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# West Jackson Highway Master Plan

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Public Facility Financing  
Plan

County of Sacramento

March 2025

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Prepared by:



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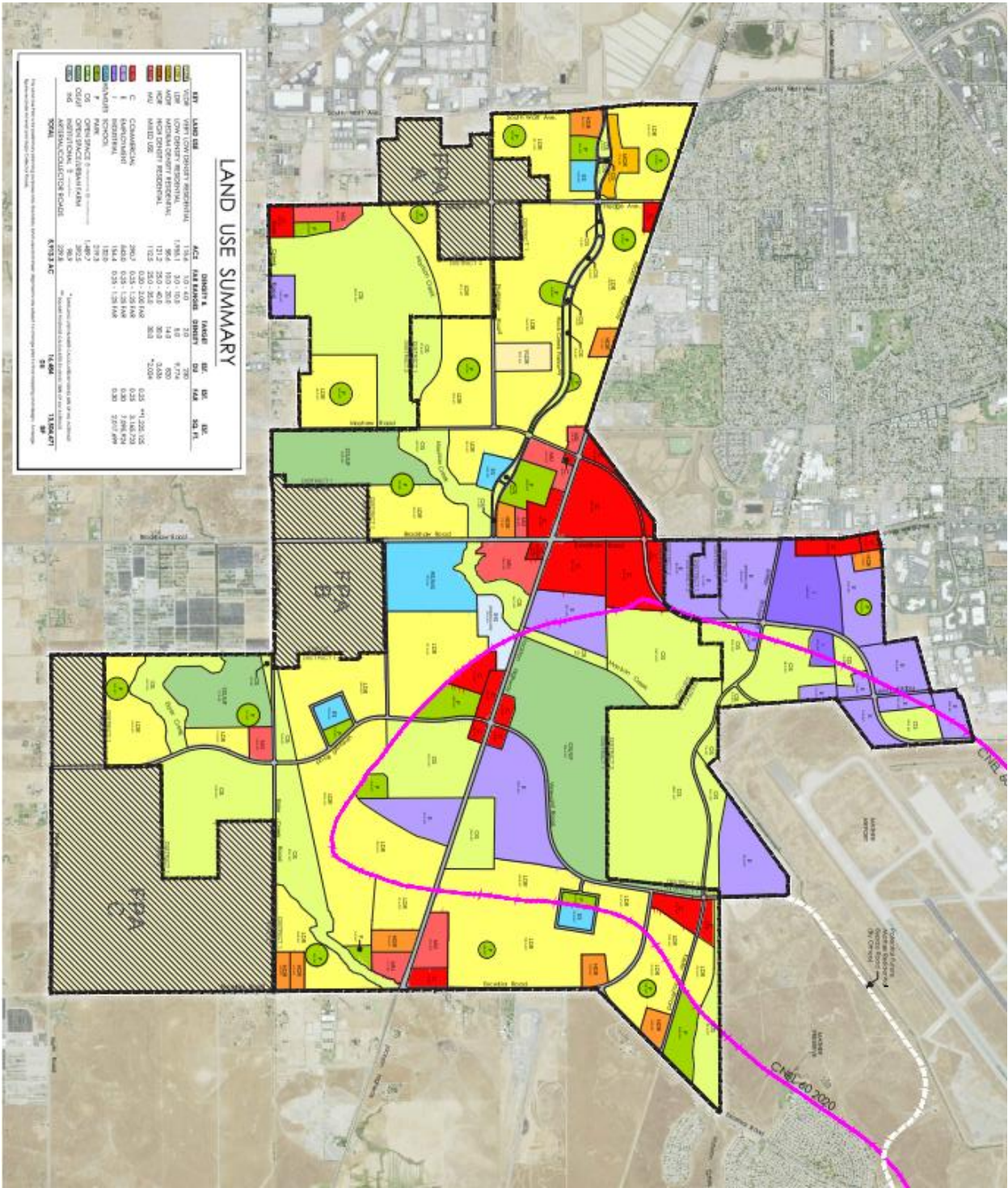
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Exhibit 1  
Land Use Map



I. PROJECT INTRODUCTION / OVERVIEW

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This Public Facilities Financing Plan is prepared on behalf of Stonebridge Properties, LLC and Granite Construction Company (collectively the “Applicants”) to establish a strategy for financing backbone infrastructure and other public facilities necessary to serve the West Jackson Highway Master Plan (“Project”). The Project will be subject to development agreements that set forth details regarding potential funding mechanisms that will be implemented between the Project and County of Sacramento (“County”). Development & Financial Advisory (“DFA”) has been retained to prepare a Public Facilities Finance Plan (“PFFP” or “Finance Plan”) to establish a strategy for financing public improvements and services required to serve the development of the Project.

A. Background / History

The Project encompasses approximately 5,913 acres located in the County’s Jackson Highway corridor straddling Jackson Highway between South Watt Avenue and Excelsior Road. At buildout, the Project is envisioned to include 16,484 residences and 13.5 million square feet of commercial, office and industrial properties along with an extensive parks, open space and trail network. Approximately 664,000 of the 13.5 million square feet is for existing land uses and not factored into this Finance Plan. See the attached land use map in **Exhibit 1**. The Project is a master planned community that will provide a variety of housing types by multiple residential and non-residential builders and a mixture of land uses. The following studies have been developed to understand the required backbone infrastructure and public facilities required to serve the Project:

- Drainage Master Study: approved April 6, 2023
- Master Sewer Study: approved June 14, 2017; Amendment approved March 30, 2023
- Master Water Study for SCWA: approved March 20, 2019; refreshed and approved January 31, 2023
- Master Water Study for CalAm: approved December 31, 2018; refreshed and approved February 3, 2023
- Sacramento County Transportation Development Fee Program, November 2019 SCTD/TIF Nexus Study

Table 1 below provides a detailed summary of the proposed land uses.

**TABLE 1**  
**Land Use Summary**

Item	Buildout			Area A			Area B			Area C		
	Acres	Res.	Non- Res.	Acres	Res.	Non- Res.	Acres	Res.	Non- Res.	Acres	Res.	Non- Res.
<b>Residential</b>		<u>DU's</u>			<u>DU's</u>			<u>DU's</u>			<u>DU's</u>	
Very Low Density	116	230	-	-	-	-	20	40	-	95	190	-
Low Density	1,955	9,774	-	403	2,016	-	672	3,365	-	880	4,393	-
Medium Density	59	820	-	-	-	-	18	246	-	41	574	-
High Density	121	3,636	-	40	1,185	-	34	1,023	-	48	1,428	-
Mixed Use Residential	68	2,024	-	19	558	-	15	459	-	34	1,007	-
<b>Subtotal Residential</b>	<b>2,318</b>	<b>16,484</b>	<b>-</b>	<b>461</b>	<b>3,759</b>	<b>-</b>	<b>760</b>	<b>5,133</b>	<b>-</b>	<b>1,097</b>	<b>7,592</b>	<b>-</b>
<b>Non-Residential</b>		<u>Bldg Sq. Ft.</u>			<u>Bldg Sq. Ft.</u>			<u>Bldg Sq. Ft.</u>			<u>Bldg Sq. Ft.</u>	
Mixed Use Commercial	45	-	1,225,703	12	337,897	-	10	277,241	-	22	610,565	-
Commercial	291	-	3,166,067	217	2,364,722	-	21	225,680	-	53	575,665	-
Employment	492	-	6,434,904	426	5,567,482	-	49	636,412	-	18	231,010	-
Industrial	154	-	2,017,073	75	980,781	-	-	-	-	79	1,036,292	-
<b>Subtotal Non-Residential</b>	<b>983</b>	<b>-</b>	<b>12,843,747</b>	<b>731</b>	<b>9,250,882</b>	<b>-</b>	<b>80</b>	<b>1,139,333</b>	<b>-</b>	<b>172</b>	<b>2,453,532</b>	<b>-</b>
<b>Non-Developable</b>												
School - HS/MS/ES	132	-	-	10	-	-	20	-	-	102	-	-
Park	219	-	-	43	-	-	72	-	-	105	-	-
Open Space	1,489	-	-	580	-	-	102	-	-	808	-	-
Open Space / Urban Farm	392	-	-	225	-	-	-	-	-	168	-	-
Institutional	23	-	-	-	-	-	-	-	-	23	-	-
Arterial / Collector Roads	228	-	-	107	-	-	51	-	-	70	-	-
<b>Subtotal Non-Developable</b>	<b>2,485</b>	<b>-</b>	<b>-</b>	<b>964</b>	<b>-</b>	<b>-</b>	<b>244</b>	<b>-</b>	<b>-</b>	<b>1,276</b>	<b>-</b>	<b>-</b>
<b>Total Project [1]</b>	<b>5,785</b>	<b>16,484</b>	<b>12,843,747</b>	<b>2,155</b>	<b>3,759</b>	<b>9,250,882</b>	<b>1,084</b>	<b>5,133</b>	<b>1,139,333</b>	<b>2,546</b>	<b>7,592</b>	<b>2,453,532</b>
<b>NAP</b>	<b>128</b>		<b>664,917</b>									

[1] Based on Master Plan.

The Finance Plan is one of several documents intended to accompany the West Jackson Highway Master Plan ("Master Plan"), Environmental Impact Report ("EIR"), and the Development Agreement.

The Finance Plan describes the long-term approach to fund backbone infrastructure, public facilities and services that will support the proposed land uses in the Project.

## **B. Purpose of the Report**

The purpose of this report is to develop a guide to delivering backbone infrastructure, public facilities and services for the Project. This report adheres to the requirements of the County's land use policy LU-13, LU 120 and LU-123 which requires the preparation of a public facilities infrastructure plan to identify major facilities required to serve new development.

The Finance Plan matches costs and funding sources for the required backbone infrastructure, public facilities and services to be constructed or acquired to implement the Master Plan. The purposes of this Finance Plan are:

- To describe the policy framework for financing;
- To describe the Master Plan backbone infrastructure, public facilities and services;

- To provide estimated costs;
- To identify capital and operational funding mechanisms;
- To identify funding issues such as threshold costs and cash flow shortfalls;
- To identify potential solutions for funding issues; and
- To demonstrate that the backbone infrastructure, public facilities and services are appropriately balanced among benefiting land uses.

Implementation of the Master Plan will require roadway, water, sewer, storm drainage and a variety of backbone infrastructure and public/private facilities (“Public Improvements”). Cost estimates for the Public Improvements have been derived from preliminary data from Wood Rodgers and the Applicants.

Table 2 summarizes the costs of the Public Improvements for the Project. The buildout cost is approximately \$1.6 billion for the Project. For purposes of this planning-level PFFP, the Public Improvements have been allocated to the respective land uses within the Project based on an equivalent dwelling unit methodology. The allocation methodology for the Public Improvements is explained in greater detail in Section IV. Financial Burden Analysis. Subsequent implementation level PFFP’s will include an updated equitable cost allocation that is based on the specific needs of each development area. This will be particularly important for drainage and flood control infrastructure improvements, because not all development in the Master Plan area will require levee protection.

Additional details on cost estimates are provided in *Table 5, Section III, Public Improvement Cost Summary*. These estimates do not include the cost of in-tract and other subdivision specific improvements. The Finance Plan may be updated from time to time to reflect changes in Public Improvements cost estimates.

**TABLE 2**  
**Public Improvement Cost Estimates**

Category	Total Cost Estimate			
	Buildout	Area A	Area B	Area C
<b>Backbone Infrastructure</b>				
Transportation - Regional				
Regional Roadways	\$ 559,743,518	\$ 260,275,720	\$ 116,552,193	\$ 182,915,605
Cross Jurisdictional	\$ 12,344,031	\$ 5,599,759	\$ 2,693,766	\$ 4,050,505
Transportation - Local				
Collector	\$ 74,126,250	\$ 8,265,000	\$ 40,211,250	\$ 25,650,000
Arterial	\$ 19,067,500	\$ 19,067,500	\$ -	\$ -
Frontage				
Arterial	\$ 31,285,200	\$ 13,868,400	\$ 5,286,400	\$ 12,130,400
Thoroughfare	\$ 58,981,900	\$ 23,251,900	\$ 9,993,600	\$ 25,736,400
<b>Subtotal Transportation</b>	<b>\$ 755,548,398</b>	<b>\$ 330,328,279</b>	<b>\$ 174,737,209</b>	<b>\$ 250,482,910</b>
Water - Offsite (SCWA)	\$ 27,615,666	\$ 16,805,334	\$ 10,810,332	
Water - Onsite (SCWA)	\$ 14,236,872	\$ 7,082,946	\$ 3,244,878	\$ 3,909,048
Water - Offsite (Cal Am)	\$ 1,160,874	\$ 779,922	\$ 380,952	
Water - Onsite (Cal Am)	\$ 22,150,128	\$ 3,677,856	\$ 18,472,272	\$ -
Sewer	\$ 58,555,458	\$ 22,792,770	\$ 10,194,756	\$ 25,567,932
Drainage & Levee	\$ 250,626,392	\$ 128,437,393	\$ 51,573,222	\$ 70,615,777
<b>Subtotal Backbone Infrastructure</b>	<b>\$ 1,129,893,788</b>	<b>\$ 509,904,500</b>	<b>\$ 269,413,621</b>	<b>\$ 350,575,667</b>
<b>Public Facilities</b>				
Parks - CRPD [1]	\$ 59,741,787	\$ 26,618,600	\$ 29,912,058	\$ 3,211,130
Parks - SRPD	\$ 66,679,587	\$ 6,419,590	\$ 8,036,176	\$ 52,223,821
Regional Trails	\$ 27,210,011	\$ 12,080,172	\$ 6,433,432	\$ 8,696,407
Local/Conventional Trails	\$ 12,988,560	\$ 7,221,926	\$ 3,694,205	\$ 2,072,429
Transit	\$ 31,535,747	\$ 14,673,941	\$ 6,574,645	\$ 10,287,162
Open Space	\$ 13,531,343	\$ -	\$ 13,531,343	\$ -
Fire	\$ 44,143,251	\$ 19,812,813	\$ 9,714,662	\$ 14,615,777
Libraries	\$ 18,006,372	\$ 3,958,416	\$ 5,733,636	\$ 8,314,320
Schools - Elk Grove USD	\$ 211,058,820	\$ 45,923,841	\$ 67,288,552	\$ 97,846,427
Schools - Sac City USD	\$ 2,995,736	\$ 2,995,736	\$ -	\$ -
<b>Subtotal Public Facilities</b>	<b>\$ 487,891,215</b>	<b>\$ 139,705,035</b>	<b>\$ 150,918,708</b>	<b>\$ 197,267,472</b>
<b>Total Project Improvements [2]</b>	<b>\$ 1,617,785,004</b>	<b>\$ 649,609,535</b>	<b>\$ 420,332,329</b>	<b>\$ 547,843,140</b>

[1] Amounts based on the methodology used in the Fuhrman Leamy Group park impact fee cost analysis dated May 2022 for JTSP.

[2] Based on engineer estimates from Wood Rodgers or existing fee programs.

The Finance Plan outlines the strategy for financing and constructing Public Improvements. The objectives of that strategy are to:

- Assure funding and/or construction of Public Improvements needed to serve the Project;

- Provide for public finance vehicles, including but not limited to, Community Facilities Districts and Enhanced Infrastructure Finance Districts;
- Utilize existing County impact fee programs and other agency fee programs;
- Create a public plan area fee program with the County. The proposed plan area fee is described in greater detail in Section VII and Appendix D;
- Provide for “pay-as-you-go” financing mechanisms;
- Provide for “Fair Share” financing mechanisms; and
- Access Federal and State grant and other infrastructure funding programs.

The anticipated funding mechanisms for the Public Improvements are explained in greater detail in Section VII, Available Potential Funding Mechanisms. A preliminary funding sources table (Table 30) provides a summary of potential sources while Tables 31-34 identifies the funding sources anticipated for the Project’s Public Improvements. The Finance Plan may be updated from time to time to reflect changes to the Development Agreements, market conditions and financing mechanisms.

### **C. Organization of the Report**

The Finance Plan is organized into several key sections as follows:

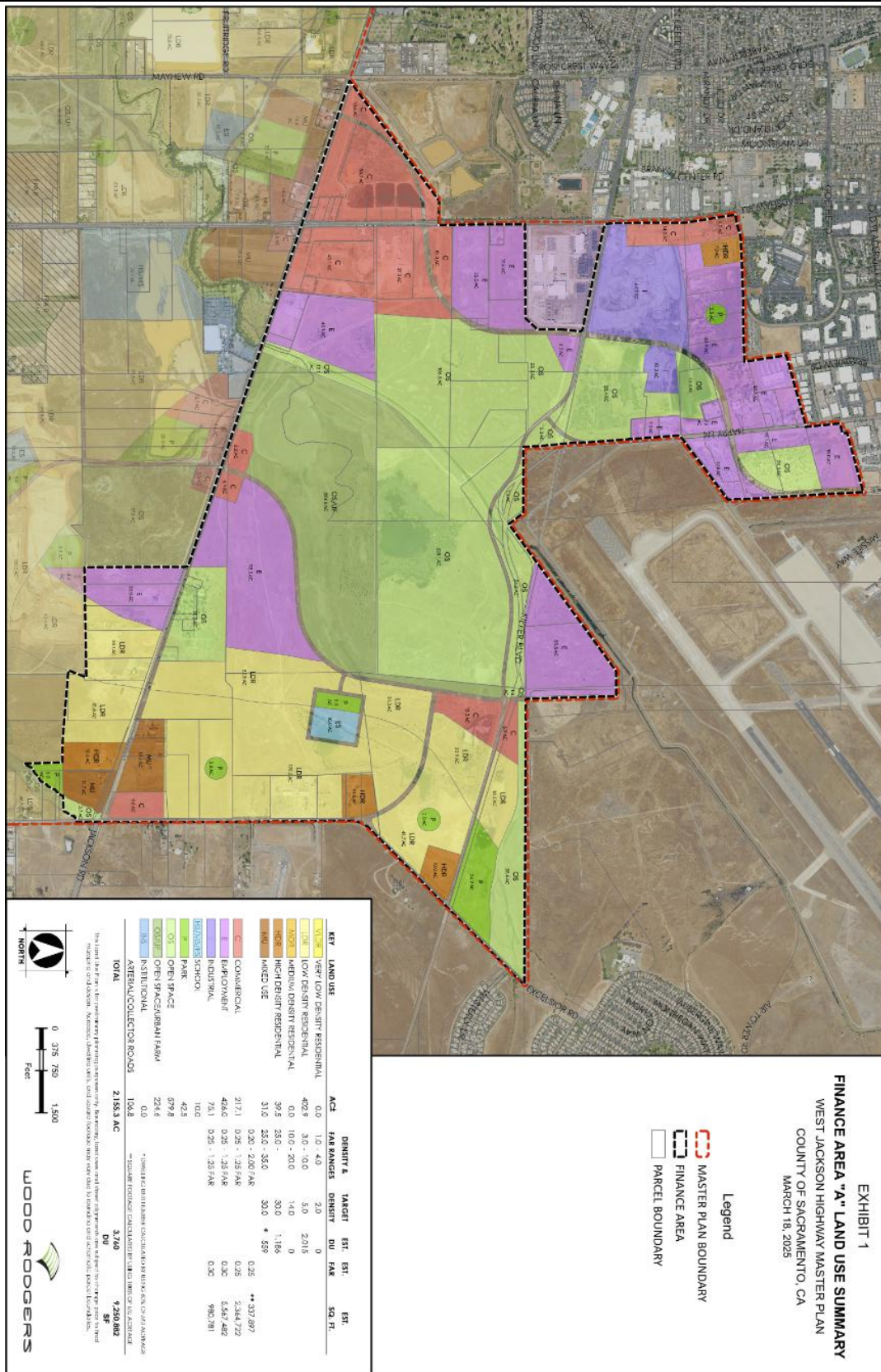
- Section II – provides a preview of the detailed results from the conclusion chapter/section on overall burden and feasibility along with a brief description of the proposed action plan.
- Section III – description of existing impact fee programs and provide Public Improvement cost estimates and descriptions.
- Section IV – description of Public Improvement cost allocation methodology and introduction of Project feasibility.
- Section V – discussion of essential Public Improvements.
- Section VI – identification of potential threshold infrastructure issues and cash flow constraints resulting from essential Public Improvements and discussion on cost balancing methodologies.
- Section VII – description of potential fundings sources for the Public Improvements
- Section VIII – description of financing strategy

## II. EXECUTIVE SUMMARY

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### **Project Location & Finance Areas**

The Project is located within the Jackson Highway corridor straddling Jackson Highway between South Watt Avenue and Excelsior Road. Because of its size, the Project is divided into three separate finance areas which have separate infrastructure burdens. Those three finance areas are illustrated in the diagrams below.







## **Project Description**

The Project encompasses approximately 5,913 acres at buildout, including 16,484 residences and 13.5 million square feet of commercial, office and industrial properties along with an extensive parks, open space and trail network. Approximately 664,000 square feet of the 13.5 million non-residential square feet is for existing land uses and not factored into this Finance Plan.

### **A. Summary of Findings**

This summary provides an overview of the PFFP by providing a brief breakdown of the feasibility results outlined in the following sections. The proposed finance strategy will be developed to ensure required backbone infrastructure and public facilities are delivered in a timely fashion consistent with County policy guidelines and the Project development agreements in a cost effective and feasible manner.

In order to deliver the land uses referenced above a significant amount of backbone infrastructure and public facilities will need to be constructed. This includes infrastructure investment into new or expanded roadways, water, sewer, storm drain and certain public facilities estimated at \$1.6 billion.

The backbone infrastructure and public facilities have been allocated to the benefiting land uses to achieve an equitable distribution of costs within the Project area. More detailed cost allocations will be developed during the implementation phase of the Finance Plan. Subsequent implementation level PFFP's will include an updated equitable cost allocation that is based on the specific needs of each development area. This will be particularly important for drainage and flood control infrastructure improvements, because not all development in the Master Plan area will require levee protection.

The Finance Plan envisions the use of existing impact fee programs, the creation of a plan area fee for the Master Plan and Mello-Roos financing to deliver the needed backbone infrastructure and public facilities in a timely and cost-effective manner. The backbone infrastructure and public facilities will be maintained by a variety of funding mechanisms consistent with County policies and the development agreements. A critical element of the Finance Plan is developing appropriate cost allocations and implementing suitable funding mechanisms that allow the Project to achieve certain feasibility metrics. A critical metric associated with the feasibility of residential developments is the two-percent test which measures total taxes and assessments as a percentage of home prices. Projects with total tax burdens less than two percent of the home price are considered feasible with typical development in the Sacramento region ranging between 1.60% to 1.80%. The Finance Plan is based on a total tax rate percentage of 1.80% for all residential land uses which is within the feasible range for the Sacramento region.

### **B. Action Plan**

The Finance Plan outlines the strategy for financing, constructing and maintaining Public Improvements. The objectives of that strategy are to:

- Assure funding and/or construction of Public Improvements needed to serve the Project;
- Provide for public finance vehicles;
- Utilize existing County impact fee programs and other agency fee programs;
- Create a public plan area fee program with the County. The proposed plan area fee is described in greater detail in Section VII and Appendix D;

- Provide for “pay-as-you-go” financing mechanisms;
- Provide for “fair share” financing mechanisms;
- Access Federal and State grant and other infrastructure funding programs; and
- Mitigate funding cash flow and infrastructure delivery constraints.

The anticipated funding mechanisms for the Public Improvements are explained in greater detail in Section VII, Available Potential Funding Sources. A preliminary funding sources table (Table 30) provides a summary of potential sources while Tables 31-34 identifies the funding sources anticipated for the Project’s Public Improvements. The Finance Plan may be updated from time to time to reflect changes to the Development Agreements, market conditions and financing mechanisms.

It is typical with multiple phase long term development projects that substantial infrastructure burdens are required in the initial years or phases prior to development of the benefitting phases. This causes a financial burden on the initial development entity or entities as those parties are required to construct and fund infrastructure to the benefit of subsequent development phases. Without an infrastructure financing program that provides the initial development entities with a reimbursement, financial burdens can be too extreme and prohibitive to project development. A financial plan shall outline the timing and amount of infrastructure required for the project, the respective development end user responsible for funding its fair share of the infrastructure, and a comprehensive credit and/or reimbursement program that provides the opportunity for equitable and feasible project development. As development occurs within the Project and market demand creates the need for future phases, Finance Plan updates may be prepared. Any update to the Finance Plan should identify the required set of Public Improvements and anticipated finance mechanisms for the future phase.

The development of the Project requires a significant number of Public Improvements to be constructed during the initial phases. Many of these Public Improvements benefit the Project and surrounding developments located along the Jackson corridor. The Public Improvement costs associated with initial phases of development exceed the fair share funding obligation of the respective phases of development. As a result, initial development will rely on fee credits and reimbursements from existing and planned fee programs to mitigate initial cash outflows and overall costs. Additionally, the Project will require alternative funding solutions in the form of Federal and State grants or tax increment through an EIFD. The Net Burden Analysis, shown later in Tables 12-17 provides an estimation of fee credits and reimbursements. *Project credit and reimbursement agreements will document the terms and structure of these mechanisms for the respective programs. Details are discussed in the Development Agreement.*

Flexibility within the action plan to mitigate changing market conditions and/or cost fluctuations is a component of this Finance Plan through the use of a variety of funding mechanisms, as described in Section VII, Available Potential Funding Mechanisms. The Finance Plan includes the following action items:

- Utilization of existing fee programs to fund facilities, such as parks, fire, library and schools;
- Creation of a public plan area fee program with the County to fund Public Improvements required by subsequent development. The proposed plan area fee is described in greater detail in Section VII and **Appendix D**;

- Utilization of federal, state, or local funding to help fund capital facilities;
- Formation of a Mello-Roos Community Facilities District (“CFD”) to fund, as necessary, any backbone improvements, public facilities and services, as generally described in Section \_\_\_\_ of the Development Agreements; and
- Establishment of Assessment Districts or CFD’s to fund, as necessary, any roadway maintenance costs, fire and law enforcement, storm drainage maintenance, lighting and landscape costs, parks, trails and open space maintenance as generally described in Section \_\_ of the Development Agreements.
- Pursue tax increment financing through the creation of an Enhanced Infrastructure Finance District.

### III. PROJECT IMPACT FEES & PUBLIC IMPROVEMENTS

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#### A. Impact Fees

The Project is subject to a variety of existing development impact fee programs. Development impact fees may be used to finance regional or localized public improvements and facilities. These fees are used to pay for the allocable costs of public improvements and facilities associated with new development. Fees are charged to fund, but are not limited to, traffic mitigation measures (i.e. streets, traffic signals, transit facilities, bridges, bike lanes and sidewalks), storm drainage and flood control facilities, water and sewer facilities, parks, and public buildings including fire and school facilities. If public improvements and facilities fall within an agency's development impact fee program, the developer will be eligible for credit or reimbursement against such fee obligation. The Project is subject to the existing fee programs listed below:

#### County of Sacramento Impact Fee Program

New backbone infrastructure and capital facilities will be required to mitigate the impacts of new development. The impact fee program will collect fee revenue for various infrastructure and capital facilities components. The impact fee categories include the following:

- Traffic Fee (Sacramento County Transportation Development Fee)  
The purpose of the Sacramento County Transportation Development Fee (SCTDF) and Transit Impact Fee (TIF) Program is to fund improvements to the County's major roadway, transit, bicycle and pedestrian facilities needed to accommodate travel demand generated by new land development in the unincorporated portion of Sacramento County over the next 30 to 35 years (i.e. approximately 2050). The Sacramento County Board of Supervisors adopted a countywide transportation development fee program for roadway and transit improvements in 1988 and updated the roadway portion of the fee program in 1993. A comprehensive update to the SCTDF/TIF Program was adopted in 2008 and included bicycle and pedestrian infrastructure improvements. Some refinements to the SCTDF/TIF Program were subsequently approved in 2010. A major update to the SCTDF/TIF Program was conducted in 2018 that involved the following:
  - New long-range development forecasts that included major new specific plans that have been proposed or approved since 2010,
  - A new transportation needs analysis based on travel demand forecasts that reflect the new development forecasts,
  - New construction cost estimates that reflected substantial increases in costs since 2010
- Fire Fee  
The Sacramento Metropolitan Fire District ("SMFD") services a population of over 745,000 in a 358 square mile service area. SMFD is a combination of 16 smaller fire departments that, over the years, merged to create this California Special District. The SMFD retained NBS Government Finance Group to prepare a nexus study to analyze the impacts of new development on the District's facility and equipment needs and to calculate impact fees based on that analysis.

- **Library Fee**

The County retained Willdan Financial Services to perform a nexus study to establish a countywide library impact fee that supersedes the plan area library impact fees. Impact fee programs in California must meet the requirements of the Mitigation Fee Act contained in California Government Code §66000 et seq. The Willdan study presents a nexus analysis of the reasonable relationship (nexus) between new urban development within the Urban Services Boundary of the unincorporated areas of County, the library facilities necessary to accommodate that development and a fee to fund those facilities.

Other development impact fees which are not charged by the County will also be required for payment; these include, but are not limited to, the following:

**Sacramento Area Sewer District & Sacramento Regional County Sanitation District**

The Sacramento Area Sewer District (“SASD”) and Sacramento Regional County Sanitation District (“SRCSD”) operate the wastewater collection and treatment system in various portions of the County and provide service to the Project. SASD collects wastewater and diverts it to the conveyance and treatment systems of the SRCSD. SASD and SRCSD charge and collect sewer impact fees to fund the costs to design, construct trunk-sized facilities and connect to wastewater interceptor and treatment systems.

**Sacramento County Water Agency (“SCWA”) / California American Water (“Cal Am”)**

SCWA was formed in 1952 and is governed by a Board of Directors. Zone 40 was created by SCWA Resolution No. 663 in May 1985, which described the boundaries of the zone and the types of projects to be undertaken. Zone 40 is a benefit zone created for the acquisition, construction, maintenance, and operation of facilities for the production, conservation, transmittal, distribution, and sale of ground or surface water or both for the present and future beneficial use of lands or inhabitants within the zone. Ordinance No. 18, adopted in 1986, empowered SCWA to establish fees, charges, credits, and regulations for the supply of water and required the development of a water supply master plan. The boundaries and scope of Zone 40’s activities were expanded in April 1999 by Resolution WA-2331 to include the use of recycled water in conjunction with surface and groundwater. SCWA will provide water to a large portion of the Project. A portion of the Project is located within the Suburban/Rosemont service area of Cal Am.

**SCWA – Zone 11**

Zone 11A established a mechanism for funding the operation and maintenance of the County storm drainage system in order that storm and surface waters may be properly drained and controlled so that the health, safety and welfare of the County and its inhabitants may be safeguarded and protected. The County maintains a system of storm and surface water management facilities within the unincorporated area of the County, County storm drainage system means the system of storm and surface water management facilities, including but not limited to inlets, conduits, manholes, channels, ditches, drainage easements, retention and detention basins, infiltration facilities, overland release corridors and other components as well as natural waterways, within the unincorporated area that is either owned or operated by the County. The fees collected by Zone 11A equitably spread the costs associated with the construction of trunk drainage facilities among the beneficiaries of, or those that create the need for, these drainage facilities. Currently, the list of drainage facilities funded by Zone 11A does not include levees.

### **Cordova Recreation & Park District / Southgate Recreation & Park District**

The Cordova Recreation and Park District (“CRPD”) was formed in 1958 to provide parks and recreation facilities and services to residents in a portion of the unincorporated County. CRPD encompasses 75 square miles and maintains over 600 acres. CRPD has over 50 parks, five facilities with community meeting spaces, a sports complex, two community pools, a splash park, five splash pads and the Cordova Golf Course. CRPD is an independent district but relies on the County for some support services. CRPD is in the eastern portion of the County, approximately 13 miles east of downtown Sacramento. Portions of the Project are within the boundaries of CRPD and will be subject to park impact fees.

Southgate Recreation & Park District (“SRPD”) is an independent special district established in 1956 under the Public Resources Code. SRPD provides park and recreation services in the County (south and east of the City of Sacramento). SRPD encompasses 45 square miles and includes 47 parks, 11 community centers and other facilities, 2 aquatic facilities, Wild Hawk Golf Club and many trails, parkways, open space areas and landscape corridors while creating community for area residents. Portions of the Project are within SRPD and will be subject to park impact fees.

### **Elk Grove Unified School District / Sacramento City Unified School District**

The Elk Grove Unified School District (EGUSD) is the fifth-largest school district in California located in southern Sacramento County. EGUSD covers 320 square miles and includes 68 schools: 43 elementary schools, nine middle schools, nine high schools, five alternative education schools, an adult school, one charter school and a virtual academy. Portions of the Project are located within EGUSD and will be subject to developer fees adopted pursuant to a school facilities needs analysis or school justification study.

Sacramento City Unified School District (“SCUSD”) is one of the oldest K-12 districts in the western United States (established in 1854). SCUSD serves 40,711 students on 75 campuses spanning 70 square miles. SCUSD is home to three Public Waldorf schools (George Washington Carver, Alice Birney and AM Winn) and the only Hmong language immersion program in the state (Susan B. Anthony Elementary School). Portions of the Project are located within SCUSD and will be subject to developer fees adopted pursuant to a school facilities needs analysis or school justification study.

### **Measure A (Sacramento Countywide Traffic Mitigation Fee Program)**

In July of 2004 the Governing Board of the Sacramento Transportation Authority (“STA”) passed Ordinance No. STA 04-01 (“Ordinance”), which provides for the continuation of a one half of one percent retail transactions and use tax for local transportation purposes. Three key components of the ordinance are 1) An expenditure plan that defines the projects to be financed, identifies the associated costs and allocates the costs between sales tax revenue funding and development impact fee (“DIF”) funding, 2) Guidelines for the implementation of the Retail Transactions and Use Tax (“Retail Tax”), and 3) Guidelines for the implementation of the Sacramento Countywide Transportation Mitigation Fee Program (“SCTMFP”). Section VII of the Ordinance deals with the SCTMFP and states that “No revenue generated from the [retail transactions and use] tax shall be used to replace transportation mitigation fees required from new development...”, and requires that the STA develop “... a professional and planning based process for charging new development with the cost of traffic impacts caused by each development...”. SCTMFP is intended to comply with Section 66000 et. seq. of the Government Code, which was enacted by the State of California in 1987, by identifying additional public facilities required by new development and determining the level of County-wide development impact fees that may be imposed to pay the costs of the future facilities. Fee amounts have been determined that will partially

satisfy the financing of transportation infrastructure at levels identified by the various local agencies within the County as being necessary to meet the needs of new development through the year 2039.

