

The Financing Plan identifies potential formation of one or more Mello-Roos CFD(s) to fund construction of Infrastructure. Initially, the Project developer(s) will fund construction of Infrastructure privately, some of which will be acquired when CFD bond proceeds are available. Other financing mechanisms, such as an Assessment District, may be implemented in conjunction with or instead of a CFD special tax.

Because of a single Project owner, this Financing Plan does not anticipate a Project-specific plan area fee program. It is not precluded, but it is not anticipated at this time.

Backbone Infrastructure, Public Facilities, and other costs amount to roughly \$134.7 million. For Backbone Infrastructure, all of the \$94.7 million will be funded by a combination of fee revenue, Developer funding, and CFDs.

## **Total Infrastructure Cost Burdens**

The Financing Plan presents the total infrastructure cost burden placed on BRSP development, as well as the total infrastructure burden on BRSP development on a per-unit basis. The Financing Plan presents the total infrastructure cost burdens by land use.

## Organization of the Report

The remainder of this report is organized as follows:

- **Chapter 2** describes the BRSP policy and financing framework.
- **Chapter 3** briefly discusses the land uses proposed in the Project.
- **Chapter 4** details the Backbone Infrastructure costs and funding sources.
- **Chapter 5** details the Public Facilities costs.
- **Chapter 6** summarizes the financing sources and strategies.
- **Chapter 7** describes the funding of public services.
- **Chapter 8** discusses the implementation and administration of the Financing Plan.

This Financing Plan also contains five appendices:

- **Appendix A** provides June 2015 cost estimates and exhibits for Backbone Infrastructure, provided by MacKay & Somps.
- **Appendix B** provides detail on the estimated fee revenue for existing and planned/potential public fee programs.
- **Appendix C** provides detail on the Newcastle/Horseshoe Bar/Penryn traffic fee cost allocation.
- **Appendix D** shows the phasing of Sierra College Boulevard widening improvements and provides the basis for the Sierra College Boulevard Widening Fee.
- **Appendix E** contains the park phasing exhibits.

## 2. POLICY AND FINANCING FRAMEWORK

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This chapter describes the policy and financing framework that shaped the financing strategy included in this Financing Plan. This chapter describes each of the following concepts:

- Specific Plan Amendment and DA Approval.
- Future Discretionary Project Approvals.
- Financing Purpose, Goals, and Policies.

### **Policy Framework**

The ability to develop property in the BRSP is governed by several County policies and approvals. The following sections summarize these actions taken for the BRSP.

#### **Specific Plan Amendment Approval**

When the Specific Plan Amendment is reviewed by the County Board of Supervisors for consideration, the Board of Supervisors will concurrently consider the following entitlements:

- Rezone
- Development Agreement
- Vesting Large Lot Tentative Subdivision Map

The above entitlements would enable processing of subsequent discretionary Project approvals that would be required before development is able to proceed.

#### **Future Discretionary Project Approvals**

Future development of BRSP property will be subject to the following future discretionary County Project approvals:

- Vesting Small Lot Tentative Subdivision Map for Phase 1.
- Subdivisions (e.g., large lot final maps, tentative maps, final small lot maps).
- Design/Site Review.
- Subsequent Conformity Review.
- Building Permits (this is a ministerial project approval rather than discretionary).

#### **Financing Plan Policy Guidance**

The financing strategy included in this Financing Plan has been guided by existing County policies and practices, by the Specific Plan Implementation Chapter, and by prevailing industry best practices for financing public infrastructure.

## **Financing Plan Purpose, Goals, and Policies**

### **Purpose**

The purpose of the Financing Plan is to identify the appropriate financing mechanisms to fund the necessary Backbone Infrastructure and Public Facilities costs required to serve the BRSP. The identified financing mechanisms are flexible enough to ensure the required improvements are constructed when necessary. The financing mechanisms ultimately used and, potentially, which ones are used at various times, will depend on the types and timing of the needed facilities.

### **Financing Plan Goals**

The elements of the Financing Plan must work together to provide the optimal balance of fee, bond, and private financing so as not to burden undeveloped land, while ensuring necessary facilities are constructed when needed. The Financing Plan articulates the financing strategy such that each property owner/investor can achieve the following goals:

- Ability to achieve final end-use, on-site vertical construction.
- Develop his or her respective property independently without relying on others to proceed (to the greatest extent physically and feasibly possible).
- Maximize available financial resources to optimize development returns, while creating a community with desired County service-level amenities.

The following financing policies are consistent with the aforementioned goals.

### **Financing Policies**

The following objectives and policies should be considered to guide financing of infrastructure and services in the BRSP:

- Clearly identify physical and financial obligations of the BRSP Developer.
- Equitably allocate BRSP Facilities costs to land uses based on proportional benefit received.
- Construct or fund on-site and off-site Facilities when needed to serve the BRSP. Some regionally serving Public Facilities may be funded by regional fee program(s), which may include areas both in and outside the BRSP.
- Maximize the use of existing funding mechanisms and tools.
- Maximize the use of pay-as-you-go funding mechanisms.
- Make appropriate use of one or more public land-secured debt financing mechanisms.
- Effectively leverage available regional, state, and federal funding where possible.
- Include flexibility to accommodate changes in development phasing, sequencing, and land uses in response to market conditions.
- Identify ways to finance construction of Backbone Infrastructure and Public Facilities through the most efficient combination of public and private financing.

### 3. LAND USE

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**Table 1** summarizes the land uses projected at buildout of the BRSP. With a total of approximately 1,928 acres, the BRSP includes the potential for 1,890 units. As shown in **Table 1**, there also are approximately 15 acres of schools, 23 acres of public parks and 15 acres of privately funded and maintained parks, 4 acres of equestrian staging area, 17 acres of recreation center, 1,080 acres of open space, 13 acres of public facilities, 17 acres of landscape corridors, and 51 acres of right-of-way.

#### **Specific Plan Amendment**

In 2001, the County Board of Supervisors approved the entitlements related to the BRSP. The 2001 approvals were challenged and, in 2004, the 2001 approvals were rescinded. The Board of Supervisors reconsidered and approved the BRSP in 2004. In 2012, LV Bickford Ranch, LLC, acquired the property and proposed development of the Project in 2013. The Board of Supervisors will consider the revised Project, including a revised land use plan.

#### **Developable Land Use Assumptions**

For purposes of this Financing Plan, the proposed land use designations are described as either “developable” or “public and other.” Developable land uses include private residential uses that will be required to pay development impact fees and will support the sale of bonds, if necessary, to finance facilities. Other land uses include public and quasi-public land uses such as parks and schools that will be exempt from paying fees or special taxes.

#### **Residential Development**

The BRSP includes approximately 1,890 residential units over approximately 701 acres of land. The Project’s 701 residential acres include the following residential uses:

- Approximately 27 rural residential units on lot sizes ranging from 1 to 10 acres.
- Approximately 1,798 low-density single-family units, with 950 units being age-restricted. Low-density residential lots are located through the central portion of the Project.
- Approximately 65 medium-density detached single-family units.

#### ***Age-Restricted Residential Development***

As outlined in the Specific Plan, approximately half of the Project’s residential development is planned as an age-restricted active-adult community for residents 55 years and older. The age-restricted portion of the Project is located in the central portion of the plan area along Boulder Ridge. The West Recreation Center, trails, several neighborhood parks, and other amenities designed for active adults are planned for the age-restricted community.

## Public and Other Land Uses

### Schools

A 15-acre site for a K-8 school is planned on the southwest side of School Ranch Road near Sierra College Boulevard. The school site is located adjacent to a public facilities site and a small portion of the open space preserve. The school site is located within the boundaries of the Loomis Union School District, which is the Project's school district for K-8 schools.

### Parks, Recreation Centers, and Open Space

There are approximately 1,131 acres of parks, recreation centers, and open space in the BRSP, which is approximately 60 percent of the total Project acres. The BRSP includes the following open space and recreation sites:

- 23.4 acres for a public community park.
- 4.2 acres of equestrian staging area.
- 15.2 acres of neighborhood parks.
- 783.5 acres of open space preserve.
- 163.3 acres of open space transition.
- 123.8 acres of open space parkways.
- 8.5 acres for the recreation center located on the western portion of BRSP.
- 8.7 acres for the recreation center located on the eastern portion of BRSP.

### Public Facilities

Thirteen parcels are designated as Public Facilities to accommodate public-serving land uses, which include the following Public Facilities:

- A 1.4-acre site for a fire station is proposed at the northeast corner of Bickford Ranch Road and Sierra College Boulevard.
- A 3.4-acre site on the eastern side of the BRSP is designated for facilities owned and operated by PCWA.
- A 3.0-acre site is planned for a water storage tank and pump station south of Sierra College Boulevard.
- A 3.0-acre site that could accommodate a park or other public/quasi-public land uses.
- 9 sewer lift stations. The location of the sewer lift stations will be shown on the small lot tentative maps.

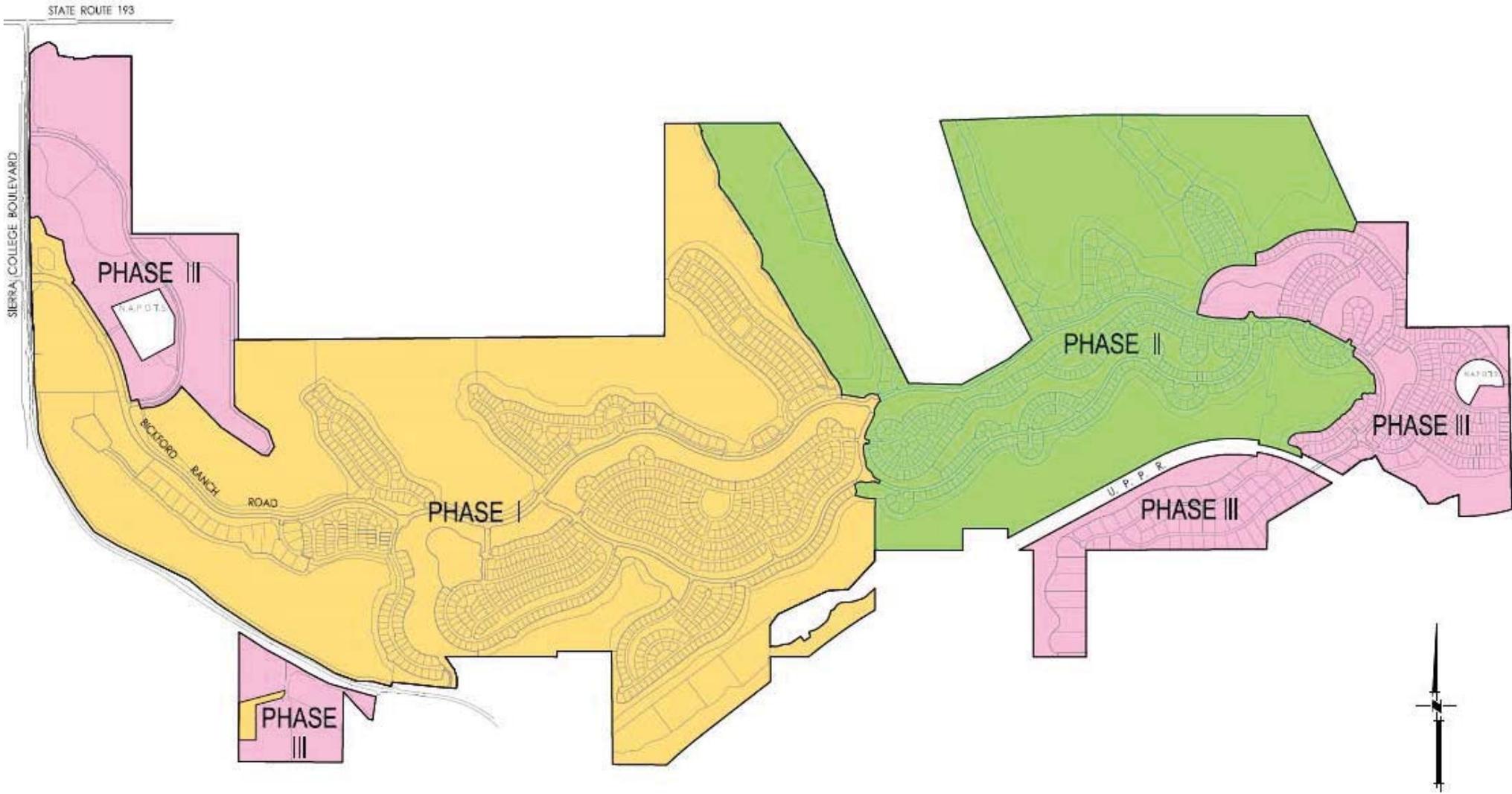
## **Phasing**

The BRSP provides a comprehensively planned infrastructure system coordinated with each potential increment of development. Land uses in the BRSP are anticipated to develop over multiple years and, depending on market conditions, may evolve in a variety of ways. Generally, construction of the BRSP is anticipated to begin from Sierra College Boulevard and proceed in an easterly direction (see **Map 3**).

The BRSP provides for construction of improvements to meet County service standards and the requirements of the BRSP. The phases are structured so development in each phase can support the cost of the required improvement. Please refer to the DA, as well as supporting information provided in the Specific Plan and corresponding facility Master Plans, for additional detail related to timing and policies of BRSP development.

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Map 3. Phasing



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## 4. BACKBONE INFRASTRUCTURE

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This chapter defines and briefly summarizes the Backbone Infrastructure requirements as informed by the Specific Plan, infrastructure master plans, and infrastructure planning documents from other agencies. Specific cost detail supporting the BRSP Backbone Infrastructure is included in **Appendix A**. The cost estimates are based on information from MacKay & Soms and the County, unless otherwise indicated.

### Financing Plan Definitions

Many people tend to use the term “backbone infrastructure” for all publicly owned facilities. This Financing Plan uses the term(s) Backbone Infrastructure and Public Facilities and relies on the following definitions to characterize these items more precisely:

- **Backbone Infrastructure:** This term includes most of the public service-based items that are underground or at ground level and which may be both on site or off site (i.e., within or outside the BRSP boundaries). Backbone Infrastructure is sized to serve the BRSP as a whole as well as provide for regional infrastructure improvements such as the 42” PCWA water line that is part of the Ophir Treatment Plant project. For the BRSP, Backbone Infrastructure includes the following items:
  - Roadways
  - Water Facilities (Raw and Potable)
  - Drainage Facilities
  - Sewer Facilities
  - Off-Site Storm Water Retention
  - Dry Utilities
  - Water Quality/Detention Facilities
- **Public Facilities:** This group of items provides amenities to the BRSP (e.g., schools) or helps to provide facilities for employees providing services to the area (e.g., law enforcement, fire). For the BRSP, Public Facilities include the following items:
  - Satellite Offices (contribution)
  - Fire Station
  - Sheriff Services Center
  - General Capital Facilities (fee for items not duplicated above)
  - Schools
  - Library
  - Parks and Trails
  - Corporation Yard (contribution)
- **Facilities:** This term is used generically in the Financing Plan to refer to Backbone Infrastructure and Public Facilities when a precise breakdown is not required.

## Items Excluded from the Financing Plan

The costs of the following items are specifically excluded from the Financing Plan:

1. Subdivision-specific Infrastructure improvements (Subdivision). This category includes infrastructure built to serve the BRSP's local needs for roads, sewer, water, storm drainage, recycled water (if required), detention basins, open space and erosion requirements, and dry utilities. Subdivision costs include improvements built in the Project that only serve individual subdivision or village-area development. Construction requirements for Subdivision projects will be determined as part of subdivision map conditions consistent with the DAs. These costs will be funded privately by the BRSP Developers.
2. Public land acquisition.
3. Land acquisition for off-site environmental mitigation, if applicable.

In addition, off-site right-of-way and easement costs are not part of the Financing Plan and will be handled by the Project developer(s) and the County as appropriate.

The following sections summarize estimated Backbone Infrastructure costs and potential funding sources for each infrastructure item. A description of each Backbone Infrastructure component will include the following discussion:

- **Identify Improvements and Corresponding Costs.** Total estimated buildout Backbone Infrastructure costs, including such improvements that may benefit properties outside the BRSP.
- **Potential Funding Sources for Infrastructure.** Reimbursements or fee credits toward existing fee programs are documented.

## Backbone Infrastructure

Backbone Infrastructure is sized to serve the BRSP and other benefiting projects/agencies. Backbone infrastructure includes roadways, water, storm drainage, off-site sewer, dry utilities, mass grading, water quality/detention facilities, and off-site stormwater retention.

**Table 2** in **Chapter 1** summarizes the major BRSP Infrastructure costs in 2015 dollars. All Backbone Infrastructure improvement costs include a 20-percent soft-cost estimate, including a 20-percent contingency. At buildout, the BRSP will require an estimated total of approximately \$94.7 million in Infrastructure costs. The BRSP property owner will be responsible for obtaining all County, state, and federal permits for construction of those Facilities.

### Roadways

The proposed backbone roadway system comprises major arterials to provide convenient and safe access to all areas in the BRSP. The BRSP Developer will grade, construct, and fund a series of roadway improvements for the BRSP, including the following improvements:

- Bickford Ranch Road (Segments A–E)
- School Ranch Road (Segment G)
- Sierra College Boulevard Widening (including the cost for a traffic signal at Bickford Ranch Road and a traffic signal at State Route 193.)
- North Clark Tunnel Road Emergency Vehicle Access (EVA)
- South Clark Tunnel Road EVA
- Woodsdale Court EVA

Total Roadway Infrastructure, as shown in **Table 4**, amounts to approximately \$49.8 million at buildout. The cost of Roadways includes streetwork, concrete, storm drainage, potable water, and sanitary sewer.

The Developer and the County are in negotiations regarding the phasing of required frontage improvements along Sierra College Boulevard. This Financing Plan is based on the assumed current outcome of those negotiations, in which the Developer will build two lanes on the northern portion of Sierra College Boulevard from State Route 193 to Twelve Bridges Drive. A portion of these improvements will be funded by the Sierra College Boulevard Widening (SCB) fee, described in more detail below. Others will construct the frontage improvements south of Twelve Bridges Drive.

The Sierra College Boulevard improvements constructed by the developer are expected to be phased with four segments over a period of time relative to the phasing of the Project development. The segmented phasing is shown on **Exhibit D-1** in **Appendix D**. The widening of Sierra College Boulevard will be funded by either the developer or the fee revenue generated by the SCB fee. The SCB fee will provide reimbursement to the developer for segments 3 and 4. If the developer should fail to construct segments 3 and 4 or proceed with the development of segments 3 and 4 during the term of the development agreement, the County shall then be permitted to use the funds to complete segments 3 and 4. The SCB fee is calculated by dividing the total cost of segments 3 and 4 by the total number of residential units in Phase 1 and 2 of development (1,480 units).

The traffic signal at Sierra College Boulevard and Twelve Bridges Drive is subject to SPRTA reimbursement or fee credit, unless it is constructed by another development (i.e. City of Lincoln Village 1). The BRSP Developer does not expect to construct the traffic signal at Twelve Bridges Drive, but may have to at the 750<sup>th</sup> building permit if it has not been constructed by others.

BRSP development will participate in selected development impact fee programs to fund its proportionate share of impacts on the regional road system. The BRSP will receive fee credits against improvements if it constructs any improvements that are included in the CIP of these fee programs. **Chapter 6** includes a detailed discussion of these fee programs, as well as proposed credit and reimbursement mechanisms.

## Potable On-Site and Off-Site Water

The BRSP will be served by the PCWA. As detailed in the Specific Plan, the northwest portion of the BRSP is located within the exclusion area of the Nevada Irrigation District (NID) but still will be served by PCWA.

### *On-Site Water*

Two sites are planned for water facilities. A 3.4-acre site on the eastern side of the BRSP is designated for facilities owned and operated by PCWA. A 3.0-acre site is planned for a water storage tank and pump station south of Sierra College Boulevard, also to be owned and operated by PCWA.

The BRSP will tie into PCWA's existing system for potable water at a 30-inch pipeline southwest of the Project. The water from PCWA would flow into Storage Tank #1 and Pump Station #1. In addition to the infrastructure required to serve the BRSP, a portion of PCWA's 42-inch Ophir transmission pipeline will be constructed in the Project on Bickford Ranch Road and between Bickford Ranch Road and Storage Tanks #1 and #2. The pipeline will provide a future service connection point to the BRSP. As shown on **Table 5**, on-site backbone water improvement costs are approximately \$20.9 million.

### PCWA

A portion of the water facilities will be funded by PCWA because of the requirement to provide transmission water facilities to serve other areas in the region. The 42-inch water line described in **Table 5** is eligible for PCWA funding. As **Table 5** shows, PCWA may have an obligation to fund approximately \$14.8 million in Potable Water facilities for the BRSP. Reimbursements for improvements to be constructed for public utilities will be fully (100%) reimbursed by PCWA upon the completion of each segment of the transmission facility. The Project also will pay the PCWA Connection Fee.

### *Off-Site Water*

Off-site water improvements include connecting to an existing potable water main and a 6-inch water distribution main. As shown on **Table 5**, off-site backbone water improvement costs are approximately \$120,000.

## Caperton Canal Encasement

The Caperton Canal extends approximately 10 miles in length, of which approximately 6.5 miles are in the BRSP. Presently the BRSP has rights to use up to 206 miners inches of raw water a portion of which may be used as part of entry features or common area water feature. Improvements, including encasement, will be made to the portions of Caperton Canal on site, at the direction of PCWA, pursuant to PCWA's policies. As shown on **Table 5**, the backbone canal encasement cost for the Caperton Canal is approximately \$4.6 million.

## Off-Site Sewer

All sewer improvements, including septic systems, will be consistent with County standards. Upon Project completion and acceptance, the sewer system will be operated and maintained by the County Department of Facility Services, septic systems will be privately owned and maintained.

As shown on **Table 6**, the backbone off-site sewer improvements cost approximately \$1.1 million and consist of the following improvements:

- 60-inch Standard Sanitary Sewer Manhole
- 18-inch Sanitary Sewer
- Connection to Existing Sanitary Sewer Main

Sewage treatment services for the BRSP will be provided at the regional wastewater treatment facility, located in the City of Lincoln, as provided for in the Construction, Operations and Joint Exercise of Powers Agreement between the City of Lincoln and the County. The City of Lincoln will operate and maintain the treatment facility, and the County will operate and maintain the trunk sewer facilities from the Project boundary to the connection with the regional trunk sewer line. The County collects a sewer connection fee, which a portion will be paid to the City of Lincoln for treatment.

## Dry Utilities

Natural gas and electric service will be provided by Pacific Gas & Electric Company. Communication services will be provided to the Project from an existing distribution system located on Sierra College Boulevard. As shown on **Table 2**, backbone dry utilities costs, including street lights, are estimated to be approximately \$10.0 million at buildout.

## Mass Grading

Backbone Infrastructure mass grading costs, as shown on **Table 2**, are estimated to be approximately \$5.0 million at buildout, based on grading plans completed by MacKay & Soms on April 18, 2014. The costs shown in this Financing Plan only include the costs of mass grading Backbone Infrastructure roadways for Bickford Ranch, School Ranch Road, and the phase 1 tank site.

## Water Quality/Detention Facilities

Backbone water quality/detention facilities costs, as shown on **Table 2**, are estimated to be approximately \$2.2 million at buildout, based on the June 2015 cost estimate from MacKay & Soms. The water quality detention ponds are based on the required volumes provided by Civil Engineering Solutions Project Drainage Study Update (April 28, 2014).

## Off-Site Stormwater Retention

Backbone off-site stormwater retention costs, as shown on **Table 2**, are estimated to be approximately \$1.0 million at buildout, based on an in-lieu fee to the City of Lincoln of \$13,000 per acre for 52 acres.

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## 5. PUBLIC FACILITIES

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### Overview

This chapter describes the BRSP Public Facility requirements as informed by the Specific Plan, County master plans, and other Public Facility planning documents from other agencies.

### Public Facilities

**Table 4** summarizes the estimated cost of BRSP Public Facilities, in 2015 dollars, which include contributions through the payment of fees towards the following Facilities:

- Satellite Offices
- Sheriff Services Center
- Library
- Other General Capital Facilities (public works (corporation yard), health and human services, agriculture and animal control, jail and countywide protection, and justice system)
- Fire Facilities
- Parks and Trails
- Schools

BRSP development will contribute to the above-listed facilities under County control (all facilities excluding schools) through a combination of payment of the County's CFF, Project-specific fees, and developer funding. **Appendix B** includes the estimated fee revenue generated by the Project for Public Facilities.

### County General Capital Facilities

The County has an existing countywide CFF that is collected from new County development. **Table 7** details the calculation of how EPS arrived at the County's CFF breakdown for each category. The County's CFF funds a variety of capital facilities required to serve new development. The table below summarizes the current CFF components by fee category.

**Table 7**  
**Bickford Ranch Specific Plan Financing Plan**  
**Placer County Capital Facilities Fee**

Item	1994 Rate per Resident		1994 Rate per Employee		2014/15 Rate	
	Amount	Percentage	Amount	Percentage	Single-Family Residential	Single-Family Age-Restricted
Formula	A	$B = A / \$1,035$	C	$D = C / \$214$	$E = \$3,897 * B$ [1]	$F = \$2,562 * B$ [2]
<b>Capital Facilities Fee</b>						
<b>Base Capital Facilities Fee</b>						
General Administration	\$356	34%	\$85	39%	\$1,340	\$881
Public Works	\$55	5%	\$13	6%	\$207	\$136
Health and Human Services	\$114	11%	\$0	0%	\$429	\$282
Sheriff's Patrol and Investigation	\$127	12%	\$39	18%	\$478	\$314
Jails and Countywide Public Protection	\$112	11%	\$35	16%	\$422	\$277
Justice System	\$132	13%	\$41	19%	\$497	\$327
Libraries	\$139	13%	\$0	0%	\$523	\$344
<b>Subtotal Base Capital Facilities Fee</b>	<b>\$1,035</b>	<b>100%</b>	<b>\$212</b>	<b>99%</b>	<b>\$3,897</b>	<b>\$2,562</b>
Animal Control	\$18	n/a	\$2	1%	\$156	\$99
<b>Total Capital Facilities Fee</b>	<b>\$1,052</b>	<b>n/a</b>	<b>\$214</b>	<b>100%</b>	<b>\$4,052</b>	<b>\$2,661</b>

cap fac

Source: County Facilities Needed to Serve Growth, prepared by Recht Hausrath & Associates (August 1994); Placer County; EPS.

[1] The total base amount of \$3,897 and animal control amount of \$156 are from the Placer County Capital Facilities Impact Fee Schedule (October 1, 2014).

[2] The total base amount of \$2,562 and animal control amount of \$99 are from the Placer County Capital Facilities Impact Fee Schedule (October 1, 2014).

<b>CFF Component</b>	<b>Amount (per SF unit)</b>	<b>Fee Category</b>
General Administration	\$1,340	Gen. Govt.
Health and Human Services	\$429	Gen. Govt.
Public Works (Corp Yard)	\$207	Gen. Govt.
Justice System	\$497	Police Protection
Jails & Countywide Public Protection	\$422	Police Protection
Sheriff's Patrol & Investigation	\$478	Police Protection
Libraries	\$523	Library
Agriculture and Animal Control	\$156	Animal Control
<b>TOTAL</b>	<b>\$4,052</b>	

As shown on **Table B-11** in **Appendix B**, BRSP revenue from CFF payments is summarized below.

***Satellite Offices***

BRSP development will generate approximately \$2.1 million in fee revenue for County general government satellite offices.

***Public Works – Corp Yard***

BRSP development will generate approximately \$0.3 million in fee revenue for County public works facilities.

***Health and Human Services***

BRSP development will generate approximately \$0.7 million in fee revenue for County Health and Human Services facilities.

***Animal Control***

BRSP development will generate approximately \$0.2 million in fee revenue for County animal control facilities.

***Sheriff***

BRSP development will generate approximately \$0.7 million in fee revenue for County sheriff facilities.