Tables 3-4 outline the estimated development impact fee obligation for Area A, Area B And Area C of the Project. The development impact fees listed in Tables 3-4 represent the average development impact fees for the respective land use categories.

To the extent Developer pays or contributes more than is required to serve the Project or mitigate actual impacts from the Project, Developer is required to advance the funding for or otherwise construct Public Improvements earlier than is required to serve the Project or to mitigate actual impacts from the Project, Developer shall be entitled to either reimbursement or fee credit, subject to the credit/reimbursement provisions within the applicable fee program, for those costs in excess of the Developer's obligation consistent with the provisions of the respective fee program. The Developer anticipates entering into a credit and reimbursement agreement with the County. Specific terms of credit and reimbursement agreements will be subject to future negotiations between the Developer, County and other applicable agencies. Please refer to the Development Agreements for additional information regarding credits or reimbursements.

Other agency fee obligations of the Project include School District and the multiple park districts. Additional information of School Facility financing is described below in Section III.

**TABLE 3**  
**Development Impact Fees**  
**(Residential)**

	Area A - Residential					
Land Use / Product Information	LDR	HDR	Mixed Use			
Development Fee Calculations	Area A - Residential Per Unit					
County Building Fees [1]						
Building Permit	\$	3,446	\$	2,114	\$	2,114
Plan Check Review	\$	1,149	\$	705	\$	705
Long Range Planning Fee	\$	322	\$	197	\$	197
Zone Check Fee	\$	149	\$	92	\$	92
Building Standards (1473)	\$	18	\$	8	\$	8
Strong Motion Fee	\$	44	\$	21	\$	21
Energy Plan Review Fee	\$	57	\$	35	\$	35
Enviro Compliance Fee	\$	40	\$	40	\$	40
IT Recovery	\$	230	\$	141	\$	141
Sub-Total - Building fees		5,455		3,353		3,353
County Impact Fees [1]						
SCTDF - Transportation District 4	\$	18,211	\$	10,380	\$	10,380
SCTDF - Transit District 4	\$	1,124	\$	641	\$	641
SCTDF - Admin District 4	\$	447	\$	255	\$	255
Cross Jurisdictional	\$	476	\$	271	\$	271
Sac Metro Fire	\$	1,647	\$	1,291	\$	1,291
Measure A Fee	\$	1,532	\$	1,072	\$	1,072
SRCSO - Expansion	\$	6,479	\$	4,859	\$	4,859
SASD User Sewer Impact - Expansion	\$	3,802	\$	634	\$	634
SASD Technology	\$	114	\$	19	\$	19
Water - SCWA	\$	20,857	\$	15,643	\$	15,643
Drainage Fees Zone 11-A	\$	3,694	\$	745	\$	746
County Library Fee	\$	1,258	\$	816	\$	816
SSHCP		TBD		TBD		TBD
Affordable Housing	\$	8,052	\$	3,660	\$	3,660
Sub-Total - Impact Fees		67,693		40,285		40,286
Plan Area Fee Program [2]						
Transportation - Local		6,985		3,982		3,982
Water		1,033		775		775
Sewer		1,020		766		1,020
Drainage		13,518		2,253		2,255
Trails		700		399		399
Open Space		820		137		137
Subtotal Plan Area Fees		24,076		8,312		8,567
Other Jurisdiction Fees: [1]						
School District - EGUSD	\$	15,488	\$	7,040	\$	7,040
Park - CRPD		7,917		5,619		5,619
Subtotal Other Fees		23,405		12,659		12,659
Total West Jackson Fees	\$	120,629	\$	64,608	\$	64,864
Total Impact Fees (Net of Building)	\$	115,174	\$	61,256	\$	61,512

[1] Based on agency fee schedules.

[2] Based on Plan Area Fee Analysis. See Appendix D for details.

	Area B - Residential									
Land Use / Product Information	VLDR		LDR		MDR	HDR	Mixed Use			
Development Fee Calculations	Area B - Residential <i>Per Unit</i>									
County Building Fees [1]										
Building Permit	\$	3,874	\$	3,446	\$	3,018	\$	2,114	\$	2,114
Plan Check Review	\$	1,291	\$	1,149	\$	1,006	\$	705	\$	705
Long Range Planning Fee	\$	362	\$	322	\$	282	\$	197	\$	197
Zone Check Fee	\$	168	\$	149	\$	131	\$	92	\$	92
Building Standards (1473)	\$	21	\$	18	\$	15	\$	8	\$	8
Strong Motion Fee	\$	51	\$	44	\$	37	\$	21	\$	21
Energy Plan Review Fee	\$	65	\$	57	\$	50	\$	35	\$	35
Enviro Compliance Fee	\$	40	\$	40	\$	40	\$	40	\$	40
IT Recovery	\$	259	\$	230	\$	201	\$	141	\$	141
Sub-Total - Building fees		6,130		5,455		4,779		3,353		3,353
County Impact Fees [1]										
SCTDF - Transportation District 4	\$	21,307	\$	18,211	\$	18,211	\$	10,380	\$	10,380
SCTDF - Transit District 4	\$	1,315	\$	1,124	\$	989	\$	641	\$	641
SCTDF - Admin District 4	\$	523	\$	447	\$	393	\$	255	\$	255
Cross Jurisdictional	\$	476	\$	476	\$	476	\$	271	\$	271
Sac Metro Fire	\$	1,647	\$	1,647	\$	1,647	\$	1,291	\$	1,291
Measure A Fee	\$	1,532	\$	1,532	\$	1,532	\$	1,072	\$	1,072
SRCS - Expansion	\$	6,479	\$	6,479	\$	6,479	\$	4,859	\$	4,859
SASD User Sewer Impact - Expansion	\$	9,552	\$	3,802	\$	1,359	\$	634	\$	634
SASD Technology	\$	287	\$	114	\$	41	\$	19	\$	19
Water - Cal Am										
Drainage Fees Zone 11-A	\$	7,830	\$	3,694	\$	1,500	\$	745	\$	746
County Library Fee	\$	1,258	\$	1,258	\$	979	\$	816	\$	816
SSHCP		TBD		TBD		TBD		TBD		TBD
Affordable Housing	\$	9,516	\$	8,052	\$	6,588	\$	3,660	\$	3,660
Sub-Total - Impact Fees		61,722		46,836		40,194		24,643		24,644
Plan Area Fee Program [2]										
Transportation - Local	\$	8,173	\$	6,985	\$	6,985	\$	3,982	\$	3,982
Water										
Sewer	\$	1,020	\$	1,020	\$	1,020	\$	766	\$	1,020
Drainage	\$	33,964	\$	13,518	\$	4,832	\$	2,253	\$	2,255
Trails	\$	819	\$	700	\$	700	\$	399	\$	399
Open Space	\$	2,060	\$	820	\$	293	\$	137	\$	137
Subtotal Plan Area Fees	\$	46,036	\$	23,043	\$	13,830	\$	7,537	\$	7,792
Other Jurisdiction Fees: [1]										
School District - EGUSD	\$	18,304	\$	15,488	\$	12,672	\$	7,040	\$	7,040
Park - CRPD	\$	7,917	\$	7,917	\$	7,150	\$	5,619	\$	5,619
Subtotal Other Fees	\$	26,221	\$	23,405	\$	19,822	\$	12,659	\$	12,659
Total West Jackson Fees										
	\$	140,109	\$	98,739	\$	78,625	\$	48,191	\$	48,447
Total Impact Fees (Net of Building)										
	\$	133,979	\$	93,284	\$	73,846	\$	44,838	\$	45,094

[1] Based on agency fee schedules.

[2] Based on Plan Area Fee Analysis. See Appendix D for details.

	Area C - Residential									
Land Use / Product Information	VLDR		LDR		MDR	HDR	Mixed Use			
Development Fee Calculations	Area C- Residential <i>Per Unit</i>									
County Building Fees [1]										
Building Permit	\$	3,874	\$	3,446	\$	3,018	\$	2,114	\$	2,114
Plan Check Review	\$	1,291	\$	1,149	\$	1,006	\$	705	\$	705
Long Range Planning Fee	\$	362	\$	322	\$	282	\$	197	\$	197
Zone Check Fee	\$	168	\$	149	\$	131	\$	92	\$	92
Building Standards (1473)	\$	21	\$	18	\$	15	\$	8	\$	8
Strong Motion Fee	\$	51	\$	44	\$	37	\$	21	\$	21
Energy Plan Review Fee	\$	65	\$	57	\$	50	\$	35	\$	35
Enviro Compliance Fee	\$	40	\$	40	\$	40	\$	40	\$	40
IT Recovery	\$	259	\$	230	\$	201	\$	141	\$	141
Sub-Total - Building fees		6,130		5,455		4,779		3,353		3,353
County Impact Fees [1]										
SCTDF - Transportation District 4	\$	21,307	\$	18,211	\$	18,211	\$	10,380	\$	10,380
SCTDF - Transit District 4	\$	1,315	\$	1,124	\$	989	\$	641	\$	641
SCTDF - Admin District 4	\$	523	\$	447	\$	393	\$	255	\$	255
Cross Jurisdictional	\$	476	\$	476	\$	476	\$	271	\$	271
Sac Metro Fire	\$	1,647	\$	1,647	\$	1,647	\$	1,291	\$	1,291
Measure A Fee	\$	1,532	\$	1,532	\$	1,532	\$	1,072	\$	1,072
SRCS - Expansion	\$	6,479	\$	6,479	\$	6,479	\$	4,859	\$	4,859
SASD User Sewer Impact - Expansion	\$	9,552	\$	3,802	\$	1,359	\$	634	\$	634
SASD Technology	\$	287	\$	114	\$	41	\$	19	\$	19
Water - SCWA	\$	20,857	\$	20,857	\$	20,857	\$	15,643	\$	15,643
Drainage Fees Zone 11-A	\$	7,830	\$	3,694	\$	1,500	\$	745	\$	746
County Library Fee	\$	1,258	\$	1,258	\$	979	\$	816	\$	816
SSHCP		TBD		TBD		TBD		TBD		TBD
Affordable Housing	\$	9,516	\$	8,052	\$	6,588	\$	3,660	\$	3,660
Sub-Total - Impact Fees		82,579		67,693		61,051		40,285		40,286
Plan Area Fee Program [2]										
Transportation - Local		8,173		6,985		6,985		3,982		3,982
Water		1,033		1,033		1,033		775		775
Sewer		1,020		1,020		1,020		766		1,020
Drainage		33,964		13,518		4,832		2,253		2,255
Trails		819		700		700		399		399
Open Space		2,060		820		293		137		137
Subtotal Plan Area Fees		47,069		24,076		14,863		8,312		8,567
Other Jurisdiction Fees: [1]										
School District - EGUSD	\$	18,304	\$	15,488	\$	12,672	\$	7,040	\$	7,040
Park - SRPD		7,917		7,917		7,150		5,619		5,619
Subtotal Other Fees		26,221		23,405		19,822		12,659		12,659
Total West Jackson Fees										
	\$	161,999	\$	120,629	\$	100,515	\$	64,608	\$	64,864
Total Impact Fees (Net of Building)										
	\$	155,869	\$	115,174	\$	95,736	\$	61,256	\$	61,512

[1] Based on agency fee schedules.

[2] Based on Plan Area Fee Analysis. See Appendix D for details.

**TABLE 4**  
**Development Impact Fees**  
**(Non-Residential)**

	Area A - Non Residential							
	MU							
Land Use / Product Information	Commercial		Commercial		Employment		Industrial	
Development Fee Calculations	Area A - Non Residential per Bldg SF							
County Building Fees [1]								
Building Permit	\$	0.75	\$	0.57	\$	0.51	\$	0.63
Plan Check Review	\$	0.15	\$	0.06	\$	0.03	\$	0.09
Long Range Planning Fee	\$	0.06	\$	0.04	\$	0.04	\$	0.05
Zone Check Fee	\$	0.02	\$	0.01	\$	0.00	\$	0.01
Building Standards (1473)	\$	0.01	\$	0.01	\$	0.01	\$	0.01
Strong Motion Fee	\$	0.02	\$	0.02	\$	0.02	\$	0.02
Energy Plan Review Fee	\$	0.01	\$	0.00	\$	0.00	\$	0.00
Enviro Compliance Fee	\$	0.04	\$	0.04	\$	0.04	\$	0.04
IT Recovery	\$	0.05	\$	0.03	\$	0.03	\$	0.04
Sub-Total - Building fees		1.10		0.79		0.68		0.90
County Impact Fees [1]								
SCTDF - Transportation District 4	\$	27.68	\$	27.68	\$	17.48	\$	10.93
SCTDF - Transit District 4	\$	1.71	\$	1.71	\$	1.08	\$	0.67
SCTDF - Admin District 4	\$	0.68	\$	0.68	\$	0.43	\$	0.27
Cross Jurisdictional	\$	0.52	\$	0.52	\$	0.46	\$	0.21
Sac Metro Fire	\$	1.36	\$	1.36	\$	1.73	\$	0.93
Measure A Fee	\$	2.30	\$	2.30	\$	1.84	\$	1.23
SRCSO - Expansion		TBD		TBD		TBD		TBD
SASD User Sewer Impact - Expansion	\$	0.70	\$	1.75	\$	1.45	\$	1.45
SASD Technology	\$	0.02	\$	0.05	\$	0.04	\$	0.04
Water - SCWA		TBD		TBD		TBD		TBD
Drainage Fees Zone 11-A	\$	0.91	\$	2.27	\$	1.89	\$	1.86
County Library Fee		NA		NA		NA		NA
SSHCP		TBD		TBD		TBD		TBD
Affordable Housing	\$	2.66	\$	2.66	\$	3.31	\$	2.07
Sub-Total - Impact Fees	\$	38.54	\$	40.98	\$	29.72	\$	19.65
Plan Area Fee Program [2]								
Transportation - Local	\$	7.61	\$	7.61	\$	6.71	\$	4.19
Water	\$	0.02	\$	0.04	\$	0.03	\$	0.03
Sewer	\$	0.20	\$	0.49	\$	0.41	\$	0.41
Drainage	\$	2.48	\$	6.21	\$	5.17	\$	5.17
Trails	\$	0.76	\$	0.76	\$	0.67	\$	0.42
Open Space	\$	0.15	\$	0.38	\$	0.31	\$	0.31
Subtotal Plan Area Fees	\$	11.22	\$	15.49	\$	13.30	\$	10.53
Other Jurisdiction Fees: [1]								
School District - EGUSD	\$	0.78	\$	0.78	\$	0.78	\$	0.78
Park - CRPD	\$	0.61	\$	0.61	\$	0.94	\$	0.41
Subtotal Other Fees	\$	1.39	\$	1.39	\$	1.72	\$	1.19
Total West Jackson Fees	\$	52.25	\$	58.64	\$	45.42	\$	32.28
Total Impact Fees (Net of Building)	\$	51.15	\$	57.85	\$	44.74	\$	31.38

[1] Based on agency fee schedules.

[2] Based on Plan Area Fee Analysis. See Appendix D for details.

	Area B - Non Residential					
	MU					
Land Use / Product Information	Commercial		Commercial	Employment		
Development Fee Calculations	Area B - Non Residential per Bldg SF					
County Building Fees [1]						
Building Permit	\$	0.75	\$	0.57	\$	0.51
Plan Check Review	\$	0.15	\$	0.06	\$	0.03
Long Range Planning Fee	\$	0.06	\$	0.04	\$	0.04
Zone Check Fee	\$	0.02	\$	0.01	\$	0.00
Building Standards (1473)	\$	0.01	\$	0.01	\$	0.01
Strong Motion Fee	\$	0.02	\$	0.02	\$	0.02
Energy Plan Review Fee	\$	0.01	\$	0.00	\$	0.00
Enviro Compliance Fee	\$	0.04	\$	0.04	\$	0.04
IT Recovery	\$	0.05	\$	0.03	\$	0.03
Sub-Total - Building fees		1.10		0.79		0.68
County Impact Fees [1]						
SCTDF - Transportation District 4	\$	27.68	\$	27.68	\$	17.48
SCTDF - Transit District 4	\$	1.71	\$	1.71	\$	1.08
SCTDF - Admin District 4	\$	0.68	\$	0.68	\$	0.43
Cross Jurisdictional	\$	0.52	\$	0.52	\$	0.46
Sac Metro Fire	\$	1.36	\$	1.36	\$	1.73
Measure A Fee	\$	2.30	\$	2.30	\$	1.84
SRCSO - Expansion		TBD		TBD		TBD
SASD User Sewer Impact - Expansion	\$	0.70	\$	1.75	\$	1.45
SASD Technology	\$	0.02	\$	0.05	\$	0.04
Water - Cal Am		TBD		TBD		TBD
Drainage Fees Zone 11-A	\$	0.91	\$	2.27	\$	1.89
County Library Fee		NA		NA		NA
SSHCP		TBD		TBD		TBD
Affordable Housing	\$	2.66	\$	2.66	\$	3.31
Sub-Total - Impact Fees	\$	38.54	\$	40.98	\$	29.72
Plan Area Fee Program [2]						
Transportation - Local	\$	7.61	\$	7.61	\$	6.71
Water						
Sewer	\$	0.20	\$	0.49	\$	0.41
Drainage	\$	2.48	\$	6.21	\$	5.17
Trails	\$	0.76	\$	0.76	\$	0.67
Open Space	\$	0.15	\$	0.38	\$	0.31
Subtotal Plan Area Fees	\$	11.21	\$	15.45	\$	13.27
Other Jurisdiction Fees: [1]						
School District - EGUSD	\$	0.78	\$	0.78	\$	0.78
Park - CRPD	\$	0.61	\$	0.61	\$	0.94
Subtotal Other Fees	\$	1.39	\$	1.39	\$	1.72
Total West Jackson Fees						
	\$	52.24	\$	58.60	\$	45.39
Total Impact Fees (Net of Building)						
	\$	51.14	\$	57.82	\$	44.71

[1] Based on agency fee schedules.

[2] Based on Plan Area Fee Analysis. See Appendix D for details.

	Area C - Non Residential							
	MU							
Land Use / Product Information	Commercial		Commercial		Employment	Industrial		
Development Fee Calculations	Area C - Non Residential per Bldg SF							
County Building Fees [1]								
Building Permit	\$	0.75	\$	0.57	\$	0.51	\$	0.63
Plan Check Review	\$	0.15	\$	0.06	\$	0.03	\$	0.09
Long Range Planning Fee	\$	0.06	\$	0.04	\$	0.04	\$	0.05
Zone Check Fee	\$	0.02	\$	0.01	\$	0.00	\$	0.01
Building Standards (1473)	\$	0.01	\$	0.01	\$	0.01	\$	0.01
Strong Motion Fee	\$	0.02	\$	0.02	\$	0.02	\$	0.02
Energy Plan Review Fee	\$	0.01	\$	0.00	\$	0.00	\$	0.00
Enviro Compliance Fee	\$	0.04	\$	0.04	\$	0.04	\$	0.04
IT Recovery	\$	0.05	\$	0.03	\$	0.03	\$	0.04
Sub-Total - Building fees		1.10		0.79		0.68		0.90
County Impact Fees [1]								
SCTDF - Transportation District 4	\$	27.68	\$	27.68	\$	17.48	\$	10.93
SCTDF - Transit District 4	\$	1.71	\$	1.71	\$	1.08	\$	0.67
SCTDF - Admin District 4	\$	0.68	\$	0.68	\$	0.43	\$	0.27
Cross Jurisdictional	\$	0.52	\$	0.52	\$	0.46	\$	0.21
Sac Metro Fire	\$	1.36	\$	1.36	\$	1.73	\$	0.93
Measure A Fee	\$	2.30	\$	2.30	\$	1.84	\$	1.23
SRCSO - Expansion		TBD		TBD		TBD		TBD
SASD User Sewer Impact - Expansion	\$	0.70	\$	1.75	\$	1.45	\$	1.45
SASD Technology	\$	0.02	\$	0.05	\$	0.04	\$	0.04
Water - SCWA		TBD		TBD		TBD		TBD
Drainage Fees Zone 11-A	\$	0.91	\$	2.27	\$	1.89	\$	1.86
County Library Fee		NA		NA		NA		NA
SSHCP		TBD		TBD		TBD		TBD
Affordable Housing	\$	2.66	\$	2.66	\$	3.31	\$	2.07
Sub-Total - Impact Fees	\$	38.54	\$	40.98	\$	29.72	\$	19.65
Plan Area Fee Program [2]								
Transportation - Local	\$	7.61	\$	7.61	\$	6.71	\$	4.19
Water	\$	0.02	\$	0.04	\$	0.03	\$	0.03
Sewer	\$	0.20	\$	0.49	\$	0.41	\$	0.41
Drainage	\$	2.48	\$	6.21	\$	5.17	\$	5.17
Trails	\$	0.76	\$	0.76	\$	0.67	\$	0.42
Open Space	\$	0.15	\$	0.38	\$	0.31	\$	0.31
Subtotal Plan Area Fees	\$	11.22	\$	15.49	\$	13.30	\$	10.53
Other Jurisdiction Fees: [1]								
School District - EGUSD	\$	0.78	\$	0.78	\$	0.78	\$	0.78
Park - SRPD	\$	0.61	\$	0.61	\$	0.94	\$	0.41
Subtotal Other Fees	\$	1.39	\$	1.39	\$	1.72	\$	1.19
Total West Jackson Fees								
	\$	52.25	\$	58.64	\$	45.42	\$	32.28
Total Impact Fees (Net of Building)								
	\$	51.15	\$	57.85	\$	44.74	\$	31.38

[1] Based on agency fee schedules.

[2] Based on Plan Area Fee Analysis. See Appendix D for details.

**B. Public Improvements**

The cost estimates associated with the Public Improvements necessary for development of the Project are shown in Table 5. Refer to **Appendix A** for additional cost and descriptions.

**TABLE 5**  
**Public Improvement Cost Summary**

Category	Total Cost Estimate			
	Buildout	Area A	Area B	Area C
<b>Backbone Infrastructure</b>				
Transportation - Regional				
Regional Roadways	\$ 559,743,518	\$ 260,275,720	\$ 116,552,193	\$ 182,915,605
Cross Jurisdictional	\$ 12,344,031	\$ 5,599,759	\$ 2,693,766	\$ 4,050,505
Transportation - Local				
Collector	\$ 74,126,250	\$ 8,265,000	\$ 40,211,250	\$ 25,650,000
Arterial	\$ 19,067,500	\$ 19,067,500	\$ -	\$ -
Frontage				
Arterial	\$ 31,285,200	\$ 13,868,400	\$ 5,286,400	\$ 12,130,400
Thoroughfare	\$ 58,981,900	\$ 23,251,900	\$ 9,993,600	\$ 25,736,400
<b>Subtotal Transportation</b>	<b>\$ 755,548,398</b>	<b>\$ 330,328,279</b>	<b>\$ 174,737,209</b>	<b>\$ 250,482,910</b>
Water - Offsite (SCWA)	\$ 27,615,666	\$ 16,805,334	\$ 10,810,332	
Water - Onsite (SCWA)	\$ 14,236,872	\$ 7,082,946	\$ 3,244,878	\$ 3,909,048
Water - Offsite (Cal Am)	\$ 1,160,874	\$ 779,922	\$ 380,952	
Water - Onsite (Cal Am)	\$ 22,150,128	\$ 3,677,856	\$ 18,472,272	\$ -
Sewer	\$ 58,555,458	\$ 22,792,770	\$ 10,194,756	\$ 25,567,932
Drainage & Levee	\$ 250,626,392	\$ 128,437,393	\$ 51,573,222	\$ 70,615,777
<b>Subtotal Backbone Infrastructure</b>	<b>\$ 1,129,893,788</b>	<b>\$ 509,904,500</b>	<b>\$ 269,413,621</b>	<b>\$ 350,575,667</b>
<b>Public Facilities</b>				
Parks - CRPD [1]	\$ 59,741,787	\$ 26,618,600	\$ 29,912,058	\$ 3,211,130
Parks - SRPD	\$ 66,679,587	\$ 6,419,590	\$ 8,036,176	\$ 52,223,821
Regional Trails	\$ 27,210,011	\$ 12,080,172	\$ 6,433,432	\$ 8,696,407
Local/Conventional Trails	\$ 12,988,560	\$ 7,221,926	\$ 3,694,205	\$ 2,072,429
Transit	\$ 31,535,747	\$ 14,673,941	\$ 6,574,645	\$ 10,287,162
Open Space	\$ 13,531,343	\$ -	\$ 13,531,343	\$ -
Fire	\$ 44,143,251	\$ 19,812,813	\$ 9,714,662	\$ 14,615,777
Libraries	\$ 18,006,372	\$ 3,958,416	\$ 5,733,636	\$ 8,314,320
Schools - Elk Grove USD	\$ 211,058,820	\$ 45,923,841	\$ 67,288,552	\$ 97,846,427
Schools - Sac City USD	\$ 2,995,736	\$ 2,995,736	\$ -	\$ -
<b>Subtotal Public Facilities</b>	<b>\$ 487,891,215</b>	<b>\$ 139,705,035</b>	<b>\$ 150,918,708</b>	<b>\$ 197,267,472</b>
<b>Total Project Improvements [2]</b>	<b>\$ 1,617,785,004</b>	<b>\$ 649,609,535</b>	<b>\$ 420,332,329</b>	<b>\$ 547,843,140</b>

[1] Amounts based on the methodology used in the Fuhrman Leamy Group park impact fee cost analysis dated May 2022 for JTSP.

[2] Based on engineer estimates from Wood Rodgers or existing fee programs.

## Description of Public Improvements

### A. Backbone Infrastructure

***A general description of engineering information for the Public Improvements described below is provided by Wood Rodgers. Detailed engineering information is provided in the attached Appendix A.***

1. **Transportation:** The Project will provide a combination of regional and local transportation improvements required to meet the traffic demands created by the Project. The regional transportation improvements include major thoroughfare and arterial roads plus cross jurisdictional roadways while local roadways will generally serve the internal circulation of the Project. Both regional and local roads will be the responsibility of the County Department of Transportation. The following is a description of the Regional and Local roadways.

#### Regional Roads:

These include road facilities that provided connectivity to multiple areas with the County. Typically, these roadway segments are defined as thoroughfare and arterial roads identified within the SCTDF program, Measure A program plus cross jurisdictional roadways. The Project is anticipated to fund improvements for the following Regional Roadways:

- Bradshaw Road
- Elder Creek Road
- Excelsior Road
- Florin Road
- Jackson Highway
- Kiefer Road
- Mayhew Road
- South Watt Avenue
- Cross Jurisdictional: (Pending)

#### Local Roads:

These are typically classified as major residential roadway improvements, intersections and traffic signals providing expanded and/or enhanced capacity within the Project boundaries. This may also include frontage improvements associated with specific regional roadway improvements. These include the following:

- Collector Road C
- Excelsior Road
- Hedge Avenue
- Rock Creek Parkway
- Regional Frontage:
  - o Bradshaw Road
  - o Elder Creek Road
  - o Excelsior Road
  - o Florin Road
  - o Jackson Highway

- Kiefer Road
- Mayhew Road
- South Watt Avenue

**Funding Sources/Strategy:**

The Project will fund regional and local roadways from a combination of revenue sources. These include, but are not limited to, the following:

- a. Sacramento County Transportation Development Fee (“SCTDF”)
- b. Sacramento County Transportation Mitigation Fee – Measure A (“SCTMF”)
- c. Cross Jurisdictional
- d. West Jackson Highway Master Plan fee program

These revenue sources are defined in greater detail above and estimated funding amounts are summarized below.

Transportation Funding Summary				
Program	Area A	Area B	Area C	Buildout
SCTDF	\$ 237,655,103	\$ 107,042,440	\$ 167,979,843	\$ 512,677,387
Measure A	\$ 22,620,617	\$ 9,509,752	\$ 14,935,762	\$ 47,066,131
Cross Jurisdictional	\$ 5,599,759	\$ 2,693,766	\$ 4,050,505	\$ 12,344,031
West Jackson HMP	\$ 83,044,810	\$ 39,548,177	\$ 60,867,864	\$ 183,460,850
<b>Total</b>	<b>\$ 348,920,289</b>	<b>\$ 158,794,136</b>	<b>\$ 247,833,974</b>	<b>\$ 755,548,398</b>

2. **Water:** Adequate water supply, treatment and transmission improvements will be provided to the Project by the Sacramento County Water Agency (“SCWA”) and California American Water (“Cal Am”). The majority of water improvements will be constructed as part of major roadway construction and include both offsite and onsite improvements. The costs are based on estimates from Wood Rodgers.

Water Improvements – Offsite (SCWA):

Water improvements include a series of transmission mains that will be part of SCWA’s Zone 40 service area. SCWA will provide fee credits to the constructing entity. These offsite water improvements are described in greater detail in Appendix A

Water Improvements – Offsite (Cal Am):

Water improvements include a series of transmission mains that will be part of Cal Am’s service area. Cal Am is anticipated to provide a reimbursement to the constructing entity. These offsite water improvements are described in greater detail in Appendix A.

Water Improvements – Onsite (SCWA):

Water improvements include a series of transmission mains that will be part of SCWA’s Zone 40 service area. SCWA will provide fee credits to the constructing entity for a portion of the onsite improvements. These onsite water improvements are described in greater detail in Appendix A.

Water Improvements – Onsite (Cal Am):

Water improvements include a series of transmission mains that will be part of Cal Am’s service area. Cal Am will provide reimbursement to the constructing entity for a portion of the onsite improvements. These onsite water improvements are described in greater detail in Appendix A.

**Funding Sources/Strategy:**

The Project will fund offsite and onsite water improvements from a combination of revenue sources. These include, but are not limited to, the following:

- a. Sacramento County Water Agency (“SCWA”) Zone 40 fee program
- b. California American Water (“Cal Am”) reimbursement program
- c. West Jackson Highway Master Plan fee program

These revenue sources are defined in greater detail above and estimated funding amounts are summarized below.

Water Funding Summary				
Program	Area A	Area B	Area C	Buildout
SCWA	\$ 68,592,266	\$ 20,481,530	\$ 140,645,423	\$ 229,719,218
Cal Am	\$ 4,457,778	\$ 18,853,224	\$ -	\$ 23,311,002
West Jackson HMP	\$ 3,359,606	\$ 1,012,333	\$ 6,938,801	\$ 11,310,740
<b>Total</b>	<b>\$ 76,409,650</b>	<b>\$ 40,347,087</b>	<b>\$ 147,584,223</b>	<b>\$ 264,340,960</b>

3. **Sewer:** The sewer system will encompass a series of backbone improvements used to collect and treat wastewater generated by land uses within the multiple Project areas and adjacent developments. The sewer system consists of backbone transmission lines, collector transmission lines, force mains and lift stations that will be owned and operated by SASD. Wood Rodgers provided the sewer improvement cost estimates.

Sewer Improvements – Backbone (Regional):

Sewer infrastructure improvements anticipated to service multiple Project areas and adjacent developments. SASD typically defines these as trunk improvements and should be eligible for fee credits for the constructing entity. The backbone sewer improvements are described in greater detail in Appendix A.

Sewer Improvements – Local:

Sewer infrastructure improvements anticipated to service specific portions of the Project. These improvements are not considered eligible for fee credits but are critical to buildout of the Project. The backbone sewer improvements are described in greater detail in Appendix A.

**Sewer Treatment**

The backbone and local sewer improvements will connect to Sacramento Regional County Regional Sanitation District interceptor improvements and ultimately to the wastewater treatment plant.

**Funding Sources/Strategy:**

The Project will fund regional and local roadways from a combination of revenue sources. These include, but are not limited to, the following:

- a. Sacramento Area Sewer District ("SASD") fee program
- b. Sacramento Regional County Regional Sanitation District ("SRCSD")
- c. West Jackson Highway Master Plan fee program

These revenue sources are defined in greater detail above and estimated funding amounts are summarized below.

Sewer Funding Summary				
Program	Area A	Area B	Area C	Buildout
SRCSD	\$ 21,531,337	\$ 30,856,238	\$ 45,244,477	\$ 97,632,051
SASD	\$ 22,655,771	\$ 15,961,482	\$ 24,113,358	\$ 62,730,611
West Jackson HMP	\$ 7,413,858	\$ 5,397,554	\$ 8,294,460	\$ 21,105,872
<b>Total</b>	<b>\$ 51,600,966</b>	<b>\$ 52,215,274</b>	<b>\$ 77,652,294</b>	<b>\$ 181,468,534</b>

- 4. Storm Drain:** The Project is located within the watersheds of Morrison Creek and Elder Creek. The drainage improvements are designed to modify peak flows such that they do not exceed pre-development flows. This will be accomplished by an extensive series of basins, pump stations and trunk lines which will be owned and operated by Sacramento County Department of Water Resources ("DWR") drainage department. Additionally, the storm drain system will require the construction of several levee segments (or criteria of high ground) associated with the creek systems and tunnel closures associated with the previous mining activities. The levee system is proposed to be owned by a yet to be determined special district. Specifically, the Project is located with Zone 11A of DWR and should provide the constructing entity with fee credits. Currently, Zone 11A does not include funding for levee improvements. As an alternative to DWR owning and operating the drainage and levee improvements, the Project could also form a special district to operate and maintain these facilities. If required, the appropriate special district will be determined in consultation with DWR.

Wood Rodgers provided the storm drainage improvements cost estimates.

**Storm Drain Improvements:**

Storm drain improvements designed and sized to accommodate Project runoff into existing waterways do not exceed pre-development flows and are designed to reduce any downstream impacts. The storm drain improvements are described in greater detail in Appendix A.

**Levee Improvements:**

Levee improvements designed to provide enhanced flood control protection along Morrison Creek and Elder Creek. These levee improvements are described in greater detail in Appendix A.

Tunnel Closures:

The conveyor facilities for the mining operations have multiple locations where tunnels are located beneath existing roads. Specific tunnels will need to be closed as not all are intended to convey flows as part of the drainage solutions. These tunnel closures are described in greater detail in Appendix A.

**Funding Sources/Strategy:**

The Project will fund backbone and local drainage improvements from a combination of revenue sources. These include, but are not limited to, the following:

- a. DWR Zone 11A fee program
- b. West Jackson Highway Master Plan fee program

These revenue sources are defined in greater detail above and estimated funding amounts are summarized below. Zone 11A fee calculations per County fee schedules and Project land use plan. See Table 3 and Table 4 for additional details.

Drainage Funding Summary				
Program	Area A	Area B	Area C	Buildout
DWR Zone 11A	\$ 26,743,895	\$ 16,172,738	\$ 24,625,236	\$ 67,541,870
West Jackson HMP	\$ 80,538,487	\$ 56,719,676	\$ 85,798,101	\$ 223,056,265
<b>Total</b>	<b>\$ 107,282,383</b>	<b>\$ 72,892,415</b>	<b>\$ 110,423,337</b>	<b>\$ 290,598,135</b>

B. Public Facilities

***Detailed engineering information for the Public Facilities described below is provided by Wood Rodgers or consistent with existing fee programs. The information is provided in the attached Appendix A.***

1. **Parks – Neighborhood & Community:**

In addition to an extensive network of Backbone Infrastructure, the Project includes a diverse group of parks that will be for public use. The Project will be serviced by the Cordova Recreation and Parks District (“CRPD”) and the Southgate Recreation and Park District (“SRPD”). Each park district has a set of service standards that will apply to the Project and guide delivery of the required park sites. The County General Plan and each park district defines park sizes and naming conventions for each park type. The following table provides a summary of this information for CRPD and SRPD.

Park Type & Size Definition	Park Types			
	Pocket	Mini	Neighborhood	Community
County General Plan	Less than 2 acres	2-5 Acres	5-10 acres	10+ Acres
CRPD	N/A	N/A	2-15 Acres	15+ Acres
SRPD	Less than 2 acres	2-5 Acres	5-10 Acres	10+ Acres

Park development will take the form of neighborhood parks and community parks. The neighborhood parks and community parks will be located within walking distance of a majority

of the homes. The park facilities are anticipated to be phased with the timing of the residential construction based on the demand for such facilities. Park facilities will be constructed along with individual subdivision development in subsequent years and provide the constructing entity with fee credits.

**CRPD Parks:**

Neighborhood & Community Parks - Park acreage is based on CRPD park requirements of 4.87 acres of improved parkland for every 1,000 residents.

**Park Facilities – Neighborhood:**

Park facilities include 32.5 acres of neighborhood parks. Neighborhood parks will serve as recreational focal points for neighborhoods and connect with open space, school sites and trail system.

**Park Facilities – Community:**

Park facilities include 62.2 acres of community parks. Community parks should generally be 15 acres or more in size with active programming with access to major roadways.

**SRPD Parks:**

Neighborhood & Community Parks - Park acreage is based on SRPD park requirements of 5.00 acres of improved parkland for every 1,000 residents.

**Park Facilities – Neighborhood:**

Park facilities include 63.9 acres of neighborhood parks. Neighborhood parks will serve as recreational focal points for neighborhoods and connect with open space, school sites and trail system.

**Park Facilities – Community:**

Park facilities include 30-plus acres of community parks. Community parks should generally be 15 acres or more in size with active programming with access to major roadways

**Funding Sources/Strategy:**

The Project will fund neighborhood and community parks from a combination of revenue sources. These include, but are not limited to, the following:

- a. CRPD impact fee program
- b. SRPD impact program

These revenue sources are defined in greater detail above and estimated funding amounts are summarized below.

Park Funding Summary				
Program	Area A	Area B	Area C	Buildout
CRPD	\$ 26,618,600	\$ 29,912,058	\$ 3,211,130	\$ 59,741,787
SRPD	\$ 6,419,590	\$ 8,036,176	\$ 52,223,821	\$ 66,679,587
<b>Total</b>	<b>\$ 33,038,189</b>	<b>\$ 37,948,233</b>	<b>\$ 55,434,951</b>	<b>\$ 126,421,374</b>

**2. Trails:**

In addition to an extensive network of neighborhood and community parks the Project includes a trail system that will be for public use. The trails will be phased with the timing of the residential construction based on the demand for such facilities. Trails will be constructed along with individual subdivision development in subsequent years. It is anticipated the Project will have a series of regional trails and localized trails which will be owned and operated by the County. Some regional trails may fall within the County's SCTDF program and be eligible for fee credits to the constructing entity.

Trails – Regional:

Trail facilities include 15.3 miles of recreational amenities and alternative travel modes.

Trails – Local (Conventional):

Trail facilities include 8.3 miles of recreation amenities and provide enhance connectivity within the Project.

**Funding Sources/Strategy:**

The Project will fund regional and local trails from a combination of revenue sources. These include, but are not limited to, the following:

- a. SCTDF impact fee program
- b. West Jackson Highway Master Plan fee program

These revenue sources are defined in greater detail above and estimated funding amounts are summarized below.

Trails Funding Summary				
Program	Area A	Area B	Area C	Buildout
SCTDF	\$ 9,682,996	\$ 5,156,789	\$ 6,970,702	\$ 21,810,487
West Jackson HMP	\$ 8,323,492	\$ 3,963,871	\$ 6,100,721	\$ 18,388,084
<b>Total</b>	<b>\$ 18,006,488</b>	<b>\$ 9,120,660</b>	<b>\$ 13,071,423</b>	<b>\$ 40,198,571</b>

**3. Transit**

The Project will receive service from Sacramento Regional Transit ("Sac RT").

**Funding Sources/Strategy:**

The Project will fund Sac RT facilities by payment of the transit portion of the SCTDF. The transit portion of the SCTDF program is estimated at \$31.5 million.

Transit Funding Summary				
Program	Area A	Area B	Area C	Buildout
SCTDF	\$ 14,673,941	\$ 6,574,645	\$ 10,287,162	\$ 31,535,747

**4. Open Space:**

The Project is anticipated to provide an expansive open space system preserving the natural beauty of the land and creek corridors. The open space network will develop and be dedicated along with the parks and trail system to provide enhanced recreational opportunities with the

Project. The open space system will be owned and operated by a variety of entities including the County and South Sacramento Conservation Agency.

Open Space – Area A: 804.5 acres which includes open space, preserve and urban farm.

Open Space – Area B: 101.9 acres which includes open space, enhanced landscaping and preserve.

Open Space – Area C: 975.5 acres which includes open space, preserve and urban farm.

**Funding Sources/Strategy:**

The Project will fund open space through the West Jackson Highway Master Plan fee program. These fee programs are defined in greater detail above and estimated funding amount is estimated at \$13.5 million.

**C. Other Public Facilities**

**1. Fire:**

The Project will receive service from the Sacramento Metropolitan Fire District (“SMFD”). The Project falls within Division 4 and 9 of SMFD and anticipates receiving service from Station 52.

**Funding Sources/Strategy:**

The Project will fund SMFD facilities by payment of the adopted impact fee. The impact fee program is defined in greater detail above and estimated funding amounts are estimated at \$44.1 million.

**2. Library:**

The Project will receive service from the Sacramento Public Library Authority (“SPLA”).

**Funding Sources/Strategy:** The Project will fund SPLA facilities by payment of the adopted impact fee. The impact fee program is defined in greater detail above and estimated funding amounts are estimated at \$18.0 million.

**3. School:**

The Project is serviced by multiple school districts. Portions of the Project are located in the Elk Grove Unified School District (“EGUSD”) and the Sacramento City Unified School (“SCUSD”). The Project is anticipated to provide multiple school sites to EGUSD.

EGUSD Schools:

Elementary Schools- 40 acres (5 sites)

Middle Schools/High School – 72.0 acres (1 joint site)

**Funding Sources/Strategy:**

The Project will fund elementary, middle and high schools from a combination of revenue sources. These include, but are not limited to, the following:

- a. EGUSD developer fee program
- b. EGUSD Community Facilities District No. 1
- c. Measure M

The fee program is estimated at \$211.1 million.

SCUSD – no new school sites identified within the Plan Area.

**Funding Sources/Strategy:**

The Project will fund elementary, middle and high schools from a combination of revenue sources. These include, but are not limited to, the following:

- a. SCUSD developer fee program
- b. Measure Q and R

The fee program is estimated at \$2.9 million.

**D. Other Facilities & Land Costs**

**1. In-tract and Private Facilities:**

In addition to the Public Improvements within the Project, there will be a network of smaller public facilities located throughout the Project. This network of smaller public facilities will include roadway, sewer, water and storm drain facilities. The size and location of these smaller public facilities will be indicated on the subdivision maps and approved when final maps and improvement plans are prepared.

**2. Land Dedication/Right-of-Way Costs:**

A public land equity/land dedication program is not currently proposed for the Project. Current engineering and related cost analysis do not anticipate Right of Way acquisition obligations of the Project. The Project will dedicate all necessary land for parks, trails, open space, easements, roadway improvements and Right of Way's as required for Project development. The Project will be entitled to applicable development impact fee credits and reimbursements only to the extent such dedications are identified in the applicable agency impact fee program.

## IV. FINANCIAL BURDEN ANALYSIS

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### Methodology

As displayed above in Table 5, Public Improvement costs are allocated among the Project's specific development areas at buildout. The allocation of Public Improvements is based on engineering standards as determined by the County, Applicants, service providers and by the Project's engineers, Wood Rodgers. Engineering source documentation is provided in the attached **Appendix A (Engineering Cost Estimates)**.

Additionally, for purposes of this planning level PFFP, the Public Improvements have been allocated among the residential and non-residential land uses based on specific equivalent dwelling unit ("EDU") factors. These EDU based allocations are a preliminary method for determining an equitable share of Public Improvements within the Project. The detailed EDU calculations are provided in **Appendix B (EDU Calculations)**. Subsequent implementation level PFFP's will include an updated equitable cost allocation that is based on the specific needs of each development area. This will be particularly important for drainage and flood control infrastructure improvements, because not all development in the Master Plan area will require levee protection.

Table 6 below references the Public Improvement category, service provider and demand factors. Many of the public facilities are funded by existing fee programs and the Project does not have a construction obligation; therefore, these public facility categories are not subject to the Finance Plan's EDU allocation methodology.

TABLE 6  
EDU Allocation Methodology

Category	Agency	Factor
<b>Backbone Infrastructure</b>		
Transportation - Regional		
Regional Roadways	County	Trip Generation Rates
Cross Jurisdictional	County	Trip Generation Rates
Transportation - Local		
Collector	County	Trip Generation Rates
Arterial	County	Trip Generation Rates
Frontage		
Arterial	County	Trip Generation Rates
Thoroughfare	County	Trip Generation Rates
Water - Offsite	SCWA	Water Consumption
Water - Onsite	SCWA	Water Consumption
Water - Offsite	Cal Am	Water Consumption
Water - Onsite	Cal Am	Water Consumption
Sewer	SASD/SRCSD	Discharge Flows
Drainage & Levee	SCWA	Net Acres
<b>Public Facilities</b>		
Neighborhood Parks	CRPD	Person per household
Community Parks	CRPD	Person per household
Neighborhood Parks	SRPD	Person per household
Community Parks	SRPD	Person per household
Regional Trails	County	Trip Generation Rates
Local Trails	County	Trip Generation Rates
Transit	County / Sac RT	Trip Generation Rates
Open Space	County	Acres

### EDU Cost Allocations

The Finance Plan utilizes EDU factors to proportionately allocate Public Improvements to the benefiting land uses within the proposed development areas of the Project. These cost allocations play a critical role in determining the feasibility for specific land uses and development areas of the Project. The following tables summarize the results of the EDU based allocation analysis for the respective development areas on a cost per unit or cost per nonresidential building square foot basis. As the development areas are serviced by multiple agencies the following tables represent a prototype land use.

TABLE 7  
Public Improvement Cost - EDU Allocations – Area A

Category	Area A										
	Residential						Non-Residential				
	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Average	Mixed Use Commercial	Commercial	Employment	Industrial	Average
<b>Backbone Infrastructure *</b>											
Transportation - Regional											
Regional Roadways		\$ 19,743		\$ 11,452	\$ 11,452	\$15,899	\$ 29.98	\$ 29.98	\$ 19.32	\$ 12.16	\$ 21.67
Cross Jurisdictional		\$ 476		\$ 271	\$ 271	\$ 381	\$ 0.52	\$ 0.52	\$ 0.46	\$ 0.21	\$ 0.45
Transportation - Local											
Collector		\$ 695		\$ 396	\$ 396	\$556.59	\$ 0.76	\$ 0.76	\$ 0.67	\$ 0.42	\$ 0.67
Arterial		\$ 1,604		\$ 914	\$ 914	\$ 1,284	\$ 1.75	\$ 1.75	\$ 1.54	\$ 0.96	\$ 1.54
Frontage											
Arterial		\$ 1,167		\$ 665	\$ 665	\$ 934	\$ 1.27	\$ 1.27	\$ 1.12	\$ 0.70	\$ 1.12
Thoroughfare		\$ 1,956		\$ 1,115	\$ 1,115	\$ 1,566	\$ 2.13	\$ 2.13	\$ 1.88	\$ 1.17	\$ 1.88
Water - Offsite		\$ 5,168		\$ 3,876	\$ 3,876	\$ 4,610	\$ 0.08	\$ 0.19	\$ 0.16		\$ 0.15
Water - Onsite		\$ 2,178		\$ 1,633	\$ 1,633	\$ 1,943	\$ 0.03	\$ 0.08	\$ 0.07		\$ 0.06
Sewer		\$ 3,143		\$ 2,362	\$ 3,143	\$ 2,897	\$ 0.42	\$ 1.50	\$ 1.25	\$ 1.25	\$ 1.29
Drainage & Levee		\$ 21,541		\$ 3,595	\$ 3,596	\$13,220	\$ 3.96	\$ 9.90	\$ 8.25	\$ 8.25	\$ 8.51
<b>Public Facilities *</b>											
Neighborhood Parks		\$ 1,493		\$ 1,129	\$ 1,129	\$ 1,344	\$ 0.58	\$ 0.58	\$ 0.90	\$ 0.38	\$ 0.74
Community Parks		\$ 2,368		\$ 1,790	\$ 1,790	\$ 2,133	\$ 0.92	\$ 0.92	\$ 1.42	\$ 0.61	\$ 1.18
Regional Trails		\$ 1,016		\$ 579	\$ 579	\$ 814	\$ 1.11	\$ 1.11	\$ 0.98	\$ 0.61	\$ 0.98
Local Trails		\$ 607		\$ 346	\$ 346	\$ 486	\$ 0.66	\$ 0.66	\$ 0.58	\$ 0.36	\$ 0.58
Transit		\$ 1,124		\$ 641	\$ 641	\$ 900	\$ 1.71	\$ 1.71	\$ 1.08	\$ 0.67	\$ 1.22
Open Space		\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fire		\$ 1,647		\$ 1,291	\$ 1,291	\$ 1,482	\$ 1.36	\$ 1.36	\$ 1.73	\$ 0.93	\$ 1.54
Libraries		\$ 1,258		\$ 816	\$ 816	\$ 1,053	\$ -	\$ -	\$ -	\$ -	\$ -
Schools		\$ 15,488		\$ 7,040	\$ 7,040	\$11,839	\$ 0.78	\$ 0.78	\$ 0.78		\$ 0.78

\* -Service providers include SCWA, CRPD and EGUSD.

TABLE 8  
Public Improvement Cost - EDU Allocations – Area B

Category	Area B										
	Residential						Non-Residential				
	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Average	Mixed Use Commercial	Commercial	Employment	Industrial	Average
<b>Backbone Infrastructure *</b>											
Transportation - Regional											
Regional Roadways	\$ 22,839	\$ 19,743	\$ 19,743	\$ 11,452	\$ 11,452	\$ 17,374	\$ 29.98	\$ 29.98	\$ 19.32	\$ 12.16	\$ 24.03
Cross Jurisdictional	\$ 476	\$ 476	\$ 476	\$ 271	\$ 271	\$ 417	\$ 0.52	\$ 0.52	\$ 0.46	\$ 0.21	\$ 0.49
Transportation - Local											
Collector	\$ 8,310	\$ 7,102	\$ 7,102	\$ 4,048	\$ 4,048	\$ 6,230	\$ 7.74	\$ 7.74	\$ 6.82		\$ 7.23
Arterial	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -
Frontage											
Arterial	\$ 1,092	\$ 934	\$ 934	\$ 532	\$ 532	\$ 819	\$ 1.02	\$ 1.02	\$ 0.90		\$ 0.95
Thoroughfare	\$ 2,065	\$ 1,765	\$ 1,765	\$ 1,006	\$ 1,006	\$ 1,548	\$ 1.92	\$ 1.92	\$ 1.69		\$ 1.80
Water - Offsite	\$ 100	\$ 100	\$ 100	\$ 75	\$ 75	\$ 91	\$ 0.00	\$ 0.00	\$ 0.00		\$ 0.00
Water - Onsite	\$ 4,843	\$ 4,843	\$ 4,843	\$ 3,632	\$ 3,632	\$ 4,427	\$ 0.07	\$ 0.18	\$ 0.15		\$ 0.13
Sewer	\$ 1,932	\$ 1,932	\$ 1,932	\$ 1,452	\$ 1,932	\$ 1,836	\$ 0.26	\$ 0.92	\$ 0.77		\$ 0.68
Drainage & Levee	\$ 31,019	\$ 12,280	\$ 4,403	\$ 2,049	\$ 2,045	\$ 9,094	\$ 2.26	\$ 5.64	\$ 4.70		\$ 4.29
<b>Public Facilities *</b>											
Neighborhood Parks	\$ 2,719	\$ 2,719	\$ 2,719	\$ 2,056	\$ 2,056	\$ 2,490	\$ 1.05	\$ 1.05	\$ 1.64		\$ 1.34
Community Parks	\$ 4,312	\$ 4,312	\$ 4,312	\$ 3,260	\$ 3,260	\$ 3,948	\$ 1.67	\$ 1.67	\$ 2.59		\$ 2.12
Regional Trails	\$ 1,329	\$ 1,136	\$ 1,136	\$ 648	\$ 648	\$ 997	\$ 1.24	\$ 1.24	\$ 1.09		\$ 1.16
Local Trails	\$ 763	\$ 652	\$ 652	\$ 372	\$ 372	\$ 572	\$ 0.71	\$ 0.71	\$ 0.63		\$ 0.66
Transit	\$ 1,315	\$ 1,124	\$ 989	\$ 641	\$ 641	\$ 979	\$ 1.71	\$ 1.71	\$ 1.08	\$ 0.67	\$ 1.36
Open Space	\$ 8,139	\$ 3,222	\$ 1,155	\$ 538	\$ 537	\$ 2,386	\$ 0.59	\$ 1.48	\$ 1.23		\$ 1.13
Fire	\$ 1,647	\$ 1,647	\$ 1,647	\$ 1,291	\$ 1,291	\$ 1,544	\$ 1.36	\$ 1.36	\$ 1.73		\$ 1.57
Libraries	\$ 1,258	\$ 1,258	\$ 979	\$ 816	\$ 816	\$ 1,117	\$ -	\$ -	\$ -		\$ -
Schools	\$ 18,304	\$ 15,488	\$ 12,672	\$ 7,040	\$ 7,040	\$ 12,936	\$ 0.78	\$ 0.78	\$ 0.78		\$ 0.78

\* -Service providers include Cal Am, CRPD and EGUSD.

**TABLE 9**  
**Public Improvement Cost - EDU Allocations – Area C**

Category	Area C										
	Residential						Non-Residential				
	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Average	Mixed Use Commercial	Commercial	Employment	Industrial	Average
<b>Backbone Infrastructure *</b>											
Transportation - Regional											
Regional Roadways	\$ 22,839	\$ 19,743	\$ 19,743	\$ 11,452	\$ 11,452	\$ 17,162	\$ 29.98	\$ 29.98	\$ 19.32	\$ 12.16	\$ 21.45
Cross Jurisdictional	\$ 476	\$ 476	\$ 476	\$ 271	\$ 271	\$ 410	\$ 0.52	\$ 0.52	\$ 0.46	\$ 0.21	\$ 0.38
Transportation - Local											
Collector	\$ 3,444	\$ 2,944	\$ 2,944	\$ 1,678	\$ 1,678	\$ 2,550	\$ 3.21	\$ 3.21	\$ 2.83	\$ 1.77	\$ 2.56
Arterial	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Frontage											
Arterial	\$ 1,629	\$ 1,392	\$ 1,392	\$ 793	\$ 793	\$ 1,206	\$ 1.52	\$ 1.52	\$ 1.34	\$ 0.84	\$ 1.21
Thoroughfare	\$ 3,456	\$ 2,954	\$ 2,954	\$ 1,684	\$ 1,684	\$ 2,559	\$ 3.22	\$ 3.22	\$ 2.84	\$ 1.77	\$ 2.57
Water - Offsite	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Water - Onsite	\$ 582	\$ 582	\$ 582	\$ 436	\$ 436	\$ 541	\$ 0.01	\$ 0.02	\$ 0.02	\$ 0.02	\$ 0.02
Sewer	\$ 3,156	\$ 3,156	\$ 3,156	\$ 2,372	\$ 3,156	\$ 3,009	\$ 0.43	\$ 1.51	\$ 1.26	\$ 1.26	\$ 1.11
Drainage & Levee	\$ 27,928	\$ 11,138	\$ 3,973	\$ 1,854	\$ 1,858	\$ 8,039	\$ 2.04	\$ 5.11	\$ 4.26	\$ 4.26	\$ 3.91
<b>Public Facilities *</b>											
Neighborhood Parks	\$ 7,290	\$ 7,290	\$ 7,290	\$ 5,012	\$ 5,012	\$ 6,676	\$ 2.66	\$ 2.66	\$ 4.05	\$ 1.90	\$ 2.44
Community Parks	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Regional Trails	\$ 1,168	\$ 998	\$ 998	\$ 569	\$ 569	\$ 865	\$ 1.09	\$ 1.09	\$ 0.96	\$ 0.60	\$ 0.87
Local Trails	\$ 278	\$ 238	\$ 238	\$ 136	\$ 136	\$ 206	\$ 0.26	\$ 0.26	\$ 0.23	\$ 0.14	\$ 0.21
Transit	\$ 1,315	\$ 1,124	\$ 989	\$ 641	\$ 641	\$ 964	\$ 1.71	\$ 1.71	\$ 1.08	\$ 0.67	\$ 1.21
Open Space	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fire	\$ 1,647	\$ 1,647	\$ 1,647	\$ 1,291	\$ 1,291	\$ 1,533	\$ 1.36	\$ 1.36	\$ 1.73	\$ 0.93	\$ 1.21
Libraries	\$ 1,258	\$ 1,258	\$ 979	\$ 816	\$ 816	\$ 1,095	\$ -	\$ -	\$ -	\$ -	\$ -
Schools	\$ 18,304	\$ 15,488	\$ 12,672	\$ 7,040	\$ 7,040	\$ 12,636	\$ 0.78	\$ 0.78	\$ 0.78	\$ 0.78	\$ 0.78

\* - Service providers include SCWA, SRPD and EGUSD.

### Viability Factor

The Finance Plan has been prepared to provide sufficient information to evaluate the public improvement and impact fee cost burden associated with developing the Project. Like most large developments, the advancement of critical infrastructure and facilities will be delivered with the understanding that reimbursements will be available to assist with project viability. The viability of a project is evaluated by understanding the burden of infrastructure to specific land uses. The following sections and tables summarize this information.

### Total Public Improvement Costs and Fees

Total Public Improvement costs and development impact fee obligations are summarized in conjunction with an analysis of the Project's Finance Plan for each development area.

Each development area is summarized as follows:

Area A: Backbone Infrastructure - \$509.9 million  
Public Facilities - \$139.7 million  
Development Fees - \$782.3 million

Area B: Backbone Infrastructure - \$269.4 million  
Public Facilities - \$150.9 million  
Development Fees - \$477.2 million

Area C: Backbone Infrastructure -	\$350.5 million
Public Facilities -	\$197.2 million
Development Fees -	\$873.6 million

Table 10 below summarizes the buildout and each development areas infrastructure, facility and fee totals in the aggregate and on an average per unit or per nonresidential building square foot basis. As noted above, the development areas are serviced by multiple agencies and the following tables represent a prototype land use.

**TABLE 10**  
**Total Public Improvement Costs and Fees By Plan Area**

Category	Area A		Area B		Area C	
	Residential	Nonresidential	Residential	Nonresidential	Residential	Nonresidential
<b>Public Improvements</b>						
Backbone Infrastructure	\$ 161,347,553	\$ 344,099,168	\$ 210,274,116	\$ 45,084,296	\$ 269,099,026	\$ 81,476,642
Public Facilities	\$ 69,684,638	\$ 60,605,071	\$ 131,915,242	\$ 10,967,290	\$ 178,461,358	\$ 15,594,985
<b>Public Improvements Total</b>	<b>\$ 231,032,191</b>	<b>\$ 404,704,239</b>	<b>\$ 342,189,358</b>	<b>\$ 56,051,586</b>	<b>\$ 447,560,383</b>	<b>\$ 97,071,626</b>
<b>Fees</b>						
County of Sacramento	\$ 220,241,981	\$ 301,580,223	\$ 231,224,543	\$ 39,764,958	\$ 473,898,930	\$ 76,226,316
WJHMP	\$ 63,167,354	\$ 124,795,778	\$ 94,070,536	\$ 15,037,568	\$ 143,737,090	\$ 29,754,468
Other Agency Fees	\$ 61,833,340	\$ 10,709,102	\$ 95,556,477	\$ 1,644,132	\$ 147,012,854	\$ 3,057,394
<b>Fee Total</b>	<b>\$ 345,242,675</b>	<b>\$ 437,085,103</b>	<b>\$ 420,851,557</b>	<b>\$ 56,446,658</b>	<b>\$ 764,648,874</b>	<b>\$ 109,038,179</b>
<b>Total Public Improvements &amp; Fees</b>	<b>\$ 576,274,866</b>	<b>\$ 841,789,342</b>	<b>\$ 763,040,914</b>	<b>\$ 112,498,244</b>	<b>\$ 1,212,209,257</b>	<b>\$ 206,109,806</b>

**TABLE 11**  
**Total Public Improvement Costs and Fees By Unit/SF**

Category	Area A		Area B		Area C	
	Residential	Nonresidential	Residential	Nonresidential	Residential	Nonresidential
<b>Public Improvements</b>						
Backbone Infrastructure	\$ 43,289	\$ 37.34	\$ 41,836	\$ 39.59	\$ 35,476	\$ 33.21
Public Facilities	\$ 20,050	\$ 7.03	\$ 26,970	\$ 10.11	\$ 23,974	\$ 6.72
<b>Public Improvements Total</b>	<b>\$ 63,340</b>	<b>\$ 44.37</b>	<b>\$ 68,806</b>	<b>\$ 49.70</b>	<b>\$ 59,451</b>	<b>\$ 39.93</b>
<b>Fees</b>						
County of Sacramento	\$ 62,868	32.54	\$ 43,802	32.54	\$ 62,868	32.54
WJHMP	\$ 18,557	13.21	\$ 18,557	13.21	\$ 18,557	13.21
Other Agency Fees	\$ 19,576	1.52	\$ 19,576	1.52	\$ 21,261	2.84
<b>Fee Total</b>	<b>\$ 101,002</b>	<b>\$ 47.27</b>	<b>\$ 81,935</b>	<b>\$ 47.27</b>	<b>\$ 102,686</b>	<b>\$ 48.58</b>
<b>Total Public Improvements &amp; Fees</b>	<b>\$ 164,341</b>	<b>\$ 91.64</b>	<b>\$ 150,741</b>	<b>\$ 96.97</b>	<b>\$ 162,137</b>	<b>\$ 88.51</b>

### Net Burden Analysis

The following burden analysis, reflected in the following tables, has been computed for each development area within the Project. The analysis below in Table 12 quantifies the average cost burden per residential unit and nonresidential building square foot. The amount of costs allocated to a

residential or nonresidential land use should be equitable relative to benefit received by the respective land use. A more comprehensive cost allocation will be developed during the implementation phase of the Finance Plan. The analysis summarized in the following tables provides a summary of the average allocated burdens along with an estimation of credits and reimbursements.

TABLE 12  
Net Burden Analysis  
(Residential)

Cost Category	Area A			
	Residential			
	LDR	HDR	Mixed Use	Average
	Detached	Attached	Attached	
<b>Public Improvements</b>				
Backbone Infrastructure	\$ 57,670	\$ 26,280	\$ 27,061	\$ 43,289
Public Facilities	\$ 25,002	\$ 13,632	\$ 13,632	\$ 20,050
<b>Total Public Improvements</b>	<b>\$ 82,671</b>	<b>\$ 39,912</b>	<b>\$ 40,693</b>	<b>\$ 63,340</b>
<b>Development Fees</b>				
County of Sacramento	\$ 73,148	\$ 43,638	\$ 43,639	\$ 62,868
WJHMP	\$ 24,076	\$ 8,312	\$ 8,567	\$ 18,557
Other Agency	\$ 23,405	\$ 12,659	\$ 12,659	\$ 19,576
<b>Total Fees</b>	<b>\$ 120,629</b>	<b>\$ 64,608</b>	<b>\$ 64,864</b>	<b>\$ 101,002</b>
<b>Total Public Improvement &amp; Fees</b>	<b>\$ 203,300</b>	<b>\$ 104,520</b>	<b>\$ 105,558</b>	<b>\$ 164,341</b>
<b>Fee Credits &amp; Reimbursement</b>				
Transportation - Regional				
Water	\$ 5,142	\$ 3,856	\$ 3,856	\$ 4,587
Sewer	\$ 1,802	\$ 1,355	\$ 1,802	\$ 1,661
Drainage	\$ 2,185	\$ 365	\$ 365	\$ 1,341
Parks	\$ -	\$ -	\$ -	\$ -
WJHMP	\$ 24,076	\$ 8,312	\$ 8,567	\$ 18,557
<b>Subtotal Fee Credits</b>	<b>\$ 33,206</b>	<b>\$ 13,888</b>	<b>\$ 14,590</b>	<b>\$ 26,146</b>
<b>Other Reimbursements</b>				
CFD Bond Proceeds	\$ 31,751	\$ 13,562	\$ 9,324	\$ 23,820
Other Reimbursements				
<b>Subtotal Other Reimbursements</b>	<b>\$ 31,751</b>	<b>\$ 13,562</b>	<b>\$ 9,324</b>	<b>\$ 23,820</b>
<b>Net Cost Burden Per Residential Unit</b>	<b>\$ 138,343</b>	<b>\$ 77,071</b>	<b>\$ 81,643</b>	<b>\$ 114,375</b>

TABLE 13  
Net Burden Analysis  
(Residential)

	Area B						
	Residential (per unit)						
Cost Category	VLDR	LDR	MDR	HDR	Mixed Use	Average	
	Detached	Detached	Detached	Attached	Attached		
Public Improvements							
Backbone Infrastructure	\$ 72,676	\$ 49,175	\$ 41,297	\$ 24,518	\$ 24,994	\$ 41,836	
Public Facilities	\$ 39,787	\$ 31,559	\$ 26,262	\$ 16,660	\$ 16,659	\$ 26,970	
Total Public Improvements	\$ 112,463	\$ 80,734	\$ 67,560	\$ 41,179	\$ 41,653	\$ 68,806	
Development Fees							
County of Sacramento	\$ 67,852	\$ 52,291	\$ 44,973	\$ 27,995	\$ 27,996	\$ 43,802	
WJHMP	\$ 46,036	\$ 23,043	\$ 13,830	\$ 7,537	\$ 7,792	\$ 18,557	
Other Agency	\$ 26,221	\$ 23,405	\$ 19,822	\$ 12,659	\$ 12,659	\$ 19,576	
Total Fees	\$ 140,109	\$ 98,739	\$ 78,625	\$ 48,191	\$ 48,447	\$ 81,935	
Total Public Improvement & Fees	\$ 252,572	\$ 179,473	\$ 146,185	\$ 89,370	\$ 90,100	\$ 150,741	
Fee Credits & Reimbursement							
Transportation - Regional							
Water	\$ 4,943	\$ 4,943	\$ 4,943	\$ 3,707	\$ 3,707	\$ 4,518	
Sewer	\$ 1,337	\$ 1,337	\$ 1,337	\$ 1,005	\$ 1,337	\$ 1,271	
Drainage	\$ 4,110	\$ 1,627	\$ 583	\$ 272	\$ 271	\$ 1,205	
Parks	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
WJHMP	\$ 46,036	\$ 23,043	\$ 13,830	\$ 7,537	\$ 7,792	\$ 18,557	
Subtotal Fee Credits	\$ 56,426	\$ 30,950	\$ 20,693	\$ 12,520	\$ 13,107	\$ 25,551	
Other Reimbursements							
CFD Bond Proceeds	\$ 44,560	\$ 32,176	\$ 26,712	\$ 13,743	\$ 9,449	\$ 25,121	
Other Reimbursements							
Subtotal Other Reimbursements	\$ 44,560	\$ 32,176	\$ 26,712	\$ 13,743	\$ 9,449	\$ 25,121	
Net Cost Burden Per Residential Unit	\$ 151,587	\$ 116,346	\$ 98,781	\$ 63,106	\$ 67,544	\$ 100,070	

TABLE 14  
Net Burden Analysis  
(Residential)