***Jail and Countywide Public Protection***

BRSP development will generate approximately \$0.7 million in fee revenue for County jail and countywide public protection facilities.

### **Justice System**

BRSP development will generate approximately \$0.8 million in fee revenue for County justice system facilities.

### **Library**

BRSP development will generate approximately \$0.8 million in fee revenue for County library facilities.

## **County Fire Fee—Fire Facilities**

The County Department of Emergency Services is examining implementation of an updated fire facilities impact fee, the County Fire Department Fire Facilities Fee, which would be applicable to new development. Although not yet adopted, the fee is anticipated to be collected on a per-building-square-foot basis. The BRSP is not anticipated to be included in the County Fire Department Fire Facilities Fee Program. The Project instead will fund fire facilities with a Project-specific fee negotiated and memorialized in the DA. This Financing Plan includes approximately \$2.5 million in fire facilities, as shown on **Table 8**, which results in a Project-specific fee of \$1,388 per residential unit (including 3-percent administration). Please see **Table B-7** in **Appendix B** for calculations of the estimated fire facilities fee revenue.

## **Parks and Trails**

This Financing Plan includes approximately \$8.5 million in park facilities costs based on the Project-specific BRSP public park fee of \$4,508 per residential unit (excluding administration). The total park fee, including 3-percent administration, is \$4,643 per residential unit, resulting in approximately \$8.8 million in park fee revenue. Please see **Table B-10** in **Appendix B** for calculations of the estimated park fee revenue. The dedication of park land, dedication of trail easements, the reimbursable BRSP public park fee, and construction of public parks and trails will fully mitigate the BRSP's public park and trail impacts, and the Project will not be required to participate in the existing Placer County Park Dedication Fee Program.

### **BRSP Public Park Fee**

A park fee is to be established for BRSP for the design and construction of park facilities in the park at Bickford Ranch Road and Sierra College Boulevard (Bickford Ranch Park). The fee will be based on the total cost of the park, equestrian staging area, multi-purpose trail, divided by 1,890 units. An administrative fee of three percent (3%) shall be added to the fee to offset costs incurred by the County to administer this fee program. The fee will be charged at the time of building permit issuance and will be adjusted annually based on an index used by the County for other park fee or capital improvement programs. The initial fee shall be based on a 2015 base rate of \$4,643, which includes the 3-percent administrative fee. The fee shall be adjusted annually by the ENR Construction Cost Index.

**Table 8**  
**Bickford Ranch Specific Plan Financing Plan**  
**Fire Station Construction Cost Estimate (2015\$)**

Item	Amount
<b>Fire Station Cost</b>	
Fire Station Construction Cost (Living Area)	\$180,000
Fire Station Office Space (2 car garage)	\$18,000
Fire Station Engine Bay	\$302,400
FF&E Allowance - Station Living Area	\$250,000
FF&E Allowance - Fire Station Office Space	\$50,000
Apparatus - Engine (Vehicle & Equipment)	\$650,000
Apparatus - Utility Vehicle	\$50,000
ALS Start Up	\$75,000
Fuel Vault and Generator	\$200,000
Training Room	\$43,200
County Impact/Building Permit Fees	\$45,000
PCWA Connection Fee	\$22,500
<b>Subtotal</b>	<b>\$1,886,100</b>
Design & Construction Soft Cost (15%)	<b>\$282,915</b>
Contingency (20%)	\$377,220
<b>Total Fire Station Cost</b>	<b>\$2,546,235</b>
BRSP Units	1,890
<b>Fire Station Cost per Unit</b>	<b>\$1,347.21</b>
Administration	\$40.42
<b>Total Fire Station Cost per Unit</b>	<b>\$1,387.63</b>

*fire*

Source: Westpark Communities.

The County shall collect the fee and place it into a segregated account for the sole use of constructing Bickford Ranch Park, equestrian staging area, and multi-purpose trail (Park Account). In addition, the Developer proposes that the unexpended portion of assessments in CSA 28 Zone of Benefit 184 "Bickford Ranch Park Maint.," at the time of approval of amendments to the Project, be transferred to the Park Account. Zone 184 funds would be used to accelerate the delivery of phased park and trail improvements. The Developer shall design and construct the park consistent with the phasing plan for improvements and shall be entitled to draw upon the funds in the park fee account for design and improvements made to the park. During construction of park improvements, the draws from the Park Account shall be allowed on a monthly basis and will pay for portions of work completed, with the Developer providing copies of invoices and certification of the completed work by the project landscape architect and approved by the County inspector.

The County will use its best efforts to make payment to the Developer within 30 days of the receipt of the payment request. Upon completion of any phase of the park improvements where the Developer has not been fully reimbursed for the cost incurred, the County will reimburse the Developer from future park fees paid into the Park Account, on a frequency of no more than quarterly, until the particular phase is fully reimbursed. Upon completion of the park improvements described herein, should the park fee funds be insufficient to reimburse the Developer, and all building permits have been issued in Bickford Ranch, the County shall have no obligation to provide further reimbursement. If, upon completion of all park improvements, the Developer has been fully reimbursed, and there remains a balance in the Park Account, the County may use these funds to provide additional public recreation improvements benefitting Penryn/Lincoln Area residents.

### **Park Construction Phasing**

The Developer shall be responsible for constructing facilities in Bickford Ranch Park identified in **Figure E-1** in **Appendix E**. The facilities described herein shall not be modified without written approval by both parties, the County may modify or add improvements to the park provided however, if the modifications or additions add to the cost of the facilities, the County must provide the funding at the time of the start of construction of the particular phase (the funding cannot come from the Park Account).

#### ***Phase 1 (Phasing Does Not Follow Project Phasing)***

The Developer shall prepare a conceptual master plan for Bickford Ranch Park, to include the phasing plan for the construction of the park as described herein with the submittal of the improvements plans for Bickford Ranch Road, which may be a part of a larger backbone improvement plan set for Phase 1 of Bickford Ranch. The master plan shall be consistent with the description below and the site plan shown in **Exhibit E-2** in **Appendix E**.

The Developer shall prepare, and submit to the County for approval, construction documents for the entire Bickford Ranch Park before the acceptance of the backbone improvements for Phase 1 of Bickford Ranch. The County shall review and approve the plans for construction. The County will cooperate with the Developer in allowing the approved plans to be constructed in phases using the approved plans without requiring additional plans set being prepared covering only the phased construction areas. The County will allow the Developer to remove plan sheets, "X" out details or sections not a part of the then-current phase to create documents for construction.

Notwithstanding, the Developer will be responsible to make any modifications to plans as a result of code changes and physical site changes realized since the previous phase plan set was constructed. Editable electronic copies of all construction documents shall be delivered to the County upon approval of each phase and shall become the intellectual property of the County to use for editing, publishing, contracting, and recording at the will of the County.

The County will process plan review within its normal process. For any County plan review time that exceeds 10 weeks, not including the Developer's response to comments periods, the Developer's timing obligations that are dependent on County plan review and approval shall be extended by the same number of days as the County review in excess of 10 weeks.

The Developer shall provide street frontage improvements (curb, gutter, and streetlights) for Bickford Ranch Road along the entire frontage of the park site, and all utility stubs (sewer, water, storm drainage, electric, and telephone) with the first phase of backbone infrastructure construction.

The Developer shall construct the entire Phase 1 multi-purpose trail (MPT) concurrent with the first phase of the backbone infrastructure for Bickford Ranch and complete the trail before the acceptance of the backbone improvements by the County. The Phase 1 multi-purpose trail shall comprise a complete loop of approximately 10 miles and may require a temporary trail connector and temporary trail easement over a segment needed to make a complete loop until such time as the Phase 2 MPT is complete. Subsequent phases of the MPT shall be constructed as described below. It is expected that construction documents for the multi-purpose trail will consist of a schematic plan view of the trail corridor, typical sections, and typical details. Final staking of the trail centerline will be performed by the Developer or Developer's contractor and approved by the County before beginning of construction. Before construction, the proposed trail alignment shall be recorded in sub-meter GPS and placed on a map that includes identified cultural and biological resources. This map will be used by the County before alignment approval to ensure there are no conflicts with mitigations, the open space management plan, relevant permitting, and to determine areas that are close enough to resources to require protective fencing during construction. The County retains discretion on the timing of opening the multi-purpose trail to the public following construction. The Developer acknowledges that trail construction requires a specialized skill set to perform alignment layout that is functional for multiple user groups, inviting, and sustainable, and construction equipment and methods to excavate and finish the trail to the required lines, grades, and curves. The Developer shall be responsible to hire qualified contractors or consultants for the specialized trail construction. The County has the right to stop trail work that is not in compliance with approved plans and trail details.

### ***Phase 2***

The Developer shall commence construction of the Equestrian Staging Area within forty-five (45) days of the issuance of the 200<sup>th</sup> building permit. The Developer shall complete the improvements within 180 calendar days of commencing construction. The time period between October 15 and April 15 shall not be counted toward the 180-day construction completion period. If construction exceeds 180 days, the Developer shall enter into a deferred improvement agreement with the County to provide security for completion of the improvements to the satisfaction of the County. Construction documents for the Equestrian Staging Area shall be

prepared and submitted for approval before the acceptance of the backbone improvements for Phase 1 of Bickford Ranch.

### **Phase 3**

The Developer shall commence construction of the Phase 3 Park Improvements within forty-five (45) days of the issuance of the 1000<sup>th</sup> building permit. The Developer shall complete the improvements within 180 calendar days of commencing construction. The time period between October 15 and April 15 shall not be counted toward the 180-day construction completion period. If construction exceeds 180 days, the Developer shall enter into a deferred improvement agreement with the County to provide security for completion of the improvements to the satisfaction of the County. Construction documents for the Phase 3 Park Improvements shall be prepared and submitted for approval as described above (modified as applicable from the approved construction documents prepared in Phase 1) within 90 days of the issuance of the 900<sup>th</sup> building permit.

### **Phase 4**

The Developer shall commence construction of the Phase 4 Park Improvements within forty-five (45) days of the issuance of the 1500<sup>th</sup> building permit. The Developer shall complete the improvements within 180 calendar days of commencing construction. The time period between October 15 and April 15 shall not be counted toward the 180-day construction completion period. If construction exceeds 180 days, the Developer shall enter into a deferred improvement agreement with the County to provide security for completion of the improvements to the satisfaction of the County. Construction documents for the Phase 4 Park Improvements shall be prepared and submitted for approval as described above (modified as applicable from the approved construction documents prepared in Phase 3) within 90 days of the issuance of the 1400<sup>th</sup> building permit.

## **Multi-Purpose Use Trail**

The Multi-Purpose Trail (MPT) is to be generally constructed through the Open Space Preserve (OSP) areas but in some cases will be contiguous or part of the trail adjacent to roadways (need input from DPW on minimum separation from roadway) or within the trails system in the Open Space Transition Areas (OST). The trail shall be constructed to a width of five feet (5') and will consist of native material. In locations where the trail becomes coterminous with a roadway or other hard surfaced trails/paths, the MPT shall be natural surface or aggregate base placed adjacent to the hard surfacing. The cost of the MPT shall be included in the park fee; the initial estimate for the MPT portion of the park fee is \$616,860.

The MPT shall be constructed in phases as shown in **Appendix E**. Phases 2 and 3 of the MPT shall be constructed concurrently with the respective phase of the backbone infrastructure for Bickford Ranch and completed before the acceptance of the backbone improvements for the particular phase.

The Developer shall construct the MPT and upon completion of an identified phase shall be reimbursed from the Park Account for the actual cost of the trail segment. If the reimbursement amount is greater than the amount in the Park Account, then the County shall pay to the Developer the unreimbursed amount as new fees are paid.

## Miscellaneous Park and Trail Provisions

By written agreement between the Developer and the Director of the Department of Public Works and Facilities, the timing and amenities included in each phase of park and trail improvements may be modified without amendment to the Development Agreement.

The County, in its sole discretion, may elect to construct any or all phases of the park, equestrian staging area, or trail system. If the County elects to construct any portion of these amenities, the Developer shall not be relieved of its responsibility to construct the remaining amenities. The park and trail components of the Services CFD shall be established with the provision that the County, in its sole discretion, may use funding generated through the CFD toward construction of enhanced park and trail amenities on site, the cost of administration of construction of amenities elected to be constructed by the County, or enhancements of public recreation amenities to benefit the community until such time as the funding is needed to maintain completed park and trail facilities.

If the Developer is in default of any of the provisions contained in this section, the County shall so notify the Developer that it is in default, and after time provide for the Developer to cure such default, the County shall have the right, but not the obligation, to construct the park improvements, and access any available funds in the Park Account. If the County elects to construct any park improvement as a result of default by the Developer, and the funds available in the Park Account are insufficient to complete the improvements, the County shall have priority of reimbursement from fees collected until such time as it has been reimbursed in full. {Same limitation or description of costs eligible for reimbursement, also limitation on changes to improvements made.}

## Schools

School services will be provided by Loomis Union and Placer Union High School Districts. Funding for school capital facilities comes from school mitigation fees paid at issuance of a building permit, state and other local bond processes, state grants and other local sources, and developer funding. Additional demand for school facilities will be met by schools outside the BRSP area, to which school mitigation fees will be paid, as required by Senate Bill (SB) 50. The Project generates approximately \$9.9 million in school fee revenues.

## Age-Restricted Active-Adult Residential Units

Age-restricted units have a reduced fee for some of the fee programs. The CFF is reduced for age-restricted units, as shown on **Table 7**. The fire facilities and park and trails fees are the same for all residential units, regardless of density or age restrictions. The school fees are charged at the nonresidential rate per square foot for age-restricted units.

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## 6. FINANCING SOURCES AND STRATEGY

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This chapter describes in detail the sources of funds and financing strategy intended to be used to implement the new BRSP development.

### Purpose

The purpose of the Financing Plan is to identify the appropriate financing mechanisms to fund the necessary Backbone Infrastructure and Public Facilities costs required to serve the BRSP. The identified financing mechanisms are flexible enough to ensure the required improvements are constructed when necessary. The financing mechanisms ultimately used and, potentially, which ones are used at various times, will depend on the types and timing of needed Facilities.

### Financing Strategy Overview

Development of the BRSP will be contingent on the construction of Backbone Infrastructure and Public Facilities necessary to support new development. In developing the Financing Plan, the various funding sources were chosen in a way that distributes costs equitably and achieves BRSP feasibility requirements.

The BRSP Developer and the County will rely on a variety of existing and proposed financing methods to fund required Backbone Infrastructure and Public Facilities. **Figure 1** in **Chapter 1** shows the major financing mechanisms, which primarily are existing and new development impact fees. In addition to the fee programs, the Developer is anticipated to rely on land-secured financing, such as Mello-Roos CFD financing, to help offset the advance-funding obligations associated with many required Facilities. Because it is anticipated most infrastructure construction obligations will precede adequate impact fee collection, advance-funded infrastructure will be eligible for reimbursement and fee credits through the applicable fee program. The following sections describe the major funding sources and financing mechanisms that will be used in combination with one another throughout BRSP implementation.

### Existing Development Impact Fee Programs

The existing impact fees collected by the County, other agencies, and school districts will be used to fund and construct a portion of the Facilities necessary to support the BRSP's residents. These existing impact fees have been established based on Government Code Section 66000 fee nexus studies that spread the cost of necessary Public Facilities among new development based on benefit. Estimated BRSP fee revenues from existing and planned/potential County and special district fees are included in **Appendix B**.

New development in the BRSP will participate in the existing and planned/potential development impact fee programs as shown on **Table 9**. The BRSP will participate in these programs by paying the fee for each program listed. These fees influence the cost burden analysis described later in this chapter.

**Table 9**  
**Bickford Ranch Specific Plan Financing Plan**  
**Summary of Existing and Planned/Potential Fee Programs**

Fee Programs	Public Facilities Funded	Abbreviation
<b>Existing Fee Programs</b>		
Sewer Fee: Placer County Connection Fee and Sewer Facilities Fee (CSA 28, Zone 183)	Sewer Connection and Treatment	County Sewer
County Transportation Capital Improvement Program Traffic Fee: Newcastle/Horseshoe Bar/Penryn	Regional Roads	Newcastle/Horseshoe Bar/Penryn Road Fee
County Road Network Capital Improvement Program Traffic Fee: Placer Central Benefit District	Regional Roads	Placer Central Road Fee
South Placer Regional Transportation Authority: South Placer Regional Transportation and Air Quality	Regional Roads	SPRTA
Sierra College Blvd. Widening Fee	Sierra College Blvd.	SCB Fee
Dry Creek Watershed Improvement Zone Fee	Drainage Facilities	Drainage Fee
Placer County Capital Facilities Impact Fee	Satellite Offices, Health and Human Services, Public Works, Animal Control, Sherriff, Jail & Countywide Public Protection, Justice System, Library.	CFF
Placer County Water Agency: Water Connection Charge & Meter Set and Installation Charge	Water Facilities	PCWA
Loomis Union and Placer Union High School District	School Facilities	School Fee
<b>Planned/Potential Fee Programs</b>		
Air Quality Mitigation Fee	Air Quality	NA
Placer County Fire	Fire Facilities	NA
Affordable Housing	Affordable Housing	NA
Oak Tree Mitigation	Oak Trees	NA
BRSP Public Park Fee	Parks and Trails	BRSP Public Park Fee

*fee programs*

Source: Placer County and other relevant public agencies

In addition, some BRSP improvements may coincide with or already are part of the CIPs of existing fee programs (e.g., County Traffic Fee for the Placer Central Benefit District) or may be captured by future CIP updates. In these cases, ultimate funding for said improvements would occur through the existing fee program, unless otherwise negotiated between the Developer and the County. As described in **Chapter 4**, there are no fee credits from the County Placer Central Traffic Fee anticipated at this time; however, that circumstance could change if alternative roadway funding arrangements are negotiated between the BRSP Developer and the County. Reimbursements and fee credits would be limited to items and costs in the specific fee program.

### ***Regional Road Fee Programs***

The BRSP will participate in several existing and planned regional road fee programs. Updates to existing fee programs may be considered by the County to reflect the addition of new improvement items or more recent cost estimates for items already in the BRSP Reimbursement Program.

#### County Traffic Fee Program

The County Traffic Fee Program funds major roadways throughout unincorporated areas of the County. The existing program comprises 11 total benefit districts, including Placer Central Benefit District. BRSP is in the Placer Central Benefit District.

#### Newcastle/Horseshoe Bar/Penryn Fee

Developers in the BRSP are not scheduled to construct any improvements in this fee program but will make a contribution as part of the Development Agreement toward improvements within this area of the County's Traffic Fee program.

#### SPRTA

The SPRTA Fee Program funds major interchanges and regional road improvements. Other than the Twelve Bridges Drive signal for which reimbursement will be provided, Developers in the BRSP are not scheduled to construct any improvements in this fee program but will pay fees toward these improvements.

In addition to these fee programs, funding from Caltrans for the traffic signal at Highway 193 and Sierra College Blvd may be available.

### ***Sewer Fees***

Development impact fees are paid to the County for inspection and connection to existing facilities. A portion of the connection fee is applied to the City of Lincoln for treatment.

### ***County CFF***

As described in **Chapter 5**, BRSP development will pay toward the following components of the County CFF:

- General Government—Satellite Offices
- Health and Human Services
- Public Works – Corporation Yard
- Animal Control

- Sheriff
- Jail and Countywide Public Protection
- Justice System
- Library

The BRSP will generate approximately \$6.3 million at buildout towards these CFF facilities.

#### ***Water Fees***

New BRSP development will pay a water connection charge through PCWA for water storage and transmission facilities.

#### ***School Mitigation Fees***

School improvements will be funded through a payment of \$9.9 million in impact fees to Loomis Union and Placer Union High School Districts.

#### ***Drainage Fees***

A portion of the BRSP lies in the Dry Creek Watershed for drainage fees. Approximately \$148,000 is expected to be collected to fund drainage improvements from 659 units.

## **New Fee Programs**

### **BRSP DA Negotiated Fees**

According to the DA, the Project will pay a set fee per unit for the following Project-specific fees:

- Contribution toward the Newcastle/Horseshoe Bar/Penryn zone of the County Traffic fee
- BRSP SCB Fee
- Air Quality Mitigation Fee
- County Fire Fee
- Affordable Housing Fee
- Oak Tree Mitigation Fee
- BRSP Public Park Fee

At the request of the BRSP Developer, the fees, with the exception of the contribution toward the Newcastle/Horseshoe Bar/Penryn traffic fee, are assumed to be collected uniformly at the same rate per unit for all dwelling units.

## **Proposed Mello-Roos CFD**

The County may allow, and the property owner may elect, to use CFD bond financing to assist with a portion of the BRSP funding requirements. The following section provides background information and preliminary analysis of the potential funding capacity, should a Mello-Roos CFD be established. Other financing mechanisms, such as an Assessment District, may be applied in conjunction with or instead of a CFD special tax. Generally, public debt can be used to fund

Infrastructure and Other Public Facilities in the form of land-secured municipal bonds. Large development projects often prefer to use this form of financing because of its flexibility and lower interest cost compared to conventional financing mechanisms, such as equity and bank loans.

### **CFD Background Information**

The 1982 Mello-Roos CFD Act enables cities, counties, special districts, and school districts to establish CFDs and to levy special taxes to fund a wide variety of public facilities and services. Proceeds of the CFD special taxes can be used for direct funding or acquisition of improvements or to pay off existing bonds.

### **Bonding Capacity of the BRSP**

Based on the current market conditions and property value assumptions shown in the accompanying tables, the BRSP has an estimated capacity of approximately \$47.6 million in CFD bond proceeds, as shown in **Table 10**. The bonding capacity calculation is based on the assumption all residential development in the BRSP will participate in the CFD at this time. It also is based on the assumption of an annual 2-percent special tax escalation, similar to the escalation of the ad valorem property tax. **Table 11** presents the estimated bond proceeds per unit at buildout.

The actual bonding capacity will depend on the interest rates at the time of the issuance of bonds and may be constrained by the appraised value of the land in the CFD and remaining special tax capacity after all public services are funded. The list of bond-funded facilities will be determined before the issuance of bonds.

Compared to the Mello-Roos-eligible construction costs show on **Table 3**, the bonding capacity of the BRSP is estimated to be lower than the Project-funding requirement, yielding a potential funding deficit. The balance of costs will be funded initially through developer funding or developer advances.

**Table 12** shows the average tax-burden analysis on a single-family unit and a single-family age-restricted unit with the proposed special tax rates. The total annual taxes and assessments as a percentage of assessed value is 1.8 percent, which is in the typical range of 1.6 percent to 1.8 percent. Total annual special taxes and assessments include assessments for roadways/drainage, a services special tax, and an infrastructure special tax. If a Facility included in the CFF or any other County fee program is instead funded with bond financing in a CFD, a developer may be given a non-transferable “fee reduction” or fee credit. This issue will require additional discussions with the parties administering the relevant fee programs.

As described in more detail in **Chapter 7**, when the Project received prior entitlements, a series of services financing mechanisms, in the form of County Service Area (CSA) assessments were created. The County is working on updating the engineer’s report for the CSA assessment for roads and drainage. The County conducted a draft Fiscal Impact Analysis Plan for the Project. Based on the results of the draft Fiscal Impact Analysis Plan, the County determined whether a replacement funding mechanism is necessary or preferable. **Table 12** shows the annual special taxes/assessments based on the Fiscal Impact Analysis and County direction.

**Table 10**  
**Bickford Ranch Specific Plan Financing Plan**  
**Estimated Bond Sizing (2015\$)**

Item	Assumptions	Buildout
<b>Maximum Special Taxes Available for Debt Service</b>		
<b>Estimated Annual Maximum Special Taxes</b>		<b>\$3,789,500</b>
<i>Less Estimated Administration Costs</i>	4%	(\$152,000)
<i>Less Delinquency Coverage</i>	10%	(\$379,000)
<i>Adjustment for Rounding</i>		\$1,500
<b>Estimated Gross Debt Service (Rounded)</b>		<b>\$3,260,000</b>
<b>Bond Proceeds and Bond Size</b>		
<b>Total Bond Size</b>		<b>\$47,381,000</b>
<i>Adjustment for Rounding</i>		\$19,000
Total Bond Size (Rounded)		\$47,400,000
<i>Increase for Annual Escalation [1]</i>		\$9,480,000
<b>Total Bond Size (Rounded)</b>		<b>\$56,880,000</b>
<b>Estimated Bond Proceeds</b>		
<b>Rounded Bond Size</b>		<b>\$56,880,000</b>
<i>Less Capitalized Interest</i>	12 months	(\$3,128,000)
<i>Less Bond Reserve Fund</i>	1-yr. debt service	(\$3,260,000)
<i>Less Issuance Cost</i>	5%	(\$2,844,000)
<b>Estimated Bond Proceeds</b>		<b>\$47,648,000</b>
<b>Assumptions [2]</b>		
Interest Rate	5.50%	
Term	30 years	
Annual Escalation	2.00%	

*est bond*

Source: EPS.

[1] Assumes special taxes are escalated 2.0% annually for 30 years, which increases total Bond Size by approximately 20%.

[2] Estimated bond sizing based on conservative assumptions. The interest rate will be determined at the time of bond sale; the bond term could be 25 to 30 years or more. This analysis assumes 30 years.

**Table 11**  
**Bickford Ranch Specific Plan Financing Plan**  
**Estimated Bond Proceeds per Unit at Buildout (2015\$)**

Item	Unit/Acre	Prelim. Max. Special Tax Rate	Maximum Special Tax		Bond Size [1]		Bond Proceeds	
			Amounts	% of Total	Amount	Per Unit/Acre	Amount	Per Unit/Acre
<i>Formula</i>	<i>A</i>	<i>B</i>	<i>C = A * B</i>	<i>D = C / Total Max Tax</i>	<i>E = D x total bond</i>	<i>F = E / A</i>	<i>G = D x bond proceeds</i>	<i>H = G / A</i>
<b>Residential</b>	<u>Per Unit</u>					<u>Per Unit</u>		<u>Per Unit</u>
Rural Residential	27	\$2,500	\$67,500	1.8%	\$1,013,168	\$37,525	\$848,724	\$31,434
Low-Density Residential - Active Adult	950	\$1,800	\$1,710,000	45.1%	\$25,666,922	\$27,018	\$21,501,011	\$22,633
Low-Density Residential	848	\$2,250	\$1,908,000	50.3%	\$28,638,881	\$33,772	\$23,990,601	\$28,291
Medium-Density Residential	65	\$1,600	\$104,000	2.7%	\$1,561,029	\$24,016	\$1,307,664	\$20,118
<b>Total Residential</b>	<b>1,890</b>		<b>\$3,789,500</b>	<b>100.0%</b>	<b>\$56,880,000</b>		<b>\$47,648,000</b>	
<b>Total</b>			<b>\$3,789,500</b>	<b>100.0%</b>	<b>\$56,880,000</b>		<b>\$47,648,000</b>	

*bond unit*

Source: EPS.

[1] Assumes special taxes are escalated 2.0% annually for 30 years, which increases total Bond Size by approximately 20%.