	Area C						
	Residential (per unit)						
Cost Category	VLDR	LDR	MDR	HDR	Mixed Use	Average	
	Detached	Detached	Detached	Attached	Attached		
Public Improvements							
Backbone Infrastructure	\$ 63,510	\$ 42,385	\$ 35,220	\$ 20,541	\$ 21,329	\$ 35,476	
Public Facilities	\$ 31,260	\$ 28,043	\$ 24,813	\$ 15,504	\$ 15,504	\$ 23,974	
Total Public Improvements	\$ 94,771	\$ 70,428	\$ 60,033	\$ 36,045	\$ 36,833	\$ 59,451	
Development Fees							
County of Sacramento	\$ 88,709	\$ 73,148	\$ 65,830	\$ 43,638	\$ 43,639	\$ 62,868	
WJHMP	\$ 47,069	\$ 24,076	\$ 14,863	\$ 8,312	\$ 8,567	\$ 18,557	
Other Agency	\$ 26,221	\$ 23,405	\$ 19,822	\$ 12,659	\$ 12,659	\$ 21,261	
Total Fees	\$ 161,999	\$ 120,629	\$ 100,515	\$ 64,608	\$ 64,864	\$ 102,686	
Total Public Improvement & Fees	\$ 256,770	\$ 191,057	\$ 160,548	\$ 100,653	\$ 101,698	\$ 162,137	
Fee Credits & Reimbursement							
Transportation - Regional							
Water	\$ 513	\$ 513	\$ 513	\$ 384	\$ 384	\$ 477	
Sewer	\$ 2,138	\$ 2,138	\$ 2,138	\$ 1,607	\$ 2,138	\$ 2,038	
Drainage	\$ 3,048	\$ 1,215	\$ 434	\$ 202	\$ 203	\$ 877	
Parks	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
WJHMP	\$ 47,069	\$ 24,076	\$ 14,863	\$ 8,312	\$ 8,567	\$ 18,557	
Subtotal Fee Credits	\$ 52,768	\$ 27,943	\$ 17,947	\$ 10,506	\$ 11,292	\$ 21,950	
Other Reimbursements							
CFD Bond Proceeds	\$ 44,329	\$ 31,889	\$ 26,399	\$ 14,288	\$ 9,974	\$ 26,743	
Other Reimbursements							
Subtotal Other Reimbursements	\$ 44,329	\$ 31,889	\$ 26,399	\$ 14,288	\$ 9,974	\$ 26,743	
Net Cost Burden Per Residential Unit	\$ 159,673	\$ 131,225	\$ 116,202	\$ 75,859	\$ 80,431	\$ 113,444	

TABLE 15  
Net Burden Analysis  
(Nonresidential)

	Area A					
	Nonresidential (per BSF)					
Cost Category	MU Commercial	Commercial	Employment	Industrial	Average	
Public Improvements						
Backbone Infrastructure	\$ 40.90	\$ 48.08	\$ 34.71	\$ 25.12	\$ 37.34	
Public Facilities	\$ 7.12	\$ 7.12	\$ 7.47	\$ 3.57	\$ 7.03	
Total Public Improvements	\$ 48.02	\$ 55.20	\$ 42.18	\$ 28.68	\$ 44.37	
Development Fees						
County of Sacramento	\$ 39.64	\$ 41.76	\$ 30.40	\$ 20.55	\$ 32.54	
WJHMP	\$ 11.22	\$ 15.49	\$ 13.30	\$ 10.53	\$ 13.21	
Other Agency	\$ 1.39	\$ 1.39	\$ 1.72	\$ 1.19	\$ 1.52	
Total Fees	\$ 52.25	\$ 58.64	\$ 45.42	\$ 32.28	\$ 47.27	
Total Public Improvement & Fees	\$ 100.27	\$ 113.84	\$ 87.61	\$ 60.96	\$ 91.64	
Fee Credits & Reimbursement						
Transportation - Regional						
Water	\$ 0.08	\$ 0.19	\$ 0.16	\$ -	\$ 0.15	
Sewer	\$ 0.24	\$ 0.86	\$ 0.72	\$ 0.72	\$ 0.74	
Drainage	\$ 0.40	\$ 1.00	\$ 0.84	\$ 0.84	\$ 0.86	
Parks	\$ -	\$ -	\$ -	\$ -	\$ -	
WJHMP	\$ 11.22	\$ 15.49	\$ 13.30	\$ 10.53	\$ 13.21	
Subtotal Fee Credits	\$ 11.94	\$ 17.54	\$ 15.01	\$ 12.09	\$ 14.96	
Other Reimbursements						
CFD Bond Proceeds						
Other Reimbursements						
Subtotal Other Reimbursements	\$ -	\$ -	\$ -	\$ -	\$ -	
Net Cost Burden Per Non-Residential Unit/ Bldg. Sq.	\$ 88.33	\$ 96.30	\$ 72.59	\$ 48.87	\$ 76.68	

TABLE 16  
Net Burden Analysis  
(Nonresidential)

	Area B			
	Nonresidential (per BSF)			
Cost Category	MU Commercial	Commercial	Employment	Average
<b>Public Improvements</b>				
Backbone Infrastructure	\$ 43.77	\$ 47.93	\$ 34.81	\$ 39.59
Public Facilities	\$ 9.12	\$ 10.00	\$ 10.77	\$ 10.11
<b>Total Public Improvements</b>	<b>\$ 52.89</b>	<b>\$ 57.93</b>	<b>\$ 45.58</b>	<b>\$ 49.70</b>
<b>Development Fees</b>				
County of Sacramento	\$ 39.64	\$ 41.76	\$ 30.40	\$ 32.54
WJHMP	\$ 11.21	\$ 15.45	\$ 13.27	\$ 13.21
Other Agency	\$ 1.39	\$ 1.39	\$ 1.72	\$ 1.52
<b>Total Fees</b>	<b>\$ 52.24</b>	<b>\$ 58.60</b>	<b>\$ 45.39</b>	<b>\$ 47.27</b>
<b>Total Public Improvement &amp; Fees</b>	<b>\$ 105.13</b>	<b>\$ 116.54</b>	<b>\$ 90.98</b>	<b>\$ 96.97</b>
<b>Fee Credits &amp; Reimbursement</b>				
Transportation - Regional				
Water	\$ 0.07	\$ 0.18	\$ 0.15	\$ 0.14
Sewer	\$ 0.18	\$ 0.64	\$ 0.53	\$ 0.47
Drainage	\$ 0.30	\$ 0.75	\$ 0.62	\$ 0.57
Parks	\$ -	\$ -	\$ -	\$ -
WJHMP	\$ 11.21	\$ 15.45	\$ 13.27	\$ 13.21
<b>Subtotal Fee Credits</b>	<b>\$ 11.76</b>	<b>\$ 17.02</b>	<b>\$ 14.58</b>	<b>\$ 14.38</b>
<b>Other Reimbursements</b>				
CFD Bond Proceeds				
Other Reimbursements				
<b>Subtotal Other Reimbursements</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Net Cost Burden Per Non-Residential Bldg. Sq. Ft.</b>	<b>\$ 93.37</b>	<b>\$ 99.52</b>	<b>\$ 76.40</b>	<b>\$ 82.59</b>

TABLE 17  
Net Burden Analysis  
(Nonresidential)

	Area C					
	Nonresidential (per BSF)					
Cost Category	MU Commercial	Commercial	Employment	Industrial	Average	
<b>Public Improvements</b>						
Backbone Infrastructure	\$ 40.92	\$ 45.08	\$ 32.31	\$ 22.27	\$ 33.21	
Public Facilities	\$ 7.86	\$ 7.86	\$ 8.83	\$ 5.02	\$ 6.72	
<b>Total Public Improvements</b>	<b>\$ 48.78</b>	<b>\$ 52.94</b>	<b>\$ 41.14</b>	<b>\$ 27.29</b>	<b>\$ 39.93</b>	
<b>Development Fees</b>						
County of Sacramento	\$ 39.64	\$ 41.76	\$ 30.40	\$ 20.55	\$ 32.54	
WJHMP	\$ 11.22	\$ 15.49	\$ 13.30	\$ 10.53	\$ 13.21	
Other Agency	\$ 1.39	\$ 1.39	\$ 1.72	\$ 1.19	\$ 2.84	
<b>Total Fees</b>	<b>\$ 52.25</b>	<b>\$ 58.64</b>	<b>\$ 45.42</b>	<b>\$ 32.28</b>	<b>\$ 48.58</b>	
<b>Total Public Improvement &amp; Fees</b>	<b>\$ 101.04</b>	<b>\$ 111.58</b>	<b>\$ 86.56</b>	<b>\$ 59.56</b>	<b>\$ 88.51</b>	
<b>Fee Credits &amp; Reimbursement</b>						
Transportation - Regional						
Water	\$ 0.01	\$ 0.02	\$ 0.02	\$ 0.02	\$ 0.02	
Sewer	\$ 0.29	\$ 1.02	\$ 0.85	\$ 0.85	\$ 0.75	
Drainage	\$ 0.22	\$ 0.56	\$ 0.46	\$ 0.46	\$ 0.43	
Parks	\$ -	\$ -	\$ -	\$ -	\$ -	
WJHMP	\$ 11.22	\$ 15.49	\$ 13.30	\$ 10.53	\$ 13.21	
<b>Subtotal Fee Credits</b>	<b>\$ 11.74</b>	<b>\$ 17.08</b>	<b>\$ 14.63</b>	<b>\$ 11.87</b>	<b>\$ 14.40</b>	
<b>Other Reimbursements</b>						
CFD Bond Proceeds						
Other Reimbursements						
<b>Subtotal Other Reimbursements</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>		<b>\$ -</b>	
<b>Net Cost Burden Per Non-Residential Bldg. Sq. Ft.</b>	<b>\$ 89.30</b>	<b>\$ 94.50</b>	<b>\$ 71.93</b>	<b>\$ 47.69</b>	<b>\$ 74.11</b>	

### Viability Conclusion

The following tables examine each development area's total one-time costs as a percentage of residential valuation. A comparison of costs to residential valuation is an accepted method of determining Project viability. This analysis takes into account all the allocated burdens along with the implementation of the financing mechanisms proposed by the Finance Plan. The costs have been allocated by using demand factors that equitably spread the burden to all land uses within each development area of the Project. *See Tables 18-23, Viability Conclusion.*

Project viability is determined based on a variety of metrics that includes the relationship between allocated cost burdens and land use pricing. Additional feasibility tests include measuring the amount of ad valorem property taxes and other special taxes/assessments against the sales price of a residential unit. The general assumption for this ratio is 2.0% of the sales price but the Sacramento region has typically been around 1.6% to 1.8%. The Project has an estimated tax rate of approximately 1.8% and is summarized in the table below. A more detailed analysis is shown in **Appendix C (CFD Analysis)**.

The Finance Plan is meant to assist the Developer and County in understanding the complex burdens associated with the Project. The information contained within the Finance Plan should be used by the Developer, County or potential merchant builders to maintain proper cost allocations and achieve Project viability.

TABLE 18  
Viability Conclusion  
(Residential)

Cost Category	Area A		
	Residential		
	LDR	HDR	Mixed Use
<b>Units</b>	Detached 2016	Attached 1185	Attached 558
<b>Estimated Home Size</b>	2200	1000	1000
<b>Estimated Sales Price Per Unit (2023\$)[1]</b>	\$ 655,000	\$ 360,000	\$ 315,000
Public Improvements			
Backbone Infrastructure	\$ 57,670	\$ 26,280	\$ 27,061
Public Facilities	\$ 25,002	\$ 13,632	\$ 13,632
<b>Total Public Improvements</b>	<b>\$ 82,671</b>	<b>\$ 39,912</b>	<b>\$ 40,693</b>
<b>Building Permit &amp; Impact Fees</b>			
Permit Fees	\$ 5,455	\$ 3,353	\$ 3,353
Impact Fees			
County	\$ 67,693	\$ 40,285	\$ 40,286
WJHMP	\$ 24,076	\$ 8,312	\$ 8,567
Other Agency	\$ 23,405	\$ 12,659	\$ 12,659
<b>Total Fees</b>	<b>\$ 120,629</b>	<b>\$ 64,608</b>	<b>\$ 64,864</b>
<b>Total Public Improvements &amp; Fees</b>	<b>\$ 203,300</b>	<b>\$ 104,520</b>	<b>\$ 105,558</b>
Credits & Reimbursement			
Fee Credits	\$ 33,206	\$ 13,888	\$ 14,590
CFD Reimbursements	\$ 31,751	\$ 13,562	\$ 9,324
Other Reimbursements	\$ -	\$ -	\$ -
<b>Total Credits &amp; reimbursements</b>	<b>\$ 64,957</b>	<b>\$ 27,449</b>	<b>\$ 23,914</b>
<b>Net Cost Burden Per Residential Unit</b>	<b>\$ 138,343</b>	<b>\$ 77,071</b>	<b>\$ 81,643</b>
<b>Percent of Estimated Sales Price</b>	<b>21%</b>	<b>21%</b>	<b>26%</b>

TABLE 19  
Viability Conclusion  
(Residential)

		Area B				
		Residential (per unit)				
Cost Category		VLDR	LDR	MDR	HDR	Mixed Use
		Detached	Detached	Detached	Attached	Attached
<b>Units</b>		40	3365	246	1023	459
<b>Estimated Home Size</b>		2600	2200	1800	1000	1000
<b>Estimated Sales Price Per Unit (2023\$)[1]</b>		\$ 850,000	\$ 655,000	\$ 575,000	\$ 360,000	\$ 315,000
Public Improvements						
	Backbone Infrastructure	\$ 72,676	\$ 49,175	\$ 41,297	\$ 24,518	\$ 24,994
	Public Facilities	\$ 39,787	\$ 31,559	\$ 26,262	\$ 16,660	\$ 16,659
<b>Total Public Improvements</b>		<b>\$ 112,463</b>	<b>\$ 80,734</b>	<b>\$ 67,560</b>	<b>\$ 41,179</b>	<b>\$ 41,653</b>
<b>Building Permit &amp; Impact Fees</b>						
Permit Fees		\$ 6,130	\$ 5,455	\$ 4,779	\$ 3,353	\$ 3,353
Impact Fees	County	\$ 61,722	\$ 46,836	\$ 40,194	\$ 24,643	\$ 24,644
	WJHMP	\$ 46,036	\$ 23,043	\$ 13,830	\$ 7,537	\$ 7,792
	Other Agency	\$ 26,221	\$ 23,405	\$ 19,822	\$ 12,659	\$ 12,659
<b>Total Fees</b>		<b>\$ 140,109</b>	<b>\$ 98,739</b>	<b>\$ 78,625</b>	<b>\$ 48,191</b>	<b>\$ 48,447</b>
<b>Total Public Improvements &amp; Fees</b>		<b>\$ 252,572</b>	<b>\$ 179,473</b>	<b>\$ 146,185</b>	<b>\$ 89,370</b>	<b>\$ 90,100</b>
Credits & Reimbursement						
	Fee Credits	\$ 56,426	\$ 30,950	\$ 20,693	\$ 12,520	\$ 13,107
	CFD Reimbursements	\$ 44,560	\$ 32,176	\$ 26,712	\$ 13,743	\$ 9,449
	Other Reimbursements	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Credits &amp; reimbursements</b>		<b>\$ 100,986</b>	<b>\$ 63,126</b>	<b>\$ 47,404</b>	<b>\$ 26,264</b>	<b>\$ 22,556</b>
<b>Net Cost Burden Per Residential Unit</b>		<b>\$ 151,587</b>	<b>\$ 116,346</b>	<b>\$ 98,781</b>	<b>\$ 63,106</b>	<b>\$ 67,544</b>
<b>Percent of Estimated Sales Price</b>		<b>18%</b>	<b>18%</b>	<b>17%</b>	<b>18%</b>	<b>21%</b>

TABLE 20  
Viability Conclusion  
(Residential)

Cost Category	Area C				
	Residential (per unit)				
	VLDR	LDR	MDR	HDR	Mixed Use
	Detached	Detached	Detached	Attached	Attached
<b>Units</b>	190	4393	574	1428	1007
<b>Estimated Home Size</b>	2600	2200	1800	1000	1000
<b>Estimated Sales Price Per Unit (2023\$)[1]</b>	\$ 850,000	\$ 655,000	\$ 575,000	\$ 360,000	\$ 315,000
<b>Public Improvements</b>					
Backbone Infrastructure	\$ 63,510	\$ 42,385	\$ 35,220	\$ 20,541	\$ 21,329
Public Facilities	\$ 31,260	\$ 28,043	\$ 24,813	\$ 15,504	\$ 15,504
<b>Total Public Improvements</b>	<b>\$ 94,771</b>	<b>\$ 70,428</b>	<b>\$ 60,033</b>	<b>\$ 36,045</b>	<b>\$ 36,833</b>
<b>Building Permit &amp; Impact Fees</b>					
Permit Fees	\$ 6,130	\$ 5,455	\$ 4,779	\$ 3,353	\$ 3,353
Impact Fees					
County	\$ 82,579	\$ 67,693	\$ 61,051	\$ 40,285	\$ 40,286
WJHMP	\$ 47,069	\$ 24,076	\$ 14,863	\$ 8,312	\$ 8,567
Other Agency	\$ 26,221	\$ 23,405	\$ 19,822	\$ 12,659	\$ 12,659
<b>Total Fees</b>	<b>\$ 161,999</b>	<b>\$ 120,629</b>	<b>\$ 100,515</b>	<b>\$ 64,608</b>	<b>\$ 64,864</b>
<b>Total Public Improvements &amp; Fees</b>	<b>\$ 256,770</b>	<b>\$ 191,057</b>	<b>\$ 160,548</b>	<b>\$ 100,653</b>	<b>\$ 101,698</b>
<b>Credits &amp; Reimbursement</b>					
Fee Credits	\$ 52,768	\$ 27,943	\$ 17,947	\$ 10,506	\$ 11,292
CFD Reimbursements	\$ 44,329	\$ 31,889	\$ 26,399	\$ 14,288	\$ 9,974
Other Reimbursements					
<b>Total Credits &amp; reimbursements</b>	<b>\$ 97,097</b>	<b>\$ 59,832</b>	<b>\$ 44,347</b>	<b>\$ 24,794</b>	<b>\$ 21,266</b>
<b>Net Cost Burden Per Residential Unit</b>	<b>\$ 159,673</b>	<b>\$ 131,225</b>	<b>\$ 116,202</b>	<b>\$ 75,859</b>	<b>\$ 80,431</b>
<b>Percent of Estimated Sales Price</b>	<b>19%</b>	<b>20%</b>	<b>20%</b>	<b>21%</b>	<b>26%</b>

TABLE 21  
Viability Conclusion  
(Nonresidential)

Cost Category	Area A			
	Nonresidential (per BSF)			
	MU Commercial	Commercial	Employment	Industrial
<b>Building SF (BSF)</b>	337,897	2,364,722	5,567,482	980,781
<b>Price / BSF</b>	\$ 400.00	\$ 400.00	\$ 350.00	\$ 110.00
<b>Estimated Sales Price Per BSF (2023\$)[1]</b>	\$ 135,158,800	\$ 945,888,800	\$ 1,948,618,700	\$ 107,885,910
<b>Public Improvements</b>				
Backbone Infrastructure	\$ 40.90	\$ 48.08	\$ 34.71	\$ 25.12
Public Facilities	\$ 7.12	\$ 7.12	\$ 7.47	\$ 3.57
<b>Total Public Improvements</b>	<b>\$ 48.02</b>	<b>\$ 55.20</b>	<b>\$ 42.18</b>	<b>\$ 28.68</b>
<b>Building Permit &amp; Impact Fees</b>				
Permit Fees	\$ 1.10	\$ 0.79	\$ 0.68	\$ 0.90
Impact Fees				
County	\$ 38.54	\$ 40.98	\$ 29.72	\$ 19.65
WJHMP	\$ 11.22	\$ 15.49	\$ 13.30	\$ 10.53
Other Agency	\$ 1.39	\$ 1.39	\$ 1.72	\$ 1.19
<b>Total Fees</b>	<b>\$ 52.25</b>	<b>\$ 58.64</b>	<b>\$ 45.42</b>	<b>\$ 32.28</b>
<b>Total Public Improvements &amp; Fees</b>	<b>\$ 100.27</b>	<b>\$ 113.84</b>	<b>\$ 87.61</b>	<b>\$ 60.96</b>
<b>Credits &amp; Reimbursement</b>				
Fee Credits	\$ 11.94	\$ 17.54	\$ 15.01	\$ 12.09
CFD Reimbursements	\$ -	\$ -	\$ -	\$ -
Other Reimbursements	\$ -	\$ -	\$ -	\$ -
<b>Total Credits &amp; reimbursements</b>	<b>\$ 11.94</b>	<b>\$ 17.54</b>	<b>\$ 15.01</b>	<b>\$ 12.09</b>
<b>Net Cost Burden Per Non-Residential Bldg. Sq. Ft.</b>	<b>\$ 88.33</b>	<b>\$ 96.30</b>	<b>\$ 72.59</b>	<b>\$ 48.87</b>
<b>Percent of Estimated Sales Price</b>	<b>22%</b>	<b>24%</b>	<b>21%</b>	<b>44%</b>

TABLE 22  
Viability Conclusion  
(Nonresidential)

		Area B		
		Nonresidential (per BSF)		
Cost Category		MU Commercial	Commercial	Employment
<b>Building SF (BSF)</b>		277,241	225,680	636,412
<b>Price / BSF</b>		\$ 400.00	\$ 400.00	\$ 350.00
<b>Estimated Sales Price Per BSF (2023\$)[1]</b>		\$ 110,896,400	\$ 90,272,000	\$ 222,744,200
Public Improvements				
	Backbone Infrastructure	\$ 43.77	\$ 47.93	\$ 34.81
	Public Facilities	\$ 9.12	\$ 10.00	\$ 10.77
<b>Total Public Improvements</b>		<b>\$ 52.89</b>	<b>\$ 57.93</b>	<b>\$ 45.58</b>
<b>Building Permit &amp; Impact Fees</b>				
Permit Fees		\$ 1.10	\$ 0.79	\$ 0.68
Impact Fees	County	\$ 38.54	\$ 40.98	\$ 29.72
	WJHMP	\$ 11.21	\$ 15.45	\$ 13.27
	Other Agency	\$ 1.39	\$ 1.39	\$ 1.72
<b>Total Fees</b>		<b>\$ 52.24</b>	<b>\$ 58.60</b>	<b>\$ 45.39</b>
<b>Total Public Improvements &amp; Fees</b>		<b>\$ 105.13</b>	<b>\$ 116.54</b>	<b>\$ 90.98</b>
Credits & Reimbursement				
	Fee Credits	\$ 11.21	\$ 15.45	\$ 13.27
	CFD Reimbursements	\$ -	\$ -	\$ -
	Other Reimbursements	\$ -	\$ -	\$ -
<b>Total Credits &amp; reimbursements</b>		<b>\$ 11.21</b>	<b>\$ 15.45</b>	<b>\$ 13.27</b>
<b>Net Cost Burden Per Non-Residential Bldg. Sq. Ft.</b>		<b>\$ 93.92</b>	<b>\$ 101.09</b>	<b>\$ 77.71</b>
<b>Percent of Estimated Sales Price</b>		<b>23%</b>	<b>25%</b>	<b>22%</b>

TABLE 23  
Viability Conclusion  
(Nonresidential)

Cost Category	Area C			
	Nonresidential (per BSF)			
	MU Commercial	Commercial	Employment	Industrial
<b>Building SF (BSF)</b>	610,565	575,665	231,010	1,036,292
<b>Price / BSF</b>	\$ 400.00	\$ 400.00	\$ 350.00	\$ 110.00
<b>Estimated Sales Price Per BSF (2023\$)[1]</b>	\$ 244,226,000	\$ 230,266,000	\$ 80,853,500	\$ 113,992,120
Public Improvements				
Backbone Infrastructure	\$ 40.92	\$ 45.08	\$ 32.31	\$ 22.27
Public Facilities	\$ 7.86	\$ 7.86	\$ 8.83	\$ 5.02
<b>Total Public Improvements</b>	<b>\$ 48.78</b>	<b>\$ 52.94</b>	<b>\$ 41.14</b>	<b>\$ 27.29</b>
<b>Building Permit &amp; Impact Fees</b>				
Permit Fees	\$ 1.10	\$ 0.79	\$ 0.68	\$ 0.90
Impact Fees				
County	\$ 38.54	\$ 40.98	\$ 29.72	\$ 19.65
WJHMP	\$ 11.22	\$ 15.49	\$ 13.30	\$ 10.53
Other Agency	\$ 1.39	\$ 1.39	\$ 1.72	\$ 1.19
<b>Total Fees</b>	<b>\$ 52.25</b>	<b>\$ 58.64</b>	<b>\$ 45.42</b>	<b>\$ 32.28</b>
<b>Total Public Improvements &amp; Fees</b>	<b>\$ 101.04</b>	<b>\$ 111.58</b>	<b>\$ 86.56</b>	<b>\$ 59.56</b>
Credits & Reimbursement				
Fee Credits	\$ 11.74	\$ 17.08	\$ 14.63	\$ 11.87
CFD Reimbursements	\$ -	\$ -	\$ -	\$ -
Other Reimbursements	\$ -	\$ -	\$ -	\$ -
<b>Total Credits &amp; reimbursements</b>	<b>\$ 11.74</b>	<b>\$ 17.08</b>	<b>\$ 14.63</b>	<b>\$ 11.87</b>
<b>Net Cost Burden Per Non-Residential Bldg. Sq. Ft.</b>	<b>\$ 89.30</b>	<b>\$ 94.50</b>	<b>\$ 71.93</b>	<b>\$ 47.69</b>
<b>Percent of Estimated Sales Price</b>	<b>22%</b>	<b>24%</b>	<b>21%</b>	<b>43%</b>

[1] Residential pricing per The Gregory Group and non-residential pricing per FIA.

## V. ESSENTIAL UPFRONT INFRASTRUCTURE

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Buildout of the Project and each finance plan area will require the delivery of critical public improvements and facilities which are essential to mitigating impacts created by the proposed land uses within the Master Plan. This set of essential upfront infrastructure includes transportation, water, sewer, drainage and levee/flood control improvements either needed in advance of onsite development activities or to provide service for multiple finance plane areas within the Project. In some cases, this set of essential upfront infrastructure provides capacity or benefit to neighboring master plan and specific plan projects. The PFFP has identified the following public improvements and facilities for each finance area. As development occurs within the Project and market demand creates the need for public improvements and facilities, updates to the list of essential upfront infrastructure may change. Not all development areas will require the same level of upfront infrastructure improvements (such as flood control).

### Finance Area A

1. Transportation:
  - a. Excelsior Road
  - b. Jackson Highway
  - c. Rock Creek Parkway East
2. Water:
  - a. 24" Excelsior Road Transmission Main
  - b. 24" Bradshaw Road Transmission Main
3. Sewer:
  - a. 27" – 30" Jackson Highway Trunk Sewer
  - b. Aspen VI Basin
    - i. 15" Trunk Sewer
    - ii. 1.91 MGD Lift Station
    - iii. 10" Force Main
4. Drainage:
  - a. 195 CFS Detention Basin (WJP1 Basin) plus associated pipes and appurtenant facilities
5. Levee/Flood Control(i)
  - a. Morrison Creek South 1 Levee (Segment 4)
  - b. Granite I Weir
  - c. Morrison Creek South 2 Levee (Segment 1)
  - d. Morrison Creek South 2 Levee (Segment 2)
  - e. Aspen VI Setback Levee

### Finance Area B

1. Transportation:
  - a. Hedge Avenue
  - b. Jackson Highway

- c. Rock Creek Parkway
- 2. Water:
  - a. 30" – 42" Elder Creek Road Transmission Main (Offsite)
  - b. 24" Jackson Highway Transmission Main
    - i. Water Tank and Booster Pump
  - c. 24" S. Watt Transmission Main
- 3. Sewer:
  - a. Aspen 2 Basin
    - i. 12" - 15" Trunk Sewer
    - ii. 1.06 MGD Lift Station
    - iii. 10" Force Main
- 4. Drainage:
  - a. 45 CFS Detention Basin (WJP3 Basin) plus associated pipes and appurtenant facilities
  - b. 14 CFS Detention Basin (WJP4 Basin) plus associated pipes and appurtenant facilities
- 5. Levee/Flood Control(i)
  - a. Morrison Creek North 1 Levee (Segment 1-2)

#### **Finance Area C**

- 1. Transportation:
  - a. Elder Creek Road
  - b. Vineyard Road
- 2. Sewer:
  - a. Elder Creek Road
    - i. 12" - 24" Trunk Sewer
    - ii. 1.35 MGD Lift Station
- 3. Drainage:
  - a. 45 CFS Detention Basin (WJP3 Basin) plus associated pipes and appurtenant facilities
  - b. 14 CFS Detention Basin (WJP4 Basin) plus associated pipes and appurtenant facilities
- 4. Levee/Flood Control (i)
  - a. Morrison Creek South 1 Levee (Segment 1-3)
- (i) As an alternative, a graded and elevated embankment providing higher ground may be constructed.

The list of essential upfront infrastructure required for Project development has a significant impact on feasibility of the Master Plan. The cost of the essential upfront infrastructure is estimated at \$333.0 million. The considerable level of infrastructure investment required during early phases of development has negative impacts on Project cash flows and requires the development of a plan of action that will need to be implemented between the Applicants and County. This plan of action is described in greater detail in Section VIII of the Finance Plan.

## VI. PHASING

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### A. Cash Flow Constraints

The development of the Project requires essential upfront infrastructure to be constructed prior to or during the initial phases. The cost associated with the essential upfront infrastructure exceeds the fair share funding obligation and financial resources of the respective phases of development. This level of infrastructure investment creates a cash flow constraint for these initial development phases and severely impacts feasibility. To mitigate the cash flow constraints the Applicant has identified several funding mechanisms which need to be implemented for the initial phases of the Project to achieve feasibility. These funding mechanisms are described in Section VII and further detailed in Section VIII below.

### B. Cash Flow Methodology

In order to analyze the feasibility of delivering the initial phases of the Project, the Applicant prepared a cash flow model. Cash flow modeling is a critical tool used by the Applicant to make educated financial decisions about the level of infrastructure investment associated with any phase of development within the Project. This is especially true for the initial phases of development in which the essential upfront infrastructure is anticipated to be constructed. The cash flow model forecasted revenue outflows and inflows for these early phases of the Project and specifically analyzed the following:

- Flood control infrastructure necessary for residential structures to be built
- Extension of off-site water and sewer facilities to serve the project
- On-site grading and infrastructure necessary for residential structures to be built
- Impact fees owed and fee credits for infrastructure built
- Lot values after construction of the above-referenced infrastructure

The results of the modeling indicate cash flow constraints for the Applicant associated with delivering the initial phases of the Project because the initial infrastructure costs, which are more expensive largely because of flood control infrastructure, are high relative to the values of the lots that are created. As a result, it is anticipated that there will be a significant financing barrier to initiating the Project without using critical funding mechanisms identified by the Applicant. Those funding mechanisms would assist with capital injection early in the Project's development and help solve the anticipated cash flow constraints associated with delivering the essential upfront infrastructure. These funding mechanisms are described in Section VII and further detailed in Section VIII below.

### C. Phase Description

A master developer typically assumes responsibility for planning land uses and improvements then makes development sites available to other builders for the actual construction of homes in accordance with the master plan's specifications. As a result of the variety of anticipated builders, the long term build out of a master plan community, and continually changing conditions in the residential and non-residential market, flexibility must be designed into a master planned community while still guaranteeing quality development.

The Project is anticipated to be implemented in three distinct finance plan areas which will contain several phases of development. Project development is anticipated to occur over multiple years, depending on market conditions. During this period, the Master Plan will be developed in logical increments in a manner consistent with efficient engineering requirements, market conditions and prudent financial and cash flow management. The Finance Plan identifies the estimated costs and financing mechanisms required to ensure the Public Improvements and more importantly the essential upfront infrastructure is provided as needed. The Applicants have identified three specific finance plan areas with the Master Plan. Each finance area will be developed in logical phases based on market demands and in consideration of cash flow constraints. Those three finance areas are illustrated in the diagrams below.