**Table 12**  
**Bickford Ranch Specific Plan Financing Plan**  
**Total Taxes on Low Density Residential Units - Hypothetical Example (2015\$)**

Item	Assumptions	Low Density - Active Adult	Low Density
<b>Estimated Sales Price [1]</b>			
Sales Price per Unit		\$530,000	\$570,000
Less: Homeowners Exemption		(\$7,000)	(\$7,000)
Estimated Assessed Value		\$523,000	\$563,000
<b>Ad Valorem Taxes</b>			
	% of AV		
Property Tax/Bond Debt Service	1.0000%	\$5,230	\$5,630
Placer High B&I 1999 Series A-Non Refunding	0.0016%	\$8	\$9
Placer High B&I 1999 Series B	0.0034%	\$18	\$19
Placer High B&I 1999 Series C	0.0027%	\$14	\$15
Placer High B&I 1999 Series A Ref 2005	0.0117%	\$61	\$66
Loomis Elem B&I 1998 Ref 2010	0.0200%	\$104	\$112
<b>Subtotal Ad Valorem Taxes</b>	<b>1.03935%</b>	<b>\$5,436</b>	<b>\$5,852</b>
<b>Special Taxes and Assessments</b>			
<b>Other Special Taxes and Assessments</b>			
Services Tax [2]		\$635	\$635
Other Assessments [3]		\$26	\$26
<b>County Service Areas [4]</b>			
Roads/Drainage [5]	Placeholder	\$56	\$56
<b>Subtotal County Service Areas</b>		<b>\$56</b>	<b>\$56</b>
<b>Infrastructure Special Tax</b>			
Infrastructure Special Tax		\$1,800	\$2,250
<b>Subtotal Special Taxes and Assessments</b>		<b>\$2,517</b>	<b>\$2,967</b>
<b>Total Annual Assessments/Taxes per Unit</b>		<b>\$7,953</b>	<b>\$8,819</b>
<b>Total Annual Assessments/Taxes as a % of Assessed Value [6]</b>		<b>1.50%</b>	<b>1.55%</b>

*2% test*

Source: Placer County; Goodwin Consulting, Inc.; EPS.

[1] Sales prices estimated by EPS.

[2] Approximate amount from the draft Fiscal Analysis prepared by Goodwin Consulting Group, Inc. (November 2015).

[3] Includes Placer Mosquito & Vector Control.

[4] A special tax/assessment for sewer of \$732 per unit will be collected, but it is in lieu of annual rates; therefore, the amount is not included in this burden analysis.

[5] Placeholder estimate from the County's budget summary for service areas and special districts (FY 2015-16). The engineer's report is currently being updated and there will be a revised special tax/assessment amount in the updated report.

[6] Typical range is 1.6% to 1.8%.

## Other Revenue Sources and Bond Financing

### Assessment Districts

Although a Mello-Roos CFD is the primary land-secured debt-funding mechanism proposed, an Assessment District is another potential source for funding. Final determination of the special financing district will be made during the Specific Plan implementation process.

California statutes give local governments the authority to levy several special assessments for specific public improvements such as streets, storm drains, sewers, streetlights, curbs, gutters, and sidewalks. The agency creates a special assessment district, defining both the area to benefit from the improvements and the properties that will pay for the improvements.

Thereafter, each property in the district will be assessed a share of the cost of improvements that is proportional to the benefit received from those improvements.

### Infrastructure Cost Burden Analysis

This Financing Plan presents the public fee burden placed on BRSP development, as well as the total infrastructure burden on BRSP development, on a per-unit basis. **Table 13** shows the existing and proposed fees by land use type. Residential per-unit fees range from roughly \$50,900 to \$67,600, depending on density.

**Table 14** shows the infrastructure cost as a percentage of total sales revenue. Typically, for a project to be considered feasible, total fee revenue and infrastructure costs should be no greater than 15 percent to 20 percent of total sales revenue, based on EPS's experience in infrastructure financing issues in similar jurisdictions. Please note that these costs do not yet include open space/conservation and other mitigation fees.

Also shown on **Table 14**, the infrastructure cost as a percentage of total sales revenue ranges from 6.2 percent to 15.4 percent, indicating at the assumed finished home sales values that the Project's infrastructure burdens are feasible.

**Table 13**  
**Bickford Ranch Specific Plan Financing Plan**  
**Existing and Proposed Fees (2015\$)**

Fee Category	Residential			
	Rural	Low-Density - Active Adult	Low-Density	Medium-Density
Unit Square Feet/ Acres	3,500	2,100	2,900	2,000
Garage Square Feet	450	400	400	400
Building Valuation	\$411,450	\$252,317	\$342,053	\$241,100
<b>Existing County/Regional Fee Programs</b>				
<b>Building Permit/Processing Fees</b>				
Building Permit	\$1,440	\$883	\$1,197	\$844
Plan Review Dee	\$1,440	\$883	\$1,197	\$844
Energy Compliance Review	\$113	\$111	\$111	\$111
Accessibility Compliance Review	\$113	\$111	\$111	\$111
Strong Motion	\$53	\$33	\$44	\$31
Building Standards Commission	\$16	\$10	\$14	\$10
Electrical, Mechanical, and Plumbing Inspection Fee	\$1,234	\$757	\$1,026	\$723
Fire-Safe (driveway) Fee	\$92	\$92	\$92	\$92
Records Fee	\$22	\$22	\$22	\$22
Grading Fee	\$38	\$38	\$38	\$38
<b>Subtotal Building Permit/Processing Fees</b>	<b>\$4,562</b>	<b>\$2,941</b>	<b>\$3,854</b>	<b>\$2,827</b>
<b>Placer County Sewer</b>				
Sewer Connection - CSA 28, Zone 183 [1]	\$9,855	\$9,855	\$9,855	\$9,855
<b>Subtotal Sewer</b>	<b>\$9,855</b>	<b>\$9,855</b>	<b>\$9,855</b>	<b>\$9,855</b>
<b>Traffic Fees</b>				
Placer County Transportation CIP: Newcastle/Horseshoe Bar/Penryn [2]	\$503	\$134	\$503	\$503
Placer County Traffic Fee: Placer Central Benefit District [2]	\$2,051	\$548	\$2,051	\$2,051
SPRTA Regional Transportation and Air Quality Fee [2]	\$1,815	\$485	\$1,815	\$1,815
Sierra College Blvd. Widening Fee [3]	\$3,893	\$3,893	\$3,893	\$3,893
Sierra College Blvd. Widening Fee Admin. (3%)	\$117	\$117	\$117	\$117
<b>Subtotal</b>	<b>\$8,378</b>	<b>\$5,176</b>	<b>\$8,378</b>	<b>\$8,378</b>
<b>Other County Fee Programs</b>				
Drainage - Dry Creek Benefit District [4]	\$224	\$224	\$224	N/A
Air Quality Mitigation Fee	\$222	\$222	\$222	\$222
Placer County Fire Fee	\$1,347	\$1,347	\$1,347	\$1,347
Placer County Fire Fee Admin. (3%)	\$40	\$40	\$40	\$40
Affordable Housing	\$4,000	\$4,000	\$4,000	\$4,000
Oak Tree Mitigation	\$1,058	\$1,058	\$1,058	\$1,058
BRSP Public Park Fee	\$4,508	\$4,508	\$4,508	\$4,508
BRSP Public Park Fee Admin. (3%)	\$135	\$135	\$135	\$135
<b>Subtotal</b>	<b>\$11,534</b>	<b>\$11,534</b>	<b>\$11,534</b>	<b>\$11,310</b>
<b>Capital Facilities Impact Fee [5]</b>				
Satellite Offices (General Administration)	\$1,340	\$881	\$1,340	\$1,340
Public Works (Corp Yard)	\$207	\$136	\$207	\$207
Health and Human Services	\$429	\$282	\$429	\$429
Agriculture and Animal Control	\$156	\$99	\$156	\$156
Sheriff	\$478	\$314	\$478	\$478
Jail and Countywide Public Protection	\$422	\$277	\$422	\$422
Justice System	\$497	\$327	\$497	\$497
Library	\$523	\$344	\$523	\$523
<b>Subtotal Capital Facilities Impact Fee</b>	<b>\$4,052</b>	<b>\$2,661</b>	<b>\$4,052</b>	<b>\$4,052</b>
<b>Subtotal Other County Fee Programs</b>	<b>\$15,587</b>	<b>\$14,196</b>	<b>\$15,587</b>	<b>\$15,363</b>
<b>Subtotal Existing County/Regional Fees</b>	<b>\$38,382</b>	<b>\$32,168</b>	<b>\$37,674</b>	<b>\$36,423</b>
<b>Other Agency Fees</b>				
Water: PCWA Zone 1 [6]	\$17,633	\$17,633	\$17,633	\$17,633
Loomis Union and Placer Union High School District [7]	\$11,550	\$1,092	\$9,570	\$6,600
<b>Total Other Agency Fees</b>	<b>\$29,183</b>	<b>\$18,725</b>	<b>\$27,203</b>	<b>\$24,233</b>
<b>Total Existing and Proposed Fees (per unit/acre)</b>	<b>\$67,565</b>	<b>\$50,893</b>	<b>\$64,877</b>	<b>\$60,656</b>

fee summary

Source: Placer County, MacKay & Somps, Westpark Communities, and EPS

- [1] Placeholder estimate as the sewer fee has yet to be determined.
- [2] Low-density active adult fees assigned DUE factor for detached senior adult housing provided in the Countywide Traffic Fee Program Schedule.
- [3] Only applies to the first two phases of development (1,480 units).
- [4] Only a portion of the development drains to the dry creek watershed and is subject to the fee. 10 rural residential, 284 low density active adult, and 365 low density units are subject to this fee. This analysis shows the fee for these land uses to show the maximum fee burden.
- [5] See Table 7 for additional information regarding the breakdown calculation for each category in the capital facilities fee.
- [6] Assumes a 5/8-inch meter for residential development.
- [7] Age-restricted units pay the nonresidential rate for the school fee.

**Table 14**  
**Bickford Ranch Specific Plan Financing Plan**  
**Total Infrastructure and Fee Cost Burden [1]**

Item	Residential			
	Rural <i>27 units</i>	Low Density - Active Adult <i>950 units</i>	Low Density <i>848 units</i>	Medium Density <i>65 units</i>
<b>Existing and Proposed Fees</b>				
Existing County/Regional Fee Programs	\$38,382	\$32,168	\$37,674	\$36,423
Other Agency Fees	\$29,183	\$18,725	\$27,203	\$24,233
<b>Subtotal Existing and Proposed Fees</b>	<b>\$67,565</b>	<b>\$50,893</b>	<b>\$64,877</b>	<b>\$60,656</b>
<b>Total Infrastructure Burden</b>	<b>\$67,565</b>	<b>\$50,893</b>	<b>\$64,877</b>	<b>\$60,656</b>
<b>Total Infrastructure Burden (Calculated as Fees)</b>	<b>\$67,565</b>	<b>\$50,893</b>	<b>\$64,877</b>	<b>\$60,656</b>
<b>Sales Price per Unit</b>	<b>\$1,082,000</b>	<b>\$530,000</b>	<b>\$570,000</b>	<b>\$394,000</b>
<b>Infrastructure Burden Costs as a % of Sales Price [2]</b>	<b>6.24%</b>	<b>9.60%</b>	<b>11.38%</b>	<b>15.39%</b>

*burden*

Source: Placer County, Westpark Communities, and EPS.

[1] Excludes frontage improvements, which is the responsibility of the individual developer.

[2] Typically, infrastructure burden costs as a percent of sales price needs to be between 15% to 20% to be considered feasible based on EPS's infrastructure financing experience.

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## 7. FUNDING OF PUBLIC SERVICES

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This draft Financing Plan addresses funding for construction of Infrastructure in the BRSP. The constructed Infrastructure also will require a source of ongoing operations and maintenance funding. The BRSP Public Services Plan will provide a detailed discussion of the costs and potential funding sources for operations and maintenance of BRSP Infrastructure and Facilities, as well as public services (e.g., parks programming, fire services, and law enforcement). More specifically, supplemental documents will describe the service levels and financing strategy to fund an urban level of public services that will be provided to BRSP's future residents, businesses, and employees. The Public Services Plan accomplishes this strategy through the steps and goals described in that plan.

### Public Services Provided to the BRSP

New BRSP residents will be provided with the following services:

- Fire Protection and Suppression Services, including ambulance and paramedic services
- Sheriff Protection
- Trails and Parks
- Recreation Services
- Open Space Maintenance, including off-site open space and habitat mitigation
- Countywide Services (e.g., probation, health services, etc.)
- Library Services
- Storm Drain Maintenance
- Road Maintenance
- Any other service provided by the County to the BRSP that may be allowed by law to be funded through a CFD or CSA

Please note that some local in-tract roads and open space may be private and funded solely through Homeowners' Association (HOA) Fees. The recreation centers located in the Project will be private and funded solely through HOA Fees.

Some infrastructure types such as water and sewer also have established funding sources for operations and maintenance in the form of user fees that are not included herein.

As mentioned previously in **Chapter 6**, when the Project received prior entitlements, a series of services financing mechanisms in the form of CSA assessments were created. The County conducted a draft Fiscal Impact Analysis Plan for the Project. Based on the results of the Fiscal Impact Analysis Plan, the County determined a replacement funding mechanism is necessary or preferable.

When the Project received prior entitlements, the following CSA assessments were created in 2007:

- **CSA No.28, Zone 183—Bickford Ranch Sewer:** Provides funding for sewer treatment and collection services and the maintenance and operation of sewer facilities in the BRSP.
- **CSA No.28, Zone 184—Bickford Ranch Park Maintenance:** Provides funding for park and recreation facility operation and maintenance in the BRSP.
- **CSA No.28, Zone 188—Bickford Ranch Roads and Storm Drain Maintenance:** Provides funding for road and storm drain maintenance in the BRSP.
- **CSA No.28, Zone 189—Bickford Ranch Fire and Emergency Services:** Provides funding for fire and emergency services in the BRSP.

The services special tax calculated in the Fiscal Impact Analysis replaces the park maintenance and fire and emergency services CSAs. Furthermore, the engineer's report for CSA No.28, Zone 188 (Bickford Ranch roads and storm drain) is currently being updated. There will be an updated assessment for roads and drainage after the engineer's report is completed.

## **Public Services Annual Costs and Funding**

The draft Fiscal Impact Analysis Plan specifies the projected gross annual costs and net annual costs to provide an urban level of services for each service category described above.

These annual service costs will be funded through a combination of sources, including County General Fund revenues such as property and sales tax revenues. In addition, a special tax or assessment on residential units will be used to fund public services. This special tax/assessment revenue estimated in the Fiscal Impact Analysis Plan and discussed in **Chapter 6** will be used as a contingency fund to cover annual shortfalls, if needed, as the Project builds out. As shown on **Table 12**, the Financing Plan includes a special tax or assessment to fund public services of approximately \$635 per unit, based on the draft Fiscal Impact Analysis, to cover annual shortfalls for park maintenance and fire and emergency services.

## 8. *UPDATES AND IMPLEMENTATION OF THE FINANCING PLAN*

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Following the County Board of Supervisors' approval of the Specific Plan, implementation of the Financing Plan strategies may require these steps:

- Update existing fee programs.
- Create Project-specific fees.
- Form CFD(s) or Assessment Districts to fund public services.
- Form CFD(s) to fund Backbone Infrastructure and Public Facilities.

The County may consider implementation of an infrastructure CFD after there are adequate assurances that public services are funded. Any CFD funding would be consistent with the County/special district's policies.

### **Changes in Infrastructure Cost Estimates and Financing Programs**

It is anticipated that as the Financing Plan is implemented, the infrastructure costs and available funding sources will change as development occurs. As a result, the Financing Plan must be flexible enough to accommodate these changes appropriately. Changes in the actual or assumed infrastructure cost estimates or funding of the infrastructure should be re-evaluated in the context of the overall financing strategy to ensure required funding is available when needed.

Possible refinements, subject to County approval, are listed below:

- New or revised infrastructure projects.
- New cost information based on actual construction costs, updated engineering estimates, or changes in the land use plan.
- New funding source data.
- Inflation adjustments to cost and funding data.
- Land use changes to the BRSP.

Changes in the financing program could include higher or lower cost estimates, as well as changes in funding sources. Costs and funding sources also will need to be adjusted annually to reflect inflation costs, as information contained in the Financing Plan is shown in 2015 dollars.

### **Future Adjustments to Existing and New Fee Programs**

Existing and newly created reimbursement and fee programs will be adjusted in the future for several reasons:

- Update and refine cost information.
- Determine that certain BRSP improvements would be more appropriately included in existing County or other special district fee programs.
- Other factors not identified at this time.

Costs for Facility improvements may be more than originally anticipated when the fee program was created or last updated. As a result, these added costs would need to be funded by development in the BRSP, though some development projects already may have been completed.

## **Fee Credits and Reimbursements**

The County will require developers to fund or construct certain infrastructure and other associated costs contained in the Infrastructure cost estimates. Funded improvements may be Facilities programmed for funding through existing fee programs, bond proceeds, or private funding.

The BRSP Developer may receive either fee credits or reimbursement for advance funding of eligible projects based on the reimbursement structure described in further detail in the DA. If the private funding/financing includes oversizing for areas outside the BRSP, the Developer also may be entitled to future reimbursements from development areas benefiting from those facilities. In addition, other development projects may be subject to participation in the funding of regional roads built by the Developer in the BRSP based on facilities included in existing or updated fee programs.

The County typically does not allow CFDs to fund Facility oversizing. Reimbursements for oversizing will be handled through the appropriate fee program, reimbursement agreement, or developer cost-sharing agreement. Details on these reimbursement obligations are provided in **Chapter 6**.

Fee credit/reimbursement programs for existing and proposed development fee and reimbursement programs will require agreement among the developer, the County, and any other applicable agencies who will administer the fee programs, such as the school districts. The policies and procedures for providing fee credits and reimbursements will be set forth in the implementing documents for the fee programs.



## APPENDICES:

- Appendix A: Infrastructure Cost Estimates
- Appendix B: Existing and Planned/Potential Fee Programs Fee Revenue Generated
- Appendix C: Cost Allocation
- Appendix D: Sierra College Blvd. Widening Phasing
- Appendix E: Park Exhibits



**APPENDIX A:**  
**Infrastructure Cost Estimates**





**Bickford Ranch Sierra College Blvd Phasing-AMENDMENT**

Subject: Segmented Cost Analysis-Traffic Signal Amendment  
 Prepared For: Megan Quinn, EPS  
 Prepared by: Brian Durham, M&S  
 Reviewed by: Mark Sauer, P.E., M&S  
 CC: Michele Kingsbury, Placer County

This segmented phasing plan ‘**amendment**’ is a strategy to address the addition of two signalized intersections within the widening of Sierra College Blvd (SCB) for the Bickford Ranch project. The purpose of this memo is to update and amend the previous Bickford Ranch Sierra College Blvd Phasing memo, “Segmented Cost Analysis-Revised”, dated July 29, 2015.

Two additional signalized intersections are to be included within the proposed Sierra College Blvd Phasing Fee, located at the intersections of Sierra College Blvd/School Ranch Road and the intersection of Sierra College Blvd/HWY-193.

As described in the July 29<sup>th</sup> memo referenced above, the total cost for SCB Phases 3 and 4 is \$4,963,440.00 and was to be funded over 1,480 units within the payment to Placer County for residential building permits. The fee amount per each residential building permit was \$3,354.00, see Table 1 below.

**Table 1-Bldg Permit Fee Phase Summary**

No. Units	Total Cost for Segments 3 and 4	Fee Amount per DU
1,480	\$ 4,963,440.00	\$ 3,354.00

The total cost of the two additional signals which are now to be included in the SCB Phasing Fee will be approximately \$798,000 (this includes 20% contingency and 20% soft costs on an estimated \$277,000 preliminary estimate for each signal). This amount of \$798,000 for two signalized intersections correlates to a \$539 increase in fees that would be due with each building permit, see Table 2 below.

**Table 2-Bldg Permit Fee Signals Summary**

No. Units	Total Cost for School Ranch Rd. & HWY-193 Signals	Fee Amount per DU
1,480	\$ 798,000	\$ 539.00

With the addition of these two signals the total SCB Phasing Fee will be \$3,893. Which is the sum of the original phasing fee of \$3,354.00 and the additional \$539.00 increase for the signals at School Ranch Road and HWY-193. Supporting conversations with Placer County Staff has been provided as a reference, see attached.

**PRELIMINARY  
BACKBONE  
COST ESTIMATES**

**Bickford Ranch**

BY

**LV Bickford, LLC**

within the  
Bickford Ranch Specific Plan Area  
Placer County, California

**June 16, 2015**

**MACKAY & SOMPS**  
ENGINEERS PLANNERS SURVEYORS  
1552 Eureka Road, Suite 100, Roseville, CA 95661 (916) 773-1189

Bickford Ranch Specific Plan  
 Backbone Infrastructure Costs  
 Summary & Description - BackboneCostEst\_updated.xls

**DESCRIPTION**

**PROJECT DESCRIPTION:**

This project consists of Backbone surface improvements (Streetwork & Concrete), utilities (Sewer, Storm Drain, Potable & Canal Water...), grading, offsite improvements (portions of 42" Water Line, Sierra College Blvd Improvements), EVA's, and Miscellaneous items (such as replace/remove/dispose of existing street lights & signals and traffic control measures) required for the improvements of Sierra College Blvd from HWY-193 to English Colony Way, Bickford Ranch Road, School Ranch Road, and other associated Backbone Infrastructure.

**Bickford Ranch Specific Plan Area**

Placer County, California

**SUMMARY:**

No.	Description	Total
	<i>Bickford Ranch Road (Segments A, B, C, D, &amp; E)</i>	\$ 35,189,000.00
	<i>School Ranch Road (Segment G)</i>	\$ 6,683,000.00
	<i>Sierra College Blvd. Widening</i>	\$ 7,381,200.00
	<i>42" On-Site Water Line</i>	\$ 14,787,400.00
	<i>Water Tank Site #1</i>	\$ 6,120,000.00
	<i>Caperton Canal Re-alignment / Piping</i>	\$ 4,562,400.00
	<i>Clark Tunnel Road / EVA's</i>	\$ 473,300.00
	<i>Dry Utilities</i>	\$ 10,047,000.00
	<i>Mass Grading, Detention &amp; Offsite Retention</i>	\$ 38,413,000.00
	<i>Offsite Sewer Connection (SCB/HWY-193)</i>	\$ 1,094,000.00
	<i>Offsite Waterline Connection (Butler Road)</i>	\$ 120,000.00
	<b>CUMULATIVE</b>	<b>\$ 124,870,300.00</b>

## PRELIMINARY COST ESTIMATE

### NOTES

for

### *Bickford Ranch Specific Plan*

Placer County, California

1. This estimate is prepared as a guide only and is subject to possible change. It has been prepared to a standard of accuracy that, to the best of our knowledge and judgment, is sufficient to satisfy our understanding of the purpose of this estimate. MacKay & Soms makes no warranty, either expressed or implied, as to the accuracy of this estimate.
2. This estimate does not consider the following:
  - a. Fencing and bulkheads
  - b. Assessments for assessment, lighting & landscaping, GHAD, Mello Roos districts of the like
  - c. Reimbursable dry utilities costs.
  - d. Postal pads and mail boxes
  - e. Land costs, right of way acquisition, entitlements, easements, and/or rights of entry
  - f. Backflow Devices
  - g. Fees due at building permit
  - h. Out of regular sequence construction
  - i. Over excavation of unsuitable materials, undercutting, and/or landslide repair
  - j. Costs associated with high groundwater or inclement weather conditions
  - k. Costs associated with limitations on construction access
  - l. Tree preservation systems and mitigation costs
  - m. Paseo landscaping & associated design costs
  - n. Costs associated with Homeowner's Associations
  - o. Financing, bonds, and overhead charges.
  - p. Costs associated with Endangered Species and Wildlife Conservation.
  - q. Cost associated with Corps of Engineer, Fish & Game, Fish & Wildlife and Wetlands (Permitting, Mitigation, and Preservation)
  - r. Cost associated with inclusionary zoning and low income housing requirements
  - s. Toxic contamination evaluation studies or remediation
  - t. Archaeological studies, investigations or relocations
  - u. Cost associated with siltation basins
  - v. Bridges and associated design costs
  - w. Bike paths or equestrian trails
  - x. Cost associated with traffic engineering studies, signalization, and construction
  - y. Irrigation systems and associated design costs
  - z. Cost associated with the operation and maintenance of stormwater quality treatment units
  - aa. Costs associated with the preparation of SWPPP
  - bb. Architectural design and associated fees
  - cc. Costs and fees associated with facility maintenance
  - dd. Cost associated with the design, construction and maintenance of residential and regional parks
  - ee. Sanitary Sewer Lift Stations
3. The "cash flow" situation may be different than the costs shown herein and whoever uses this estimate should take this into consideration. For example, PG&E may require refundable deposits for gas and electricity that are paid back when the houses are connected.
4. Costs presented herein represent an opinion based on historical information and coordination efforts with the contractors, consultants and the owners group. No provision has been made for inflation
5. Roadway excavation represented in these estimates limits the excavation to the pavement section plus 1-1/2 foot within the right-of-way.