Figure 2  
Finance Area A

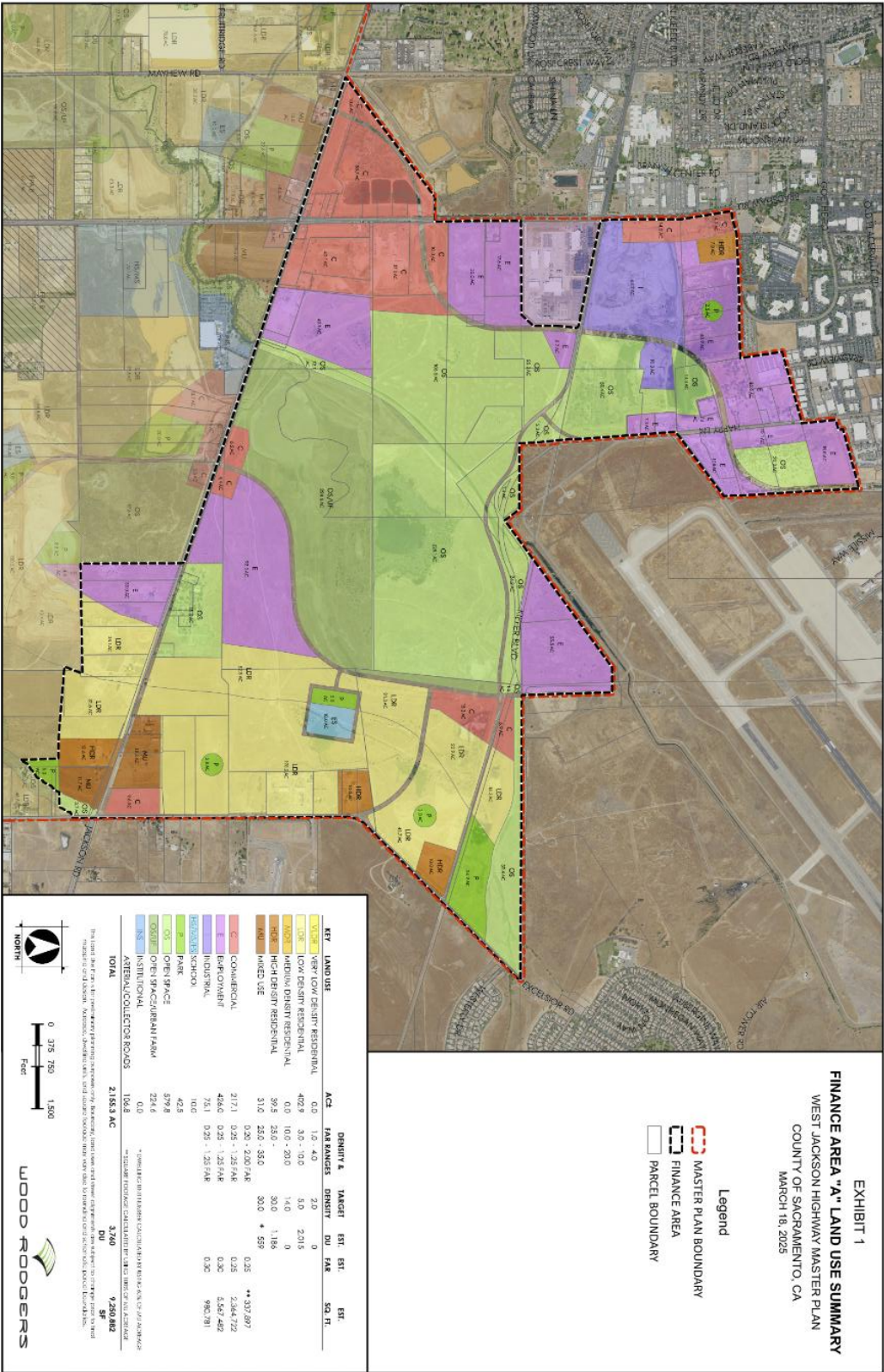


Figure 3  
Finance Area B

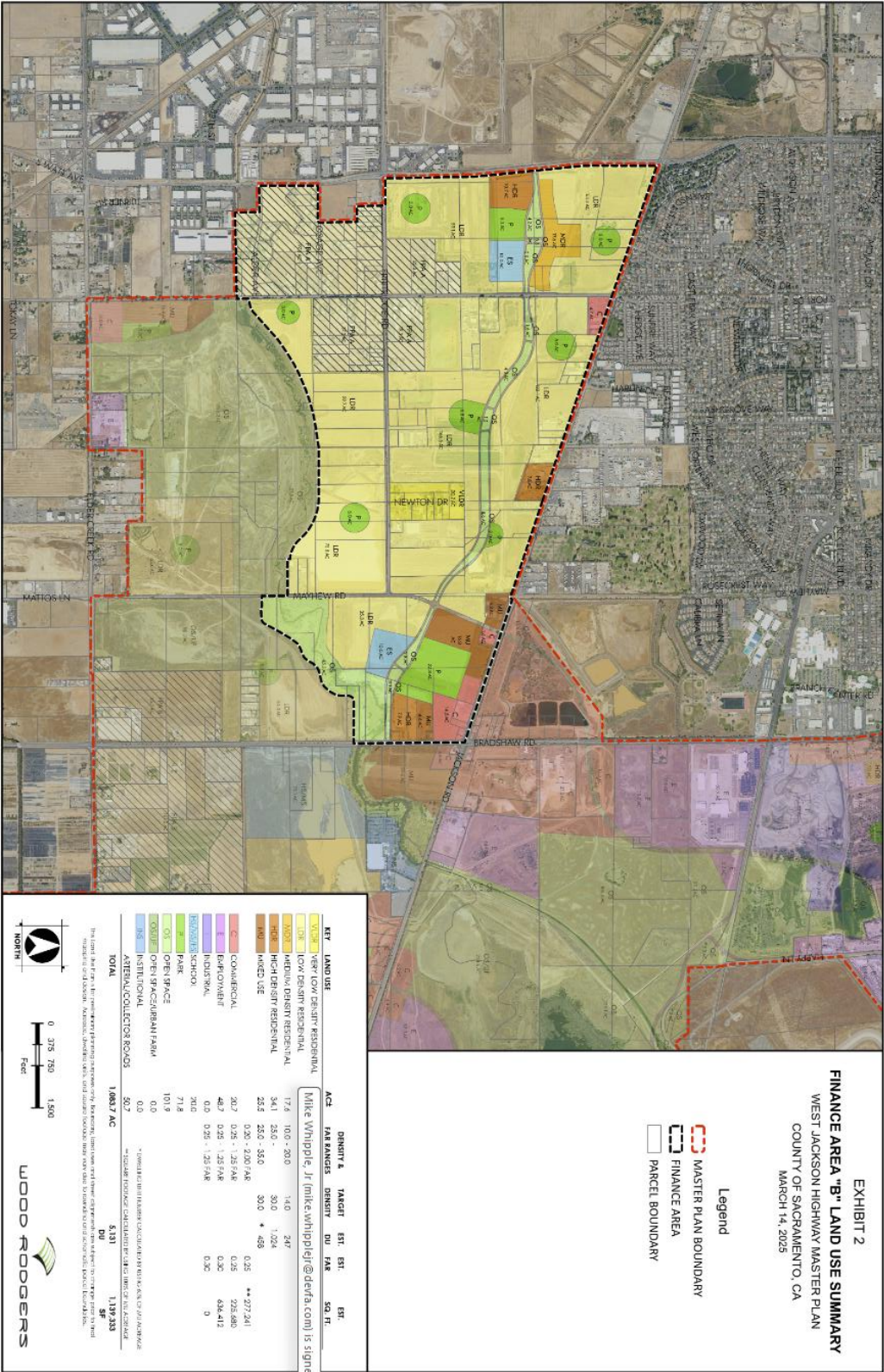
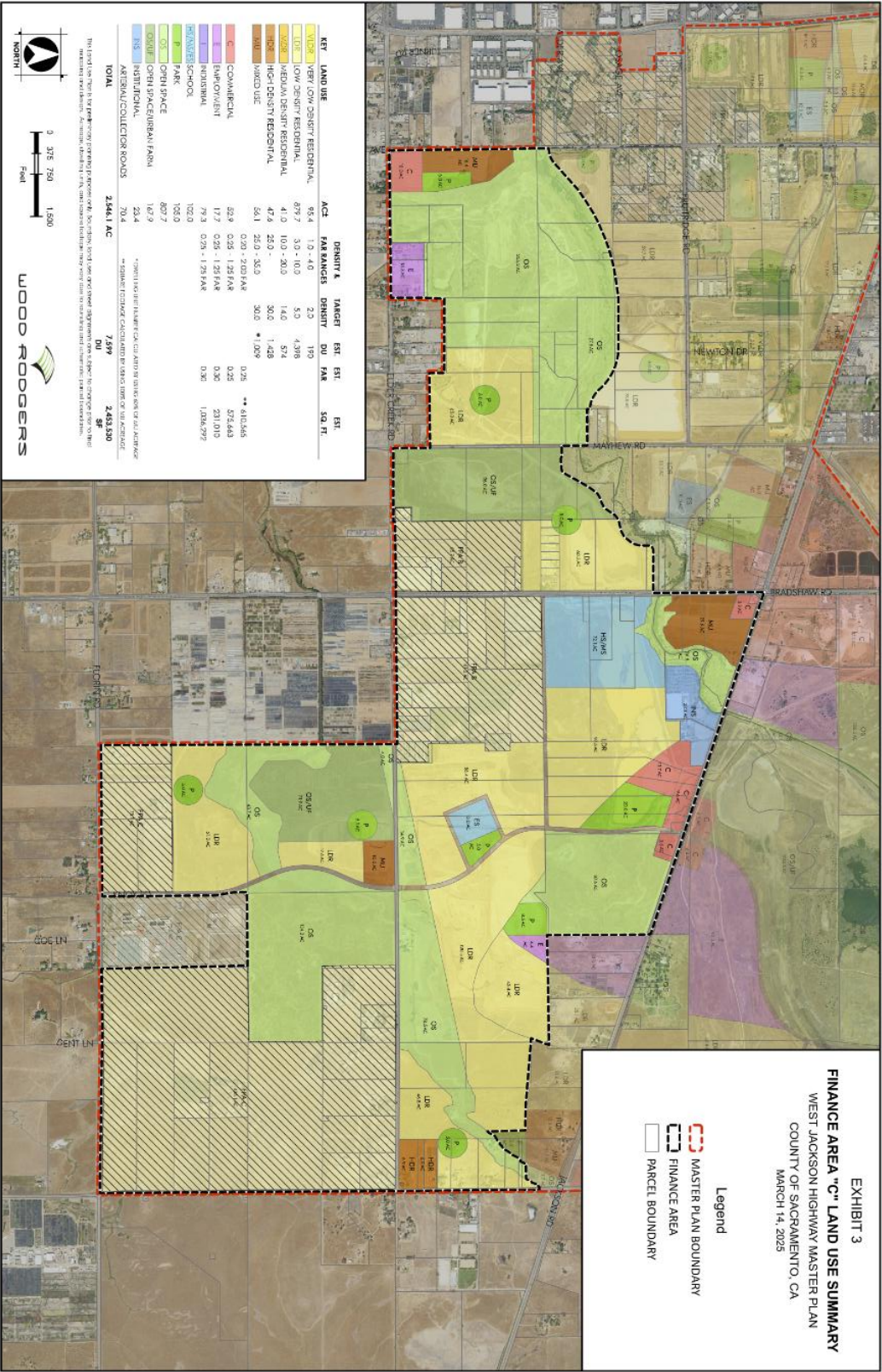


Figure 4  
Finance Area C



As development occurs within the Project and market demand creates the need for future phases, implementation level Finance Plan updates will be prepared. Any update to the Finance Plan will identify the required set of Public Improvements including any essential upfront infrastructure and anticipated finance mechanisms for the future phase.

#### **D. Cost Balancing**

As displayed in Section IV, Public Improvement costs are allocated among the Project's finance areas. The allocation of Public Improvements is based on engineering standards as determined by the County, Applicants, service providers and by the Project's engineers, Wood Rodgers. Engineering source documentation is provided in the attached **Appendix A**.

Additionally, for purposes of this planning level PFFP, the Public Improvements have been allocated among the residential and non-residential land uses based on specific equivalent dwelling unit ("EDU") factors. These EDU based allocations are the preliminary method for determining an equitable share of Public Improvements within the Project. This process of cost balancing amongst benefitting land uses is a key factor in mitigating cash flow constraints incurred by delivering the essential upfront infrastructure. Implementation of an equitable cost balancing approach to development of the Project establishes a process to minimize cash flow constraints to manageable levels. Additional details related to cost balancing are described in Section VII and further detailed in Section VIII below.

## VII. AVAILABLE POTENTIAL FUNDING MECHANISMS

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A number of strategic and creative mechanisms may be used to fund Public Improvements required for development of the Project. The ultimate type of financing mechanisms will be determined by the Applicants or master developer based on the technical analysis of costs, financing requirements, duration of funding, reimbursement requirements, absorption rates and market strategies and the Development Agreements. An efficient use of various funding sources will assist in alleviating the impacts of significant upfront infrastructure burdens (e.g. reimbursements or fee credits).

This section describes the key features of the funding mechanisms available to the Project for financing the Public Improvements. The mechanisms discussed in this section fall into eight distinct categories. The other category is included to define alternative funding mechanisms being evaluated by the Applicants for the Project.

- Formation of land secured financing districts,
- Federal, State, County or local funding
- Development impact fees,
  - Creation of a West Jackson Highway Master Plan fee program,
- Developer equity, conventional financing and other forms of private financing,
- Private cost sharing/Reimbursement agreement,
- Quimby Act and Parks reimbursement,
- School facility financing,
- Area of Benefit/Zone of Benefit
- Other

The following describes the eight types of funding sources. Table 30, which appears later in this section, identifies which types of funding sources are available and/or proposed for the various types of Public Improvements required for the Project.

### 1. Land Secured Financing

Land secured financing for public facilities generally involve either Assessment Districts (“AD”) or Community Facility Districts (“CFD”). Given the flexibility that would be required to meet the unique needs within the Project, a CFD would likely be the selected form of land secured financing, although AD’s remain an alternative mechanism.

The Mello Roos Community Facilities District Act of 1982 (“Act”) established a means to finance certain public facilities through the sale of CFD bonds. A Mello Roos tax can be used to finance the purchase, construction, expansion, improvement or rehabilitation of real property with a useful life of five years or more, consistent with County financing policies.

A preliminary CFD bond capacity analysis for each development area has been prepared for the Project and is attached as **Appendix C (CFD Analysis)**. The CFD analysis is based on the anticipated Project product type, including unit count, unit price and home size and includes existing and anticipated taxes and assessments. Nonresidential land uses are also included in the CFD analysis. The CFD analysis is consistent with the requirements identified in the Act and County policies.

The Act and County policies have determined a maximum burden guideline of 2.0% of the estimated assessed value of the home. Typically, a residential unit with an overall tax rate of less than 2.0% is considered feasible. Assuming existing market conditions, current ad valorem taxes along with future ad valorem and special taxes the CFD analysis targets a 1.80% tax burden and estimates the following for CFD amounts for each development area:

Area A – A par amount of \$84.3 million (CRPD) and \$21.3 million (SRPD) in bonds and an improvement fund amount of \$67.6 million (CRPD) and \$17.1 (SRPD) after accounting for bond issuance costs

Area B – A par amount \$129.0 million (CRPD) and \$36.4 million (SRPD) in bonds and an improvement fund amount of \$103.4 million (CRPD) \$29.2 million (SRPD) after accounting for bond issuance costs

Area C – A par amount of \$5.5 million (CRPD) and \$235.4 million (SRPD) in bonds and an improvement fund amount of \$4.4 million (CRPD) and \$188.8 million (SRPD) after accounting for bond issuance costs

See **Appendix C (CFD Analysis)** for additional details. The CFD will be structured to allow special tax revenue to finance Public Improvements on a pay-as-you-go basis. The funding of Public Improvements with CFD special taxes would be in addition to any bond proceeds. The above referenced proceeds are estimates and the actual amount of the CFD bond financing for the Project and each development area will be determined at a later date consistent with County financing policy guidelines, Development Agreement, market constraint and the Project's business plan. Additionally, the Applicants are evaluating the possibility of extending the term of the CFD special tax. Extending the term of the CFD by an additional twenty five (25) to thirty (30) years or longer would allow the County and Project to identify a secure source of funding for long term capital improvements. As the Project may be required to contribute funding for capital improvement projects required near the termination of a typical CFD, it is prudent for the Applicants and County to address these funding needs.

The Applicants are contemplating the creation of improvement areas with the CFD. These improvements areas would be tied to specific phases of Project development. An improvement area structure provides flexibility for future development areas to adjust with changing market conditions as well as minimize cross collateralization among owners.

## **2. Federal, State, County or local funding**

Federal, state, county or local funding may be utilized to fund capital facilities through various funding sources such as voter approved measures (i.e. parcel or sales tax) or regional fee programs. Additionally, the Project anticipates targeting Federal and State grant programs for regional facilities. Some regional fee programs include the following:

### **Measure A (Sacramento Countywide Traffic Mitigation Fee Program)**

SCTMFP is intended to comply with Section 66000 et. seq. of the Government Code, which was enacted by the State of California in 1987, by identifying additional public facilities required by new development and determining the level of County-wide development impact fees that may be imposed to pay the costs of the future facilities. Fee amounts have been determined that will partially satisfy the financing of transportation infrastructure at levels identified by the various local agencies within the County as being necessary to meet the needs of new development through the year 2039. For additional details on the SCTMFP and other agency impact fees please refer to Section III of the Finance Plan.

## **3. Development Impact Fees**

Development impact fees may be used to finance regional or countywide facilities. These fees are used to pay for the allocable costs of public facilities associated with new development. Fees are typically

paid when building permits are issued. Fees are charged to fund traffic mitigation measures (i.e. streets, traffic signals, bridges, bike lanes and sidewalks), storm drainage and flood control facilities, water and sewer facilities, and public buildings including fire, police, corporation yard and administrative facilities. If public facilities fall within an agency's development impact fee program, the developer will be eligible for credit or reimbursement against such fee obligation.

#### **County of Sacramento Impact Fee Program**

New backbone infrastructure and capital facilities will be required to mitigate the impacts of new development. The impact fee program will collect funding for various infrastructure and capital facilities components. A detailed list of County fee programs is provided above in Section III. Generally speaking, the following County fee programs are available to fund:

- Transportation
- Fire
- Library

Other development impact fees which are not charged by the County will also be required for payment; these include, but are not limited to, sewer fees, water fees, park fees and school fees. For additional details on County and other agency impact fees please refer to Section III of the Finance Plan.

#### **West Jackson High Master Plan Area Fee**

The Applicants may request a fee be established to contribute to the cost of selected Public Improvements ("Plan Area Fee") required to buildout the Project and each development area. Upon approval of such a fee, the County agrees to implement and administer such Plan Area Fee for such items as the Applicants may request, including, by way of illustration and not limitation, transportation, water, sewer and drainage facilities. The Applicants may elect to implement a Plan Area Fee for all or any portion(s) of the Project, or for specific development types or specific development phases. The anticipated costs associated with implementing and administering the collection and distribution of such a Plan Area Fee shall be incorporated into the calculation of the fee. The Development Agreements provide additional details on the specific components of the Plan Area Fee. A preliminary Plan Area Fee analysis is attached as **Appendix D**. The Plan Area Fee analysis allocates costs of transportation, water, sewer and drainage on a specific EDU methodology. The average Plan Area Fees are summarized below in Table 24-29.

Table 24-29 outlines the estimated development impact fee obligation for the Project. The development impact fees listed in Table 24-29 represent the average development impact fees for the respective land use categories. The Project will be required to participate in future development impact fee programs adopted by the County. Examples of any future development impact fees are listed in the Development Agreement.

To the extent Applicants pay or contribute more than is required to serve the Project or mitigate actual impacts from the Project, Applicants are required to advance the funding for or otherwise construct Public Improvements earlier than is required to serve the Project or to mitigate actual impacts from the Project, Applicants shall be entitled to either reimbursement or fee credit, subject to the credit/reimbursement provisions within the applicable fee program, for those costs in excess of the Applicants' obligation consistent with the provisions of the respective fee program. The Developer anticipates entering into a credit and reimbursement agreement with the County and other public

agencies. Specific terms of credit and reimbursement agreements will be subject to future negotiations between the Applicants, County and other applicable agencies. Please refer to the Development Agreement for additional information regarding credits or reimbursements.

Other agency fee obligations of the Project include water, sewer, parks and school districts. As noted above, the development areas are serviced by multiple agencies and the following tables represent a prototype land use. Additional information of school facility financing is described below.

TABLE 24  
Development Impact Fees

	Area A - Residential			
Land Use / Product Information	LDR	HDR	Mixed Use	
Development Fee Calculations	Area A - Residential Per Unit			
County Building Fees [1]				
Building Permit	\$	3,446	\$	2,114
Plan Check Review	\$	1,149	\$	705
Long Range Planning Fee	\$	322	\$	197
Zone Check Fee	\$	149	\$	92
Building Standards (1473)	\$	18	\$	8
Strong Motion Fee	\$	44	\$	21
Energy Plan Review Fee	\$	57	\$	35
Enviro Compliance Fee	\$	40	\$	40
IT Recovery	\$	230	\$	141
Sub-Total - Building fees		5,455		3,353
County Impact Fees [1]				
SCTDF - Transportation District 4	\$	18,211	\$	10,380
SCTDF - Transit District 4	\$	1,124	\$	641
SCTDF - Admin District 4	\$	447	\$	255
Cross Jurisdictional	\$	476	\$	271
Sac Metro Fire	\$	1,647	\$	1,291
Measure A Fee	\$	1,532	\$	1,072
SRCSO - Expansion	\$	6,479	\$	4,859
SASD User Sewer Impact - Expansion	\$	3,802	\$	634
SASD Technology	\$	114	\$	19
Water - SCWA	\$	20,857	\$	15,643
Drainage Fees Zone 11-A	\$	3,694	\$	746
County Library Fee	\$	1,258	\$	816
SSHCP		TBD		TBD
Affordable Housing	\$	8,052	\$	3,660
Sub-Total - Impact Fees		67,693		40,285
Plan Area Fee Program [2]				
Transportation - Local		6,985		3,982
Water		1,033		775
Sewer		1,020		766
Drainage		13,518		2,253
Trails		700		399
Open Space		820		137
Subtotal Plan Area Fees		24,076		8,312
Other Jurisdiction Fees: [1]				
School District - EGUSD	\$	15,488	\$	7,040
Park - CRPD		7,917		5,619
Subtotal Other Fees		23,405		12,659
Total West Jackson Fees				
	\$	120,629	\$	64,608
Total Impact Fees (Net of Building)				
	\$	115,174	\$	61,512

[1] Based on agency fee schedules.

[2] Based on Plan Area Fee Analysis. See Appendix D for details.

TABLE 25  
Development Impact Fees

	Area B - Residential									
Land Use / Product Information	VLDR		LDR		MDR		HDR		Mixed Use	
Development Fee Calculations	Area B - Residential Per Unit									
County Building Fees [1]										
Building Permit	\$	3,874	\$	3,446	\$	3,018	\$	2,114	\$	2,114
Plan Check Review	\$	1,291	\$	1,149	\$	1,006	\$	705	\$	705
Long Range Planning Fee	\$	362	\$	322	\$	282	\$	197	\$	197
Zone Check Fee	\$	168	\$	149	\$	131	\$	92	\$	92
Building Standards (1473)	\$	21	\$	18	\$	15	\$	8	\$	8
Strong Motion Fee	\$	51	\$	44	\$	37	\$	21	\$	21
Energy Plan Review Fee	\$	65	\$	57	\$	50	\$	35	\$	35
Enviro Compliance Fee	\$	40	\$	40	\$	40	\$	40	\$	40
IT Recovery	\$	259	\$	230	\$	201	\$	141	\$	141
Sub-Total - Building fees		6,130		5,455		4,779		3,353		3,353
County Impact Fees [1]										
SCTDF - Transportation District 4	\$	21,307	\$	18,211	\$	18,211	\$	10,380	\$	10,380
SCTDF - Transit District 4	\$	1,315	\$	1,124	\$	989	\$	641	\$	641
SCTDF - Admin District 4	\$	523	\$	447	\$	393	\$	255	\$	255
Cross Jurisdictional	\$	476	\$	476	\$	476	\$	271	\$	271
Sac Metro Fire	\$	1,647	\$	1,647	\$	1,647	\$	1,291	\$	1,291
Measure A Fee	\$	1,532	\$	1,532	\$	1,532	\$	1,072	\$	1,072
SRCS D - Expansion	\$	6,479	\$	6,479	\$	6,479	\$	4,859	\$	4,859
SASD User Sewer Impact - Expansion	\$	9,552	\$	3,802	\$	1,359	\$	634	\$	634
SASD Technology	\$	287	\$	114	\$	41	\$	19	\$	19
Water - Cal Am										
Drainage Fees Zone 11-A	\$	7,830	\$	3,694	\$	1,500	\$	745	\$	746
County Library Fee	\$	1,258	\$	1,258	\$	979	\$	816	\$	816
SSHCP		TBD		TBD		TBD		TBD		TBD
Affordable Housing	\$	9,516	\$	8,052	\$	6,588	\$	3,660	\$	3,660
Sub-Total - Impact Fees		61,722		46,836		40,194		24,643		24,644
Plan Area Fee Program [2]										
Transportation - Local	\$	8,173	\$	6,985	\$	6,985	\$	3,982	\$	3,982
Water										
Sewer	\$	1,020	\$	1,020	\$	1,020	\$	766	\$	1,020
Drainage	\$	33,964	\$	13,518	\$	4,832	\$	2,253	\$	2,255
Trails	\$	819	\$	700	\$	700	\$	399	\$	399
Open Space	\$	2,060	\$	820	\$	293	\$	137	\$	137
Subtotal Plan Area Fees	\$	46,036	\$	23,043	\$	13,830	\$	7,537	\$	7,792
Other Jurisdiction Fees: [1]										
School District - EGUSD	\$	18,304	\$	15,488	\$	12,672	\$	7,040	\$	7,040
Park - CRPD	\$	7,917	\$	7,917	\$	7,150	\$	5,619	\$	5,619
Subtotal Other Fees	\$	26,221	\$	23,405	\$	19,822	\$	12,659	\$	12,659
Total West Jackson Fees	\$	140,109	\$	98,739	\$	78,625	\$	48,191	\$	48,447
Total Impact Fees (Net of Building)	\$	133,979	\$	93,284	\$	73,846	\$	44,838	\$	45,094

[1] Based on agency fee schedules.

[2] Based on Plan Area Fee Analysis. See Appendix D for details.

**TABLE 26**  
**Development Impact Fees**

	Area C - Residential									
Land Use / Product Information	VLDR		LDR		MDR		HDR		Mixed Use	
Development Fee Calculations	Area C- Residential Per Unit									
County Building Fees [1]										
Building Permit	\$	3,874	\$	3,446	\$	3,018	\$	2,114	\$	2,114
Plan Check Review	\$	1,291	\$	1,149	\$	1,006	\$	705	\$	705
Long Range Planning Fee	\$	362	\$	322	\$	282	\$	197	\$	197
Zone Check Fee	\$	168	\$	149	\$	131	\$	92	\$	92
Building Standards (1473)	\$	21	\$	18	\$	15	\$	8	\$	8
Strong Motion Fee	\$	51	\$	44	\$	37	\$	21	\$	21
Energy Plan Review Fee	\$	65	\$	57	\$	50	\$	35	\$	35
Enviro Compliance Fee	\$	40	\$	40	\$	40	\$	40	\$	40
IT Recovery	\$	259	\$	230	\$	201	\$	141	\$	141
Sub-Total - Building fees		6,130		5,455		4,779		3,353		3,353
County Impact Fees [1]										
SCTDF - Transportation District 4	\$	21,307	\$	18,211	\$	18,211	\$	10,380	\$	10,380
SCTDF - Transit District 4	\$	1,315	\$	1,124	\$	989	\$	641	\$	641
SCTDF - Admin District 4	\$	523	\$	447	\$	393	\$	255	\$	255
Cross Jurisdictional	\$	476	\$	476	\$	476	\$	271	\$	271
Sac Metro Fire	\$	1,647	\$	1,647	\$	1,647	\$	1,291	\$	1,291
Measure A Fee	\$	1,532	\$	1,532	\$	1,532	\$	1,072	\$	1,072
SRCSO - Expansion	\$	6,479	\$	6,479	\$	6,479	\$	4,859	\$	4,859
SASD User Sewer Impact - Expansion	\$	9,552	\$	3,802	\$	1,359	\$	634	\$	634
SASD Technology	\$	287	\$	114	\$	41	\$	19	\$	19
Water - SCWA	\$	20,857	\$	20,857	\$	20,857	\$	15,643	\$	15,643
Drainage Fees Zone 11-A	\$	7,830	\$	3,694	\$	1,500	\$	745	\$	746
County Library Fee	\$	1,258	\$	1,258	\$	979	\$	816	\$	816
SSHCP		TBD		TBD		TBD		TBD		TBD
Affordable Housing	\$	9,516	\$	8,052	\$	6,588	\$	3,660	\$	3,660
Sub-Total - Impact Fees		82,579		67,693		61,051		40,285		40,286
Plan Area Fee Program [2]										
Transportation - Local		8,173		6,985		6,985		3,982		3,982
Water		1,033		1,033		1,033		775		775
Sewer		1,020		1,020		1,020		766		1,020
Drainage		33,964		13,518		4,832		2,253		2,255
Trails		819		700		700		399		399
Open Space		2,060		820		293		137		137
Subtotal Plan Area Fees		47,069		24,076		14,863		8,312		8,567
Other Jurisdiction Fees: [1]										
School District - EGUSD	\$	18,304	\$	15,488	\$	12,672	\$	7,040	\$	7,040
Park - SRPD		7,917		7,917		7,150		5,619		5,619
Subtotal Other Fees		26,221		23,405		19,822		12,659		12,659
Total West Jackson Fees	\$	161,999	\$	120,629	\$	100,515	\$	64,608	\$	64,864
Total Impact Fees (Net of Building)	\$	155,869	\$	115,174	\$	95,736	\$	61,256	\$	61,512

[1] Based on agency fee schedules.

[2] Based on Plan Area Fee Analysis. See Appendix D for details.

TABLE 27  
Development Impact Fees

	Area A - Non Residential							
Land Use / Product Information	MU							
	Commercial	Commercial	Employment	Industrial				
Development Fee Calculations	Area A - Non Residential per Bldg SF							
County Building Fees [1]								
Building Permit	\$	0.75	\$	0.57	\$	0.51	\$	0.63
Plan Check Review	\$	0.15	\$	0.06	\$	0.03	\$	0.09
Long Range Planning Fee	\$	0.06	\$	0.04	\$	0.04	\$	0.05
Zone Check Fee	\$	0.02	\$	0.01	\$	0.00	\$	0.01
Building Standards (1473)	\$	0.01	\$	0.01	\$	0.01	\$	0.01
Strong Motion Fee	\$	0.02	\$	0.02	\$	0.02	\$	0.02
Energy Plan Review Fee	\$	0.01	\$	0.00	\$	0.00	\$	0.00
Enviro Compliance Fee	\$	0.04	\$	0.04	\$	0.04	\$	0.04
IT Recovery	\$	0.05	\$	0.03	\$	0.03	\$	0.04
Sub-Total - Building fees		1.10		0.79		0.68		0.90
County Impact Fees [1]								
SCTDF - Transportation District 4	\$	27.68	\$	27.68	\$	17.48	\$	10.93
SCTDF - Transit District 4	\$	1.71	\$	1.71	\$	1.08	\$	0.67
SCTDF - Admin District 4	\$	0.68	\$	0.68	\$	0.43	\$	0.27
Cross Jurisdictional	\$	0.52	\$	0.52	\$	0.46	\$	0.21
Sac Metro Fire	\$	1.36	\$	1.36	\$	1.73	\$	0.93
Measure A Fee	\$	2.30	\$	2.30	\$	1.84	\$	1.23
SRCSO - Expansion		TBD		TBD		TBD		TBD
SASD User Sewer Impact - Expansion	\$	0.70	\$	1.75	\$	1.45	\$	1.45
SASD Technology	\$	0.02	\$	0.05	\$	0.04	\$	0.04
Water - SCWA		TBD		TBD		TBD		TBD
Drainage Fees Zone 11-A	\$	0.91	\$	2.27	\$	1.89	\$	1.86
County Library Fee		NA		NA		NA		NA
SSHCP		TBD		TBD		TBD		TBD
Affordable Housing	\$	2.66	\$	2.66	\$	3.31	\$	2.07
Sub-Total - Impact Fees	\$	38.54	\$	40.98	\$	29.72	\$	19.65
Plan Area Fee Program [2]								
Transportation - Local	\$	7.61	\$	7.61	\$	6.71	\$	4.19
Water	\$	0.02	\$	0.04	\$	0.03	\$	0.03
Sewer	\$	0.20	\$	0.49	\$	0.41	\$	0.41
Drainage	\$	2.48	\$	6.21	\$	5.17	\$	5.17
Trails	\$	0.76	\$	0.76	\$	0.67	\$	0.42
Open Space	\$	0.15	\$	0.38	\$	0.31	\$	0.31
Subtotal Plan Area Fees	\$	11.22	\$	15.49	\$	13.30	\$	10.53
Other Jurisdiction Fees: [1]								
School District - EGUSD	\$	0.78	\$	0.78	\$	0.78	\$	0.78
Park - CRPD	\$	0.61	\$	0.61	\$	0.94	\$	0.41
Subtotal Other Fees	\$	1.39	\$	1.39	\$	1.72	\$	1.19
Total West Jackson Fees	\$	52.25	\$	58.64	\$	45.42	\$	32.28
Total Impact Fees (Net of Building)	\$	51.15	\$	57.85	\$	44.74	\$	31.38

[1] Based on agency fee schedules.

[2] Based on Plan Area Fee Analysis. See Appendix D for details.

**TABLE 28**  
**Development Impact Fees**

Land Use / Product Information	Area B - Non Residential			
	MU			
	Commercial	Commercial	Employment	Industrial
Development Fee Calculations				
Area B - Non Residential per Bldg SF				
<b>County Building Fees [1]</b>				
Building Permit	\$ 0.75	\$ 0.57	\$ 0.51	\$ 0.63
Plan Check Review	\$ 0.15	\$ 0.06	\$ 0.03	\$ 0.09
Long Range Planning Fee	\$ 0.06	\$ 0.04	\$ 0.04	\$ 0.05
Zone Check Fee	\$ 0.02	\$ 0.01	\$ 0.00	\$ 0.01
Building Standards (1473)	\$ 0.01	\$ 0.01	\$ 0.01	\$ 0.01
Strong Motion Fee	\$ 0.02	\$ 0.02	\$ 0.02	\$ 0.02
Energy Plan Review Fee	\$ 0.01	\$ 0.00	\$ 0.00	\$ 0.00
Enviro Compliance Fee	\$ 0.04	\$ 0.04	\$ 0.04	\$ 0.04
IT Recovery	\$ 0.05	\$ 0.03	\$ 0.03	\$ 0.04
Sub-Total - Building fees	1.10	0.79	0.68	0.90
<b>County Impact Fees [1]</b>				
SCTDF - Transportation District 4	\$ 27.68	\$ 27.68	\$ 17.48	\$ 10.93
SCTDF - Transit District 4	\$ 1.71	\$ 1.71	\$ 1.08	\$ 0.67
SCTDF - Admin District 4	\$ 0.68	\$ 0.68	\$ 0.43	\$ 0.27
Cross Jurisdictional	\$ 0.52	\$ 0.52	\$ 0.46	\$ 0.21
Sac Metro Fire	\$ 1.36	\$ 1.36	\$ 1.73	\$ 0.93
Measure A Fee	\$ 2.30	\$ 2.30	\$ 1.84	\$ 1.23
SRCSO - Expansion	TBD	TBD	TBD	TBD
SASD User Sewer Impact - Expansion	\$ 0.70	\$ 1.75	\$ 1.45	\$ 1.45
SASD Technology	\$ 0.02	\$ 0.05	\$ 0.04	\$ 0.04
Water - Cal Am	TBD	TBD	TBD	TBD
Drainage Fees Zone 11-A	\$ 0.91	\$ 2.27	\$ 1.89	\$ 1.86
County Library Fee	NA	NA	NA	NA
SSHCP	TBD	TBD	TBD	TBD
Affordable Housing	\$ 2.66	\$ 2.66	\$ 3.31	\$ 2.07
Sub-Total - Impact Fees	\$ 38.54	\$ 40.98	\$ 29.72	\$ 19.65
<b>Plan Area Fee Program [2]</b>				
Transportation - Local	\$ 7.61	\$ 7.61	\$ 6.71	\$ 4.19
Water				
Sewer	\$ 0.20	\$ 0.49	\$ 0.41	\$ 0.41
Drainage	\$ 2.48	\$ 6.21	\$ 5.17	\$ 5.17
Trails	\$ 0.76	\$ 0.76	\$ 0.67	\$ 0.42
Open Space	\$ 0.15	\$ 0.38	\$ 0.31	\$ 0.31
Subtotal Plan Area Fees	\$ 11.21	\$ 15.45	\$ 13.27	\$ 10.50
<b>Other Jurisdiction Fees: [1]</b>				
School District - EGUSD	\$ 0.78	\$ 0.78	\$ 0.78	\$ 0.78
Park - CRPD	\$ 0.61	\$ 0.61	\$ 0.94	\$ 0.41
Subtotal Other Fees	\$ 1.39	\$ 1.39	\$ 1.72	\$ 1.19
<b>Total West Jackson Fees</b>	\$ 52.24	\$ 58.60	\$ 45.39	\$ 32.25
<b>Total Impact Fees (Net of Building)</b>	\$ 51.14	\$ 57.82	\$ 44.71	\$ 31.35

[1] Based on agency fee schedules.