**Bickford Ranch Rd. - Segment A (2,190 LF)**

Backbone Infrastructure Costs  
 BackboneCostEst\_updated.xls

Preliminary Opinion of Construction Costs  
 Major Backbone Infrastructure Only

No.	Description	Quantity	Units	Unit Price	Amount
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<sup>[3]</sup> **Streetwork:**

1	Clearing and Grubbing	5.9	AC	\$ 1,000.00	\$ 5,900.00
2	Erosion Control	5.9	AC	\$ 5,000.00	\$ 29,300.00
3	Roadway Excavation	28,348	CY	\$ 12.00	\$ 340,200.00
4	Roadway Finish Grading	255,135	SF	\$ 0.25	\$ 63,800.00
5	Urban Primary (Segment A) Paving - (5" AC on 13" AB)	135,780	SF	\$ 6.50	\$ 882,600.00
7	Landscaping	83,220	SF	\$ 5.00	\$ 416,100.00
8	Bus Shelter Pad	1	EA	\$ 1,500.00	\$ 1,500.00
9	Street Barricade	1	EA	\$ 1,200.00	\$ 1,200.00
10	Signage & Striping	2,190	LF	\$ 10.00	\$ 21,900.00
11	Survey Monuments	4	EA	\$ 2,000.00	\$ 8,000.00

*Streetwork Subtotal: \$ 1,770,500.00*

**Concrete:**

1	Type II Curb & Gutter	4,380	LF	\$ 21.00	\$ 92,000.00
2	Type 2 Barrier/Median Curb	4,380	LF	\$ 25.00	\$ 109,500.00
3	10' Detached Sidewalk (Measured Thru HC Ramps)	21,900	SF	\$ 9.00	\$ 197,100.00

*Concrete Subtotal: \$ 398,600.00*

<sup>[4]</sup> **Storm Drain:**

1	48" Standard Storm Drain Manhole	3	EA	\$ 5,400.00	\$ 16,200.00
2	60" Standard Storm Drain Manhole	4	EA	\$ 7,200.00	\$ 28,800.00
3	Type "C" Drainage Inlet	10	EA	\$ 3,000.00	\$ 30,000.00
4	12" Storm Drain, RCP CL III	410	LF	\$ 54.00	\$ 22,140.00
5	24" Storm Drain, RCP CL III	300	LF	\$ 78.00	\$ 23,400.00
6	30" Storm Drain, RCP CL III	70	LF	\$ 90.00	\$ 6,300.00
7	33" Storm Drain, RCP CL III	60	LF	\$ 96.00	\$ 5,760.00
8	12" Flared End Section	1	EA	\$ 500.00	\$ 500.00
9	18" Flared End Section	1	EA	\$ 750.00	\$ 750.00
10	24" Flared End Section	2	EA	\$ 900.00	\$ 1,800.00
11	30" Flared End Section	3	EA	\$ 1,200.00	\$ 3,600.00
12	36" Flared End Section	1	EA	\$ 1,500.00	\$ 1,500.00
13	WQ Channels Outfalls	5	EA	\$ 25,000.00	\$ 125,000.00

*Storm Drain Subtotal: \$ 265,750.00*

**Bickford Ranch Rd. - Segment A (2,190 LF)**

Backbone Infrastructure Costs  
 BackboneCostEst\_updated.xls

Preliminary Opinion of Construction Costs  
 Major Backbone Infrastructure Only

No.	Description	Quantity	Units	Unit Price	Amount
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<sup>[1]</sup> Potable Water:

1	8" Water Distribution Main, PVC C900	300	LF	\$ 54.00	\$ 16,200.00
2	12" Water Distribution Main, PVC C900	1,870	LF	\$ 78.00	\$ 145,860.00
3	8" Gate Valve	1	EA	\$ 1,500.00	\$ 1,500.00
4	12" Butterfly Valve	5	EA	\$ 3,500.00	\$ 17,500.00
5	Fire Hydrant Assembly	3	EA	\$ 6,000.00	\$ 18,000.00

*Potable Water Subtotal:* \$ 199,060.00

<sup>[2]</sup> Sanitary Sewer

1	18" Sanitary Sewer, VCP	2,250	LF	\$ 102.00	\$ 229,500.00
2	60" Standard Sanitary Sewer Manhole	8	EA	\$ 7,200.00	\$ 57,600.00
3	Plug & Mark Stubs	3	EA	\$ 400.00	\$ 1,200.00

*Sanitary Sewer Subtotal:* \$ 288,300.00

- [1] Reference Tech Memo for Bickford Ranch Treated Water Infrastructure Phasing, dated April 28, 2014 by HydroScience Engineers
- [2] Reference Bickford Ranch Sanitary Sewer Master Plan Update, dated 3/19/14 by MacKay & Somps, Inc.
- [3] Reference Bickford Ranch Land Use Map and Project Description dated 1/22/14
- [4] Reference Bickford Ranch Project Drainage Study Update, dated 4/15/14 by Civil Engineering Solutions, Inc.
- [5] Landscaping includes any medians, shoulders, greenways up to an including any Multi Purpose Easement

<i>Estimate Subtotal:</i>	\$ 2,922,200.00
<i>20% Contingency:</i>	\$ 584,400.00
<i>Construction Total:</i>	\$ 3,506,600.00
<i>20% Soft Costs:</i>	\$ 701,300.00
<b><i>Estimated Project Total:</i></b>	<b>\$ 4,208,000.00</b>

**Bickford Ranch Rd. - Segment B (4,080 LF)**

Backbone Infrastructure Costs  
 BackboneCostEst\_updated.xls

Preliminary Opinion of Construction Costs  
 Major Backbone Infrastructure Only

No.	Description	Quantity	Units	Unit Price	Amount
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<sup>[3]</sup>**Streetwork:**

1	Clearing and Grubbing	7.7	AC	\$ 1,000.00	\$ 7,700.00
2	Erosion Control	7.7	AC	\$ 5,000.00	\$ 38,600.00
3	Roadway Excavation	35,322	CY	\$ 12.00	\$ 423,900.00
4	Roadway Finish Grading	336,600	SF	\$ 0.25	\$ 84,200.00
5	Urban Secondary (Segments B, C, D, & G) Paving - (4" AC on 12" AB)	171,360	SF	\$ 6.00	\$ 1,028,200.00
6	Bus Shelter Pad	1	EA	\$ 1,500.00	\$ 1,500.00
7	Street Barricade	1	EA	\$ 1,200.00	\$ 1,200.00
8	Signage & Striping	4,080	LF	\$ 10.00	\$ 40,800.00
9	Landscaping	102,000	SF	\$ 5.00	\$ 510,000.00
10	Survey Monuments	3	EA	\$ 2,000.00	\$ 6,000.00
11	Retaining Walls	89,536	SF	\$ 40.00	\$ 3,581,440.00

*Streetwork Subtotal: \$ 5,723,500.00*

**Concrete:**

1	Type II Curb & Gutter	8,160	LF	\$ 21.00	\$ 171,400.00
2	Type 2 Barrier/Median Curb	8,160	LF	\$ 25.00	\$ 204,000.00
3	10' Detached Sidewalk (Measured Thru HC Ramps)	40,800	SF	\$ 9.00	\$ 367,200.00

*Concrete Subtotal: \$ 742,600.00*

<sup>[4]</sup>**Storm Drain:**

1	48" Standard Storm Drain Manhole	4	EA	\$ 5,400.00	\$ 21,600.00
3	72" Standard Storm Drain Manhole	3	EA	\$ 8,400.00	\$ 25,200.00
4	Type "C" Drainage Inlet	15	EA	\$ 3,000.00	\$ 45,000.00
5	12" Storm Drain, RCP CL III	1,080	LF	\$ 54.00	\$ 58,320.00
6	18" Storm Drain, RCP CL III	170	LF	\$ 66.00	\$ 11,200.00
7	24" Storm Drain, RCP CL III	240	LF	\$ 78.00	\$ 18,720.00
8	30" Storm Drain, RCP CL III	40	LF	\$ 90.00	\$ 3,600.00
9	12" Flared End Section	7	EA	\$ 500.00	\$ 3,500.00
10	18" Flared End Section	2	EA	\$ 750.00	\$ 1,500.00
11	WQ Channels at Outfalls	3	EA	\$ 25,000.00	\$ 75,000.00

*Storm Drain Subtotal: \$ 263,640.00*

**Bickford Ranch Rd. - Segment B (4,080 LF)**

Backbone Infrastructure Costs  
 BackboneCostEst\_updated.xls

Preliminary Opinion of Construction Costs  
 Major Backbone Infrastructure Only

No.	Description	Quantity	Units	Unit Price	Amount
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<sup>[1]</sup>**Potable Water:**

1	12" Water Distribution Main, PVC C900	3,700	LF	\$ 78.00	\$ 288,600.00
2	12" Butterfly Valve	8	EA	\$ 3,500.00	\$ 28,000.00
3	Fire Hydrant Assembly	4	EA	\$ 6,000.00	\$ 24,000.00

*Potable Water Subtotal: \$ 340,600.00*

<sup>[2]</sup>**Sanitary Sewer**

1	18" Sanitary Sewer, VCP	3,580	LF	\$ 102.00	\$ 365,160.00
2	60" Standard Sanitary Sewer Manhole	12	EA	\$ 7,200.00	\$ 86,400.00
3	Plug & Mark Stubs	2	EA	\$ 400.00	\$ 800.00

*Sanitary Sewer Subtotal: \$ 452,360.00*

- [1] Reference Tech Memo for Bickford Ranch Treated Water Infrastructure Phasing, dated April 28, 2014 by HydroScience Engineers
- [2] Reference Bickford Ranch Sanitary Sewer Master Plan Update, dated 3/19/14 by MacKay & Soms, Inc.
- [3] Reference Bickford Ranch Land Use Map and Project Description dated 1/22/14
- [4] Reference Bickford Ranch Project Drainage Study Update, dated 4/15/14 by Civil Engineering Solutions, Inc.

<i>Estimate Subtotal:</i>	<i>\$ 7,522,700.00</i>
<i>20% Contingency:</i>	<i>\$ 1,504,500.00</i>
<i>Construction Total:</i>	<i>\$ 9,027,200.00</i>
<i>20% Soft Costs:</i>	<i>\$ 1,805,400.00</i>
<b><i>Estimated Project Total:</i></b>	<b><i>\$ 10,833,000.00</i></b>

**Bickford Ranch Rd. - Segment C (2,300 LF)**

Backbone Infrastructure Costs  
 BackboneCostEst\_updated.xls

Preliminary Opinion of Construction Costs  
 Major Backbone Infrastructure Only

No.	Description	Quantity	Units	Unit Price	Amount
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<sup>13</sup>**Streetwork:**

1	Clearing and Grubbing	5.1	AC	\$ 1,000.00	\$ 5,100.00
2	Erosion Control	5.1	AC	\$ 5,000.00	\$ 25,500.00
3	Roadway Excavation	23,291	CY	\$ 12.00	\$ 279,500.00
4	Roadway Finish Grading	221,950	SF	\$ 0.25	\$ 55,487.50
5	Urban Secondary (Segments B, C, D, & G) Paving - (4" AC on 12" AB)	96,600	SF	\$ 6.00	\$ 579,600.00
6	Landscaping	87,400	SF	\$ 5.00	\$ 437,000.00
7	Street Barricade	1	EA	\$ 1,200.00	\$ 1,200.00
8	Signage & Striping	2,300	LF	\$ 10.00	\$ 23,000.00
9	Survey Monuments	3	EA	\$ 2,000.00	\$ 6,000.00
10	Retaining Walls	6,800	SF	\$ 40.00	\$ 272,000.00

*Streetwork Subtotal: \$ 1,684,387.50*

**Concrete:**

1	Type II Curb & Gutter	4,600	LF	\$ 21.00	\$ 96,600.00
2	Type 2 Barrier/Median Curb	4,600	LF	\$ 25.00	\$ 115,000.00
3	10' Detached Sidewalk (Measured Thru HC Ramps)	23,000	SF	\$ 9.00	\$ 207,000.00

*Concrete Subtotal: \$ 418,600.00*

<sup>14</sup>**Storm Drain:**

1	48" Standard Storm Drain Manhole	3	EA	\$ 5,400.00	\$ 16,200.00
3	72" Standard Storm Drain Manhole	4	EA	\$ 8,400.00	\$ 33,600.00
4	Type "C" Drainage Inlet	10	EA	\$ 3,000.00	\$ 30,000.00
5	12" Storm Drain, RCP CL III	1,090	LF	\$ 54.00	\$ 58,860.00
6	24" Storm Drain, RCP CL III	70	LF	\$ 78.00	\$ 5,460.00
7	33" Storm Drain, RCP CL III	360	LF	\$ 96.00	\$ 34,560.00
8	36" Storm Drain, RCP CL III	130	LF	\$ 102.00	\$ 13,260.00
9	48" Storm Drain, RCP CL III	300	LF	\$ 120.00	\$ 36,000.00
10	24" Flared End Section	1	EA	\$ 900.00	\$ 900.00
11	36" Flared End Section	1	EA	\$ 1,500.00	\$ 1,500.00
12	48" Pipe Outfall	1	EA	\$ 9,000.00	\$ 9,000.00
13	WQ Channels at Outfalls	3	EA	\$ 25,000.00	\$ 75,000.00

*Storm Drain Subtotal: \$ 314,340.00*

**Bickford Ranch Rd. - Segment C (2,300 LF)**

Backbone Infrastructure Costs  
 BackboneCostEst\_updated.xls

Preliminary Opinion of Construction Costs  
 Major Backbone Infrastructure Only

No.	Description	Quantity	Units	Unit Price	Amount
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<sup>[1]</sup> Potable Water:

1	12" Water Distribution Main, PVC C900	2,450	LF	\$ 78.00	\$ 191,100.00
2	12" Butterfly Valve	5	EA	\$ 3,500.00	\$ 17,500.00
3	Fire Hydrant Assembly	3	EA	\$ 6,000.00	\$ 18,000.00

*Potable Water Subtotal:* \$ 226,600.00

<sup>[2]</sup> Sanitary Sewer

1	60" Standard Sanitary Sewer Manhole	7	EA	\$ 7,200.00	\$ 50,400.00
2	12" Sanitary Sewer, VCP	120	LF	\$ 72.00	\$ 8,640.00
3	15" Sanitary Sewer, VCP	760	LF	\$ 84.00	\$ 63,840.00
4	18" Sanitary Sewer, VCP	850	LF	\$ 102.00	\$ 86,700.00
5	Plug & Mark Stubs	3	EA	\$ 400.00	\$ 1,200.00

*Sanitary Sewer Subtotal:* \$ 210,780.00

- [1] Reference Tech Memo for Bickford Ranch Treated Water Infrastructure Phasing, dated April 28, 2014 by HydroScience Engineers
- [2] Reference Bickford Ranch Sanitary Sewer Master Plan Update, dated 3/19/14 by MacKay & Soms, Inc.
- [3] Reference Bickford Ranch Land Use Map and Project Description dated 1/22/14
- [4] Reference Bickford Ranch Project Drainage Study Update, dated 4/15/14 by Civil Engineering Solutions, Inc.

<i>Estimate Subtotal:</i>	\$ 2,854,700.00
<i>20% Contingency:</i>	\$ 570,900.00
<i>Construction Total:</i>	\$ 3,425,600.00
<i>20% Soft Costs:</i>	\$ 685,100.00
<b><i>Estimated Project Total:</i></b>	<b>\$ 4,111,000.00</b>

**Bickford Ranch Rd. - Segment D (4,700 LF)**

Backbone Infrastructure Costs  
 BackboneCostEst\_updated.xls

Preliminary Opinion of Construction Costs  
 Major Backbone Infrastructure Only

No.	Description	Quantity	Units	Unit Price	Amount
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<sup>3</sup>**Streetwork:**

1	Clearing and Grubbing	8.6	AC	\$ 1,000.00	\$ 8,600.00
2	Erosion Control	8.6	AC	\$ 5,000.00	\$ 43,200.00
3	Roadway Excavation	39,457	CY	\$ 12.00	\$ 473,500.00
4	Roadway Finish Grading	376,000	SF	\$ 0.25	\$ 94,000.00
5	Urban Secondary (Segments B, C, D, & G) Paving - (4" AC on 12" AB)	197,400	SF	\$ 6.00	\$ 1,184,400.00
6	Street Barricade	1	EA	\$ 1,200.00	\$ 1,200.00
7	Signage & Striping	4,700	LF	\$ 10.00	\$ 47,000.00
8	Landscaping	131,600	SF	\$ 5.00	\$ 658,000.00
9	Survey Monuments	9	EA	\$ 2,000.00	\$ 18,000.00
10	Retaining Walls	7,770	SF	\$ 40.00	\$ 310,800.00

*Streetwork Subtotal: \$ 2,838,700.00*

**Concrete:**

1	10' Detached Sidewalk (Measured Thru HC Ramps)	47,000	SF	\$ 9.00	\$ 423,000.00
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*Concrete Subtotal: \$ 423,000.00*

<sup>4</sup>**Storm Drain:**

1	48" Standard Storm Drain Manhole	3	EA	\$ 5,400.00	\$ 16,200.00
2	72" Standard Storm Drain Manhole	2	EA	\$ 8,400.00	\$ 16,800.00
3	84" Standard Storm Drain Manhole	2	EA	\$ 10,200.00	\$ 20,400.00
4	Type "C" Drainage Inlet	10	EA	\$ 3,000.00	\$ 30,000.00
5	12" Storm Drain, RCP CL III	1,050	LF	\$ 54.00	\$ 56,700.00
6	24" Storm Drain, RCP CL III	300	LF	\$ 78.00	\$ 23,400.00
7	42" Storm Drain, RCP CL III	200	LF	\$ 114.00	\$ 22,800.00
8	60" Storm Drain, RCP CL III	200	LF	\$ 240.00	\$ 48,000.00
9	12" Flared End Section	9	EA	\$ 500.00	\$ 4,500.00
10	24" Flared End Section	1	EA	\$ 900.00	\$ 900.00
11	42" Pipe Outfall	1	EA	\$ 8,000.00	\$ 8,000.00
12	60" Pipe Outfall	1	EA	\$ 11,000.00	\$ 11,000.00
13	WQ Channels at Outfalls	5	EA	\$ 25,000.00	\$ 125,000.00

*Storm Drain Subtotal: \$ 383,700.00*

**Bickford Ranch Rd. - Segment D (4,700 LF)**

Backbone Infrastructure Costs  
 BackboneCostEst\_updated.xls

Preliminary Opinion of Construction Costs  
 Major Backbone Infrastructure Only

No.	Description	Quantity	Units	Unit Price	Amount
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<sup>[1]</sup>**Potable Water:**

1	12" Water Distribution Main, PVC C900	4,800	LF	\$ 78.00	\$ 374,400.00
2	12" Butterfly Valve	10	EA	\$ 3,500.00	\$ 35,000.00
3	Fire Hydrant Assembly	5	EA	\$ 6,000.00	\$ 30,000.00

*Potable Water Subtotal: \$ 439,400.00*

<sup>[2]</sup>**Sanitary Sewer**

1	48" Standard Sanitary Sewer Manhole	16	EA	\$ 6,600.00	\$ 105,600.00
2	12" Sanitary Sewer, VCP	4,770	LF	\$ 72.00	\$ 343,440.00
3	Plug & Mark Stubs	4	EA	\$ 400.00	\$ 1,600.00

*Sanitary Sewer Subtotal: \$ 450,640.00*

- [1] Reference Tech Memo for Bickford Ranch Treated Water Infrastructure Phasing, dated April 28, 2014 by HydroScience Engineers
- [2] Reference Bickford Ranch Sanitary Sewer Master Plan Update, dated 3/19/14 by MacKay & Soms, Inc.
- [3] Reference Bickford Ranch Land Use Map and Project Description dated 1/22/14
- [4] Reference Bickford Ranch Project Drainage Study Update, dated 4/15/14 by Civil Engineering Solutions, Inc.

<i>Estimate Subtotal:</i>	\$ 4,535,440.00
<i>20% Contingency:</i>	\$ 907,100.00
<i>Construction Total:</i>	\$ 5,442,540.00
<i>20% Soft Costs:</i>	\$ 1,088,508.00
<b><i>Estimated Project Total:</i></b>	<b>\$ 6,531,000.00</b>

**Bickford Ranch Rd. - Segment E (7,650 LF)**

Backbone Infrastructure Costs  
 BackboneCostEst\_updated.xls

Preliminary Opinion of Construction Costs  
 Major Backbone Infrastructure Only

No.	Description	Quantity	Units	Unit Price	Amount
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<sup>3</sup>**Streetwork:**

1	Clearing and Grubbing	12.5	AC	\$ 1,000.00	\$ 12,500.00
2	Erosion Control	12.5	AC	\$ 5,000.00	\$ 62,300.00
3	Roadway Excavation	56,997	CY	\$ 12.00	\$ 684,000.00
4	Roadway Finish Grading	543,150	SF	\$ 0.25	\$ 135,800.00
5	Modified Urban Secondary (Segment E) Paving - (4" AC on 12" AB)	290,700	SF	\$ 6.00	\$ 1,744,200.00
7	Street Barricade	1	EA	\$ 1,200.00	\$ 1,200.00
8	Signage & Striping	7,650	LF	\$ 10.00	\$ 76,500.00
9	Landscaping	214,200	SF	\$ 5.00	\$ 1,071,000.00
12	Survey Monuments	14	EA	\$ 2,000.00	\$ 28,000.00

*Streetwork Subtotal: \$ 3,815,500.00*

**Concrete:**

1	10' Detached Sidewalk (Measured Thru HC Ramps)	76,500	SF	\$ 9.00	\$ 688,500.00
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*Concrete Subtotal: \$ 688,500.00*

<sup>4</sup>**Storm Drain:**

1	48" Standard Storm Drain Manhole	4	EA	\$ 5,400.00	\$ 21,600.00
2	60" Standard Storm Drain Manhole	2	EA	\$ 7,200.00	\$ 14,400.00
3	72" Standard Storm Drain Manhole	2	EA	\$ 8,400.00	\$ 16,800.00
4	84" Standard Storm Drain Manhole	4	EA	\$ 10,200.00	\$ 40,800.00
5	Jensen Precast Junction Structure (8' ID x 8' ID)	1	EA	\$ 30,000.00	\$ 30,000.00
6	Type "C" Drainage Inlet	17	EA	\$ 3,000.00	\$ 51,000.00
7	12" Storm Drain, RCP CL III	1,800	LF	\$ 54.00	\$ 97,200.00
8	18" Storm Drain, RCP CL III	210	LF	\$ 66.00	\$ 13,860.00
9	30" Storm Drain, RCP CL III	60	LF	\$ 90.00	\$ 5,400.00
10	48" Storm Drain, RCP CL III	860	LF	\$ 120.00	\$ 103,200.00
11	54" Storm Drain, RCP CL III	930	LF	\$ 180.00	\$ 167,400.00
12	60" Storm Drain, RCP CL III	250	LF	\$ 240.00	\$ 60,000.00
13	72" Storm Drain, RCP CL III	90	LF	\$ 390.00	\$ 35,100.00
14	12" Flared End Section	7	EA	\$ 500.00	\$ 3,500.00
15	30" Flared End Section	1	EA	\$ 1,200.00	\$ 1,200.00
16	72" Pipe Outfall	1	EA	\$ 13,000.00	\$ 13,000.00
17	WQ Channels at Outfalls	2	EA	\$ 25,000.00	\$ 50,000.00

*Storm Drain Subtotal: \$ 724,460.00*

**Bickford Ranch Rd. - Segment E (7,650 LF)**

Backbone Infrastructure Costs  
 BackboneCostEst\_updated.xls

Preliminary Opinion of Construction Costs  
 Major Backbone Infrastructure Only

No.	Description	Quantity	Units	Unit Price	Amount
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<sup>[1]</sup>**Potable Water:**

2	12" Water Distribution Main, PVC C900	7590	LF	\$ 78.00	\$ 592,020.00
4	12" Butterfly Valve	17	EA	\$ 3,500.00	\$ 59,500.00
5	Fire Hydrant Assembly	8	EA	\$ 6,000.00	\$ 48,000.00

*Potable Water Subtotal: \$ 699,500.00*

<sup>[2]</sup>**Sanitary Sewer**

1	48" Standard Sanitary Sewer Manhole	22	EA	\$ 6,600.00	\$ 145,200.00
2	6" Sanitary Sewer, VCP	890	LF	\$ 48.00	\$ 42,720.00
3	8" Sanitary Sewer, VCP	1,250	LF	\$ 54.00	\$ 67,500.00
4	10" Sanitary Sewer, VCP	2,730	LF	\$ 60.00	\$ 163,800.00
5	12" Sanitary Sewer, VCP	2,240	LF	\$ 72.00	\$ 161,280.00
6	6" Sanitary Sewer Force Main, PVC	1,500	LF	\$ 60.00	\$ 90,000.00
7	Plug & Mark Stubs	8	EA	\$ 400.00	\$ 3,200.00

*Sanitary Sewer Subtotal: \$ 673,700.00*

- [1] Reference Tech Memo for Bickford Ranch Treated Water Infrastructure Phasing, dated April 28, 2014 by HydroScience Engineers
- [2] Reference Bickford Ranch Sanitary Sewer Master Plan Update, dated 3/19/14 by MacKay & Soms, Inc.
- [3] Reference Bickford Ranch Land Use Map and Project Description dated 1/22/14
- [4] Reference Bickford Ranch Project Drainage Study Update, dated 4/15/14 by Civil Engineering Solutions, Inc.

<i>Estimate Subtotal:</i>	\$ 6,601,660.00
<i>20% Contingency:</i>	\$ 1,320,300.00
<i>Construction Total:</i>	\$ 7,921,960.00
<i>20% Soft Costs:</i>	\$ 1,584,392.00
<b><i>Estimated Project Total:</i></b>	<b>\$ 9,506,000.00</b>

**School Ranch Rd. - Segment G (4,740 LF)**

Backbone Infrastructure Costs  
 BackboneCostEst\_updated.xls

Preliminary Opinion of Construction Costs  
 Major Backbone Infrastructure Only

No.	Description	Quantity	Units	Unit Price	Amount
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<sup>13</sup>Streetwork:

1	Clearing and Grubbing	9.0	AC	\$ 1,000.00	\$ 9,000.00
2	Erosion Control	9.0	AC	\$ 5,000.00	\$ 45,200.00
3	Roadway Excavation	41,285	CY	\$ 12.00	\$ 495,400.00
4	Roadway Finish Grading	393,420	SF	\$ 0.25	\$ 98,400.00
5	Urban Secondary (Segments B, C, D, & G) Paving - (4" AC on 12" AB)	199,080	SF	\$ 6.00	\$ 1,194,500.00
7	Bus Shelter Pad	1	EA	\$ 1,500.00	\$ 1,500.00
8	Street Barricade	1	EA	\$ 1,200.00	\$ 1,200.00
9	Signage & Striping	4,740	LF	\$ 10.00	\$ 47,400.00
10	Landscaping	94,800	SF	\$ 5.00	\$ 474,000.00
11	Survey Monuments	6	EA	\$ 2,000.00	\$ 12,000.00

*Streetwork Subtotal: \$ 2,378,600.00*

**Concrete:**

1	Type II Curb & Gutter	9,480	LF	\$ 21.00	\$ 199,100.00
2	5' Detached Sidewalk (Measured Thru HC Ramps)	23,700	SF	\$ 8.00	\$ 189,600.00
3	10' Detached Sidewalk (Measured Thru HC Ramps)	47,400	SF	\$ 9.00	\$ 426,600.00

*Concrete Subtotal: \$ 815,300.00*

<sup>14</sup>Storm Drain:

1	48" Standard Storm Drain Manhole	11	EA	\$ 5,400.00	\$ 59,400.00
2	60" Standard Storm Drain Manhole	3	EA	\$ 7,200.00	\$ 21,600.00
3	84" Standard Storm Drain Manhole	3	EA	\$ 10,200.00	\$ 30,600.00
4	Jensen Precast Junction Structure (8' ID x 8' ID)	1	EA	\$ 30,000.00	\$ 30,000.00
5	Type "C" Drainage Inlet	25	EA	\$ 3,000.00	\$ 75,000.00
6	12" Storm Drain, RCP CL III	3,400	LF	\$ 54.00	\$ 183,600.00
7	18" Storm Drain, RCP CL III	1,070	LF	\$ 66.00	\$ 70,700.00
8	42" Storm Drain, RCP CL III	390	LF	\$ 114.00	\$ 44,500.00
9	48" Storm Drain, RCP CL III	170	LF	\$ 120.00	\$ 20,400.00
10	54" Storm Drain, RCP CL III	50	LF	\$ 180.00	\$ 9,000.00
11	72" Storm Drain, RCP CL III	150	LF	\$ 390.00	\$ 58,500.00
12	42" Pipe Outfall	2	EA	\$ 8,000.00	\$ 16,000.00
13	48" Pipe Outfall	2	EA	\$ 9,000.00	\$ 18,000.00
14	54" Pipe Outfall	1	EA	\$ 10,000.00	\$ 10,000.00
15	72" Pipe Outfall	2	EA	\$ 13,000.00	\$ 26,000.00
16	WQ Channels at Outfalls	4	EA	\$ 25,000.00	\$ 100,000.00

*Storm Drain Subtotal: \$ 773,300.00*

**School Ranch Rd. - Segment G (4,740 LF)**

Backbone Infrastructure Costs  
 BackboneCostEst\_updated.xls

Preliminary Opinion of Construction Costs  
 Major Backbone Infrastructure Only

No.	Description	Quantity	Units	Unit Price	Amount
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<sup>[1]</sup> Potable Water:

1	8" Water Distribution Main, PVC C900	1,080	LF	\$ 54.00	\$ 58,320.00
3	12" Water Distribution Main, PVC C900	3,160	LF	\$ 78.00	\$ 246,480.00
4	8" Gate Valve	4	EA	\$ 1,500.00	\$ 6,000.00
6	12" Butterfly Valve	8	EA	\$ 3,500.00	\$ 28,000.00
7	Fire Hydrant Assembly	5	EA	\$ 6,000.00	\$ 30,000.00

*Potable Water Subtotal: \$ 368,800.00*

<sup>[2]</sup> Sanitary Sewer

1	6" Sanitary Sewer, VCP	4,400	LF	\$ 48.00	\$ 211,200.00
2	48" Standard Sanitary Sewer Manhole	14	EA	\$ 6,600.00	\$ 92,400.00
3	Plug & Mark Stubs	4	EA	\$ 400.00	\$ 1,600.00

*Sanitary Sewer Subtotal: \$ 305,200.00*

- [1] Reference Tech Memo for Bickford Ranch Treated Water Infrastructure Phasing, dated April 28, 2014 by HydroScience Engineers
- [2] Reference Bickford Ranch Sanitary Sewer Master Plan Update, dated 3/19/14 by MacKay & Soms, Inc.
- [3] Reference Bickford Ranch Land Use Map and Project Description dated 1/22/14
- [4] Reference Bickford Ranch Project Drainage Study Update, dated 4/15/14 by Civil Engineering Solutions, Inc.

<i>Estimate Subtotal:</i>	\$ 4,641,200.00
<i>20% Contingency:</i>	\$ 928,200.00
<i>Construction Total:</i>	\$ 5,569,400.00
<i>20% Soft Costs:</i>	\$ 1,113,900.00
<i>Estimated Project Total:</i>	\$ 6,683,000.00

**Sierra Collge Blvd. Widening**  
 Backbone Infrastructure Costs  
 BackboneCostEst\_updated.xls

Preliminary Opinion of Construction Costs  
 Major Backbone Infrastructure Only

No.	Description	Quantity	Units	Unit Price	Amount
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**Sierra College Blvd. Widening**

1	Clearing and Grubbing	11.2	AC	\$ 1,000.00	\$ 11,200.00
2	Erosion Control	11.2	AC	\$ 5,000.00	\$ 56,000.00
3	Roadway Excavation	38,000	CY	\$ 10.00	\$ 380,000.00
4	Roadway Finish Grading	324,800	SF	\$ 0.25	\$ 81,200.00
5	Roadway Grading-Cut	46,700	CY	\$ 10.00	\$ 467,000.00
6	Roadway Grading-Fill	80,400	CY	\$ 10.00	\$ 804,000.00
7	Sierra College Paving - (6" AC on 12" AB)	324,800	SF	\$ 7.00	\$ 2,273,600.00
8	Signage & Striping	8,120	LF	\$ 10.00	\$ 81,200.00
9	Metal Beam Guardrails	1,500	LF	\$ 23.00	\$ 34,500.00
10	AC Dike	8,120	LF	\$ 2.40	\$ 19,500.00
11	Roadside Ditch Grading	8,120	CY	\$ 20.00	\$ 162,400.00
12	12" Storm Drain, RCP CL III	410	LF	\$ 54.00	\$ 22,200.00
13	18" Storm Drain, RCP CL III	20	LF	\$ 66.00	\$ 1,400.00
14	24" Storm Drain, RCP CL III	160	LF	\$ 78.00	\$ 12,500.00
15	30" Storm Drain, RCP CL III	280	LF	\$ 90.00	\$ 25,200.00
16	42" Storm Drain, RCP CL III	270	LF	\$ 114.00	\$ 30,800.00
17	60" Storm Drain, RCP CL III	130	LF	\$ 240.00	\$ 31,200.00
18	12" Flared End Section	3	EA	\$ 500.00	\$ 1,500.00
19	18" Flared End Section	2	EA	\$ 750.00	\$ 1,500.00
20	24" Flared End Section	4	EA	\$ 900.00	\$ 3,600.00
21	30" Flared End Section	13	EA	\$ 1,200.00	\$ 15,600.00
22	42" Pipe Outfall	4	EA	\$ 8,000.00	\$ 32,000.00
23	60" Pipe Outfall	2	EA	\$ 11,000.00	\$ 22,000.00
24	48" Standard Storm Drain Manhole	1	EA	\$ 5,400.00	\$ 5,400.00
25	Grate Inlet (GDO)	2	EA	\$ 2,640.00	\$ 5,300.00
26	Park and Ride Site	1	LS	\$ 25,000.00	\$ 25,000.00
28	Saw Cut Existing Pavement	8,120	LF	\$ 2.50	\$ 20,300.00
29	Traffic Signal (SCB/HWY-193 & BRR/SCB Intersections)	2	EA	\$ 250,000.00	\$ 500,000.00

**Sierra College Blvd. Widening Subtotal: \$ 5,126,000.00**

Estimate Subtotal:	\$ 5,126,000.00
20% Contingency:	\$ 1,025,000.00
Construction Total:	\$ 6,151,000.00
20% Soft Costs:	\$ 1,230,200.00
<b>Estimated Project Total:</b>	<b>\$ 7,381,200.00</b>

**42" Waterline (approx. 21,000 LF)**

Backbone Infrastructure Costs  
 BackboneCostEst\_updated.xls

Preliminary Opinion of Construction Costs Major Backbone Infrastructure Only
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No.	Description	Quantity	Units	Unit Price	Amount
<b>42" Water Line</b>					
1	42" Water Transmission Main, DIP CL 50	21,000	LF	\$ 360.00	\$ 7,560,000.00
2	6" Fire Hydrant Blow-off	20	EA	\$ 7,200.00	\$ 144,000.00
3	2" ARV Assembly	20	EA	\$ 3,000.00	\$ 60,000.00
4	Flush Mounted Test Station	15	EA	\$ 2,000.00	\$ 30,000.00
5	Pressure Reducing Stations	25	EA	\$ 75,000.00	\$ 1,875,000.00
6	42" Butterfly Valve	20	EA	\$ 30,000.00	\$ 600,000.00

**42" Water Line Subtotal:** \$ 10,269,000.00

- [1] Assumptions based on Bickford Ranch Road 42" pipeline plans dated August 2006
- [2] Reference Tech Memo for Bickford Ranch Treated Water Infrastructure Phasing, dated April 28, 2014 by HydroScience Engineers

<i>Estimate Subtotal:</i>	\$	10,269,000.00
<i>20% Contingency:</i>	\$	2,053,800.00
<i>Construction Total:</i>	\$	12,322,800.00
<i>20% Soft Costs:</i>	\$	2,464,560.00
<b><i>Estimated Project Total:</i></b>	<b>\$</b>	<b>14,787,400.00</b>

**Water Tank**

Backbone Infrastructure Costs  
 BackboneCostEst\_updated.xls

Preliminary Opinion of Construction Costs Major Backbone Infrastructure Only
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No.	Description	Quantity	Units	Unit Price	Amount
<b>Water Tanks</b>					
1	1.3 MG Water Storage Tank #1	1	LS	\$ 1,250,000.00	\$ 1,250,000.00
2	Pump Station #1	1	LS	\$ 2,500,000.00	\$ 2,500,000.00
3	Water Tank Site #1 Grading	1	LS	\$ 500,000.00	\$ 500,000.00

**Water Tank Subtotal:** \$ 4,250,000.00

- [1] Lump Sums based on HydroScience Engineers estimate of costs
- [2] Reference Tech Memo for Bickford Ranch Treated Water Infrastructure Phasing, dated April 28, 2014 by HydroScience Engineers

<i>Estimate Subtotal:</i>	\$ 4,250,000.00
<i>20% Contingency:</i>	\$ 850,000.00
<i>Construction Total:</i>	\$ 5,100,000.00
<i>20% Soft Costs:</i>	\$ 1,020,000.00
<b><i>Estimated Project Total:</i></b>	<b>\$ 6,120,000.00</b>

**Caperton Canal**  
 Backbone Infrastructure Costs  
 BackboneCostEst\_updated.xls

Preliminary Opinion of Construction Costs  
 Major Backbone Infrastructure Only

No.	Description	Quantity	Units	Unit Price	Amount
<b>Caperton Canal</b>					
1	Clearing and Grubbing	14	AC	\$ 1,000.00	\$ 13,600.00
2	Erosion Control	14	AC	\$ 5,000.00	\$ 68,000.00
3	Chain Link Fencing	47,500	LF	\$ 32.00	\$ 1,520,000.00
4	Temporary Silt Barrier	23,750	LF	\$ 20.00	\$ 475,000.00
5	Interceptor Ditch	4,000	CY	\$ 20.00	\$ 80,000.00
6	36" RCP CL III Canal Encasement	1,800	LF	\$ 102.00	\$ 183,600.00
7	30" RCP CL III Canal Encasement	4,500	LF	\$ 90.00	\$ 405,000.00
8	24" RCP CL III Canal Encasement	2,410	LF	\$ 78.00	\$ 187,980.00
9	Canal Mainline Inlet Structure[2]	1	LS	\$ 80,000.00	\$ 80,000.00
10	Exist Canal Mainline Outlet Structure Improvements[2]	1	LS	\$ 10,000.00	\$ 10,000.00
11	8" Float Valve Distribution Box for 6 Services[2]	1	LS	\$ 30,000.00	\$ 30,000.00
12	4" Float Valve Distribution Box for 3 Services[2]	1	LS	\$ 10,000.00	\$ 10,000.00
13	4" Float Valve Distribution Box for 5 Services[2]	1	LS	\$ 30,000.00	\$ 30,000.00
14	Pressure Sustaining Valve Station	1	LS	\$ 75,000.00	\$ 75,000.00

**Caperton Canal Subtotal: \$ 3,168,000.00**

- [1] Assumed RCP CLIII for canal encasement, HDPE may be substituted per req'd deflection calculations to ensure the structural strength of the pipe under 30-40 ft of cover
- [2] Misc Lump Sum costs were taken from Nov. 2005 cost estimate by Frayji (Phase 1-Master Caperton Canal)
- [3] This estimate for the Caperton Canal Improvements does include the development of a Siphon per the Master Facilities Agreement between PCWA and SunCal Bickford Ranch, LLC.

<i>Estimate Subtotal:</i>	\$ 3,168,000.00
<i>20% Contingency:</i>	\$ 634,000.00
<i>Construction Total:</i>	\$ 3,802,000.00
<i>20% Soft Costs:</i>	\$ 760,400.00
<b><i>Estimated Project Total:</i></b>	<b>\$ 4,562,400.00</b>

**North/South Clark Tunnel Rd. and EVA's**

Backbone Infrastructure Costs  
 BackboneCostEst\_updated.xls

Preliminary Opinion of Construction Costs  
 Major Backbone Infrastructure Only

No.	Description	Quantity	Units	Unit Price	Amount
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**North Clark Tunnel (3,950 LF)**

1	12" AB	27,650	SF	\$ 3.00	\$ 82,950.00
2	Roadway Excavation	1,600	CY	\$ 12.00	\$ 19,200.00
3	Double Chip Seal Wearing Course	8,800	SY	\$ 5.00	\$ 44,000.00
4	Erosion Control	4	AC	\$ 5,000.00	\$ 18,000.00
5	Roadway Finish Grading	27,650	SF	\$ 0.25	\$ 7,000.00
6	15" Storm Drain, RCP CL III	70	LF	\$ 60.00	\$ 4,200.00
7	18" Storm Drain, RCP CL III	80	LF	\$ 66.00	\$ 5,280.00
8	24" Storm Drain, RCP CL III	130	LF	\$ 78.00	\$ 10,140.00
9	15" Flared End Section With Rock Apron	2	EA	\$ 625.00	\$ 1,250.00
10	18" Flared End Section With Rock Apron	2	EA	\$ 750.00	\$ 1,500.00
11	24" Flared End Section With Rock Apron	3	EA	\$ 900.00	\$ 2,700.00
12	Roadside Ditch Grading	1,320	CY	\$ 20.00	\$ 26,400.00
13	OMP Drainage Inlet	7	EA	\$ 2,500.00	\$ 17,500.00
14	Pipe Acces Gate w/ Electronic KNOX Lock	2	EA	\$ 7,500.00	\$ 15,000.00

**North Clark Tunnel Road Subtotal:** \$ 255,120.00

**South Clark Tunnel Road (350 LF)**

1	2" AC Overlay	4,100	SF	\$ 1.30	\$ 5,330.00
2	Double Chip Seal Wearing Course	700	SY	\$ 5.00	\$ 3,500.00
3	AC Dike	550	LF	\$ 2.40	\$ 1,320.00
4	Roadway Finish Grading	4,100	SF	\$ 0.25	\$ 1,100.00
5	EVA (South Clark Tunnel Road) Paving - (4" AC on 6" AB)	5,400	SF	\$ 4.50	\$ 24,300.00
6	Pipe Acces Gate w/ Electronic KNOX Lock	2	EA	\$ 7,500.00	\$ 15,000.00
7	Erosion Control	0.4	AC	\$ 5,000.00	\$ 2,000.00

**South Clark Tunnel Road Subtotal:** \$ 52,550.00

**North/South Clark Tunnel Rd. and EVA's**

Backbone Infrastructure Costs  
 BackboneCostEst\_updated.xls

Preliminary Opinion of Construction Costs Major Backbone Infrastructure Only
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No.	Description	Quantity	Units	Unit Price	Amount
<b>Woodsdale Court EVA (250 LF)</b>					
1	12" AB	750	SF	\$ 3.00	\$ 2,250.00
2	Double Chip Seal Wearing Course	500	SY	\$ 5.00	\$ 2,500.00
3	Roadway Finish Grading	750	SF	\$ 0.25	\$ 200.00
4	Pipe Acces Gate w/ Electronic KNOX Lock	2	EA	\$ 7,500.00	\$ 15,000.00
5	Erosion Control	0.2	AC	\$ 5,000.00	\$ 1,000.00

**Woodsdale Court Subtotal:** \$ 20,950.00

[1] Assumptions based on Clark Tunnel Road plans dated January 2005 by GW Consulting Engineers and Land Use Plan dated 1/22/2014 by MacKay & Soms

<i>Estimate Subtotal:</i>	\$ 328,620.00
<i>20% Contingency:</i>	\$ 65,724.00
<i>Construction Total:</i>	\$ 394,344.00
<i>20% Soft Costs:</i>	\$ 78,870.00
<b><i>Estimated Project Total:</i></b>	<b>\$ 473,300.00</b>

**Dry Utilities**

Backbone Infrastructure Costs  
 BackboneCostEst\_updated.xls

Preliminary Opinion of Construction Costs  
 Major Backbone Infrastructure Only

No.	Description	Quantity	Units	Unit Price	Amount
<b>Dry Utilities:</b>					
1	Bickford Ranch Road (Segment A, 2190-LF)	2,190	LF	\$ 117.00	\$ 257,000.00
2	Bickford Ranch Road (Segment B, 4080-LF)	4,080	LF	\$ 115.00	\$ 470,000.00
3	Bickford Ranch Road (Segment C, 2300-LF)	2,300	LF	\$ 224.00	\$ 516,000.00
4	Bickford Ranch Road (Segment D, 4700-LF)	4700	LF	\$ 204.00	\$ 959,000.00
5	Bickford Ranch Road (Segment E, 7650-LF)	7,650	LF	\$ 201.00	\$ 1,538,000.00
6	School Ranch Road (Segment G, 4740-LF)	4740	LF	\$ 121.00	\$ 574,000.00
7	Segment J Subdivision (37 lot Village LDR-04, 2500-LF)	2500	LF	\$ 172.00	\$ 430,000.00
8	Sierra College Blvd (UG Conversions, 3000-LF)	3,000	LF	\$ 364.00	\$ 1,092,000.00
9	Offsite Bring-Up (Sierra College Blkvd., 3400-LF)	3,400	LF	\$ 149.00	\$ 507,000.00
10	Segment E - Autobank (back tie)	1	LS	\$ 201,000.00	\$ 201,000.00
11	Street Lights (conduit, wiring and appurtenances)	86	EA	\$ 4,300.00	\$ 370,000.00
12	Street Light Tesco pedestals	18	EA	\$ 3,500.00	\$ 63,000.00

**Dry Utilities Subtotal: \$ 6,977,000.00**

<i>Estimate Subtotal:</i>	\$ 6,977,000.00
<i>20% Contingency:</i>	\$ 1,395,400.00
<i>Construction Total:</i>	\$ 8,372,400.00
<i>20% Soft Costs:</i>	\$ 1,674,480.00
<b><i>Estimated Project Total:</i></b>	<b>\$ 10,047,000.00</b>

**Mass Grading**

Backbone Infrastructure Costs  
 BackboneCostEst\_updated.xls

Preliminary Opinion of Construction Costs  
 Major Backbone Infrastructure Only

No.	Description	Quantity	Units	Unit Price	Amount
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**Mass Grading**

1	Mass Grading <sup>[1]</sup>	3,500,000	CY	\$ 7.00	\$ 24,500,000.00
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*Subtotal* \$ 24,500,000.00

**Water Quality/Detention Facility**

1	10 Water Quality/Detention Facility <sup>[2]</sup>	1	LS	\$ 1,500,000.00	\$ 1,500,000.00
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*Subtotal* \$ 1,500,000.00

**Stormwater Retention**

1	52 Acres of Offsite Stormwater Retention <sup>[3]</sup>	52	ACFT	\$ 13,000.00	\$ 676,000.00
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*Subtotal* \$ 676,000.00

[1] Based on 4/18/14 grading completed by MacKay & Soms

[2] Water Quality Detention ponds are based on required volumes provided by Civil Solutions Project Drainage Study Update, dated April 25, 2014. Further detail and analysis will be required to finalize the cost.

[3] Stormwater off-site retention storage provided per an in-lieu fee to the City of Lincoln \$13,000 per AC.FT.

<i>Estimate Subtotal:</i>	\$ 26,676,000.00
<i>20% Contingency:</i>	\$ 5,335,200.00
<i>Construction Total:</i>	\$ 32,011,200.00
<i>20% Soft Costs:</i>	\$ 6,402,240.00
<b><i>Estimated Project Total:</i></b>	<b>\$ 38,413,000.00</b>

**Offsite Sewer w/in Sierra College Blvd. HWY-193**  
 Backbone Infrastructure Costs

Preliminary Opinion of Construction Costs Major Backbone Infrastructure Only
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No.	Description	Quantity	Units	Unit Price	Amount
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<sup>[1]</sup> **Offsite Sewer**

1	60" Standard Sanitary Sewer Manhole	18	EA	\$ 7,200.00	\$ 129,600.00
2	18" Sanitary Sewer, VCP	6,165	LF	\$ 102.00	\$ 628,800.00
3	Connect to Existing Sanitary Sewer Main	1	EA	\$ 1,500.00	\$ 1,500.00

**Sanitary Sewer Subtotal: \$ 759,900.00**

<i>Estimate Subtotal:</i>	\$ 759,900.00
<i>20% Contingency:</i>	\$ 152,000.00
<i>Construction Total:</i>	\$ 911,900.00
<i>20% Soft Costs:</i>	\$ 182,400.00
<b><i>Estimated Project Total:</i></b>	<b>\$ 1,094,000.00</b>

**Offsite 6" Waterline - Butler Road Connection**  
 Backbone Infrastructure Costs

Preliminary Opinion of Construction Costs  
 Major Backbone Infrastructure Only

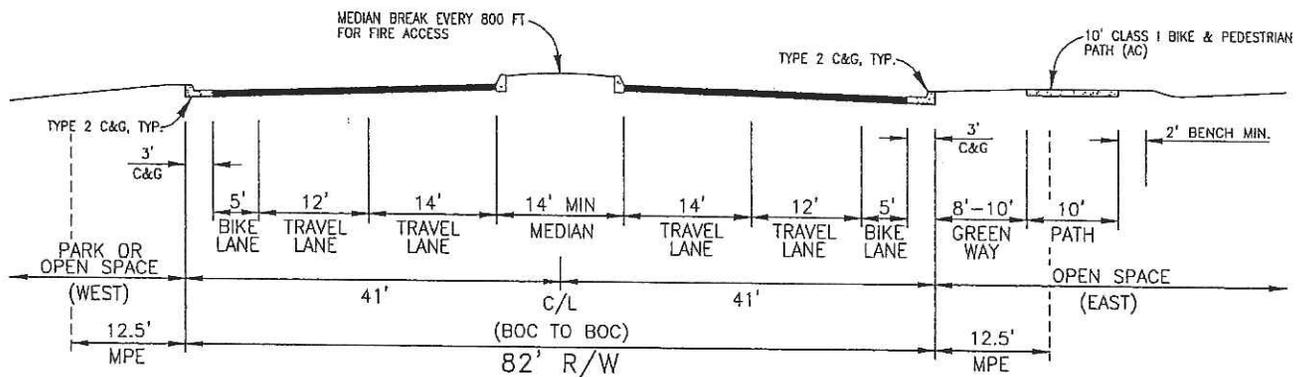
No.	Description	Quantity	Units	Unit Price	Amount
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<sup>[1]</sup> Potable Water:

1	Connect to Existing Potable Water Main	1	EA	\$ 4,500.00	\$ 4,500.00
2	6" Water Distribution Main, PVC C900	1,450	LF	\$ 40.00	\$ 58,000.00
3	6" Fire Hydrant Blow-off	1	EA	\$ 6,000.00	\$ 6,000.00
4	6" Gate Valve	5	EA	\$ 1,200.00	\$ 6,000.00
5	2" Blow-Off Assembly	3	EA	\$ 3,000.00	\$ 9,000.00

**Potable Water Subtotal: \$ 83,500.00**

<i>Estimate Subtotal:</i>	\$ 83,500.00
<i>20% Contingency:</i>	\$ 16,700.00
<i>Construction Total:</i>	\$ 100,200.00
<i>20% Soft Costs:</i>	\$ 20,000.00
<b>Estimated Project Total:</b>	<b>\$ 120,000.00</b>

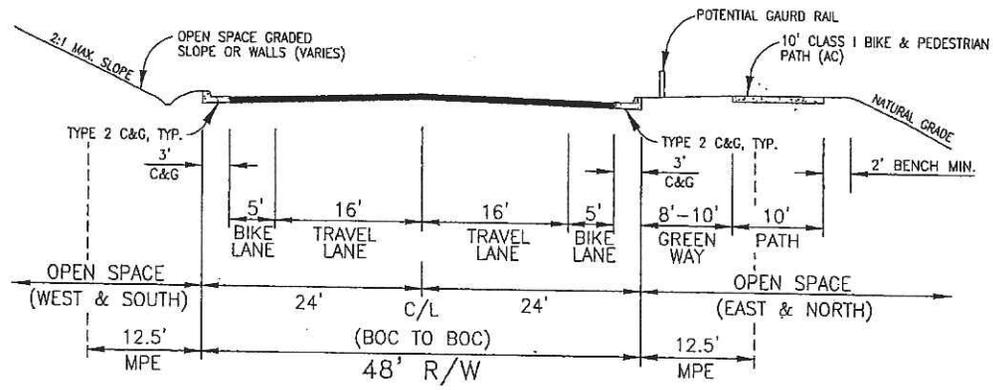


A

### Bickford Ranch Road

West Entry at Sierra College Boulevard to School Ranch Road

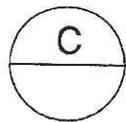
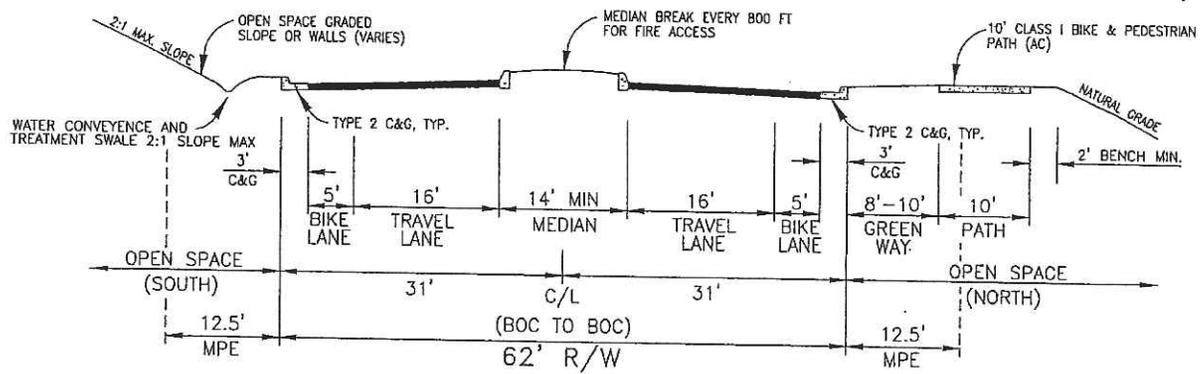
N.T.S.



**B**

Bickford Ranch Road  
 School Ranch Road to Traffic Circle 'A'

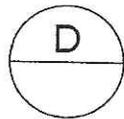
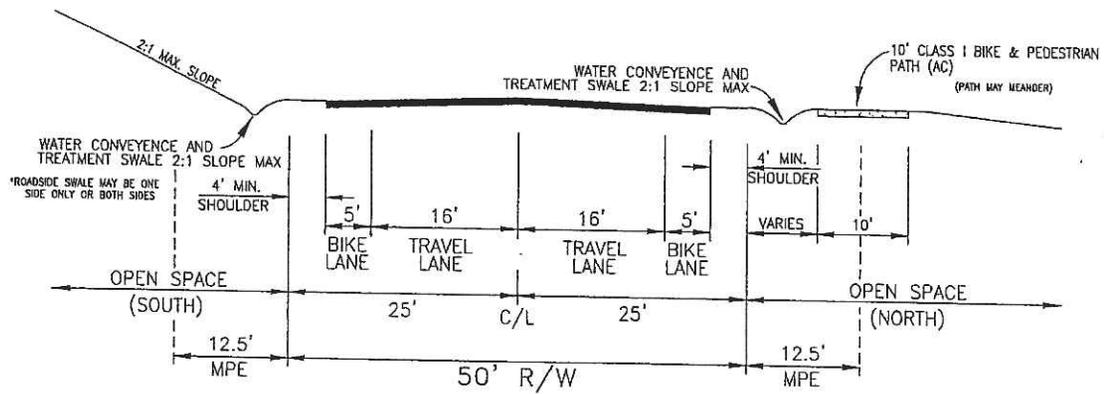
N.T.S.



## Bickford Ranch Road

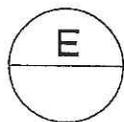
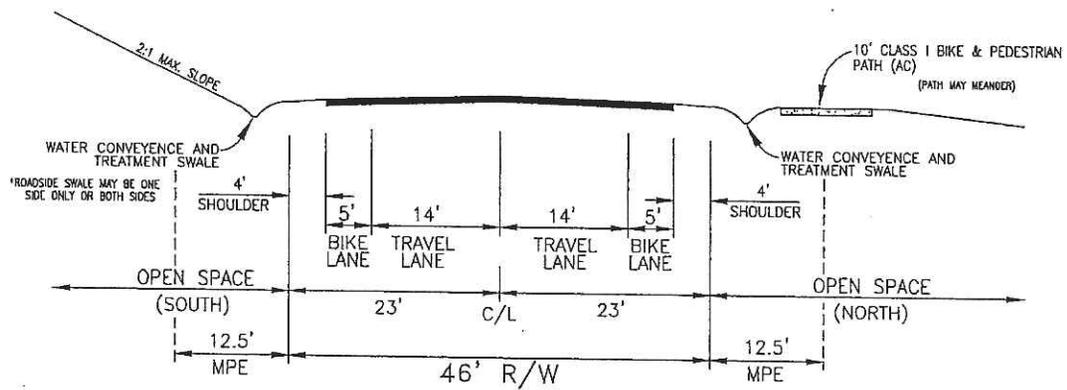
Traffic Circle 'A' (East) to Boulder Ridge Drive

N.T.S.



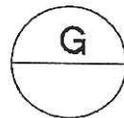
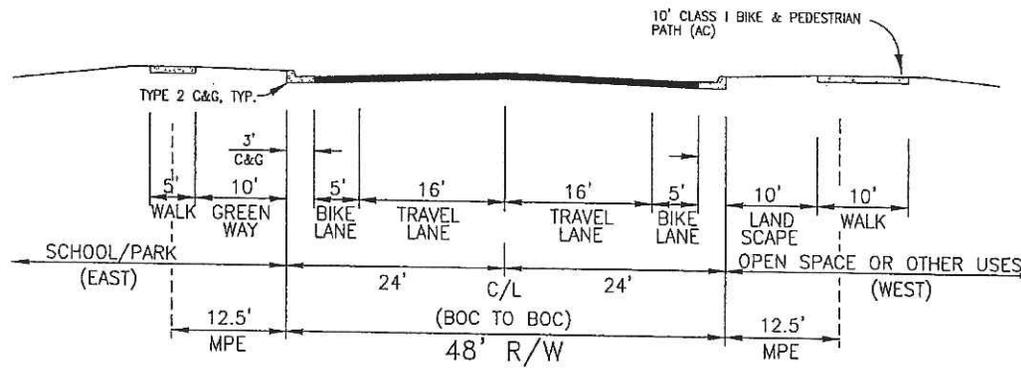
Bickford Ranch Road  
 Boulder Ridge Drive to Caperton Drive

N.T.S.



Bickford Ranch Road  
Caperton Drive to Traffic Circle 'F'

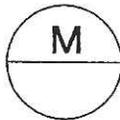
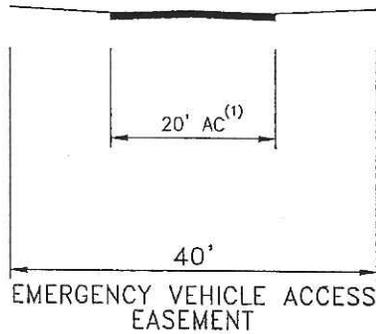
N.T.S.



## School Ranch Road

1. SIDEWALK ADJACENT TO SCHOOL/PARK ONLY; NO SIDEWALK ELSEWHERE.

N.T.S.