[2] Based on Plan Area Fee Analysis. See Appendix D for details.

TABLE 29  
Development Impact Fees

	Area C - Non Residential							
	MU							
Land Use / Product Information	Commercial		Commercial		Employment	Industrial		
Development Fee Calculations	Area C - Non Residential per Bldg SF							
County Building Fees [1]								
Building Permit	\$	0.75	\$	0.57	\$	0.51	\$	0.63
Plan Check Review	\$	0.15	\$	0.06	\$	0.03	\$	0.09
Long Range Planning Fee	\$	0.06	\$	0.04	\$	0.04	\$	0.05
Zone Check Fee	\$	0.02	\$	0.01	\$	0.00	\$	0.01
Building Standards (1473)	\$	0.01	\$	0.01	\$	0.01	\$	0.01
Strong Motion Fee	\$	0.02	\$	0.02	\$	0.02	\$	0.02
Energy Plan Review Fee	\$	0.01	\$	0.00	\$	0.00	\$	0.00
Enviro Compliance Fee	\$	0.04	\$	0.04	\$	0.04	\$	0.04
IT Recovery	\$	0.05	\$	0.03	\$	0.03	\$	0.04
Sub-Total - Building fees		1.10		0.79		0.68		0.90
County Impact Fees [1]								
SCTDF - Transportation District 4	\$	27.68	\$	27.68	\$	17.48	\$	10.93
SCTDF - Transit District 4	\$	1.71	\$	1.71	\$	1.08	\$	0.67
SCTDF - Admin District 4	\$	0.68	\$	0.68	\$	0.43	\$	0.27
Cross Jurisdictional	\$	0.52	\$	0.52	\$	0.46	\$	0.21
Sac Metro Fire	\$	1.36	\$	1.36	\$	1.73	\$	0.93
Measure A Fee	\$	2.30	\$	2.30	\$	1.84	\$	1.23
SRCSO - Expansion		TBD		TBD		TBD		TBD
SASD User Sewer Impact - Expansion	\$	0.70	\$	1.75	\$	1.45	\$	1.45
SASD Technology	\$	0.02	\$	0.05	\$	0.04	\$	0.04
Water - SCWA		TBD		TBD		TBD		TBD
Drainage Fees Zone 11-A	\$	0.91	\$	2.27	\$	1.89	\$	1.86
County Library Fee		NA		NA		NA		NA
SSHCP		TBD		TBD		TBD		TBD
Affordable Housing	\$	2.66	\$	2.66	\$	3.31	\$	2.07
Sub-Total - Impact Fees	\$	38.54	\$	40.98	\$	29.72	\$	19.65
Plan Area Fee Program [2]								
Transportation - Local	\$	7.61	\$	7.61	\$	6.71	\$	4.19
Water	\$	0.02	\$	0.04	\$	0.03	\$	0.03
Sewer	\$	0.20	\$	0.49	\$	0.41	\$	0.41
Drainage	\$	2.48	\$	6.21	\$	5.17	\$	5.17
Trails	\$	0.76	\$	0.76	\$	0.67	\$	0.42
Open Space	\$	0.15	\$	0.38	\$	0.31	\$	0.31
Subtotal Plan Area Fees	\$	11.22	\$	15.49	\$	13.30	\$	10.53
Other Jurisdiction Fees: [1]								
School District - EGUSD	\$	0.78	\$	0.78	\$	0.78	\$	0.78
Park - SRPD	\$	0.61	\$	0.61	\$	0.94	\$	0.41
Subtotal Other Fees	\$	1.39	\$	1.39	\$	1.72	\$	1.19
Total West Jackson Fees	\$	52.25	\$	58.64	\$	45.42	\$	32.28
Total Impact Fees (Net of Building)	\$	51.15	\$	57.85	\$	44.74	\$	31.38

[1] Based on agency fee schedules.

[2] Based on Plan Area Fee Analysis. See Appendix D for details.

#### **4. Private Financing**

The master developers and builders may construct public improvements and facilities that are required to serve the Project using cash, funds from private investors, lines of credit, conventional lending sources and other sources of private financing.

#### **5. Private Cost Sharing/Reimbursement Agreement**

Public Improvements that directly benefit other properties within the Project or outside the Project (regional share) are financed through a share of costs allocated among properties based on an equitable cost allocation factor. In the case where one property would develop before other benefitting properties and constructs the Public Improvements necessary for all benefitting properties, the provider of the shared Public Improvement will be entitled to reimbursement of costs.

#### **6. Quimby Act & Parks Reimbursement**

Cities and counties have been authorized since the passage of the 1975 Quimby Act ("Act") to pass ordinances requiring developers to set aside land, donate conservation easements or pay park fees for park improvements. Revenues generated through the Quimby Act cannot be used for the operation and maintenance of park facilities. The Act ensures open space acreage in jurisdictions adopting Quimby Act standards of 3-5 acres per 1,000 residents. County requirement for park dedication varies depending on the specific park district. The Project is serviced by the Cordova Recreation and Park District ("CRPD") and the Southgate Recreation and Park District ("SRPD"). According to County Code Section 22.40.045, CRPD has a dedication requirement of 4.87 acres per 1,000 population and SRPD has a dedication requirement of 5.00 acres per 1,000 population.

The Project is dedicating approximately 94.73 acres of parkland to CRPD and approximately 124.62 acres of parkland to SRPD. Developer has agreed to dedicate approximately 23 park sites totaling approximately 219.35 acres. County, CRPD and SRPD acknowledge that the dedication of the identified park sites fully satisfies the Project obligations for the dedication of parkland. Park dedications are based on Quimby factors from 2021. Satisfaction of Quimby required parkland dedication will be determined as individual tentative maps are proposed and approved. Please note, updated Quimby factors results in 126.18 acres of parkland to SRPD.

#### **7. School Facility Financing**

The passage of Senate Bill 50 ("SB 50") provides for a level of permissible school fees that may be charged by school districts in California. The fees charged are utilized for the construction or reconstruction of school facilities provided the school district meets the applicable legal requirements including justification for levying the fees. Authority exists for collection of three levels of developer fees on residential development commonly known as Level I fees, Level II fees and Level III fees. Age-restricted residential, commercial and industrial developments pay a reduced fee. The Project is serviced by the following school districts:

- a. Elk Grove Unified School District ("EGUSD")
- b. Sacramento City Unified School District ("SCUSD")

As of the date of the Finance Plan, the Level I fee is \$4.79 per square foot for residential property and \$0.78 per square foot for non-residential property. Level II fees may be charged if a school district meets specified legal requirements and adopts a School Facilities Needs Analysis. Level III fees may be charged if State funding for new construction becomes unavailable and a school district has met the applicable

statutory requirements. EGUSD qualifies for Level II fees at the following rates: (i) EGUSD - \$7.04 per square foot. The current posted rate for SCUSD is \$3.36 per square foot.

Other sources of school facility funding may also include bond tax elections or local school funds.

The following bond measures have been authorized:

- EGUSD: Measure M - Measure M will provide EGUSD students and the community with \$476 million in critical improvements to existing school buildings and grounds.
- SCUSD: Measure Q - Upgrading classrooms, science labs, computer systems and technology; renovating heating and ventilation systems; reducing costs through energy efficiency; improving student safety and security systems; repairing roofs, floors, walkways, bathrooms, electrical, plumbing and sewer systems (\$346 million).
- Measure R - Repair playgrounds and playfields to meet modern safety standards, improve physical education facilities and bathrooms, improve irrigation systems and water drainage to reduce water consumption, remove asbestos, lead paint and other unsafe conditions and to upgrade kitchen facilities to improve nutrition and nutritional education for children (\$68 million).

#### **8. Area of Benefit/Zone of Benefit (“AOB/ZOB”)**

The purpose of an AOB/ZOB is to make a provision for assessing property as a condition of approval of a map, condition of development approval, or as a condition of issuing a building permit. An AOB/ZOB may be established so long as the construction of Public Improvements provided for by the AOB/ZOB is required by subsequent developments, and that the assessments are fairly apportioned within the area on either: (i) the basis of benefits conferred on property proposed for development; or (ii) the need for such Public Improvements created by the proposed development and development of other property within the area.

#### **Other**

In addition to the funding mechanisms listed above the Project is evaluating the reasonableness of alternative funding strategies. These alternative funding strategies include the use of 1) transfer fees and 2) Enhanced Infrastructure Finance Districts (“EIFD”).

The transfer fee is controlled by CA Code Section 1098 and is any fee payment imposed within a covenant, restriction, or condition contained within a deed, contract, security instrument or other document affecting the transfer or sale in real property. A transfer fee document to create the transfer fee must be recorded with the county in which the property is located. The transfer fee document provides the following:

1. The title of the document shall be “Payment of Transfer Fee Required” in at least 14 point boldface type.
2. The document shall include:
  - a. The names of all current owners of real property subject to the transfer fee, and the legal description and assessor's parcel number for the affected real property.
  - b. The amount, if the fee is a flat amount, or the percentage of the sales price constituting the cost of the fee.

- c. If the real property is residential property, actual dollar-cost examples of the fee for a home priced at two hundred fifty thousand dollars (\$250,000), five hundred thousand dollars (\$500,000), and seven hundred fifty thousand dollars (\$750,000).
- d. The date or circumstances under which the transfer fee payment requirement expires, if any.
- e. The purpose for which the funds from the fee will be used.
- f. The entity to which funds from the fee will be paid and specific contact information regarding where the funds are to be sent.

The Project has analyzed transfer fees as a possible source of funding to assist in mitigating costs associated with the Public Improvements.

The EIFD law was authorized by SB (628) and was signed by Governor Jerry Brown on September 29, 2014. The EIFD is governed by California Government Code Section 53398.50 to 53398.88 and allows for the use of property tax increment to fund public improvements and facilities. The property tax increment would be diverted from consenting municipalities like the County for a term of 45 years.

The EIFD provides a new opportunity for a public agency and the development community to form partnerships for investing in public improvements and facilities with a useful life of fifteen (15) years.

Examples of these public improvements and facilities include:

1. Sewer, water and drainage/flood control
2. Transportation, transit and parking improvements
3. Parks and open space
4. Civic centers, community centers and child care facilities
5. Construction and repair of private industrial structures

The EIFD may also be a key tool in implementing a sustainable community strategy and economic development strategy or funding brownfield restoration, environmental mitigation and affordable housing.

The Project is currently analyzing the appropriateness of the use of EIFD funding for the following types of Project Improvements:

- Transportation
- Drainage and flood control
- Sewer
- Water

#### **Funding Sources Table**

Table 30 below identifies which types of funding sources are available and/or are appropriate for the various types of Public Improvements required for the Project.

TABLE 30  
Potential Funding Sources

	Land Secured Financing	Federal, State, County or Local Funding	Development Impact Fee	WJHMP Plan Area Fee	Private Financing	Private Cost Sharing/Reimbursements	Quimby Act & Park Reimbursement	School Facility Financing	Area of Benefit	Other
<b>Public Improvements</b>										
Transportation - Regional	x	x	X		x	x			x	x
Transportation - Local	x			X	x	x			x	x
Water	x	x	X	X	x	x			x	x
Sewer	x	x	x	X	x	x			x	x
Drainage & Flood Control	x	x	X	X	x	x			x	x
Parks	x		x		x		X			x
Trails	x			X	x		X			x
Transit			x							
Open Space				X			X			
Fire			X							
Library			x							
Schools	x							X		

The initial finance strategy for the Project anticipates the use of a combination of the funding mechanisms listed in this Section VII. The following table 31-34 summarizes this initial finance strategy for the Project's Public Improvements at buildout and each development area.

**TABLE 31**  
**Funding Sources Summary**

		Funding Source - Area A						
	Estimated	County Fee	Other Agency Fee	WJHMP Fee	State &			Land
Category	Costs	Programs	Programs	Program	Federal	Subtotal	Other	Secured
Backbone Infrastructure								
Transportation - Regional [1]								
Regional Roadways	\$260,275,720	\$ 237,655,103	\$ 22,620,617			\$260,275,720	X	X
Cross Jurisdictional	\$ 5,599,759			\$ 5,599,759		\$ 5,599,759	X	X
Transportation - Local								
Collector	\$ 8,265,000			\$ 8,265,000		\$ 8,265,000	X	X
Arterial	\$ 19,067,500			\$ 19,067,500		\$ 19,067,500	X	X
Frontage								
Arterial	\$ 13,868,400			\$ 13,868,400		\$ 13,868,400	X	X
Thoroughfare	\$ 23,251,900			\$ 23,251,900		\$ 23,251,900	X	X
Subtotal Transportation	\$330,328,279	\$237,655,103	\$ 22,620,617	\$ 70,052,559	\$ -	\$330,328,279		
Water - Offsite (SCWA)[2]	\$ 16,805,334		\$ 11,517,603	\$ 5,287,731		\$ 16,805,334	X	X
Water - Onsite (SCWA)[2]	\$ 7,082,946		\$ 5,203,822	\$ 1,879,124		\$ 7,082,946	X	X
Water - Offsite (Cal Am)[3]	\$ 779,922		\$ 779,922			\$ 779,922	X	X
Water - Onsite (Cal Am)[3]	\$ 3,677,856		\$ 3,677,856			\$ 3,677,856	X	X
Sewer[4]	\$ 22,792,770		\$ 13,071,835	\$ 9,720,935		\$ 22,792,770	X	X
Drainage & Levee[5]	\$128,437,393		\$ 13,030,222	\$115,407,171		\$128,437,393	X	X
Subtotal Backbone Infrastructure	\$509,904,500	\$237,655,103	\$ 69,901,877	\$202,347,519	\$ -	\$509,904,500		
Public Facilities								
Parks - CRPD[6]	\$ 26,618,600		\$ 26,618,600			\$ 26,618,600		X
Parks - SRPD[7]	\$ 6,419,590		\$ 6,419,590			\$ 6,419,590		X
Regional Trails [8]	\$ 12,080,172	\$ 9,682,996		\$ 2,397,176		\$ 12,080,172		X
Local/Conventional Trails[7][8]	\$ 7,221,926			\$ 7,221,926		\$ 7,221,926		X
Transit	\$ 14,673,941	\$ 14,673,941				\$ 14,673,941		
Open Space	\$ -			\$ -		\$ -		
Fire[9]	\$ 19,812,813		\$ 19,812,813			\$ 19,812,813		
Libraries[10]	\$ 3,958,416		\$ 3,958,416			\$ 3,958,416		
Schools - Elk Grove USD[11]	\$ 45,923,841		\$ 45,923,841			\$ 45,923,841		X
Schools - Sac City USD[12]	\$ 2,995,736		\$ 2,995,736			\$ 2,995,736		X
Subtotal Public Facilities	\$139,705,035	\$ 24,356,937	\$ 105,728,996	\$ 9,619,102	\$ -	\$139,705,035		
Total Area A	\$649,609,535	\$262,012,040	\$ 175,630,873	\$211,966,622	\$ -	\$649,609,535		

[1] Funding from the SCTDF program.

[2] Funding from the SCWA Zone 40 program.

[3] Assumed reimbursement from Cal Am.

[4] Funding from Sac Sewer program.

[5] Funding from SCWA Zone 11A program.

[6] Funding from CRPD program.

[7] Funding from SRPD program.

[8] Funding from SCTDF program.

[9] Funding from Sac Metro program.

[10] Funding from Sacramento Library Agency program.

[11] Funding from Elk Grove Unified School District program.

[12] Funding from Sacramento City School District program.

TABLE 32  
Funding Sources Summary

Category	Estimated Costs	Funding Source - Area B						
		County Fee Programs	Other Agency Fee Programs	WJHMP Fee Program	State & Federal	Subtotal	Land Other Secured	
Backbone Infrastructure								
Transportation - Regional [1]								
Regional Roadways	\$116,552,193	\$107,042,440	\$9,509,752			\$116,552,193	X	X
Cross Jurisdictional	\$2,693,766			\$2,693,766		\$2,693,766	X	X
Transportation - Local								
Collector	\$40,211,250			\$40,211,250		\$40,211,250	X	X
Arterial	\$-			\$-		\$-	X	X
Frontage								
Arterial	\$5,286,400			\$5,286,400		\$5,286,400	X	X
Thoroughfare	\$9,993,600			\$9,993,600		\$9,993,600	X	X
Subtotal Transportation	\$174,737,209	\$107,042,440	\$9,509,752	\$58,185,016	\$-	\$174,737,209		
Water - Offsite (SCWA)[2]	\$10,810,332		\$8,586,931	\$2,223,401		\$10,810,332	X	X
Water - Onsite (SCWA)[2]	\$3,244,878		\$1,790,528	\$1,454,350		\$3,244,878	X	X
Water - Offsite (Cal Am)[3]	\$380,952		\$380,952			\$380,952	X	X
Water - Onsite (Cal Am)[3]	\$18,472,272		\$18,472,272			\$18,472,272	X	X
Sewer[4]	\$10,194,756		\$7,056,430	\$3,138,326		\$10,194,756	X	X
Drainage & Levee[5]	\$51,573,222		\$6,833,541	\$44,739,682		\$51,573,222	X	X
Subtotal Backbone Infrastructure	\$269,413,621	\$107,042,440	\$52,630,405	\$109,740,776	\$-	\$269,413,621		
Public Facilities								
Parks - CRPD[6]	\$29,912,058		\$29,912,058			\$29,912,058		X
Parks - SRPD[7]	\$8,036,176		\$8,036,176			\$8,036,176		X
Regional Trails [8]	\$6,433,432	\$5,156,789		\$1,276,643		\$6,433,432		X
Local/Conventional Trails[7][8]	\$3,694,205			\$3,694,205		\$3,694,205		X
Transit	\$6,574,645	\$6,574,645				\$6,574,645		
Open Space	\$13,531,343			\$13,531,343		\$13,531,343		
Fire[9]	\$9,714,662		\$9,714,662			\$9,714,662		
Libraries[10]	\$5,733,636		\$5,733,636			\$5,733,636		
Schools - Elk Grove USD[11]	\$67,288,552		\$67,288,552			\$67,288,552		X
Subtotal Public Facilities	\$150,918,708	\$11,731,434	\$120,685,083	\$18,502,191	\$-	\$150,918,708		
Total Area B	\$420,332,329	\$118,773,874	\$173,315,488	\$128,242,967	\$-	\$420,332,329		

[1] Funding from the SCTDF program.

[2] Funding from the SCWA Zone 40 program.

[3] Assumed reimbursement from Cal Am.

[4] Funding from Sac Sewer program.

[5] Funding from SCWA Zone 11A program.

[6] Funding from CRPD program.

[7] Funding from SRPD program.

[8] Funding from SCTDF program.

[9] Funding from Sac Metro program.

[10] Funding from Sacramento Library Agency program.

[11] Funding from Elk Grove Unified School District program.

TABLE 33  
Funding Sources Summary

Category	Estimated Costs	Funding Source - Area C						
		County Fee Programs	Other Agency Fee Programs	WJHMP Fee Program	State & Federal	Subtotal	Land Other Secured	
Backbone Infrastructure								
Transportation - Regional [1]								
Regional Roadways	\$182,915,605	\$ 167,979,843	\$ 14,935,762			\$182,915,605	X	X
Cross Jurisdictional	\$ 4,050,505			\$ 4,050,505		\$ 4,050,505	X	X
Transportation - Local								
Collector	\$ 25,650,000			\$ 25,650,000		\$ 25,650,000	X	X
Arterial	\$ -			\$ -		\$ -	X	X
Frontage								
Arterial	\$ 12,130,400			\$ 12,130,400		\$ 12,130,400	X	X
Thoroughfare	\$ 25,736,400			\$ 25,736,400		\$ 25,736,400	X	X
Subtotal Transportation	\$250,482,910	\$167,979,843	\$ 14,935,762	\$ 67,567,305	\$ -	\$250,482,910		
Water - Offsite (SCWA)[2]						\$ -	X	X
Water - Onsite (SCWA)[2]	\$ 3,909,048		\$ 3,442,915	\$ 466,133		\$ 3,909,048	X	X
Water - Offsite (Cal Am)[3]						\$ -	X	X
Water - Onsite (Cal Am)[3]	\$ -					\$ -	X	X
Sewer[4]	\$ 25,567,932		\$ 17,321,322	\$ 8,246,610		\$ 25,567,932	X	X
Drainage & Levee[5]	\$ 70,615,777		\$ 7,706,364	\$ 62,909,413		\$ 70,615,777	X	X
Subtotal Backbone Infrastructure	\$350,575,667	\$167,979,843	\$ 43,406,362	\$139,189,462	\$ -	\$350,575,667		
Public Facilities								
Parks - CRPD[6]	\$ 3,211,130		\$ 3,211,130			\$ 3,211,130		X
Parks - SRPD[7]	\$ 52,223,821		\$ 52,223,821			\$ 52,223,821		X
Regional Trails [8]	\$ 8,696,407	\$ 6,970,702		\$ 1,725,705		\$ 8,696,407		X
Local/Conventional Trails[7][8]	\$ 2,072,429			\$ 2,072,429		\$ 2,072,429		X
Transit	\$ 10,287,162	\$ 10,287,162				\$ 10,287,162		
Open Space	\$ -			\$ -		\$ -		
Fire[9]	\$ 14,615,777		\$ 14,615,777			\$ 14,615,777		
Libraries[10]	\$ 8,314,320		\$ 8,314,320			\$ 8,314,320		
Schools - Elk Grove USD[11]	\$ 97,846,427		\$ 97,846,427			\$ 97,846,427		X
Subtotal Public Facilities	\$197,267,472	\$ 17,257,863	\$ 176,211,475	\$ 3,798,134	\$ -	\$197,267,472		
Total Area C	\$547,843,140	\$185,237,706	\$ 219,617,837	\$142,987,596	\$ -	\$547,843,140		

[1] Funding from the SCTDF program.

[2] Funding from the SCWA Zone 40 program.

[3] Assumed reimbursement from Cal Am.

[4] Funding from Sac Sewer program.

[5] Funding from SCWA Zone 11A program.

[6] Funding from CRPD program.

[7] Funding from SRPD program.

[8] Funding from SCTDF program.

[9] Funding from Sac Metro program.

[10] Funding from Sacramento Library Agency program.

[11] Funding from Elk Grove Unified School District program.

TABLE 34  
Funding Sources Summary

Category	Estimated Costs	Funding Source - Buildout					
		County Fee Programs	Other Agency Fee Programs	WJHMP Fee Program	State & Federal	Subtotal	Land Other Secured
Backbone Infrastructure							
Transportation - Regional [1]							
Regional Roadways	\$ 559,743,518	\$ 512,677,387	\$ 47,066,131			\$ 559,743,518	X X
Cross Jurisdictional	\$ 12,344,031			\$ 12,344,031		\$ 12,344,031	X X
Transportation - Local							
Collector	\$ 74,126,250			\$ 74,126,250		\$ 74,126,250	X X
Arterial	\$ 19,067,500			\$ 19,067,500		\$ 19,067,500	X X
Frontage							
Arterial	\$ 31,285,200			\$ 31,285,200		\$ 31,285,200	X X
Thoroughfare	\$ 58,981,900			\$ 58,981,900		\$ 58,981,900	X X
Subtotal Transportation	\$ 755,548,398	\$512,677,387	\$ 47,066,131	\$195,804,881	\$ -	\$ 755,548,398	
Water - Offsite (SCWA)[2]	\$ 27,615,666		\$ 20,104,534	\$ 7,511,132		\$ 27,615,666	X X
Water - Onsite (SCWA)[2]	\$ 14,236,872		\$ 10,437,265	\$ 3,799,607		\$ 14,236,872	X X
Water - Offsite (Cal Am)[3]	\$ 1,160,874		\$ 1,160,874			\$ 1,160,874	X X
Water - Onsite (Cal Am)[3]	\$ 22,150,128		\$ 22,150,128			\$ 22,150,128	X X
Sewer[4]	\$ 58,555,458		\$ 37,449,586	\$ 21,105,872		\$ 58,555,458	X X
Drainage & Levee[5]	\$ 250,626,392		\$ 27,570,127	\$223,056,265		\$ 250,626,392	X X
Subtotal Backbone Infrastructure	\$ 1,129,893,788	\$512,677,387	\$ 165,938,645	\$451,277,757	\$ -	\$ 1,129,893,788	
Public Facilities							
Parks - CRPD[6]	\$ 59,741,787		\$ 59,741,787			\$ 59,741,787	X
Parks - SRPD[7]	\$ 66,679,587		\$ 66,679,587			\$ 66,679,587	X
Regional Trails [8]	\$ 27,210,011	\$ 21,810,487		\$ 5,399,524		\$ 27,210,011	X
Local/Conventional Trails[7][8]	\$ 12,988,560			\$ 12,988,560		\$ 12,988,560	X
Transit	\$ 31,535,747	\$ 31,535,747				\$ 31,535,747	
Open Space	\$ 13,531,343			\$ 13,531,343		\$ 13,531,343	
Fire[9]	\$ 44,143,251		\$ 44,143,251			\$ 44,143,251	
Libraries[10]	\$ 18,006,372		\$ 18,006,372			\$ 18,006,372	
Schools - Elk Grove USD[11]	\$ 211,058,820		\$ 211,058,820			\$ 211,058,820	X
Schools - Sac City USD[12]	\$ 2,995,736		\$ 2,995,736			\$ 2,995,736	X
Subtotal Public Facilities	\$ 487,891,215	\$ 53,346,234	\$ 402,625,553	\$ 31,919,428	\$ -	\$ 487,891,215	
Total Buildout	\$ 1,617,785,004	\$566,023,621	\$ 568,564,198	\$483,197,185	\$ -	\$ 1,617,785,004	

[1] Funding from the SCTDF program.

[2] Funding from the SCWA Zone 40 program.

[3] Assumed reimbursement from Cal Am.

[4] Funding from Sac Sewer program.

[5] Funding from SCWA Zone 11A program.

[6] Funding from CRPD program.

[7] Funding from SRPD program.

[8] Funding from SCTDF program.

[9] Funding from Sac Metro program.

[10] Funding from Sacramento Library Agency program.

[11] Funding from Elk Grove Unified School District program.

[12] Funding from Sacramento City School District program.

The funding for the other category in the tables above is envisioned to come from a variety of sources. These funding sources may include but are not limited to (i) Land Secured Financing, (ii) Federal, State, County or local funding and (iii) Private Financing. These funding mechanisms are described earlier in this Section VII.

In addition to the one-time, upfront Public Improvement requirements, the Master Plan will create annual operating and maintenance demands associated with the provision of services to the Project. A list of the various Public Improvements along with the dedicated services provider(s) and existing and/or proposed key annual funding sources is shown in the following table 35. The Project anticipates annexing into or creating districts to secure long term operational and maintenance financing for the

service providers. A comprehensive list of these districts is shown in the preliminary CFD bond capacity analysis included in **Appendix C**.

TABLE 35  
Services Funding Matrix

Public Improvements & Facilities	Service Provider	Funding Source
Transportation - Regional	County of Sacramento	GT/GF/CFD
Transportation - Local	County of Sacramento	GT/GF/CFD
Water	SCWA / Cal Am	UF
Sewer	SASD / SRCSD	UF
Drainage & Levee (i)	SCWA	CFD
Parks	CRPD / SRPD	CFD
Trails	County of Sacramento	CFD
Transit	County of Sacramento / Regional Transit	CFD/AD/CSA
Open Space	County of Sacramento	CFD
Fire	Sac Metro Fire	GF
Sheriff	County of Sacramento	GF/CFD
Library	Sacramento Public Library Authority	GF
Schools	EGUSD / SCUSD / FCUSD	GF
(i) SCWA does not maintain levees. Special district to be formed.		

\*Key annual funding represent existing or potential funding sources for the respective public improvements/facility. Actual application will be determined at a future date.

AD = Assessment District	LLD = Landscape & Lighting District
CFD = Community Facilities District	UF = User Fees
GF = General Fund	HOA = Homeowners Association
TDA = Transportation Development Act	GT = Gas Tax
CSA = County Service Area	

## VIII. ACTION IMPLEMENTATION PLAN (ACTION PLAN)

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The Finance Plan outlines the strategy for financing, constructing and maintaining Public Improvements. Included as part of the Public Improvements is a set of essential upfront infrastructure that is required prior to or in conjunction with initial phases of development. The essential upfront infrastructure has created significant cash flow constraints for the Applicants which requires the implementation of specific funding mechanism allowing for a cost-effective plan of development. Implementation of these funding mechanisms or action plan ("Action Plan") is necessary to cure the cash flow constraints and achieve the feasibility metrics outlined in this Finance Plan.

The Finance Plan includes the following action items to mitigate the cash flow constraints associated with initial phases of the Project triggered by the essential upfront infrastructure.

**Action Item No. 1:** Utilization of federal, state, and local grant funding to deliver flood control and levee protection.

The Applicant is pursuing grant opportunities with federal, state, and local agencies to fund construction of the extensive flood control and levee improvements required prior to or in conjunction with the initial phases of development. The flood control and levee improvements provide regional security to existing and future downstream development within the Morrison Creek and Elder Creek water shed areas. The regional nature of the flood control and levee improvements which impact multiple agencies provides a level of environmental equity allowing the Applicant to actively pursue grant funding opportunities. . Critical to the application process of grant programs is active participation by the County. A lack of support from the County in obtaining grant funding severely impacts the feasibility of the initial phases of the Project and the Applicant's ability to achieve the required feasibility metrics.

**Action Item No. 2:** Formation of an Enhanced Infrastructure Finance District ("EIFD").

The Project contains a substantial amount of non-residential land uses that creates a unique opportunity for the Applicant and County. The significant non-residential properties generate positive general fund cash flows that can be leveraged to fund a variety of Public Improvements and other activities through an EIFD. As described above in Section VII, the EIFD allows for the use of property tax increment and other revenue sources to fund public improvements and facilities. The EIFD provides a new opportunity for the County and the Applicant to form a partnership for investing in public improvements and facilities with a useful life of fifteen (15) years.

The Applicant is currently analyzing the appropriateness of using EIFD funding for the following types of Public Improvements:

- Flood Control and levee
- Transportation
- Sewer
- Water

The ability to leverage the positive fiscal impact the Project has on the County to deliver regional or multijurisdictional Public Improvements including the essential upfront infrastructure is key to delivering a feasible Project and minimizing the cash flow constraints.

**Action Item No. 3:** Extended term Community Facilities District (“CFD”)

Due to the size and scope of the Project, the Applicants are proposing to extend the term of the CFD special tax. As the Project may be required to contribute funding for capital improvement projects required near the termination of a typical CFD, it is prudent for the Applicants and County to address these funding needs. Extending the term of the CFD by an additional twenty-five (25) to thirty (30) years or longer would allow the County and Project to identify a source of funding for long-term capital improvements. The Applicants envision future CFD bond sales after the termination of the initial CFD bond to fund these long-term capital improvements. Additionally, the CFD special tax revenues from the extended term could directly fund repair, replacement or rehabilitation needs associated with early phase capital improvements or the essential upfront infrastructure. The use of the extended term CFD provides the Project with a more comprehensive and efficient use of the CFD mechanism. By enhancing the CFD by extending the term of the special tax the Project is able to fully leverage bond proceeds in early years to offset cash flow constraints and feasibility concerns while preserving needed funding for future phases of the Project. E

**Action Item No. 4:** Regional Cost Sharing

The Project is one of many located within the Jackson Highway Master Plan Area (“JHMPA”) of the County. These include: (i) West Jackson Highway Master Plan, (ii) Jackson Township Specific Plan, (iii) Newbridge Specific Plan and (iv) Mather South Master Plan. Many of these master plan and specific plan projects will be conditioned with the construction of regional improvements that provide capacity or benefit development within one or multiple planned projects. The Applicant and County should pursue the development of cost sharing of these construction activities. A regional cost sharing program would lower initial infrastructure investments and deliver needed regional improvements to the key masterplan projects along the JHMPA.

**Action Item No. 5:** Direct Reimbursement from Public Agency

Several of the Project service providers carry large impact fee fund balances. These fund balances are generated by the collection of impact fee and other revenue sources over a long period of time. Fund balances from the collection of impact fees are required to be spent within a five (5) year period on new or expanded improvements and facilities. Currently, SCWA and Sac Sewer are sitting on fund balances of approximately \$450 million and \$90 million respectively. The substantial fund balances at these two service providers could be used to directly reimburse the Applicant for constructing water and sewer improvements that are part of the essential upfront infrastructure. The utilization of these existing fund balances as an alternative to applying traditional impact fee credits at building permits has a dramatic impact on the cash flow constraints associated with delivering the initial phases of the Project.

The Action Plan outlined in this section identifies strategies to address the significant cash flow constraints of the initial phases of the Project and provides a pathway to full buildout. Flexibility within the Action Plan to address changing market conditions is an element of this Finance Plan. The action items listed above are anticipated to evolve with the market and be subject to revision.