### EVA's, Clark Tunnel Road (North & South), and Woodsdale Court Access

1. ROADWAY WIDTH MAY BE LESS WHERE NECESSITATED BY TOPOGRAPHIC CONDITIONS OR TREES; REDUCED WIDTH ROADWAY LENGTHS WILL HAVE TURN-OUTS PROVIDED FOR TWO-WAY EMERGENCY TRAFFIC, PER REQUIREMENTS OF SERVING FIRE DISTRICT.

*N.T.S.*

## Bickford Ranch Unit Cost Summary

### 1. Streetwork:

- **Unit Cost for Roadway Grading Improvements**

- Clearing & Grubbing = \$1,000/AC
- Erosion Control = \$5,000/AC
- Roadway Excavation = \$12/CY
- Mass Grading = \$7/CY
- Roadway Finish Grading = \$0.25/SF
  - Estimate quantities for roadway excavation assumes a volume of material taken within the roadway structural section only, BOC to BOC, and that rough grading for the project is complete.

- **Unit Cost for Pavement Improvements**

(AC and AB depths based on Traffic Index's per Geotechnical Report by Wallace Kuhl dated Dec. 27, 2002 & Improvement Plans for Bickford Ranch Rd. Ph. A by Frayji dated March 6, 2007)

- **Bickford Ranch Rd.-Segment A (Urban Primary) – 82' R/W**  
**14' Median + 4 Travel Lanes + 2 Bike Lanes**

- 5" AC / 13" AB (\$0.65/ SF-in AC + \$0.25/SF-in AB)

5" AC	\$3.25/SF
13" AB	<u>\$3.25/SF</u>
	\$6.50/SF - Use \$6.50/SF

- Assumes entire section is built which yields 62 SF of pavement per LF of roadway.

- **Bickford Ranch Rd.-Segments B, C, & D, School Ranch Rd.-Segment G**  
**(Urban Secondary) – 46' to 50' R/W**  
**2 Travel Lanes + 2 Bike Lanes + (14' Median for Segment C)**

- 4" AC/ 12" AB (\$0.65/ SF-in AC + \$0.25/SF-in AB)

4" AC	\$2.60/SF
12" AB	<u>\$3.00/SF</u>
	\$5.60/SF – Use \$6.00/SF

- Assume entire section, 42 SF of pavement is build per LF of roadway.

- **Bickford Ranch Rd.-Segment E (Modified Urban Secondary) – 46' R/W**  
**2 Travel Lanes + 2 Bike Lanes**

- 4" AC/ 12" AB (\$0.65/ SF-in AC + \$0.25/SF-in AB)

4" AC	\$2.60/SF
12" AB	<u>\$3.00/SF</u>
	\$5.60/SF – Use \$6.00/SF

- Assume entire section, 38 SF of pavement is build per LF of roadway.

- **Sierra College Blvd. (Urban Primary) – R/W Varies**  
**3 Travel Lanes + 2 Bike Lanes**

- 6" AC/ 12" AB (\$0.65/ SF-in AC + \$0.25/SF-in AB)

6" AC	\$3.90/SF
12" AB	<u>\$3.00/SF</u>
	\$6.90/SF – Use \$7.00/SF

- Section varies depending on widening improvements.

- **Clark Tunnel Rd./Woodsdale Ct. (EVA Access) – 40' R/W**  
**2 Travel Lanes**

- 4" AC/ 6" AB (\$0.65/ SF-in AC + \$0.25/SF-in AB)

4" AC	\$2.60/SF
6" AB	<u>\$1.50/SF</u>
	\$4.10/SF – Use \$4.50/SF

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5/8/2014

- **Unit Cost for Miscellaneous Streetwork Improvements**
  - Traffic Signals = \$250,000/EA – (Confirmed unit price w/Fehr & Peers)
  - Median Landscaping = \$5.00/SF
  - 5' Greenway landscaping = \$5.00/SF
  - Metal Beam Guardrail = \$23.00/LF - (Confirmed unit price w/ Caltrans 2012 Contract Cost Data)
  - Street Barricade = \$1,200/EA
  - Pedestrian Barricade = \$400/EA
  - Survey Monument Wells = \$2,000/EA
    - ***Monument spacing every 1000' ± (based on a clear line of sight) and at all intersections***
  - Signing & Striping = \$10.00/LF
  - AC Dike = \$2.40/LF - (Confirmed unit price w/ Caltrans 2012 Contract Cost Data)
  - Roadside Ditch Grading = \$20.00/CY - (Confirmed unit price w/ Caltrans 2012 Contract Cost Data)
  - Bus Shelter Pad = \$1,500/EA
  - 1" Grind and Overlay = \$3.00/SF
  - Retaining Walls = \$40.00/SF
  - Chain Link Fencing = \$ 32.00/LF - (Confirmed unit price w/ Caltrans 2012 Contract Cost Data)

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5/8/2014

## 2. Concrete:

- **Unit Cost for Concrete Improvements**
  - Type I C&G = \$20/LF
  - Type II C&G = \$21/LF
  - 5' Detached Sidewalk = \$8.00/SF
  - 10' Monolithic Sidewalk = \$9.00/SF
  - 10' Detached Sidewalk = \$9.00/SF
  - Type 2 Barrier/Median Curb = \$25/LF
  - Handicap Ramps = \$1,500/EA

### 3. Storm Drain:

- **Unit Cost for Storm Drain Improvements**
  - 48" Standard Storm Drain Manhole = \$4,500/EA
  - 60" Standard Storm Drain Manhole = \$6,000/EA
  - 72" Standard Storm Drain Manhole = \$7,000/EA
  - 84" Standard Storm Drain Manhole = \$8,500/EA
  - 96" Standard Storm Drain Manhole = \$10,000/EA
  - Jensen Precast Junction Structure (8'ID x 8'ID) = \$30,000/EA
  - Custom Precast Junction Structure (Larger than 8'ID x 8'ID) = \$40,000/EA
    - *Manhole spacing every 375' ± (City Standard 500' reduced 25%) and at all intersections*
  
  - Type "C" Drainage Inlet = \$2,500/EA
    - *Inlets spacing every 375' ± (City Standard 500' reduced 25%)*
    - *Approximately 6 inlets and 300 LF of 12" SD every 750' ±*
    - *Inlets included only for pipe systems within the current street layout*
  
  - 12" Storm Drain, RCP CL III = \$45/LF
  - 18" Storm Drain, RCP CL III = \$55/LF
  - 24" Storm Drain, RCP CL III = \$65/LF
  - 30" Storm Drain, RCP CL III = \$75/LF
  - 33" Storm Drain, RCP CL III = \$80/LF
  - 36" Storm Drain, RCP CL III = \$85/LF
  - 42" Storm Drain, RCP CL III = \$95/LF
  - 48" Storm Drain, RCP CL III = \$100/LF
  - 54" Storm Drain, RCP CL III = \$150/LF
  - 60" Storm Drain, RCP CL III = \$200/LF
  - 66" Storm Drain, RCP CL III = \$275/LF
  - 72" Storm Drain, RCP CL III = \$325/LF
  - 78" Storm Drain, RCP CL III = \$350/LF
  - 84" Storm Drain, RCP CL III = \$450/LF
  - 90" Storm Drain, RCP CL III = \$500/LF
  - 14' x 5.7' CMPA Culvert = \$500/LF
  - 15' x 5.8' CMPA Culvert = \$550/LF
  - 12" Flared End Section = \$500/EA
  - 18" Flared End Section = \$750/EA
  - 24" Flared End Section = \$900/EA
  - 30" Flared End Section = \$1,200/EA
  - 36" Flared End Section = \$1,500/EA
    - *Flared end section assumed at all outfalls less than 42"*
  
  - 42" Pipe Outfall Structure = \$8,000/EA

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5/8/2014

- 48" Pipe Outfall Structure = \$9,000/EA
- 54" Pipe Outfall Structure = \$10,000/EA
- 60" Pipe Outfall Structure = \$11,000/EA
- 66" Pipe Outfall Structure = \$12,000/EA
- 72" Pipe Outfall Structure = \$13,000/EA
  - Pipe Outfall Structures per City Standard Plan DR-16
  
- WQ Grassy Swale Outfalls= \$25,000/EA
- Caltrans Light Rock Slope Protection/Riprap = \$65/CY
  - *Riprap assumed at all outfalls less than 42" in diameter*

#### **4. Sanitary Sewer:**

- **Unit Cost for Sanitary Sewer Improvements**
  - Connect to Existing Sanitary Sewer Main = \$1,500/EA
  - 48" Standard Sanitary Sewer Manhole = \$5,500/EA
    - *Manhole spacing every 300' ± (City Standard 400' reduced 25%) and per the Sanitary Sewer Master Plan Layout*
    - *Manholes are assumed to be non-epoxy coated structures*
  - 60" Standard Sanitary Sewer Manhole = \$6,000/EA
  - 6" Sanitary Sewer, VCP = \$40/LF
  - 8" Sanitary Sewer, VCP = \$45/LF
  - 10" Sanitary Sewer, VCP = \$50/LF
  - 12" Sanitary Sewer, VCP = \$60/LF
  - 15" Sanitary Sewer, VCP = \$70/LF
  - 18" Sanitary Sewer, VCP = \$85/LF
  - 21" Sanitary Sewer, VCP = \$95/LF
    - *All Sanitary Sewer Pipes assumed to be at an average depth of 13' ±*
- 6" Sanitary Sewer Force Main, PVC C905 = \$50/LF
- Plug & Mark Sewer Main Stubs = \$400/EA

## 5. Potable Water:

- **Unit Cost for Potable Water Improvements**
  - Connect to Existing 24" Potable Water Main = \$4,500/EA
  - 8" Water Distribution Main, PVC C900 = \$45/LF
  - 12" Water Distribution Main, PVC C900 = \$65/LF
  - 12" Water Distribution Main, DIP CL 50 = \$/LF
  - 16" Water Transmission Main, DIP CL 50 = \$85/LF
  - 24" Water Transmission Main, DIP CL 50 = \$150/LF
  - 30" Transmission Main, DIP CL 300 = \$200/LF
  - 42" Transmission Main, DIP CL 300 = \$300/LF
  - 8" Potable Water Service (Approx. 50 LF to each Parcel) = \$2,500/EA
  - Inspection Plate Manhole (24" W Main only – 1500' spacing) = \$7,000/EA
  - 8" Gate Valve (500' spacing) = \$1,500/EA
  - 12" Butterfly Valve (500' spacing) = \$3,500/EA
  - 16" Butterfly Valve w/Access Manhole (2000' spacing) = \$10,000/EA
  - 24" Butterfly Valve w/Access Manhole (2000' spacing) = \$20,000/EA
  - 42" Butterfly Valve = \$30,000
  - Fire Hydrant Assembly (1000' spacing) = \$5,000/EA
  - 6" Fire hydrant Blow-Off = \$6,000/EA
    - *Hydrant spacing every 1000'max. for streets without structures (per California Fire Code 2013) and 300' max. for residential*
  - 2" Blow-Off Assembly = \$3,000/EA
  - 4" Blow-Off Assembly = \$3,500/EA
  - 4" ARV Assembly = \$6,500
  - Isolating Joint Test Station (at all valves) = \$1,000/EA
  - Water Tank (2.4 MG), Treatment, & Booster Pump Site = \$1.25 GAL – (Confirmed unit price w/HydroScience)
  - Water Tank (1.0 MG), Treatment, & Booster Pump Site = \$1.25 GAL – (Confirmed unit price w/HydroScience)
  - Pump Station #1 = \$2,500,000 LS - (Confirmed unit price w/ HydroScience)
  - Pump Station #2 = \$3,000,000 LS - (Confirmed unit price w/ HydroScience)
  - PRV Stations = \$75,000/EA

## 6. Recycled Water:

### • **Unit Cost for Recycled Water Improvements**

- Connect to Existing 12" Recycled Water Main = \$4,500/EA
- Connect to Existing 16" Recycled Water Main = \$4,500/EA
- Connect to Existing 24" Recycled Water Main = \$4,500/EA
- 6" Recycled Water Main, PVC C900 (Purple Pipe) = \$40/LF
- 8" Recycled Water Main, PVC C900 (Purple Pipe) = \$45/LF
- 12" Recycled Water Main, PVC C900 (Purple Pipe) = \$65/LF
- 16" Recycled Water Main, DIP CL 50 (w/Warning Tape) = \$85/LF
- 24" Recycled Water Main, DIP CL 50 (w/Warning Tape) = \$150/LF
- Inspection Plate Manhole (24" RW Main only – 1500' spacing) = \$7,000/EA
- 6" Gate Valve (500' spacing) = \$1,200/EA
- 8" Gate Valve (500' spacing) = \$1,500/EA
- 12" Butterfly Valve (500' spacing) = \$3,500/EA
- 16" Butterfly Valve w/Access Manhole (2000' spacing) = \$10,000/EA
- 24" Butterfly Valve w/Access Manhole (2000' spacing) = \$20,000/EA
- 2" Blow-Off Assembly = \$3,000/EA
- 4" Blow-Off Assembly = \$3,500/EA
- Isolating Joint Test Station (at all valves) = \$1,000/EA
- ARV Assembly = \$5,000/EA
- Creek / Channel Crossing = \$50,000/EA
  - *Item added to estimate to account for appurtenances needed at each crossing that the master plan layouts do not detail out at this time.*

## **Bickford Ranch Backbone Cost Estimate Assumptions/References**

### **1. Bickford Ranch Rd/School Ranch Rd**

- Street Section based on 1/29/14 project description
- Drainage items within street sections have been derived from 4/28/14 Drainage report by Civil Solutions
- Sewer items within street sections have been derived from the Sanitary Sewer Master Plan Update by MacKay & Somps, dated 3/19/2014
- Water items within street sections have been derived from the Technical Memorandum for Bickford Ranch Treated Water Infrastructure Phasing by HydroScience Engineers, Inc. dated 03/13/2014
- Survey Monuments are assumed at every intersection and between intersection separated by more than 1,000 feet.

### **2. Sierra College Blvd. Widening & 193/S.C. Intersection**

- Intersections from the Bickford Ranch project and Sierra College have been referenced from the 1/29/14 project description
- Sierra College widening has referenced plans by Wood Rodgers; Route 193/Sierra College Blvd. Intersection dated 6/04 and Improvement plans for Sierra College Blvd. Widening dated 10/07
- Supplemental hand sketches to update revised entry locations which differ from the above previous plans

### **3. Water Tank**

- Infrastructure and sizing has been determined using the Technical Memorandum for Bickford Ranch Treated Water Infrastructure Phasing by HydroScience Engineers, Inc. dated 04/28/2014
- Discussions regarding Preliminary cost opinions with HydroScience Engineers

### **4. Phase 3 Waterline**

- The Phase 3 - 30" waterline is assumed to be constructed and completed by the City of Lincoln.
- Lump Sum costs for the two Water Tanks and two Pump stations have been confirmed with HydroScience Engineers.

### **5. 42" On-site Waterline**

- Infrastructure needs derived from the Penryn/Lincoln Pipeline Phase 3 Pre-Design Report dated August 2009.
- Infrastructure derived from Construction Plans for Bickford Ranch 42" Water Pipeline dated August 2006 by CH2MHILL Engineers
- Infrastructure and sizing has been determined using the Technical Memorandum for Bickford Ranch Treated Water Infrastructure Phasing by HydroScience Engineers, Inc. dated 04/28/2014
- Lump Sum costs for the two Water Tanks and two Pump stations have been confirmed with HydroScience Engineers.

## **6. Caperton Canal Re-alignment/Piping**

- MacKay & Somps grading study completed 4/18/2014
- Construction plans for the Caperton Canal Re-location and Encasement by PSOMAS dated August 2006
- Reference to the previous Bickford Ranch cost estimate completed by Frayji Design Group dated Nov. 2005
- PCWA facilities agreement No.2521
- Per discussion meetings held with PCWA and LV Bickford, LL, a limited portion of the canal is assumed to have up to 35-ft of cover and will be shallowed up to approx. 10 to 15-ft within the Bickford Ranch Rd. ROW. It is also assumed that with new lotting layouts that adequate setback distances, diversion trenches, easement dedication and fencing can be used in lieu of siphon's to sustain the Caperton's water quality integrity.

## **7. Clark Tunnel Road/EVA's**

- Referenced street sections per Project Description dated 1/29/2014
- Reference to previous Improvement Plans for Clark Tunnel EVA by GW consultants dated Jan. 2005
- EVA's do not include a pressure switch gate, a pipe gate with a Knox lock is assumed to be at every gate.

## **8. Offsite Sewer**

- Sewer from the Bickford Ranch project is assumed to extend offsite within Sierra College Blvd heading north to HWY 193 and west along HWY 193 approximately 3,000 west from the intersection of HWY 193 and Sierra College Blvd.
- Offsite connections were assumed per the Sanitary Sewer Master Plan Update by MacKay & Somps, dated 3/19/2014

## **9. Offsite Water-Butler Road 6" Waterline**

- A connection will be made to the south of the project in the vicinity of Butler Road and Itow Court.
- This connection will be made to help flush an existing dead end line at Butler Road and provide an additional point source for a potable water back tie
- Offsite connections are outlined within the Technical Memorandum for Bickford Ranch Water Master Plan, by HydroScience Engineers, Inc. dated 07/16/2014

## **10. Dry Utilities**

Estimates, quantities were provided by Capital Utility Specialists, Inc.

- Assumes difficult digging: Trench costs for major roads estimated at \$35.70/foot
- Contractor prices assume prevailing wage
- The northwest portion of the project will be served 12 kV off the existing facilities running along Sierra College Blvd. The balance of other project from Twelve Bridges Drive.

## **9. Dry Utilities (Cont.)**

- Lift Stations will require 3 Phase electric plus phone service. Costs assume a 3 Phases distribution main running throughout much of Bickford Ranch Road paralleling the mainline.
- Segment J includes costs (contractor and utility) to build the complete subdivision dry utilities (transformers, pedestals, services to each lot) with gas and electric mainlines running through the joint trench.
- Sierra College Blvd, Underground Conversions Segment: Assume 3000' of pole (10 poles) require relocation and conversion to underground.
- Traffic control is not included with Dry Utilities, it shall be included with the Sierra College Widening/Intersection and Street segments
- Assumes a bring up of 21 kV mainline circuit from Twelve Bridges Drive extended southeast down Sierra College then north into the development at Woodsdale Court, then north through LDR-04 to Bickford Ranch Rd.
- Assumes 2500' of the electric offsite bring-up circuit will be installed in an existing conduit system on Twelve Bridges Dr.
- Assumes the 8" gas main will be picked up at Twelve Bridges Dr. and extended southeast down Sierra College then north into the development at Woodsdale Court, then north through LDR-04 to Bickford Ranch Rd.
- Assumes AT&T fiber will be picked up at Twelve Bridges and extended on existing poles to the development along Sierra College Blvd.
- Assumes a cost for the Autobank in Segment E. This is for an Electric mainline back-tie, near Clark Tunnel Rd. This is a unforeseen cost with the Dry utilities that may qualify for cost sharing under the discount option. This requirement is pending review and further discussions with PG&E at the time of later design details.
- The cost opinions include engineering fees and tie-in, provision and installation of electric cabling, transformers, interrupters and other electrical facilities, natural gas facilities, telephone and cable television facilities, inspection fees and appropriate ITCC taxes as applicable. It also includes contractor costs for installation of trench, conduit, boxes, manholes, pads and the PG&E natural gas system. This cost estimate also includes relocation and conversion (to underground) costs for the PG&E, AT&T and Wave facilities on Sierra College Blvd. near the two entrances.
- It is assumed that PG&E will install the electric system (cabling, transformers, interrupters, etc.) and the successful contractor will install the balance of the system with the exception that AT&T and Wave will install their own cable in a developer provided conduit system.

## **10. Mass Grading**

- Grading volumes were derived from the 4/18/2014 grading study

## **11. Miscellaneous Assumptions**

- This estimate does not include an allowance for blasting.
- Detention ponds estimated within this estimate do not include any wetland creation or wetland mitigation costs.
- This estimate does not include an allowance for rock crushing.

## **11. Miscellaneous Assumptions (Cont.)**

- Wetland mitigation retention costs associated with an in-lieu fee into the Lakeview Farms mitigation credit with the City of Lincoln are approx. \$13,000 per AF, per Civil Solutions. Resulting in approx. \$663,000 in fees plus any operation and maintenance fees to be determined at a later date.
- Wetland Mitigation has been assumed a 50/50 split between providing on-site retention storage and paying an in-lieu fee to the City of Lincoln. Approx. 26 acres is assumed to be developed on-site and 26 acres is assumed to be a in-lieu fee paid to the City of Lincoln in the amount of \$338,000 plus any operation and maintenance fees per the COL.
- Water Quality Detention ponds are based on required volumes provided by Civil Solutions Project Drainage Study Update, dated April 25, 2014. Further detail and analysis will be required to refine the cost.



## APPENDIX B:

### Existing and Planned/Potential Fee Programs Fee Revenue Generated

Table B-1	Estimated Fee Revenues: Placer County Sewer Connection Fee—CSA 28, Zone 183
Table B-2	Estimated Fee Revenues: Placer County Traffic—Placer Central Benefit District
Table B-3	Estimated Fee Revenues: SPRTA
Table B-4	Estimated Fee Revenues: Sierra College Blvd. Widening Fee
Table B-5	Estimated Fee Revenues: Drainage—Dry Creek Benefit District
Table B-6	Estimated Fee Revenues: Air Quality Mitigation Fee
Table B-7	Estimated Fee Revenues: Fire Facilities
Table B-8	Estimated Fee Revenues: Affordable Housing Fee
Table B-9	Estimated Fee Revenues: Oak Tree Mitigation Fee
Table B-10	Estimated Fee Revenues: BRSP Public Park Fee
Table B-11	Estimated Fee Revenues: Placer County Capital Facilities Fee
Table B-12	Estimated Fee Revenues: Placer County Water Agency
Table B-13	Estimated Fee Revenues: Loomis Union and Placer Union High School Districts



**Table B-1  
Bickford Ranch Specific Plan Financing Plan  
Estimated Fee Revenues: Placer County Sewer Connection Fee - CSA 28, Zone 183 (2015\$)**

<b>Placer County Sewer Connection Fee</b>
---

Land Use	Placer County Sewer Connection Fee	Total Buildout			Total Fee Revenue
		EDUs	Acres	Sq. Ft.	
	[1]				
<b>Residential</b>	<i>per EDU</i>				
Rural Residential [2]	\$9,855	16	108.2	-	\$157,680
Low-Density Residential - Active Adult	\$9,855	950	242.9	-	\$9,362,250
Low-Density Residential	\$9,855	848	333.7	-	\$8,357,040
Medium-Density Residential	\$9,855	65	16.3	-	\$640,575
<b>Total Residential</b>		<b>1,879</b>	<b>701.1</b>	-	<b>\$18,517,545</b>
<b>Anders House</b>	\$9,855	<b>1</b>	<b>n/a</b>	-	\$9,855
<b>Public Land Uses [3]</b>	\$9,855	<b>82</b>	<b>n/a</b>	-	\$808,110
<b>Total</b>		<b>1,962</b>	<b>701.1</b>	-	<b>\$19,335,510</b>

*sconnect alloc*

Source: Placer County.

- [1] Placeholder estimate as the sewer fee has yet to be determined.
- [2] Excludes 11 rural residential units that have an on-site septic tank.
- [3] Includes public parks, recreation center clubhouses, school, fire station, and PCWA facilities.

**Table B-2  
Bickford Ranch Specific Plan Financing Plan  
Estimated Fee Revenues: Placer County Traffic - Placer Central Benefit District (2015\$)**

<b>Placer County Traffic: Placer Central Benefit District</b>
---

Land Use	Placer County Traffic Fee	Total Buildout			Total Fee Revenue
		Units	Acres	Sq. Ft.	
<b>Residential</b>	<i>per unit</i>				
Rural Residential	\$2,051	27	108.2	-	\$55,377
Low-Density Residential - Active Adult [1]	\$548	950	242.9	-	\$520,236
Low-Density Residential	\$2,051	848	333.7	-	\$1,739,248
Medium-Density Residential	\$2,051	65	16.3	-	\$133,315
<b>Total Residential</b>		<b>1,890</b>	<b>701.1</b>	-	<b>\$2,448,176</b>
<b>Total</b>		<b>1,890</b>	<b>701.1</b>	-	<b>\$2,448,176</b>

*pc traffic alloc*

Source: Placer County.

[1] Low-density active adult fee assigned the DUE factor for detached senior adult housing provided in the Countywide Traffic Fee Program Schedule.

**Table B-3  
Bickford Ranch Specific Plan Financing Plan  
Estimated Fee Revenues: SPRTA (2015\$)**

SPRTA
-------

Land Use	SPRTA Fee	Total Buildout			Total Fee Revenue
		Units	Acres	Sq. Ft.	
<b>Residential</b>	<i>per unit</i>				
Rural Residential	\$1,815	27	108.2	-	\$49,005
Low-Density Residential - Active Adult [1]	\$485	950	242.9	-	\$460,375
Low-Density Residential	\$1,815	848	333.7	-	\$1,539,120
Medium-Density Residential	\$1,815	65	16.3	-	\$117,975
<b>Total Residential</b>		<b>1,890</b>	<b>701.1</b>	-	<b>\$2,166,475</b>
<b>Total</b>		<b>1,890</b>	<b>701.1</b>	-	<b>\$2,166,475</b>

*sprta alloc*

Source: Placer County.

[1] Low-density active adult fee assigned the DUE factor for detached senior adult housing provided in the Countywide Traffic Fee Program Schedule.

**Table B-4**  
**Bickford Ranch Specific Plan Financing Plan**  
**Estimated Fee Revenues: Sierra College Blvd. Widening Fee [1] (2015\$)**

**Sierra College Blvd. Widening Fee**

Land Use	Sierra College Blvd. Widening Fee			Units [2]	Total Fee Revenue		
	Amount	Admin (3%)	Total		Amount	Admin (3%)	Total
<b>Residential</b>	<i>per unit</i>	<i>per unit</i>	<i>per unit</i>				
Rural Residential	\$3,893	\$117	\$4,010	16	\$62,286	\$1,869	\$64,154
Low-Density Residential - Active Adult	\$3,893	\$117	\$4,010	950	\$3,698,222	\$110,947	\$3,809,168
Low-Density Residential	\$3,893	\$117	\$4,010	449	\$1,747,896	\$52,437	\$1,800,333
Medium-Density Residential	\$3,893	\$117	\$4,010	65	\$253,036	\$7,591	\$260,627
<b>Total Residential</b>				<b>1,480</b>	<b>\$5,761,440</b>	<b>\$172,843</b>	<b>\$5,934,283</b>
<b>Total</b>				<b>1,480</b>	<b>\$5,761,440</b>	<b>\$172,843</b>	<b>\$5,934,283</b>

SCB

Source: MacKay and Soms (June and November 2015); Westpark Communities (July 2015); EPS.

[1] The County will collect a fee to reimburse the developer for the construction of segments 3 and 4 of widening Sierra College Blvd. Segments 3 and 4 are shown on Exhibit D-1 in Appendix D.

[2] This fee only applies to the units in the first two phases of development.

**Table B-5  
Bickford Ranch Specific Plan Financing Plan  
Estimated Fee Revenues: Drainage - Dry Creek Benefit District (2015\$)**

<b>Drainage - Dry Creek Benefit District</b>
--

Land Use	Dry Creek Drainage Fee	Total Buildout			Total Fee Revenue
		Units [1]	Acres	Sq. Ft.	
<b>Residential</b>	<i>per unit</i>				
Rural Residential	\$224	10	108.2	-	\$2,240
Low-Density Residential - Active Adult	\$224	284	242.9	-	\$63,616
Low-Density Residential	\$224	365	333.7	-	\$81,760
Medium-Density Residential	-	-	16.3	-	-
<b>Total Residential</b>		<b>659</b>	<b>701.1</b>	-	<b>\$147,616</b>
<b>Total</b>		<b>659</b>	<b>701.1</b>	-	<b>\$147,616</b>

*drain alloc*

Source: Placer County.

[1] Only a portion of BRSP drains to dry creek watershed and will be subject to this fee.

**Table B-6**  
**Bickford Ranch Specific Plan Financing Plan**  
**Estimated Fee Revenues: Air Quality Mitigation Fee (2015\$)**

<b>Air Quality Mitigation Fee</b>
---------------------------------------

Land Use	Air Quality Mitigation Fee	Total Buildout			Total Fee Revenue
		Units	Acres	Sq. Ft.	
<b>Residential</b>	<i>per unit</i>				
Rural Residential	\$222	27	108.2	-	\$5,991
Low-Density Residential - Active Adult	\$222	950	242.9	-	\$210,805
Low-Density Residential	\$222	848	333.7	-	\$188,171
Medium-Density Residential	\$222	65	16.3	-	\$14,424
<b>Total Residential</b>		<b>1,890</b>	<b>701.1</b>	-	<b>\$419,391</b>
<b>Total</b>		<b>1,890</b>	<b>701.1</b>	-	<b>\$419,391</b>

*air alloc*

Source: Placer County.

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**Table B-7**  
**Bickford Ranch Specific Plan Financing Plan**  
**Estimated Fee Revenues: Fire Facilities (2015\$) [1]**

Placer County Fire Fee

Land Use	Placer County Fire Fee			Units	Total Fee Revenue		
	Amount	Admin (3%)	Total		Amount	Admin (3%)	Total
<b>Residential</b>	<i>per unit</i>						
Rural Residential	\$1,347	\$40	\$1,388	27	\$36,375	\$1,091	\$37,466
Low-Density Residential - Active Adult	\$1,347	\$40	\$1,388	950	\$1,279,854	\$38,396	\$1,318,249
Low-Density Residential	\$1,347	\$40	\$1,388	848	\$1,142,438	\$34,273	\$1,176,711
Medium-Density Residential	\$1,347	\$40	\$1,388	65	\$87,569	\$2,627	\$90,196
<b>Total Residential</b>				<b>1,890</b>	<b>\$2,546,235</b>	<b>\$76,387</b>	<b>\$2,622,622</b>
<b>Total</b>					<b>\$2,546,235</b>	<b>\$76,387</b>	<b>\$2,622,622</b>

*fire alloc*

Source: Westpark Communities.

**Table B-8**  
**Bickford Ranch Specific Plan Financing Plan**  
**Estimated Fee Revenues: Affordable Housing Fee (2015\$)**

**Affordable Housing Fee**

Land Use	Affordable Housing Fee	Total Buildout			Total Fee Revenue
		Units	Acres	Sq. Ft.	
<b>Residential</b>	<i>per unit</i>				
Rural Residential	\$4,000	27	108.2	-	\$108,000
Low-Density Residential - Active Adult	\$4,000	950	242.9	-	\$3,800,000
Low-Density Residential	\$4,000	848	333.7	-	\$3,392,000
Medium-Density Residential	\$4,000	65	16.3	-	\$260,000
<b>Total Residential</b>		<b>1,890</b>	<b>701.1</b>	-	<b>\$7,560,000</b>
<b>Total</b>		<b>1,890</b>	<b>701.1</b>	-	<b>\$7,560,000</b>

*ah alloc*

Source: Westpark Communities, May 29, 2015.

**Table B-9**  
**Bickford Ranch Specific Plan Financing Plan**  
**Estimated Fee Revenues: Oak Tree Mitigation Fee (2015\$)**

<b>Oak Tree Mitigation Fee</b>
------------------------------------

Land Use	Oat Tree Mitigation Fee	Total Buildout			Total Fee Revenue
		Units	Acres	Sq. Ft.	
<b>Residential</b>	<i>per unit</i>				
Rural Residential	\$1,058	27	108.2	-	\$28,566
Low-Density Residential - Active Adult	\$1,058	950	242.9	-	\$1,005,100
Low-Density Residential	\$1,058	848	333.7	-	\$897,184
Medium-Density Residential	\$1,058	65	16.3	-	\$68,770
<b>Total Residential</b>		<b>1,890</b>	<b>701.1</b>	-	<b>\$1,999,620</b>
<b>Total</b>		<b>1,890</b>	<b>701.1</b>	-	<b>\$1,999,620</b>

*oak alloc*

Source: Westpark Communities, May 29, 2015.

**Table B-10**  
**Bickford Ranch Specific Plan Financing Plan**  
**Estimated Fee Revenues: BRSP Public Park Fee (2015\$)**

<b>BRSP Public Park Fee</b>
---------------------------------

Land Use	BRSP Public Park Fee			Units	Total Fee Revenue		
	Amount	Admin (3%)	Total		Amount	Admin (3%)	Total
<b>Residential</b>	<i>per unit</i>						
Rural Residential	\$4,508	\$135	\$4,643	27	\$121,704	\$3,651	\$125,355
Low-Density Residential - Active Adult	\$4,508	\$135	\$4,643	950	\$4,282,161	\$128,465	\$4,410,625
Low-Density Residential	\$4,508	\$135	\$4,643	848	\$3,822,392	\$114,672	\$3,937,063
Medium-Density Residential	\$4,508	\$135	\$4,643	65	\$292,990	\$8,790	\$301,780
<b>Total Residential</b>				<b>1,890</b>	<b>\$8,519,246</b>	<b>\$255,577</b>	<b>\$8,774,823</b>
<b>Total</b>				<b>1,890</b>	<b>\$8,519,246</b>	<b>\$255,577</b>	<b>\$8,774,823</b>

*park alloc*

Source: Westpark Communities, September 8, 2015.

<b>Placer County Capital Facilities Fee (CFF)</b>
---

**Table B-11  
Bickford Ranch Specific Plan Financing Plan  
Estimated Fee Revenues: Placer County Capital Facilities Fee (2015\$)**

Land Use	General Admin. (Satellite Offices)	Public Works	Health and Human Services	Agriculture and Animal Control	Sheriff	Jail and Countywide Public Protection	Justice System	Library	Total Fee	Buildout			Total Fee Revenue
										Units	Acres	Sq. Ft.	
<b>Residential</b>					<i>per unit</i>								
Rural Residential	\$1,340	\$207	\$429	\$156	\$478	\$422	\$497	\$523	\$4,052	27	108.2	-	\$109,413
Low-Density Residential - Active Adult	\$881	\$136	\$282	\$99	\$314	\$277	\$327	\$344	\$2,661	950	242.9	-	\$2,528,397
Low-Density Residential	\$1,340	\$207	\$429	\$156	\$478	\$422	\$497	\$523	\$4,052	848	333.7	-	\$3,436,384
Medium-Density Residential	\$1,340	\$207	\$429	\$156	\$478	\$422	\$497	\$523	\$4,052	65	16.3	-	\$263,402
<b>Subtotal</b>										<b>1,890</b>	<b>701.1</b>	<b>-</b>	<b>\$6,337,596</b>
<b>Gross Fee Revenue</b>	<b>\$2,096,689</b>	<b>\$324,109</b>	<b>\$671,789</b>	<b>\$240,817</b>	<b>\$748,396</b>	<b>\$660,003</b>	<b>\$777,861</b>	<b>\$817,932</b>	<b>\$6,337,596</b>	<b>1,890</b>	<b>701.1</b>	<b>-</b>	<b>\$6,337,596</b>

*cff*

Source: Placer County.

**Table B-12**  
**Bickford Ranch Specific Plan Financing Plan**  
**Estimated Fee Revenues: Placer County Water Agency (2015\$)**

**Placer County  
Water Agency**

Land Use	Placer County	Total Buildout			Total Fee Revenue
	Water Agency Fee	Units	Acres	Sq. Ft.	
<b>Residential</b>	<i>per unit</i>				
Rural Residential	\$17,633	27	108.2	-	\$476,091
Low-Density Residential - Active Adult	\$17,633	950	242.9	-	\$16,751,350
Low-Density Residential	\$17,633	848	333.7	-	\$14,952,784
Medium-Density Residential	\$17,633	65	16.3	-	\$1,146,145
<b>Total Residential</b>		<b>1,890</b>	<b>701.1</b>	-	<b>\$33,326,370</b>
<b>Total</b>		<b>1,890</b>	<b>701.1</b>	-	<b>\$33,326,370</b>

*water alloc*

Source: Placer County Water Agency.

**Table B-13**  
**Bickford Ranch Specific Plan Financing Plan**  
**Estimated Fee Revenues: Loomis Union and Placer Union High School Districts (2015\$)**

**Loomis Union and Placer Union High School Districts**

Land Use	Land Uses			School Fee	Fee per Unit	Total Fee Revenue
	Units	Developable Acres	Sq. Ft.			
<i>Formula</i>	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E = C * D</i>	<i>F = A * E</i>
<b>Residential</b>				<i>per sq. ft.</i>		
Rural Residential	27	108.2	3,500	\$3.30	\$11,550	\$311,850
Low-Density Residential - Active Adult [1]	950	242.9	2,100	\$0.52	\$1,092	\$1,037,400
Low-Density Residential	848	333.7	2,900	\$3.30	\$9,570	\$8,115,360
Medium-Density Residential	65	16.3	2,000	\$3.30	\$6,600	\$429,000
<b>Total Residential</b>	<b>1,890</b>	<b>701.1</b>				<b>\$9,893,610</b>
<b>Total</b>		<b>701.10</b>				<b>\$9,893,610</b>

*school alloc*

Source: Loomis Union and Placer Union High School Districts.

[1] Age-restricted units pay the nonresidential rate for the school fee.

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# APPENDIX C: Cost Allocation

Table C-1 Estimated Fee Revenues: Placer County Sewer





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**Table C-1  
Bickford Ranch Specific Plan Financing Plan  
Newcastle/Horseshoe Bar/Penryn Traffic Fee Cost Allocation (2015\$)**

<b>Newcastle/Horseshoe Bar/Penryn Traffic Fee</b>
---

Land Use	Land Use		DUE Factor	Total Persons Served	% of Total	Allocated Cost	
	Units / Sq. Ft.	Acres				Total Cost	Cost/ Unit
<b>Residential</b>	<i>units</i>		<i>per unit</i>				<i>per unit</i>
Rural Residential	27	108.2	1.000	27	2.3%	\$13,572	\$503
Low-Density Residential - Active Adult	950	242.9	0.267	254	21.2%	\$127,500	\$134
Low-Density Residential	848	333.7	1.000	848	71.0%	\$426,256	\$503
Medium-Density Residential	65	16.3	1.000	65	5.4%	\$32,673	\$503
<b>Total Residential</b>	<b>1,890</b>			<b>1,194</b>	<b>100.0%</b>	<b>\$600,000</b>	
<b>Total</b>				<b>1,194</b>	<b>100.0%</b>	<b>\$600,000</b>	

*t alloc*

Source: Westpark Communities, May 29, 2015.

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APPENDIX D:

Sierra College Blvd. Widening Phasing





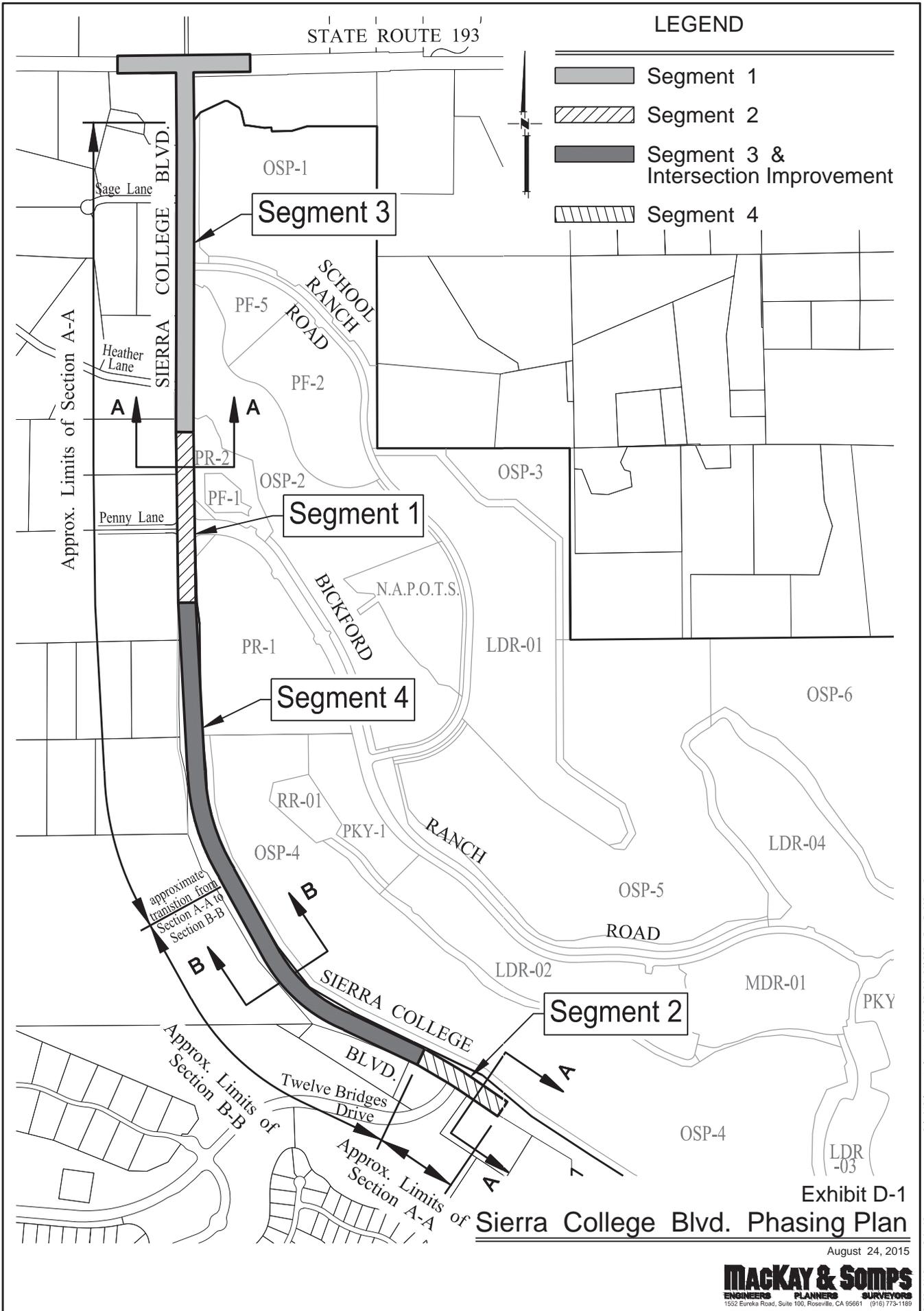


Exhibit D-1  
Sierra College Blvd. Phasing Plan

August 24, 2015

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**Bickford Ranch Sierra College Blvd Phasing-AMENDMENT**

Subject: Segmented Cost Analysis-Traffic Signal Amendment  
 Prepared For: Megan Quinn, EPS  
 Prepared by: Brian Durham, M&S  
 Reviewed by: Mark Sauer, P.E., M&S  
 CC: Michele Kingsbury, Placer County

This segmented phasing plan ‘**amendment**’ is a strategy to address the addition of two signalized intersections within the widening of Sierra College Blvd (SCB) for the Bickford Ranch project. The purpose of this memo is to update and amend the previous Bickford Ranch Sierra College Blvd Phasing memo, “Segmented Cost Analysis-Revised”, dated July 29, 2015.

Two additional signalized intersections are to be included within the proposed Sierra College Blvd Phasing Fee, located at the intersections of Sierra College Blvd/School Ranch Road and the intersection of Sierra College Blvd/HWY-193.

As described in the July 29<sup>th</sup> memo referenced above, the total cost for SCB Phases 3 and 4 is \$4,963,440.00 and was to be funded over 1,480 units within the payment to Placer County for residential building permits. The fee amount per each residential building permit was \$3,354.00, see Table 1 below.

**Table 1-Bldg Permit Fee Phase Summary**

No. Units	Total Cost for Segments 3 and 4	Fee Amount per DU
1,480	\$ 4,963,440.00	\$ 3,354.00

The total cost of the two additional signals which are now to be included in the SCB Phasing Fee will be approximately \$798,000 (this includes 20% contingency and 20% soft costs on an estimated \$277,000 preliminary estimate for each signal). This amount of \$798,000 for two signalized intersections correlates to a \$539 increase in fees that would be due with each building permit, see Table 2 below.

**Table 2-Bldg Permit Fee Signals Summary**

No. Units	Total Cost for School Ranch Rd. & HWY-193 Signals	Fee Amount per DU
1,480	\$ 798,000	\$ 539.00

With the addition of these two signals the total SCB Phasing Fee will be \$3,893. Which is the sum of the original phasing fee of \$3,354.00 and the additional \$539.00 increase for the signals at School Ranch Road and HWY-193. Supporting conversations with Placer County Staff has been provided as a reference, see attached.

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**Bickford Ranch Sierra College Blvd Phasing**

Subject: Segmented Cost Analysis-Revised  
 Prepared For: Richard Moorehead, P.E., T.E.  
 Prepared by: Brian Durham, M&S  
 Reviewed by: Mark Sauer, P.E., M&S

This segmented phasing plan is a strategy to address the widening of Sierra College Blvd (SCB) for the Bickford Ranch project. The purpose of this memo is to describe one alternative for the potential funding and the timing of construction for four segments of widening for SCB. This analysis describes the funding for a fee spread over 1,480 units.

The widening of SCB is expected to be phased with four segments over a period of time relative to the phasing of the Bickford Ranch development. This memo references the segmented phasing as shown on the July 27, 2015 Sierra College Blvd Widening Phasing Concept exhibit and Sierra College Blvd Widening Draft cost estimate dated July 7, 2015 by MacKay & Somps, Inc., see attached.

The segmented costs associated for widening SCB will be funded by three sources, either by the Developer or by Fee’s generated by traffic mitigation fees of which will be collected with residential building permit fees paid by the homebuilder. The total cost of the segmented SCB widening is approximately \$6.6 million at build out. For each alternative the cost per segment of SCB widening and the responsible party for funding is shown in Table 1 below:

**Table 1-Alternative 1 Cost and Funding Source**

Segment	Segment Estimated Cost	Funding Source
1	\$ 743,640.00	Developer
2	\$ 954,720.00	Developer/SPRTA
3	\$ 1,612,680.00	Developer
4	\$ 3,350,760.00	Developer

To address concerns of the County as to the funding for Segments 3 and 4, the Developer is proposing to impose a fee on the Phase 1 and 2 residential permits issued within Bickford Ranch sufficient to fund Segments 3 and 4. The fee is to be calculated by dividing the total cost of Segments 3 and 4 (\$4,963,440) by the total number of units within Phases 1 and 2 of Bickford Ranch (1,480) (see Table 2). The County shall collect the fee, place it into a segregated account for the sole use of constructing Segments 3 and 4 of SCB. The County shall use the funds to reimburse the Developer for the construction of Segments 3 and 4, or should the Developer fail to construct Segments 3 and 4, then the County shall be permitted to use these funds to complete Segments 3 and 4.

**Table 2-Bldg Permit Fee Calculation**

No. Units	Total Cost for Segments 3 and 4	Fee Amount per DU
1,480	\$ 4,963,440.00	\$ 3,354.00

Appropriate fees will be generated based on the actual number of residential building permits that are issued. The above fee amount based on dwelling unit (DU) can be applied to each residential building permit issued in Phase 1 and 2 of the project and are shown below (Table 3).

**Table 3-Fee Generation Schedule**

Residential Units per Phase	Total Building Permits issued	Fee Amount per DU	Fee's Generated per Phase
Ph.1 - 1049	1049	\$ 3,354.00	\$ 3,518,346.00
Ph.2 - 431	1480	\$ 3,354.00	\$ 1,445,574.00
Ph.3 - 410	1890	\$ 0	\$ 0
<i>Total Fee's Generated</i>			\$ 4,963,920.00

Segment 1 construction will begin concurrently with the starting construction of Phase 1 Backbone of the Bickford Ranch development and construction will be completed prior to the acceptance of the onsite improvements for the map that creates the first residential lot in Phase 1 of Bickford Ranch. Segment 1 will be funded by the developer in its entirety.

Segment 2 construction will be completed prior to acceptance of the onsite improvements for the map that creates the 750<sup>th</sup> building permit and will be funded by the developer. However, this segment which includes the intersection and signal improvement of the Twelve Bridges Drive and Sierra College Blvd, is SPRTA funded and is subject to reimbursements. This segment will either be constructed by the Bickford Ranch development or the Village 1 development, whichever develops first and will be reimbursable or subject to fee credit by SPRTA funds.

Segment 3 construction will begin concurrently with the starting construction of Phase 2 Backbone of the Bickford Ranch development and construction will be completed prior to the acceptance of the onsite improvements for the map that creates the first residential lot in Phase 2 of Bickford Ranch. The Developer shall be entitled to draw upon the fees collected to date by the County for the Segment 3 improvements.

Segment 4 construction will begin concurrently with the construction of the Phase 3 Backbone of the Bickford Ranch development and construction will be completed prior to the acceptance of the onsite improvements for the map that creates the first residential lot in Phase 3 of Bickford Ranch. The Developer shall be entitled to draw upon the fees collected to date by the County for the Segment 4 improvements.

Any unreimbursed costs related to the Segment 3 and 4 improvements shall be made to the Developer on a to-be-agreed-to schedule until either of the following occurs; 1) the Developer has been fully reimbursed for all costs related to the design and construction of the Segment 3 or 4 improvements; or 2) all building permits have been issued in Bickford Ranch and all of the fees associated with the Segment 3 or 4 improvements have been paid to the Developer. If the Segment 3 or 4 fees collected have been paid to the Developer and there are no further building permits to be issued in Bickford Ranch, the County shall have no further obligation to reimburse Developer for the Segment 3 or 4 improvements.

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Bickford Ranch Specific Plan  
Sierra College Blvd. Widening

**DRAFT**

Preliminary Opinion of Construction Costs  
Major Backbone Infrastructure Only

No.	Description	Quantity	Quantity	Quantity	Quantity	Quantity	Units	Unit Price	Amount	Amount	Amount	Amount	Amount
Sierra College Blvd. Widening Segmented		Seg. 1	Seg. 2	Seg. 3	Seg. 4	Total			Seg. 1	Seg. 2	Seg. 3	Seg. 4	Total
1	Clearing and Grubbing	1.6	3.5	0.9	5.2	11.2	AC	\$ 1,000.00	\$ 1,600.00	\$ 3,500.00	\$ 900.00	\$ 5,200.00	\$ 11,200.00
2	Erosion Control	1.6	3.5	0.9	5.2	11.2	AC	\$ 5,000.00	\$ 8,000.00	\$ 17,500.00	\$ 4,500.00	\$ 26,000.00	\$ 56,000.00
3	Roadway Excavation	5,000	3,000	12,000	18,000	38,000	CY	\$ 10.00	\$ 50,000.00	\$ 30,000.00	\$ 120,000.00	\$ 180,000.00	\$ 380,000.00
4	Roadway Finish Grading	46,400	25,600	100,800	152,000	324,800	SF	\$ 0.25	\$ 11,600.00	\$ 6,400.00	\$ 25,200.00	\$ 38,000.00	\$ 81,200.00
5	Roadway Grading-Cut	2,800	100	1,100	42,700	46,700	CY	\$ 10.00	\$ 28,000.00	\$ 1,000.00	\$ 11,000.00	\$ 427,000.00	\$ 467,000.00
6	Roadway Grading-Fill	4,100	39,300	3,300	33,700	80,400	CY	\$ 10.00	\$ 41,000.00	\$ 393,000.00	\$ 33,000.00	\$ 337,000.00	\$ 804,000.00
7	Sierra College Paving - (6" AC on 12" AB)	46,400	25,600	100,800	152,000	324,800	SF	\$ 7.00	\$ 324,800.00	\$ 179,200.00	\$ 705,600.00	\$ 1,064,000.00	\$ 2,273,600.00
8	Signage & Striping	1,160	640	2,520	3,800	8,120	LF	\$ 10.00	\$ 11,600.00	\$ 6,400.00	\$ 25,200.00	\$ 38,000.00	\$ 81,200.00
9	Metal Beam Guardrails			640	860	1,500	LF	\$ 23.00	\$ -	\$ -	\$ 14,800.00	\$ 19,800.00	\$ 34,600.00
10	AC Dike	1,160	640	2,520	3,800	8,120	LF	\$ 2.40	\$ 2,800.00	\$ 1,600.00	\$ 6,100.00	\$ 9,200.00	\$ 19,700.00
11	Roadside Ditch Grading	1,160	640	2,520	3,800	8,120	CY	\$ 20.00	\$ 23,200.00	\$ 12,800.00	\$ 50,400.00	\$ 76,000.00	\$ 162,400.00
12	12" Storm Drain, RCP CL III				410	410	LF	\$ 54.00	\$ -	\$ -	\$ -	\$ 22,200.00	\$ 22,200.00
13	18" Storm Drain, RCP CL III			20		20	LF	\$ 66.00	\$ -	\$ -	\$ 1,400.00	\$ -	\$ 1,400.00
14	24" Storm Drain, RCP CL III	120		40		160	LF	\$ 78.00	\$ 9,400.00	\$ -	\$ 3,200.00	\$ -	\$ 12,600.00
15	30" Storm Drain, RCP CL III		80	170	30	280	LF	\$ 90.00	\$ -	\$ 7,200.00	\$ 15,300.00	\$ 2,700.00	\$ 25,200.00
16	42" Storm Drain, RCP CL III				270	270	LF	\$ 114.00	\$ -	\$ -	\$ -	\$ 30,800.00	\$ 30,800.00
17	60" Storm Drain, RCP CL III			130		130	LF	\$ 240.00	\$ -	\$ -	\$ 31,200.00	\$ -	\$ 31,200.00
18	12" Flared End Section				3	3	EA	\$ 500.00	\$ -	\$ -	\$ -	\$ 1,500.00	\$ 1,500.00
19	18" Flared End Section			2		2	EA	\$ 750.00	\$ -	\$ -	\$ 1,500.00	\$ -	\$ 1,500.00
20	24" Flared End Section	2		2		4	EA	\$ 900.00	\$ 1,800.00	\$ -	\$ 1,800.00	\$ -	\$ 3,600.00
21	30" Flared End Section		2	4	7	13	EA	\$ 1,200.00	\$ -	\$ 2,400.00	\$ 4,800.00	\$ 8,400.00	\$ 15,600.00
22	42" Pipe Outfall				4	4	EA	\$ 8,000.00	\$ -	\$ -	\$ -	\$ 32,000.00	\$ 32,000.00
23	60" Pipe Outfall			2		2	EA	\$ 11,000.00	\$ -	\$ -	\$ 22,000.00	\$ -	\$ 22,000.00
24	48" Standard Storm Drain Manhole			1		1	EA	\$ 5,400.00	\$ -	\$ -	\$ 5,400.00	\$ -	\$ 5,400.00
25	Grate Inlet (GDO)			2		2	EA	\$ 2,640.00	\$ -	\$ -	\$ 5,300.00	\$ -	\$ 5,300.00
26	Park and Ride Site	1		1		1	LS	\$ 25,000.00	\$ -	\$ -	\$ 25,000.00	\$ -	\$ 25,000.00
28	Saw Cut Existing Pavement	1,160	640	2,520	3,800	8,120	LF	\$ 2.50	\$ 2,900.00	\$ 1,600.00	\$ 6,300.00	\$ 9,500.00	\$ 20,300.00

**Segment 1 Subtotal:** \$ 516,700.00

<i>Segment 1 Estimate Subtotal:</i>	\$ 516,700.00
<i>20% Contingency:</i>	\$ 103,000.00
<i>Construction Total:</i>	\$ 619,700.00
<i>20% Soft Costs:</i>	\$ 123,940.00
<b><i>Estimated Segment 1 Project Total:</i></b>	<b>\$ 743,640.00</b>