**APPENDIX A**  
**WEST JACKSON HIGHWAY MASTER PLAN**  
**ENGINEERING COST ESTIMATES**



# Memorandum

**WOOD RODGERS**  
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME

**To:** StoneBridge Properties, LLC  
Granite Construction Company

**From:** Jason Reed, PE

**Cc:** Mike Motroni, PE

**Date:** January 30, 2025

**Subject:** West Jackson Highway Master Plan: Backbone Roads and Trails Estimate and Narrative

**DRAFT**

## Introduction

West Jackson Highway Master Plan (WJHMP) covers approximately 5,913 acres of land in Sacramento County straddling Jackson Highway, between South Watt Avenue and Excelsior Road. To date, various iterations of master studies have been prepared and approved in support of entitlement for WJHMP and addressing major infrastructure needs. The studies, along with the latest land use plan and Master Plan have informed these estimates for Backbone Roads and Trails:

- 2019 Update Sacramento County Transportation Development Fee and Transit Impact Fee Program, dated November 2019 and prepare by DKS (SCTDF)

The SCTDF along with the latest land use plan and WJHMP were used as basis for the attached backbone cost estimates and exhibits. Quantities are appropriate as a large-scale estimate, based on schematic proposed alignments.

This estimate does not include roadway segments and intersections that are included in the SCTDF as WJHMP will pay its fair share cost of this fee and therefore should not be counted separately as a Plan Area Fee. The frontage segments that were excluded from the SCTDF costs are included in this estimate.

This estimate memo does not include backbone drainage, sewer, water as those are subject of a separate memo. Similarly, these estimates do not include mass grading, potential grading of off-site utility alignments for placement of utilities, or levee improvements.

## Roads

The planning area has backbone roads classified into three main designations, which include: Thoroughfare (6-lanes), Arterial (4-lanes) and Collector (2-lanes) with some variations of Low Impact Design (LID) Median vs. Non-LID Median.

Cost estimates for backbone roads infrastructure are based on the attached Circulation Exhibit. Unit Cost estimates have been developed for each roadway type and those have been projected based upon the Circulation Exhibit. Quantities for the estimates are organized by Finance Areas (A, B, and C). Final phasing or sequencing of backbone roads will be subject to future analysis during tentative map phases. Roadway segments that appear in the SCTDF are excluded from this estimate. Similarly, intersections that appear in

the SCTDF have been excluded from this estimate. Lengths of roadway frontage segments utilize the length described in the SCTDF.

### **Trails**

The planning area has backbone Trails included as two main designations, which include: Regional Trail and Conventional Trail.

Cost estimates for backbone trails are based on the Trails Plan attached. Unit Cost estimates have been developed for each trail type and those have been projected based upon the Trails Plan Exhibit. Quantities for the estimates are organized by Finance Areas (A, B, and C). Ultimately, some trails may be located with backbone roads for efficiencies and costs may be consolidated (trail on one side of the road instead of trail and sidewalk). This level of analysis is subject to further plan development.

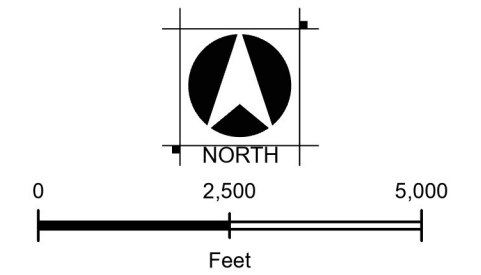
### **Attachments**

1. Finance Plan Area Exhibit
2. Backbone Roads and SCTDF Excluded Frontage Unit Cost Development
3. Backbone Roads Cross Section Exhibits
4. Backbone Roads and Intersections Cost Estimates
5. Backbone Roads SCTDF Segment Estimates
6. Backbone Trails Unit Cost Development and Cost Estimates
7. Backbone Trails Exhibit



**ATTACHMENT 1: FINANCE PLAN AREA EXHIBIT**

**FINANCE PLAN AREA**  
WEST JACKSON HIGHWAY MASTER PLAN  
COUNTY OF SACRAMENTO, CA  
MARCH 21, 2025

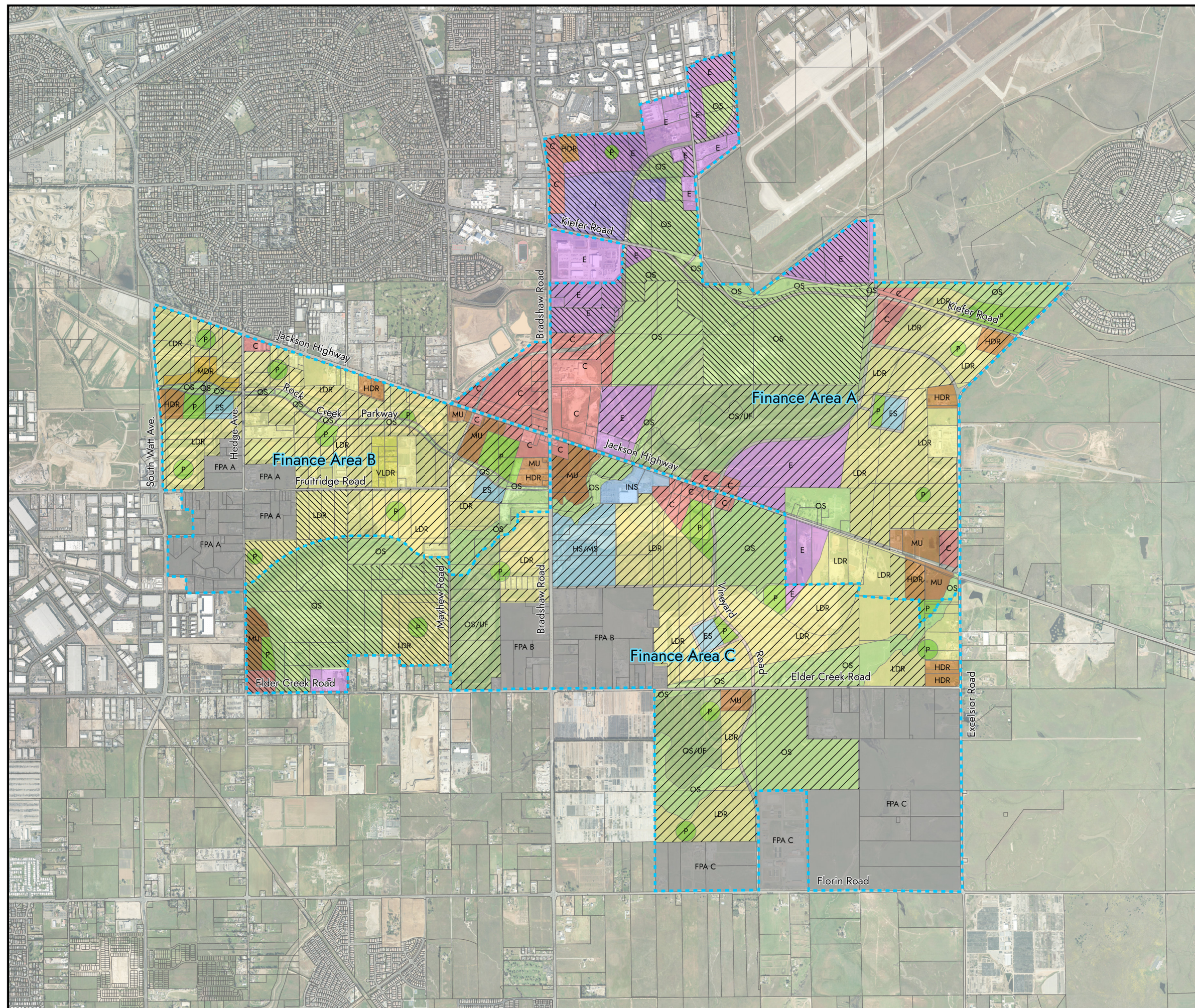


**Legend**

- Finance Area
- Parcel Boundary
- Granite Properties
- Teichert Properties

**Proposed Land Use**

- Very Low Density Residential
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Mixed Use
- Commercial
- Employment Center
- Industrial
- School
- Park
- Open Space
- Open Space/Urban Farm
- Institutional
- Future Planning Area (FPA)





**ATTACHMENT 2: BACKBONE ROADS AND SCTDF EXCLUDED FRONTAGE UNIT COST DEVELOPMENT**

**PRELIMINARY**

**Table A-1.2**  
**WJHMP Backbone Estimate**  
**Preliminary Infrastructure Development Cost Estimate**

**Preliminary Cost Per Linear Foot Summary**

TYPE	ROADWAY	Total Cost Per L.F.
COLLECTOR	50' ROW 2 LANES	\$2,280
MAJOR COLLECTOR	60' ROW 2 LANES	\$2,410
MODIFIED COLLECTOR	108' ROW 2 LANES AND EXPANDED MEDIAN (SWALE)	\$3,150
ARTERIAL	74' ROW 4 LANES	\$2,900
THOROUGHFARE	96' ROW 6 LANES	\$3,370
FRONTAGE ONLY - COLLECTOR	FRONTAGE ONLY - PER FOOT FOR 1-SIDE	\$680
	FRONTAGE ONLY - PER FOOT FOR 2-SIDES	\$1,130
FRONTAGE ONLY - ARTERIAL	FRONTAGE ONLY - PER FOOT FOR 1-SIDE	\$700
AND THOROUGHFARE	FRONTAGE ONLY - PER FOOT FOR 2-SIDES	\$1,180

**NOTES**

1. Subgrade Preparation quantities include proposed paving and concrete work within the ROW plus an additional 3' contingency for work outside of ROW and within landscape medians.
2. Excavation quantities include anticipated earthwork activities within proposed roadway and landscape sections equal to width of corridor by 3' depth.
3. Signing and Striping quantities are based on number of lanes and anticipated signage spacing.
4. Erosion Control quantities include proposed ROW plus proposed landscape corridors.
5. Estimate soft costs allowances estimated at 20%.
- 6. Estimate does not include water quality and LID improvements.**
7. Dry utility/joint trench costs are included for backbone roads only. Excludes existing utility relocations.
8. Estimate assumes the offsite utility extensions are sufficient depth and location to avoid utility conflicts and serve the project. Estimate does not include detailed mass grading for utility alignments.
9. Monumentation or other architectural features are not included in this estimate.
10. Costs reflect 2023 dollars based on interpolation of unit cost prices from comparable projects.
11. Pavement and concrete structural sections are assumed and not based on site specific geotechnical analysis.
12. Mitigation fees are not included in this cost estimate.
- 13. Mass grading efforts are not included in this estimate.**
14. Quantities not explicitly detailed within are not included as part of this estimate.
- 15. Reimbursements for creditable facilities are not backed-out of the per LF Cost.**
16. Intract costs are not a part of this estimate.

Taken from Table A-1.2 of WJHMP  
WJHMP Backbone Estimate  
Preliminary Infrastructure Development Cost Estimate

Preliminary Cost Per Linear Foot

50' R.O.W.  
(2 Lane Collector)

Item	Quantity	Unit	\$ / Unit	Per Ft Cost
1. Subgrade Preparation	56	s.f.	\$0.25	\$14.00
2. Excavation (3')	11	c.y.	\$4.00	\$44.00
3. 4" Asphaltic Concrete Paving	44	s.f.	\$3.40	\$149.60
4. 12" Aggregate Base	44	s.f.	\$4.15	\$182.60
5. Curb & Gutter, Type 2 (Vertical Curb)	2	l.f.	\$35.00	\$70.00
6. Signing & Striping	5	l.f.	\$5.00	\$25.00
7. Erosion Control	94	s.f.	\$0.15	\$14.10
8. Local Drainage for Major Arterial (Drain, Leads & DI's)	1	l.f.	\$190.00	\$190.00
9. Street Lights (Type A, 170' estimated spacing)	1	l.f.	\$80.00	\$80.00
10. Joint Trench	1	l.f.	\$250.00	\$250.00
11. Landscape Corridor - Frontage	34	l.f.	\$8.00	\$272.00
12. Sidewalk	10	s.f.	\$7.50	\$75.00
13. Distribution Water	1	l.f.	\$155.00	\$155.00
	<b>Construction Subtotal</b>			<b>\$1,521.30</b>
Soft Cost			20%	\$304.26
Contingency			30%	\$456.39
	<b>Construction Total</b>			<b>\$2,281.95</b>
		<b>Use</b>		<b>\$2,280.00</b>

Taken from Table A-1.2 of WJHMP  
WJHMP Backbone Estimate  
Preliminary Infrastructure Development Cost Estimate

Preliminary Cost Per Linear Foot

**60' R.O.W.**

**(2 Lane Collector)**

Item	Quantity	Unit	\$ / Unit	Per Ft Cost
1. Subgrade Preparation	66	s.f	\$0.25	\$16.50
2. Excavation (3')	12	c.y.	\$4.00	\$48.00
3. 4" Asphaltic Concrete Paving	54	s.f.	\$3.40	\$183.60
4. 12" Aggregate Base	54	s.f.	\$4.15	\$224.10
5. Curb & Gutter, Type 2 (Vertical Curb)	2	l.f.	\$35.00	\$70.00
6. Signing & Striping	6	l.f.	\$5.00	\$30.00
7. Erosion Control	104	s.f.	\$0.15	\$15.60
8. Local Drainage for Major Arterial (Drain, Leads & DI's)	1	l.f.	\$190.00	\$190.00
9. Street Lights (Type A, 170' estimated spacing)	1	l.f.	\$80.00	\$80.00
10. Joint Trench	1	l.f.	\$250.00	\$250.00
11. Landscape Corridor - Frontage	34	l.f.	\$8.00	\$272.00
12. Sidewalk	10	s.f.	\$7.50	\$75.00
13. Distribution Water	1	l.f.	\$155.00	\$155.00
	<b>Construction Subtotal</b>			<b>\$1,609.80</b>
Soft Cost			20%	\$321.96
Contingency			30%	\$482.94
	<b>Construction Total</b>			<b>\$2,414.70</b>
	<b>Use</b>			<b>\$2,410.00</b>

Taken from Table A-1.2 of WJHMP  
WJHMP Backbone Estimate  
Preliminary Infrastructure Development Cost Estimate

**Preliminary Cost Per Linear Foot**  
**108' R.O.W. with Expanded Median (Swale)**  
**(2 Lane Modified Collector)**

Item	Quantity	Unit	\$ / Unit	Per Ft Cost
1. Subgrade Preparation	70	s.f.	\$0.25	\$17.50
2. Excavation (3')	16	c.y.	\$4.00	\$64.00
3. 4" Asphaltic Concrete Paving	51	s.f.	\$3.40	\$173.40
4. 12" Aggregate Base	51	s.f.	\$4.15	\$211.65
5. Curb & Gutter, Type 2 (Vertical Curb)	2	l.f.	\$35.00	\$70.00
6. Signing & Striping	4	l.f.	\$5.00	\$20.00
7. Erosion Control	140	s.f.	\$0.15	\$21.00
8. Local Drainage for Major Arterial (Drain, Leads & DI's)	1	l.f.	\$190.00	\$190.00
9. Street Lights (Type A, 170' estimated spacing)	1	l.f.	\$80.00	\$80.00
10. Joint Trench	1	l.f.	\$250.00	\$250.00
11. Landscape Corridor - Frontage	20	s.f.	\$8.00	\$160.00
12. Landscape Corridor - Median	50	s.f.	\$12.00	\$600.00
13. Sidewalk	12	s.f.	\$7.50	\$90.00
14. Distribution Water	1	l.f.	\$155.00	\$155.00
	<b>Construction Subtotal</b>			<b>\$2,102.55</b>
Soft Cost			20%	\$420.51
Contingency			30%	\$630.77
	<b>Construction Total</b>			<b>\$3,153.83</b>
	<b>Use</b>			<b>\$3,150.00</b>

Taken from Table A-1.2 of WJHMP  
WJHMP Backbone Estimate  
Preliminary Infrastructure Development Cost Estimate

## Preliminary Cost Per Linear Foot

74' R.O.W.  
(4 Lane Arterial)

Item	Quantity	Unit	\$ / Unit	Per Ft Cost
1. Subgrade Preparation	68	s.f.	\$0.25	\$17.00
2. Excavation (3')	13	c.y.	\$4.00	\$52.00
3. 6" Asphaltic Concrete Paving	56	s.f.	\$5.10	\$285.60
4. 16" Aggregate Base	56	s.f.	\$4.80	\$268.80
5. Curb & Gutter, Type 2 (Vertical Curb)	2	l.f.	\$35.00	\$70.00
6. Curb, Type 5 (Median Curb)	2	l.f.	\$35.00	\$70.00
7. Median Landscaping & Irrigation (turf & street trees)	12	s.f.	\$8.00	\$96.00
8. Median Top Soil Import (18")	0.7	c.y.	\$35.00	\$24.50
9. Signing & Striping	6	l.f.	\$5.00	\$30.00
10. Erosion Control	114	s.f.	\$0.15	\$17.10
11. Local Drainage for Major Arterial (Drain, Leads & DI's)	1	l.f.	\$190.00	\$190.00
12. Street Lights (Type A, 210' estimated spacing)	1	l.f.	\$70.00	\$70.00
13. Joint Trench	1	l.f.	\$250.00	\$250.00
14. Traffic Signal Interconnect	1	l.f.	\$20.00	\$20.00
15. Landscape Corridor - Frontage	30	l.f.	\$8.00	\$240.00
16. Sidewalk	10	s.f.	\$7.50	\$75.00
17. Distribution Water	1	l.f.	\$155.00	\$155.00
	<b>Construction Subtotal</b>			<b>\$1,931.00</b>
Soft Cost			20%	\$386.20
Contingency			30%	\$579.30
	<b>Construction Total</b>			<b>\$2,896.50</b>
	<b>Use</b>			<b>\$2,900.00</b>

Taken from Table A-1.2 of WJHMP  
WJHMP Backbone Estimate  
Preliminary Infrastructure Development Cost Estimate

Preliminary Cost Per Linear Foot

96' R.O.W.  
(6 Lane Thoroughfare)

Item	Quantity	Unit	\$ / Unit	Per Ft Cost
1. Subgrade Preparation	90	s.f.	\$0.25	\$22.50
2. Excavation (3')	15	c.y.	\$4.00	\$60.00
3. 6" Asphaltic Concrete Paving	78	s.f.	\$5.10	\$397.80
4. 19" Aggregate Base	78	s.f.	\$5.70	\$444.60
5. Curb & Gutter, Type 2 (Vertical Curb)	2	l.f.	\$35.00	\$70.00
6. Curb, Type 5 (Median Curb)	2	l.f.	\$35.00	\$70.00
7. Median Landscaping & Irrigation (turf & street trees)	12	s.f.	\$8.00	\$96.00
8. Median Top Soil Import (18")	0.7	c.y.	\$35.00	\$24.50
9. Signing & Striping	8	l.f.	\$5.00	\$40.00
10. Erosion Control	136	s.f.	\$0.15	\$20.40
11. Local Drainage for Major Arterial (Drain, Leads & DI's)	1	l.f.	\$190.00	\$190.00
12. Street Lights (Type A, 210' estimated spacing)	1	l.f.	\$70.00	\$70.00
13. Joint Trench	1	l.f.	\$250.00	\$250.00
14. Traffic Signal Interconnect	1	l.f.	\$20.00	\$20.00
15. Landscape Corridor - Frontage	30	l.f.	\$8.00	\$240.00
16. Sidewalk	10	s.f.	\$7.50	\$75.00
17. Distribution Water	1	l.f.	\$155.00	\$155.00
	<b>Construction Subtotal</b>			<b>\$2,245.80</b>
Soft Cost			20%	\$449.16
Contingency			30%	\$673.74
	<b>Construction Total</b>			<b>\$3,368.70</b>
	<b>Use</b>			<b>\$3,370.00</b>

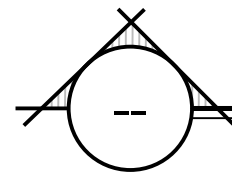
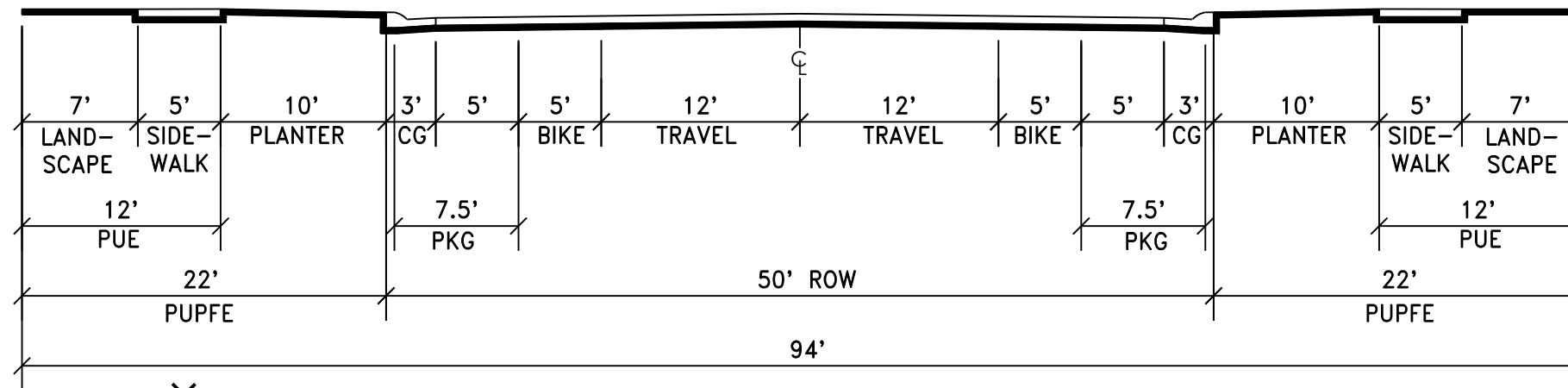
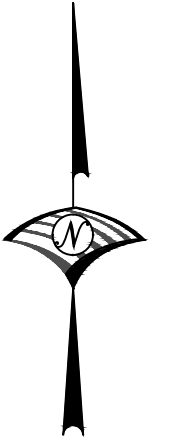
**PRELIMINARY****Frontage Only Estimates****WJHMP Backbone Estimate****Preliminary Infrastructure Development Cost Estimate****Preliminary Cost Per Linear Foot****Frontage Only - Collector and Arterial / Thoroughfare**

Item		Quantity	Unit	\$ / Unit	Per Ft Cost
<b>Collector - Per Side</b>					
1	Sawcut	1	l.f.	\$3.00	\$3.00
2	2' Asphalt Replacement	1	l.f.	\$12.00	\$12.00
3	Curb and Gutter	1	l.f.	\$35.00	\$35.00
4	Landscape	15	s.f.	\$10.00	\$150.00
5	Sidewalk	5	s.f.	\$8.00	\$40.00
6	Drainage Inlets and lateral	1	l.f.	\$45.00	\$45.00
7	Local Drainage Main Line (one side only)	1	l.f.	\$150.00	\$150.00
8	Street Lights (staggered at 220' spacing)	1	l.f.	\$16.00	\$16.00
<b>Construction Subtotal</b>					<b>\$451.00</b>
Soft Cost				20%	\$90.20
Contingency				30%	\$135.30
<b>Construction Total</b>					<b>\$676.50</b>
<b>1-Side Use</b>					<b>\$680.00</b>
<b>2-Sides Use</b>					<b>\$1,130.00</b>
<b>Arterial / Thoroughfare - Per Side</b>					
1	Sawcut	1	l.f.	\$3.00	\$3.00
2	2' Asphalt Replacement	1	l.f.	\$12.00	\$12.00
3	Curb and Gutter	1	l.f.	\$35.00	\$35.00
4	Landscape	15	s.f.	\$10.00	\$150.00
5	Sidewalk	5	s.f.	\$8.00	\$40.00
6	Drainage Inlets and lateral	1	l.f.	\$45.00	\$45.00
7	Local Drainage Main Line (one side only)	1	l.f.	\$150.00	\$150.00
8	Street Lights (paired at 220' spacing)	1	l.f.	\$32.00	\$32.00
<b>Construction Subtotal</b>					<b>\$467.00</b>
Soft Cost				20%	\$93.40
Contingency				30%	\$140.10
<b>Construction Total</b>					<b>\$700.50</b>
<b>1-Side Use</b>					<b>\$700.00</b>
<b>2-Sides Use</b>					<b>\$1,180.00</b>



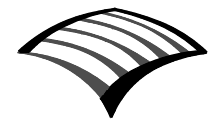
**ATTACHMENT 3: BACKBONE ROADS AND SCDTF EXCLUDED FRONTAGE CROSS SECTION EXHIBITS**

**50' STREET SECTION**  
**WEST JACKSON HIGHWAY MASTER PLAN**  
 COUNTY OF SACRAMENTO, CALIFORNIA  
 NOVEMBER 2023



**COLLECTOR**

50' STREET SECTION



**WOOD RODGERS**

BUILDING RELATIONSHIPS ONE PROJECT AT A TIME

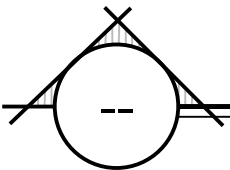
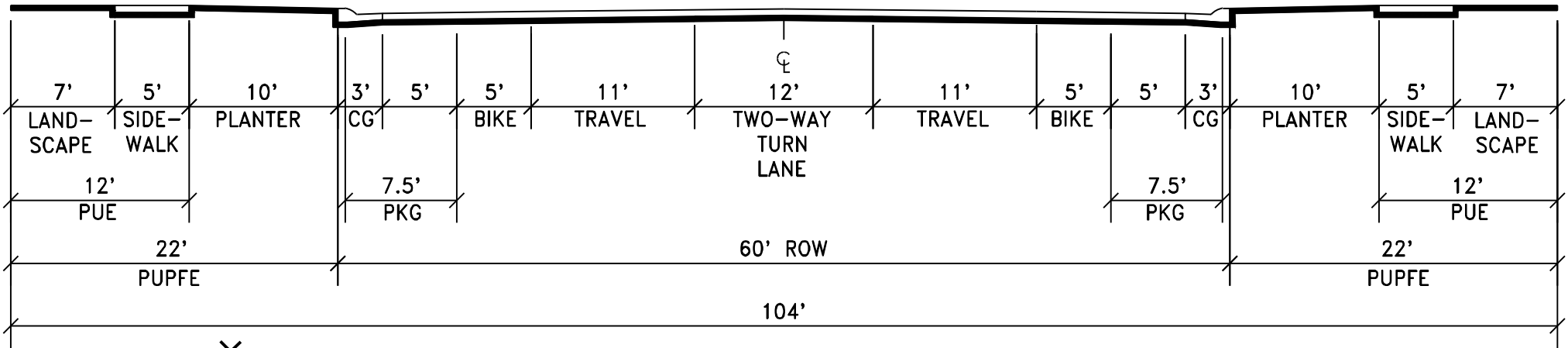
3741 DOUGLAS BLVD, STE 150 TEL 916.341.7760

ROSEVILLE, CA 95661 FAX 916.341.7767

60' STREET SECTION

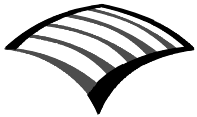
# WEST JACKSON HIGHWAY MASTER PLAN

COUNTY OF SACRAMENTO, CALIFORNIA  
JANUARY 2025



MAJOR COLLECTOR

60' STREET SECTION



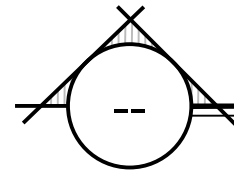
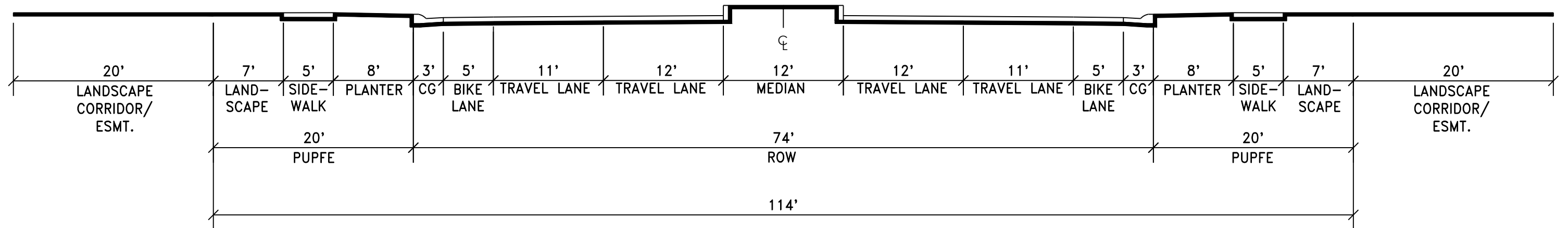
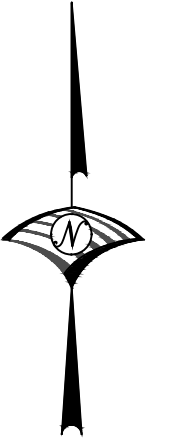
**WOOD RODGERS**

BUILDING RELATIONSHIPS ONE PROJECT AT A TIME

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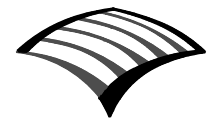
ROSEVILLE, CA 95661 FAX 916.341.7767

**74' STREET SECTION**  
**WEST JACKSON HIGHWAY MASTER PLAN**  
 COUNTY OF SACRAMENTO, CALIFORNIA  
 NOVEMBER 2023



**ARTERIAL**

74' STREET SECTION



**WOOD RODGERS**

BUILDING RELATIONSHIPS ONE PROJECT AT A TIME

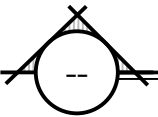
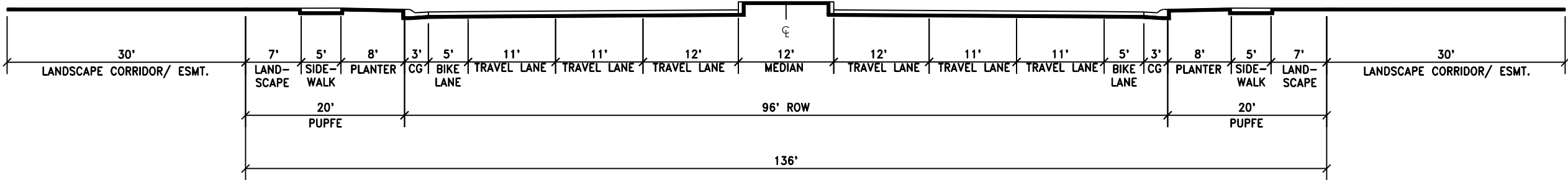
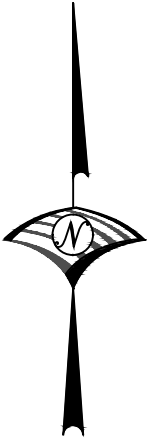
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ROSEVILLE, CA 95661 FAX 916.341.7767

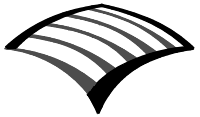
96' STREET SECTION

# WEST JACKSON HIGHWAY MASTER PLAN

COUNTY OF SACRAMENTO, CALIFORNIA  
NOVEMBER 2023



THOROUGHFARE  
96' STREET SECTION



**WOOD RODGERS**

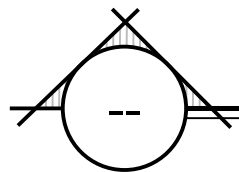
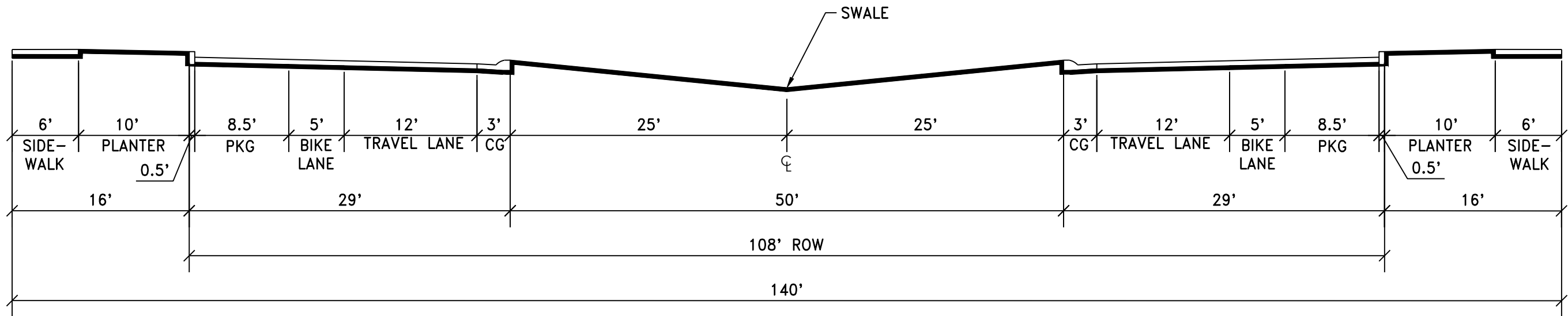
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME

3741 DOUGLAS BLVD, STE 150 TEL 916.341.7760  
ROSEVILLE, CA 95661 FAX 916.341.7767

108' STREET SECTION

# WEST JACKSON HIGHWAY MASTER PLAN

COUNTY OF SACRAMENTO, CALIFORNIA  
NOVEMBER 2023



MODIFIED COLLECTOR

108' STREET SECTION



**WOOD RODGERS**

BUILDING RELATIONSHIPS ONE PROJECT AT A TIME

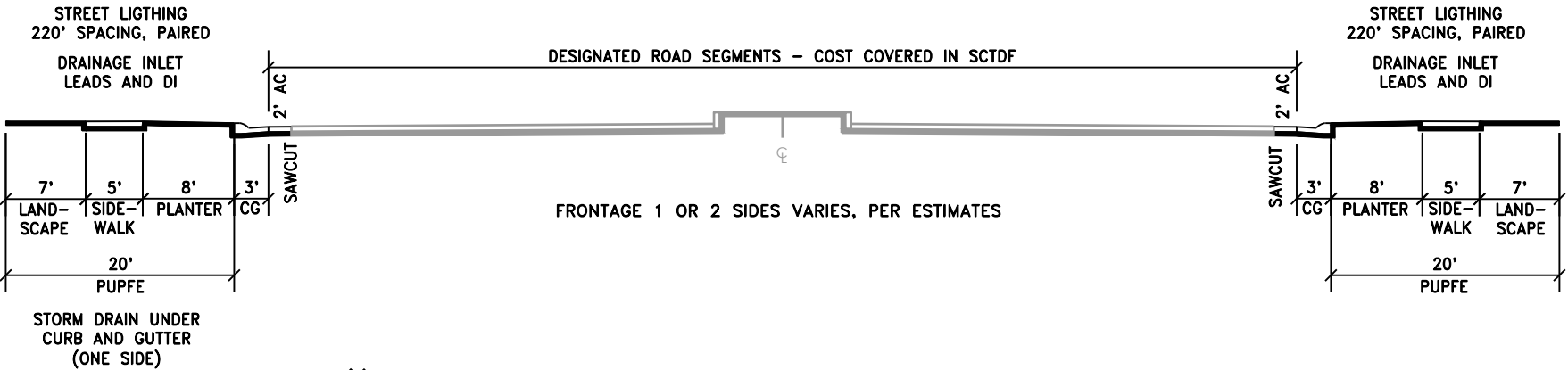
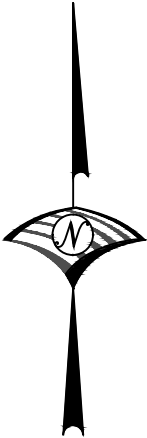
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ROSEVILLE, CA 95661 FAX 916.341.7767

ARTERIAL AND THOROUGHFARE FRONTAGE ONLY

# WEST JACKSON HIGHWAY MASTER PLAN

COUNTY OF SACRAMENTO, CALIFORNIA  
NOVEMBER 2023



**WOOD RODGERS**

BUILDING RELATIONSHIPS ONE PROJECT AT A TIME

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**ATTACHMENT 4: BACKBONE ROADS AND INTERSECTIONS COST ESTIMATES**

## Preliminary Major (Backbone) Roadway Infrastructure

Updated: 11/9/2023

	Backbone Roadway Total	SCTDF Excluded Frontage	Total for Plan Area
Total Finance Area A Roadway	\$ 27,330,000	\$ 37,120,000	\$ 64,450,000
Total Finance Area B Roadway	\$ 40,210,000	\$ 15,280,000	\$ 55,490,000
Total Finance Area C Roadway	\$ 25,650,000	\$ 37,870,000	\$ 63,520,000
<b>TOTAL ROADWAY INFRASTRUCTURE</b>	<b>\$ 93,190,000</b>	<b>\$ 90,270,000</b>	<b>\$ 183,460,000</b>

## NOTES

1. Subgrade Preparation quantities include proposed paving and concrete work within the ROW plus an additional 3' contingency for work outside of ROW and within landscape medians.
2. Based on preliminary nature of studies, 30% contingency is applied.
3. Signing and Striping quantities are based on number of lanes and anticipated signage
4. Excavation quantities include anticipated earthwork activities within proposed roadway and landscape sections equal to width of corridor by 3' depth.
5. Estimate includes a 20% soft cost allowance. Assumed to be engineering (8%), mapping (1%), plan check (2%), inspection (3%), geotech (3%), and staking (3%).
6. Monumentation or other architectural features are not included in this estimate.
7. Pavement and concrete structural sections are assumed and not based on site specific geotechnical analysis.
8. Intract costs are not a part of this estimate.
9. Costs reflect 2023 dollars.
10. Quantities not explicitly detailed within are not included as part of this estimate.
11. Improvements included in SCTDF (roadway, intersections and applicable frontage) are not included in these estimates as the project will pay it's fair share.
12. Quantity for LF of road frontage match SCTDF segment lengths which also incorporate reductions for intersection offsets.
13. Backbone roadway segments and intersections included in the SCTDF are excluded from this estimate as the project is anticipated to pay its fair share cost which will be separate from a Plan Area cost. Frontages where excluded from SCTDF are included in this estimate.
14. Length of Road Segments that are not in SCTDF are reduced where applicable due to intersection leg length that is included in the SCTDF program.