**Segment 2 Subtotal:** \$ 662,600.00

<i>Estimate Subtotal:</i>	\$ 662,600.00
<i>20% Contingency:</i>	\$ 133,000.00
<i>Construction Total:</i>	\$ 795,600.00
<i>20% Soft Costs:</i>	\$ 159,120.00
<b><i>Estimated Project Total:</i></b>	<b>\$ 954,720.00</b>

**Segment 3 Subtotal:** \$ 1,119,900.00

<i>Estimate Subtotal:</i>	\$ 1,119,900.00
<i>20% Contingency:</i>	\$ 224,000.00
<i>Construction Total:</i>	\$ 1,343,900.00
<i>20% Soft Costs:</i>	\$ 268,780.00
<b><i>Estimated Project Total:</i></b>	<b>\$ 1,612,680.00</b>

**Segment 4 Subtotal:** \$ 2,327,300.00

<i>Estimate Subtotal:</i>	\$ 2,327,300.00
<i>20% Contingency:</i>	\$ 465,000.00
<i>Construction Total:</i>	\$ 2,792,300.00
<i>20% Soft Costs:</i>	\$ 558,460.00
<b><i>Estimated Project Total:</i></b>	<b>\$ 3,350,760.00</b>

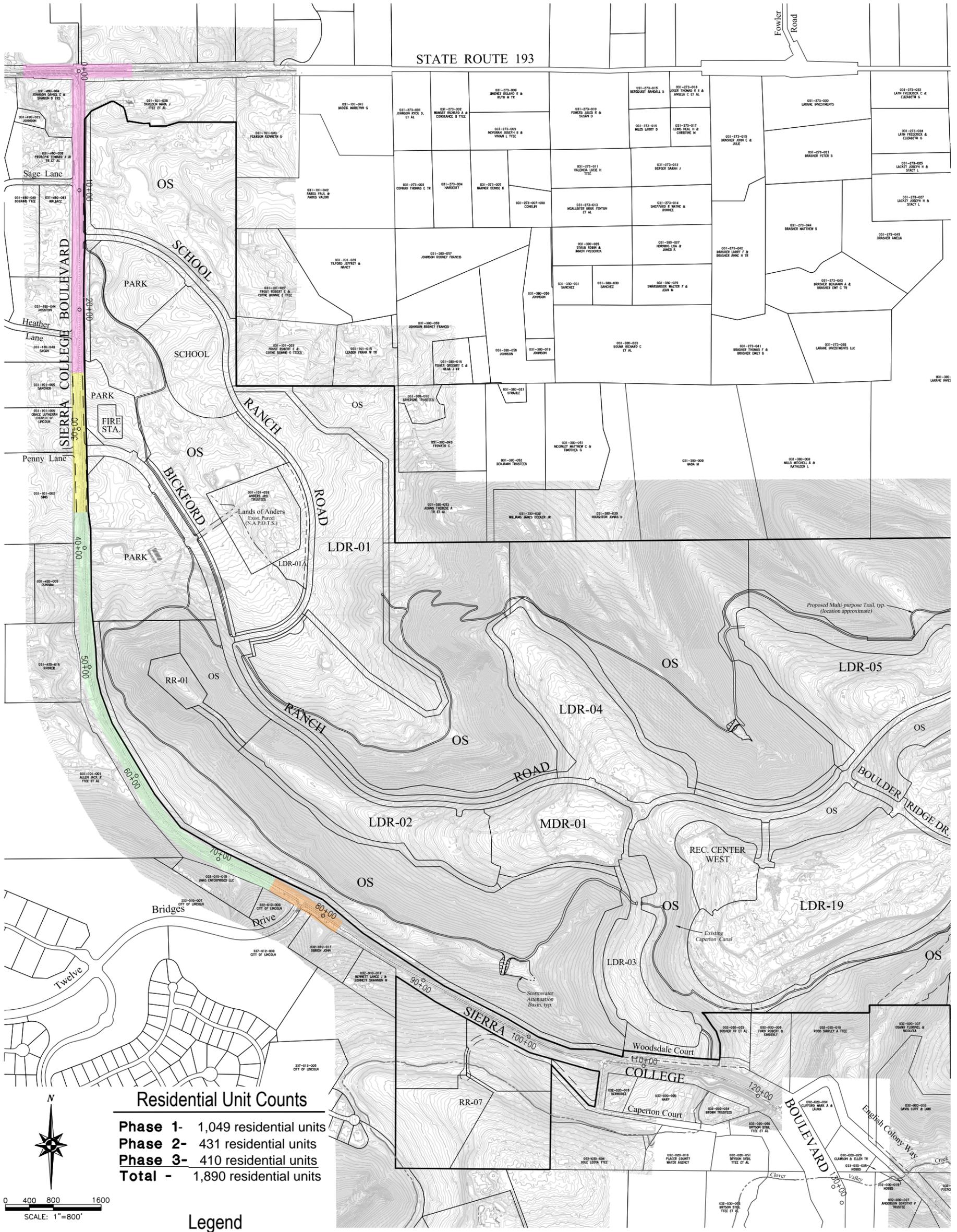
**Sierra College Blvd. Widening Subtotal:** \$ 4,626,500.00

<i>Estimate Subtotal:</i>	\$ 4,626,500.00
<i>20% Contingency:</i>	\$ 925,000.00
<i>Construction Total:</i>	\$ 5,551,500.00
<i>20% Soft Costs:</i>	\$ 1,110,300.00
<b><i>Estimated Project Total:</i></b>	<b>\$ 6,661,800.00</b>

Notes:

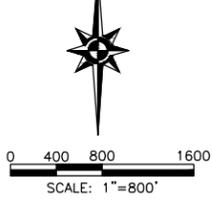
- [1] This estimate references preliminary improvement plans by others; Sierra College Blvd Widening dated Oct 2007 by Wood Rodgers and Route 193/Sierra College Intersection dated July 2004 by Wood Rodgers
- [2] Reference: May 8, 2014 Backbone Cost Estimate by M&S, Inc. and associated Sierra College Blvd preliminary plan line drawings
- [3] Reference: Sierra College Blvd Widening Phasing Concept exhibit dated June 2015 by M&S, Inc.





**Residential Unit Counts**

<b>Phase 1-</b>	1,049 residential units
<b>Phase 2-</b>	431 residential units
<b>Phase 3-</b>	410 residential units
<b>Total -</b>	1,890 residential units



**Legend**

- Segment 1 -** Full buildout of BRR/SCB intersection (4 lanes, turning lanes and signal), construction to begin concurrently with the start construction of Phase 1 backbone development
- Segment 2-** Full buildout of Twelve Bridges/SCB intersection (4 lanes, turn lanes and signal), approved plans and construction to be completed prior to acceptance of onsite improvements for the map that creates the 750th residential lot, unless completed by others
- Segment 3-** Full buildout of HWY-193/SCB intersection (4 lanes and signal) and full buildout widening of SCB (4 lanes) south to BRR/SCB intersection, construction to begin concurrently with the start construction of Phase 2 backbone development
- Segment 4 -** Full buildout widening of SCB from BRR/SCB intersection to Twelve Bridges/SCB intersection (4 lanes), construction to begin with the start construction of Phase 3 backbone development

# SIERRA COLLEGE BLVD. WIDENING PHASING CONCEPT

## Bickford Ranch

Westpark Communities      MacKay & Soms Civil Engineers, Inc.  
Scale: 1"= 800'      County of Placer, California      July 27, 2015

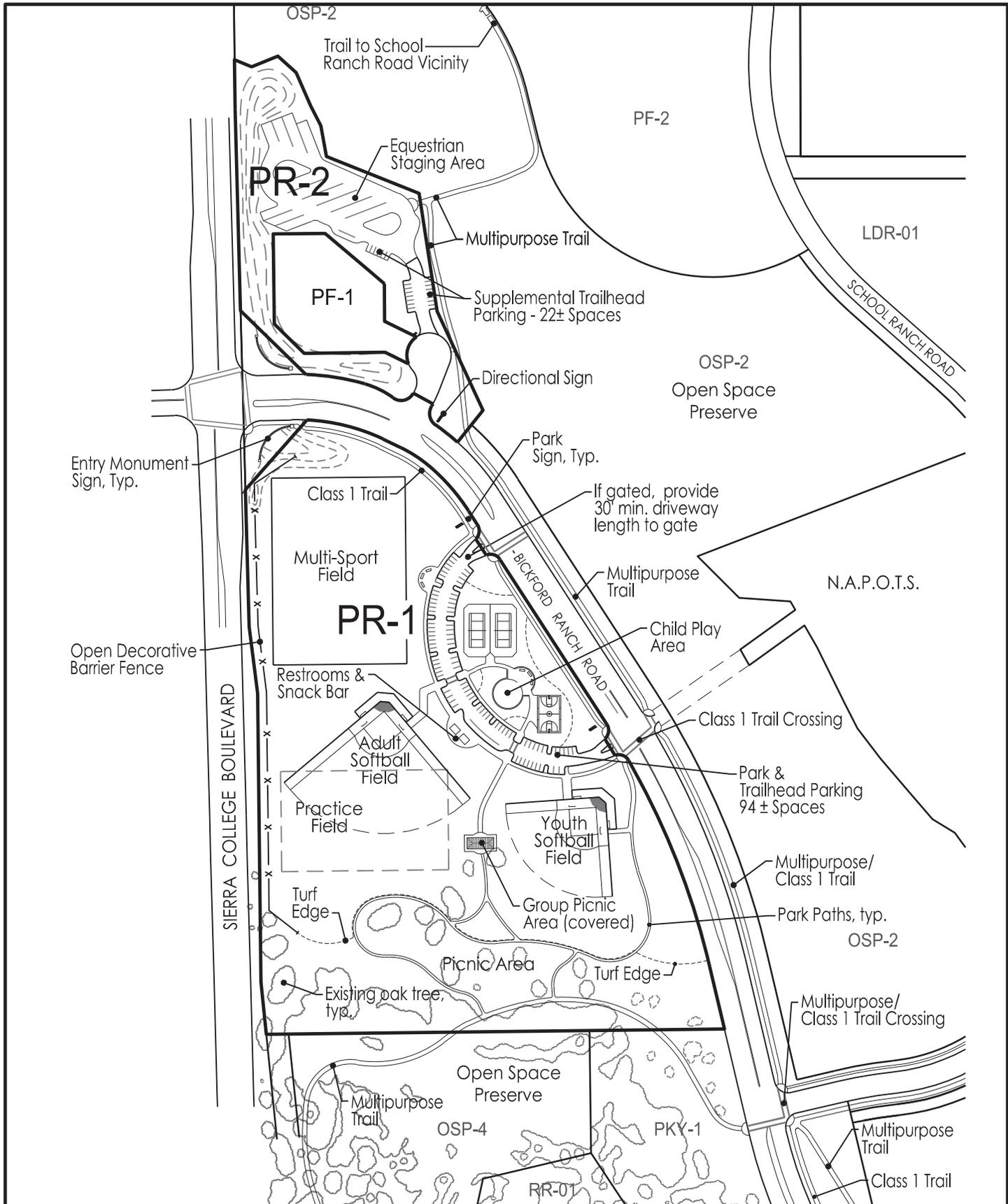






APPENDIX E:  
Park Exhibits





**Exhibit E-1**  
**Bickford Ranch Community Park**

September 3, 2015

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 [1] P:\19451\topo\WAS\_34476-H.dwg

LEGEND

- Phase 1 - Street Frontage
- Phase 1 - Utility Stubs

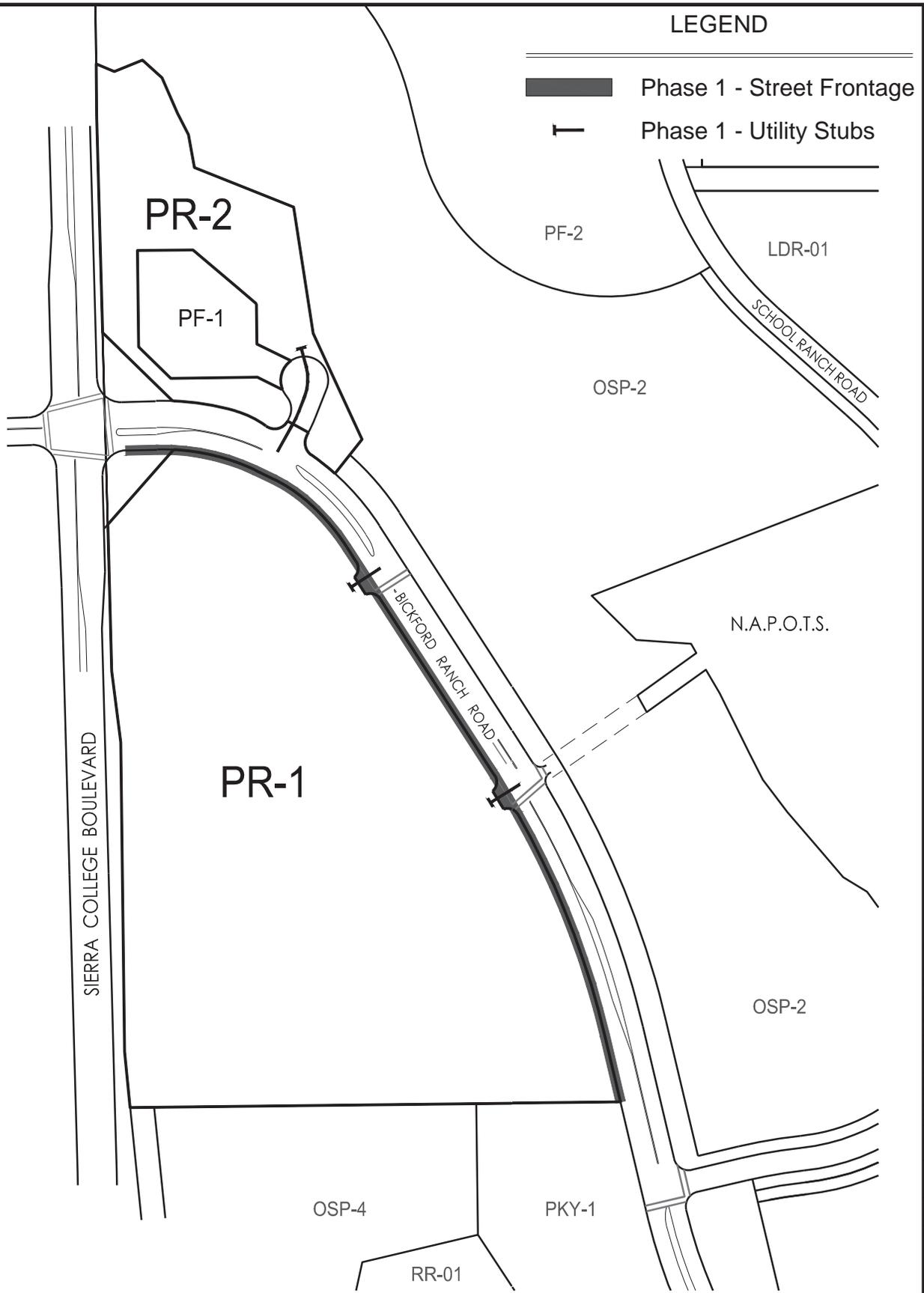


Exhibit E-2  
Bickford Ranch Community Park

September 3, 2015

**Mackay & Soms**  
ENGINEERS PLANNERS SURVEYORS  
1632 Eureka Road, Suite 100, Roseville, CA 95661 (916) 775-1189

P:\16457\Planning\exhibit\2015-SP-02-US\BROA E.m. L01 BR Park-Phasing.dwg 16:26:02 shaskell  
There are no references in this drawing.

LEGEND



Phase 2 - Improvements

PF-2

LDR-01

SCHOOL RANCH ROAD

OSP-2  
Open Space  
Preserve

N.A.P.O.T.S.

OSP-2

Trail to School  
Ranch Road Vicinity

PR-2

Equestrian  
Staging Area

Multipurpose Trail

PF-1

Supplemental Trailhead  
Parking - 22± Spaces

Directional Sign

Entry Monument  
Sign, Typ.

PR-1

BICKFORD RANCH ROAD

Multipurpose  
Trail

SIERRA COLLEGE BOULEVARD

Existing oak tree,  
typ.

Open Space  
Preserve

Multipurpose  
Trail

OSP-4

PKY-1

RR-01

Exhibit E-3  
Bickford Ranch Community Park

September 3, 2015

LEGEND

Phase 3 - Improvements

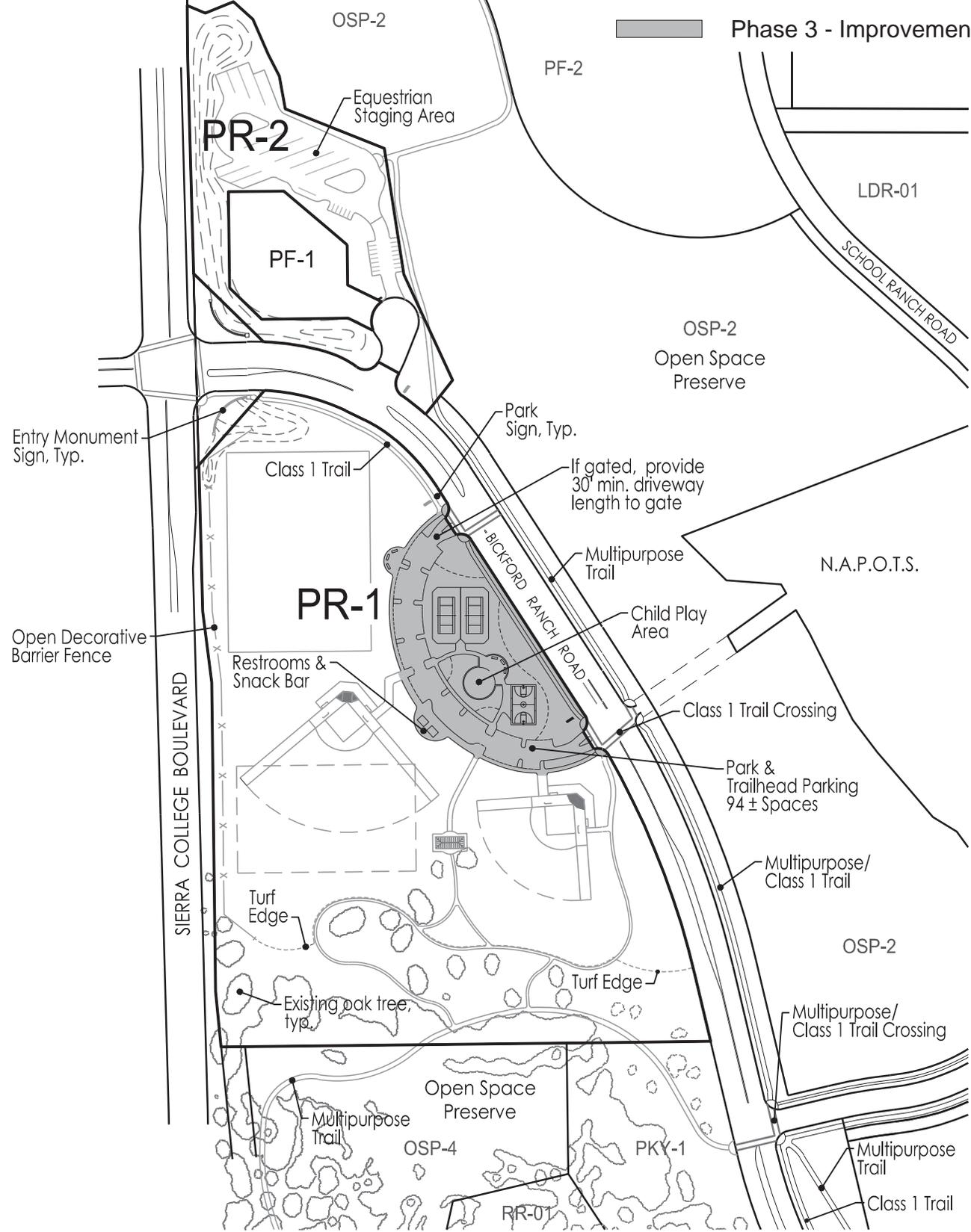


Exhibit E-4  
Bickford Ranch Community Park

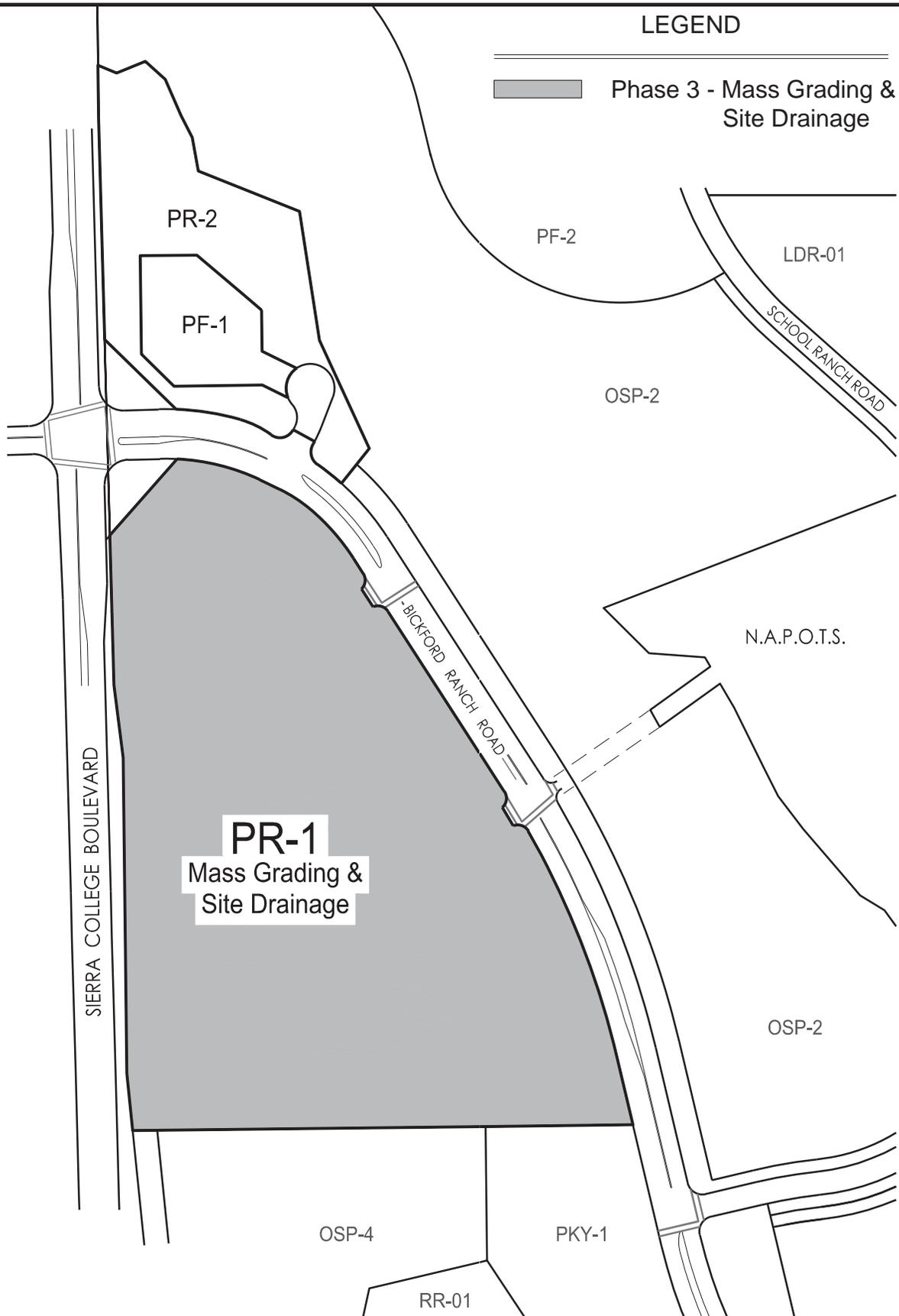
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LEGEND



Phase 3 - Mass Grading & Site Drainage



**PR-1**  
Mass Grading &  
Site Drainage

Exhibit E-5

Bickford Ranch Community Park

September 3, 2015



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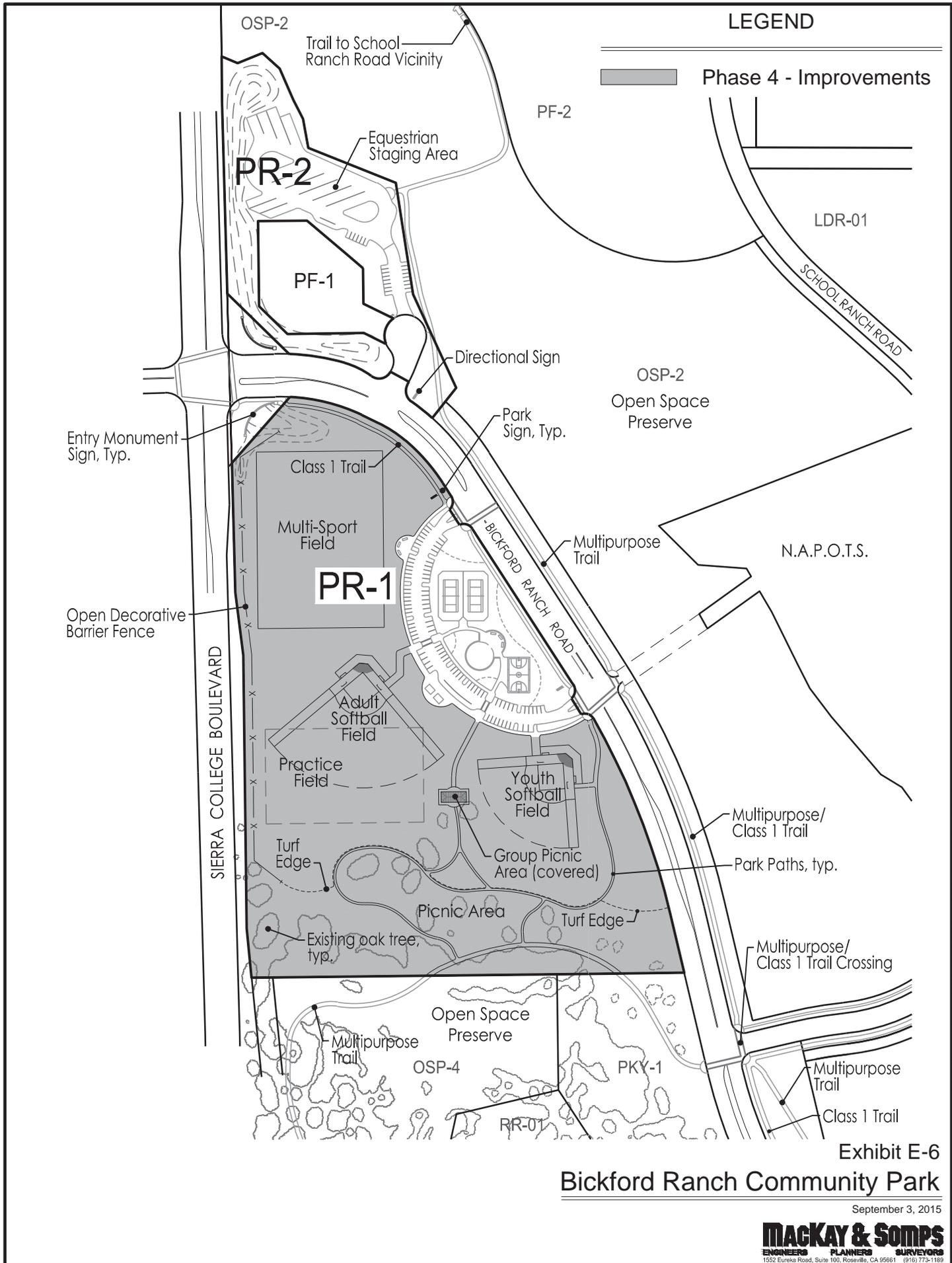


Exhibit E-6  
**Bickford Ranch Community Park**

September 3, 2015

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