**Preliminary Backbone Roadway Infrastructure  
Finance Area A**

Identifier	Description	Quantity	Unit	\$ / Unit	Total
<b>Roads Not Included in SCTDF</b>					
<u>Collector</u>					
	Excelsior Road (From North Plan Bndy. to New Excelsior Road)	3,625 LF	\$	2,280	\$ 8,265,000
<u>Arterial</u>					
	Rock Creek Parkway East (From Jackson Rd. To Kiefer Rd.)	6,575 LF	\$	2,900	\$ 19,067,500
				<b>SUBTOTAL</b>	<b>\$ 27,330,000</b>
<b>Frontages Not Included in SCTDF</b>					
<u>Arterial</u>					
Mayhew Road (From North Plan Boundary to Kiefer Road)					
	Segment 1005 (Partial)	2 Sides	2,400 LF	\$ 1,180	\$ 2,832,000
	Segment 1006	2 Sides	2,070 LF	\$ 1,180	\$ 2,442,600
Kiefer Road (From Rock Creek Parkway East to Excelsior Road)					
	Segment 265	2 Sides	2,800 LF	\$ 1,180	\$ 3,304,000
Excelsior Road (from South FAA to Rock Creek Parkway East)					
	Segment 69	2 Sides	1,340 LF	\$ 1,180	\$ 1,581,200
	Segment 70	2 Sides	370 LF	\$ 1,180	\$ 436,600
	Segment 131	2 Sides	1,000 LF	\$ 1,180	\$ 1,180,000
	Segment 132	2 Sides	1,000 LF	\$ 1,180	\$ 1,180,000
	Segment 133	2 Sides	500 LF	\$ 1,180	\$ 590,000
	Segment 134	1 Side	460 LF	\$ 700	\$ 322,000
<u>Thoroughfare</u>					
Bradshaw Road (From Jackson Rd. To North FAA, excluding gap)					
	Segment 38	1 Side	425 LF	\$ 700	\$ 297,500
	Segment 39 (Partial)	1 Side	820 LF	\$ 700	\$ 574,000
	Segment 40	1 Side	820 LF	\$ 700	\$ 574,000
	Segment 41	2 Sides	820 LF	\$ 1,180	\$ 967,600
Kiefer Road (From Bradshaw Rd. To Rock Creek Pkwy. East)					
	Segment 260	2 Sides	350 LF	\$ 1,180	\$ 413,000
	Segment 261	2 Sides	350 LF	\$ 1,180	\$ 413,000
	Segment 262	2 Sides	350 LF	\$ 1,180	\$ 413,000
	Segment 263	2 Sides	350 LF	\$ 1,180	\$ 413,000
	Segment 264	2 Sides	1,840 LF	\$ 1,180	\$ 2,171,200
Mayhew Road (From Jackson Rd. To Kiefer Rd.)					
	Segment 305	2 Sides	940 LF	\$ 1,180	\$ 1,109,200
	Segment 306	2 Sides	1,500 LF	\$ 1,180	\$ 1,770,000
	Segment 1007	2 Sides	3,090 LF	\$ 1,180	\$ 3,646,200

Jackson Highway (From West FAA To Excelsior Rd.)					
Segment 240	2 Sides	1,770 LF	\$	1,180	\$ 2,088,600
Segment 241	2 Sides	870 LF	\$	1,180	\$ 1,026,600
Segment 242	2 Sides	1,370 LF	\$	1,180	\$ 1,616,600
Segment 243	2 Sides	1,370 LF	\$	1,180	\$ 1,616,600
Segment 244	2 Sides	1,770 LF	\$	1,180	\$ 2,088,600
Segment 245	2 Sides	870 LF	\$	1,180	\$ 1,026,600
Segment 246	2 Sides	870 LF	\$	1,180	\$ 1,026,600
				<b>SUBTOTAL</b>	<b>\$ 37,120,000</b>
<b>TOTAL FINANCE AREA A ROADWAY</b>					<b>\$ 64,450,000</b>

Preliminary Backbone Roadway Infrastructure  
Finance Area B

Identifier	Description	Quantity	Unit	\$ / Unit	Total
<b>Roads Not Included in SCTDF</b>					
Collector					
	Hedge Avenue (From Morrison Creek To Jackson Rd.)	5,375	LF	\$ 2,280	\$ 12,255,000
	Rock Creek Parkway (From South Watt Ave. To Bradshaw Rd.)	8,875	LF	\$ 3,150	\$ 27,956,250
				<b>SUBTOTAL</b>	<b>\$ 40,210,000</b>
<b>Frontages Not Included in SCTDF</b>					
<u>Arterial</u>					
Fruitridge Road (From South Watt Ave. To Mayhew Rd.)					
	Segment 177	2 Sides	1,140	LF \$ 1,180	\$ 1,345,200
	Segment 178	2 Sides	1,670	LF \$ 1,180	\$ 1,970,600
	Segment 179	2 Sides	1,670	LF \$ 1,180	\$ 1,970,600
<u>Thoroughfare</u>					
Mayhew Road (From South FAB To Fruitridge Rd.)					
	Segment 309	2 Sides	650	LF \$ 1,180	\$ 767,000
Bradshaw Road (From South FAB To Jackson Rd.)					
	Segment 42	2 Sides	650	LF \$ 1,180	\$ 767,000
South Watt Ave (From South FAB To Jackson Rd., excluding gap)					
	Segment 345	1 Side	1,475	LF \$ 700	\$ 1,032,500
	Segment 346	1 Side	1,475	LF \$ 700	\$ 1,032,500
	Segment 347 (Partial)	2 Sides	2,150	LF \$ 1,180	\$ 2,537,000
Mayhew Road (From Fruitridge Rd. To Jackson Rd.)					
	Segment 307	2 Sides	110	LF \$ 1,180	\$ 129,800
	Segment 308	2 Sides	110	LF \$ 1,180	\$ 129,800
Jackson Highway (From West FAB To East FAB)					
	Segment 237	1 Side	1,490	LF \$ 700	\$ 1,043,000
	Segment 238	1 Side	1,825	LF \$ 700	\$ 1,277,500
	Segment 239	1 Side	1,825	LF \$ 700	\$ 1,277,500
				<b>SUBTOTAL</b>	<b>\$ 15,280,000</b>
<b>TOTAL FINANCE AREA B ROADWAY</b>					<b>\$ 55,490,000</b>

Preliminary Backbone Roadway Infrastructure  
Finance Area C

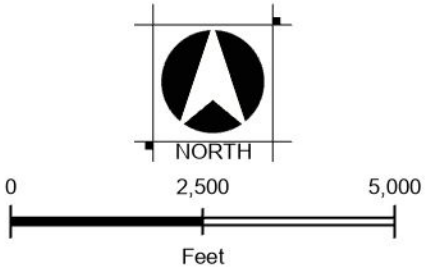
Identifier	Description	Quantity	Unit	\$ / Unit	Total
<b>Roads Not Included in SCTDF</b>					
<u>Collector</u>					
	Hedge Avenue (From Elder Creek Rd. To North FAC)	2,050	LF	\$ 2,280	\$ 4,674,000
	Collector Road Area C (From Vineyard Rd. To Excelsior Rd.)	5,450	LF	\$ 2,280	\$ 12,426,000
	Collector Road with LID Median Area C (From Bradshaw Rd. To Vineyard Rd.)	3,750	LF	\$ 2,280	\$ 8,550,000
				<b>SUBTOTAL</b>	<b>\$ 25,650,000</b>
<b>Frontages Not Included in SCTDF</b>					
<u>Arterial</u>					
Mayhew Road (From Elder Creek Rd. To North FAC)					
	Segment 310	2 Sides	2,600	LF \$ 1,180	\$ 3,068,000
Vineyard Road (From Florin Rd. To Jackson Rd.)					
	Segment 372	2 Sides	790	LF \$ 1,180	\$ 932,200
	Segment 373	2 Sides	2,620	LF \$ 1,180	\$ 3,091,600
	Segment 374	2 Sides	4,270	LF \$ 1,180	\$ 5,038,600
<u>Thoroughfare</u>					
Bradshaw Road (From Elder Creek Rd. To North FAC)					
	Segment 43	2 Sides	650	LF \$ 1,180	\$ 767,000
	Segment 44	2 Sides	650	LF \$ 1,180	\$ 767,000
	Segment 45	2 Sides	650	LF \$ 1,180	\$ 767,000
Excelsior Road (From Elder Creek Rd. To North FAC)					
	Segment 135	1 Side	460	LF \$ 700	\$ 322,000
	Segment 136	1 Side	4,330	LF \$ 700	\$ 3,031,000
Elder Creek Road (From Hedge Rd. To Excelsior Rd., excluding gap)					
	Segment 98 (Partial)	2 Sides	2,140	LF \$ 1,180	\$ 2,525,200
	Segment 99	2 Sides	1,640	LF \$ 1,180	\$ 1,935,200
	Segment 100	2 Sides	4,280	LF \$ 1,180	\$ 5,050,400
	Segment 101	2 Sides	4,280	LF \$ 1,180	\$ 5,050,400
Florin Road (From West FAC To Excelsior Rd.)					
	Segment 164 (Partial)	2 Sides	2,140	LF \$ 1,180	\$ 2,525,200
	Segment 165	1 Side	4,280	LF \$ 700	\$ 2,996,000
				<b>SUBTOTAL</b>	<b>\$ 37,870,000</b>
<b>TOTAL FINANCE AREA C ROADWAY</b>					<b>\$ 63,520,000</b>



**ATTACHMENT 5: BACKBONE ROADS SCTDF SEGMENT ESTIMATES**

ATTACHMENT 4  
PROPOSED ROADWAYS

WEST JACKSON HIGHWAY MASTER PLAN  
COUNTY OF SACRAMENTO, CA  
MARCH 24, 2025



Roadways (Miles)					
	Thoroughfare (6 lanes)	Arterial (4 lanes)	Collector w/ W.Q. Median (2 lanes)	Collector (2 lanes)	Total
Finance Plan A	5.7	4.8	-	0.9	11.4
Finance Plan B	1.1	1.7	2.1	1.3	6.1
Finance Plan C	2.5	4.0	0.8	1.0	8.4
Total	9.3	10.5	2.9	3.2	25.9

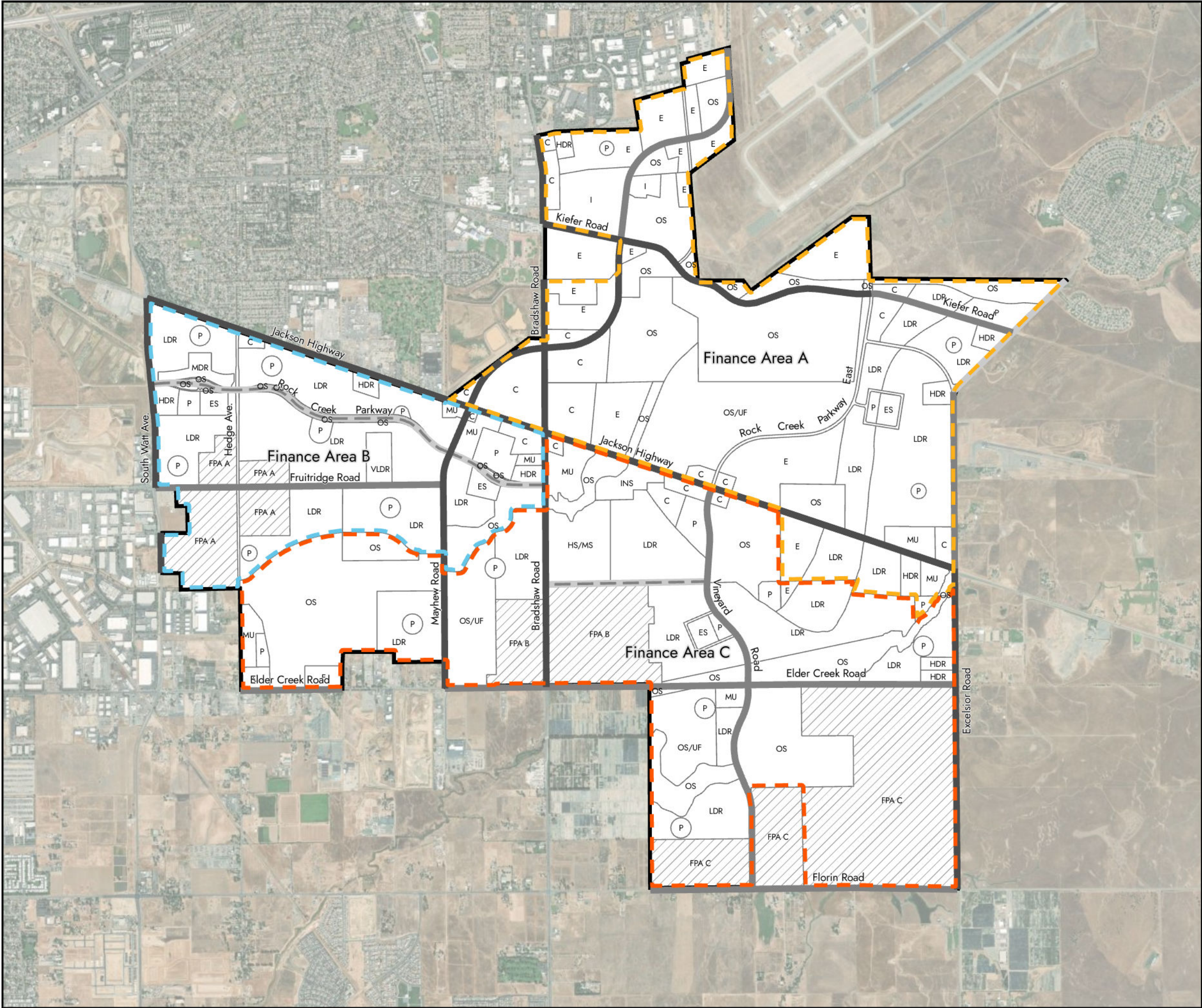
Legend

Finance Areas

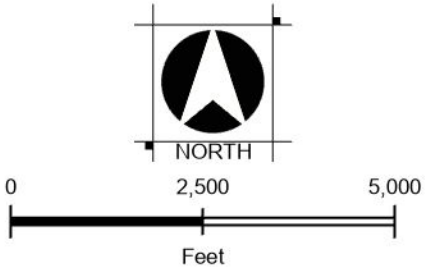
- A
- B
- C

Proposed Roadways

- Thoroughfare (6 lanes)
- Arterial (4 lanes)
- Collector with Water Quality Median (2 lanes)
- Collector (2 lanes)



WOOD RODGERS

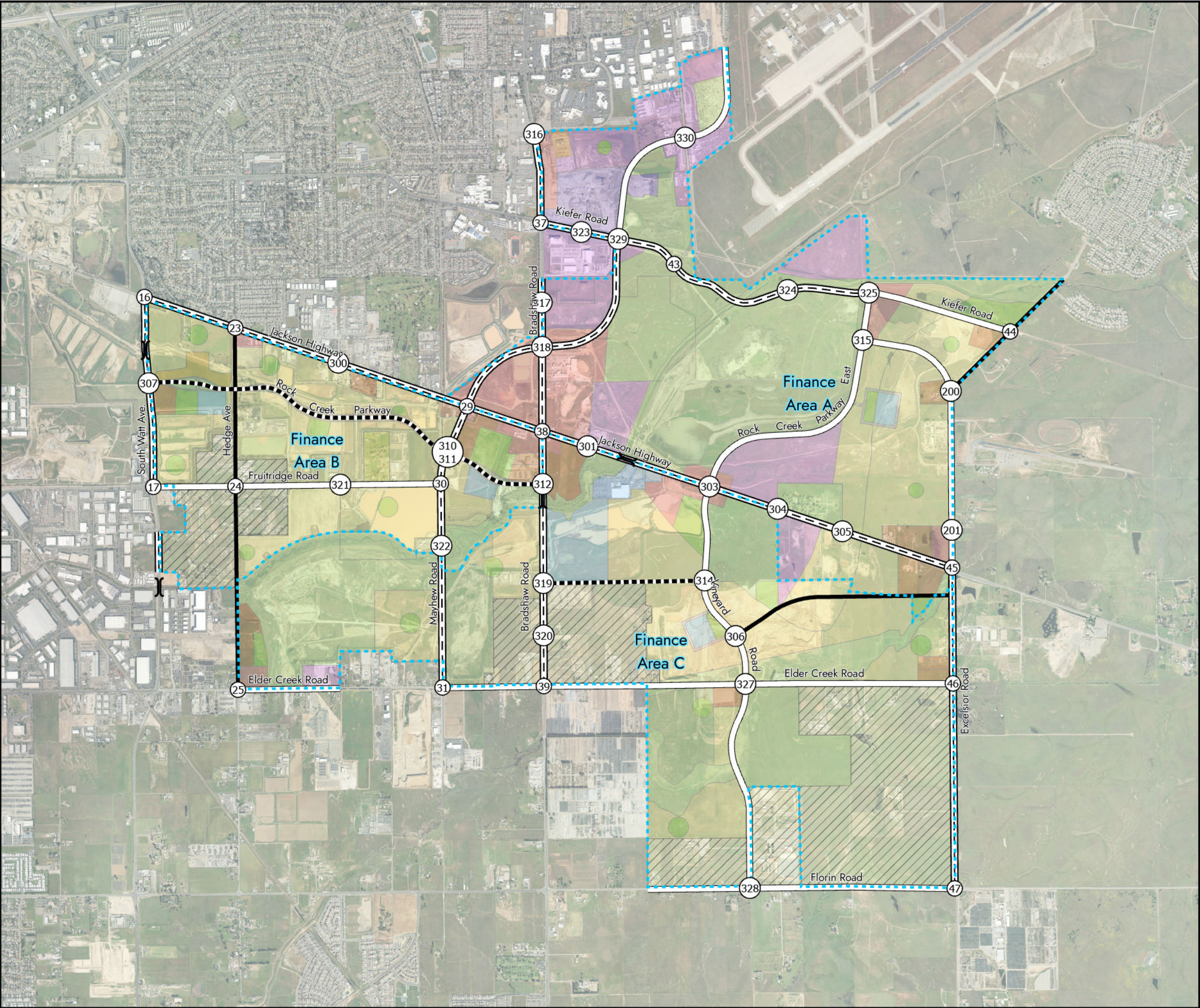


Legend

- ① Intersection Number
- Approximate Bridge Location
- Finance Area
- Parcel Boundary
- Proposed Circulation**
  - Thoroughfare (6 lanes)
  - Arterial (4 lanes)
  - Collector with Lid Median (2 lanes)
  - Collector (2 lanes)

Land Use Classification

- Very Low Density Residential
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Mixed Use
- Commercial
- Employment Center
- Industrial
- School
- Park
- Open Space
- Open Space/Urban Farm
- Institutional
- Future Planning Area (FPA)



WOOD RODGERS



**ATTACHMENT 6: BACKBONE TRAILS UNIT PRICE DEVELOPMENT AND COST ESTIMATES**

**Engineer's Opinion of Preliminary Cost  
Preliminary Backbone Trails**

Updated: 10/3/2023

Total Finance Area A Trails	\$	19,302,098
Total Finance Area B Trails	\$	10,127,637
Total Finance Area C Trails	\$	10,768,836
<b>TOTAL TRAILS</b>	<b>\$</b>	<b>40,198,571</b>

**NOTES**

1. Subgrade Preparation quantities include proposed paving and shoulders plus an additional 5' each side.
2. Estimate includes a 20% soft cost allowance. Assumed to be engineering (8%), mapping (1%), plan check (2%), inspection (3%), geotech (3%), and staking (3%).
3. Based on preliminary nature of studies, 30% contingency is applied.
4. Costs reflect 2023 dollars.
5. Quantities not explicitly detailed within are not included as part of this estimate.

**Cost per Foot - Conventional Trails - 10' Trail with 2' Shoulder on Each Side**

Rough Grading	24 SF	\$	1.25	\$	30.00
3" AC	10 SF	\$	4.00	\$	40.00
8.5" AB	10 SF	\$	5.00	\$	50.00
2' DG Shoulder - Left	2 SF	\$	13.50	\$	27.00
2' DG Shoulder- Right	2 SF	\$	13.50	\$	27.00
Striping	1 LF	\$	10.00	\$	10.00
Soft Costs			20%	\$	36.80
Contingency			30%	\$	66.24
				<b>\$</b>	<b>287.04</b>

**Cost Per Foot - Regional Trails with 12' Trail with 2' Shoulder on Each Side**

Rough Grading	26 LF	\$	1.50	\$	39.00
3" AC	12 SF	\$	4.00	\$	48.00
8.5" AB	12 SF	\$	5.00	\$	60.00
2' DG Shoulder - Left	2 SF	\$	13.50	\$	27.00
2' DG Shoulder- Right	2 SF	\$	13.50	\$	27.00
Striping	1 LF	\$	10.00	\$	10.00
Soft Costs			20%	\$	42.20
Contingency			30%	\$	75.96
				<b>\$</b>	<b>329.16</b>

Preliminary Backbone Trails					
Finance Area A					
Identifier	Description	Quantity	Unit	\$ / Unit	Total
<u>Conventional Trails</u>					
MRT-A	Mayhew Road Trail A	13,365	LF	\$ 287.04	\$ 3,836,290
BRT-A	Bradshaw Road Trail A	2,160	LF	\$ 287.04	\$ 620,006
ERT-A	Excelsior Road Trail A	9,635	LF	\$ 287.04	\$ 2,765,630
					\$ 7,221,926
<u>Regional Trails</u>					
KRT-A	Kiefer Road Trail A	12,975	LF	\$ 329.16	\$ 4,270,851
RCPET-A	Rock Creek Parkway East Trail A	9,625	LF	\$ 329.16	\$ 3,168,165
JHT-A	Jackson Highway Trail A	13,270	LF	\$ 329.16	\$ 4,367,953
ECT-A	Elder Creek Trail A	830	LF	\$ 329.16	\$ 273,203
					\$ 12,080,172
TOTAL FINANCE AREA A TRAILS					\$ 19,302,098

Preliminary Backbone Trails						
Finance Area B						
Identifier	Description	Quantity	Unit	\$ / Unit	Total	
<u>Conventional Trails</u>						
HAT-B	Hedge Avenue Trail B	6,740	LF	\$ 287.04	\$	1,934,650
MRT-B	Mayhew Road Trail B	4,130	LF	\$ 287.04	\$	1,185,475
BRT-B	Bradshaw Road Trail B	2,000	LF	\$ 287.04	\$	574,080
					\$	3,694,205
<u>Regional Trails</u>						
RCPT-B	Rock Creek Parkway Trail B	10,870	LF	\$ 329.16	\$	3,577,969
MCT-B	Morrision Creek Trail B	8,675	LF	\$ 329.16	\$	2,855,463
					\$	6,433,432
TOTAL FINANCE AREA B TRAILS					\$	10,127,637

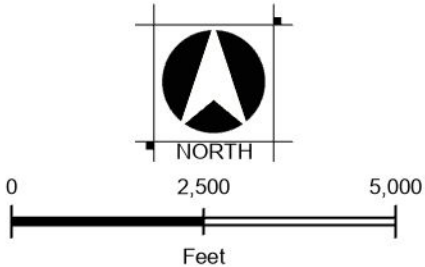
Preliminary Backbone Trails Finance Area C						
Identifier	Description	Quantity	Unit	\$ / Unit		Total
<u>Conventional Trails</u>						
BRT-C	Bradshaw Road Trail C	4,650	LF	\$	287.04	\$ 1,334,736
HAT-C	Hedge Avenue Trail C	2,570	LF	\$	287.04	\$ 737,693
						\$ 2,072,429
<u>Regional Trails</u>						
VRT-C	Vineyard Road Trail C	10,875	LF	\$	329.16	\$ 3,579,615
ECT-C	Elder Creek Trail C	9,755	LF	\$	329.16	\$ 3,210,956
MCT-C	Morrision Creek Trail C	5,790	LF	\$	329.16	\$ 1,905,836
						\$ 8,696,407
TOTAL FINANCE AREA C TRAILS						\$ 10,768,836



**ATTACHMENT 7: BACKBONE TRAILS EXHIBIT**

ATTACHMENT 4  
PROPOSED TRAILS

WEST JACKSON HIGHWAY MASTER PLAN  
COUNTY OF SACRAMENTO, CA  
MARCH 21, 2025



Trails (Miles)			
	Regional	Conventional	Total
Finance Plan A:	6.7	4.7	11.4
Finance Plan B:	4.6	2.0	6.6
Finance Plan C:	6.6	1.8	8.4
Total	17.9	8.5	26.4

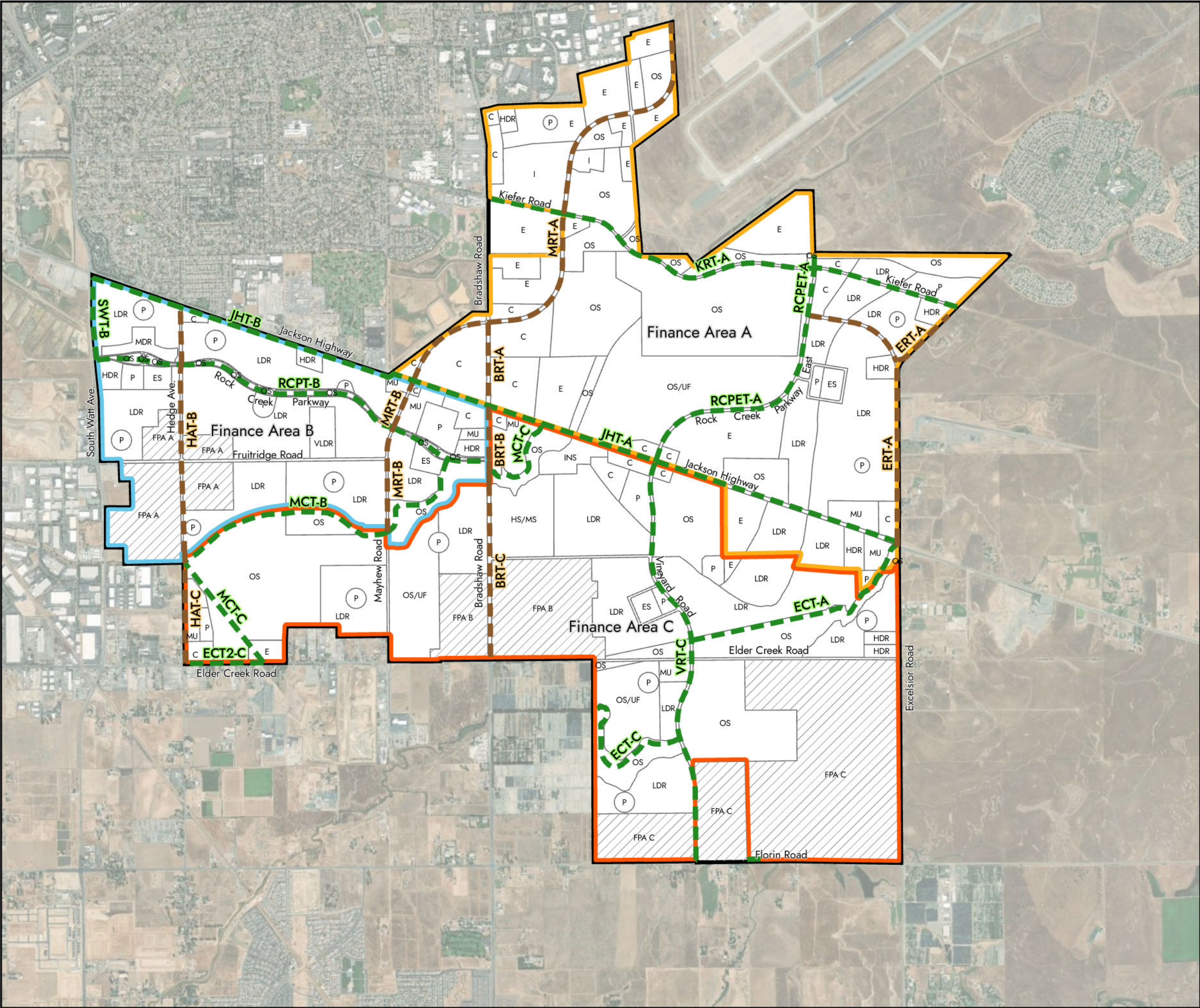
Legend

Finance Areas

- A
- B
- C

Trail Types

- Conventional Trail
- Regional Trail



**DRAFT**

# Memorandum

**WOOD RODGERS**  
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME

**To:** StoneBridge Properties, LLC  
Granite Construction Company

**From:** Jason Reed, PE

**Cc:** Mike Motroni, PE

**Date:** January 30, 2025

**Subject:** West Jackson Highway Master Plan: Backbone Infrastructure Estimate Narrative

---

## **Introduction**

West Jackson Highway Master Plan (WJHMP) covers approximately 5,913 acres of land in Sacramento County straddling Jackson Highway, between South Watt Avenue and Excelsior Road. To date, various iterations of master studies have been prepared and approved in support of entitlement for WJHMP, addressing major infrastructure needs of water, sewer, drainage, and flood control. The studies have evolved through multiple revisions to satisfy agency comments as well as to reflect the latest land use plan:

- Drainage Master Study: December 2, 2022, approved
- Master Sewer Study: approved June 14, 2017; Amendment approved March 30, 2023
- Master Water Study for SCWA: approved March 20, 2019; refreshed and approved January 31, 2023
- Master Water Study for CalAm: approved December 31, 2018; refreshed and approved February 3, 2023

The proposed infrastructure presented in the studies were used as basis for the attached backbone cost estimates and exhibits. This memorandum summarizes the status of each study as of September, 2023. Quantities are appropriate as a large-scale estimate, based on schematic proposed trunk alignments.

Estimates do not include backbone roads, trails, or mass grading. Additionally, these costs do not include potential grading of off-site utility alignments for placement of utilities.

## **Drainage**

The drainage master study for WJHMP has been in review with the Sacramento County Department of Water Resources (SCDWR) since 2014. A fourth submittal draft of the WJHMP Master Drainage and Flood Control Study was submitted on December 2, 2022 and has since been approved. The master drainage study addresses the existing conditions, planned drainage improvements (trunk lines, detention basins, and pump stations), planned flood control improvements for the Morrison and Elder Creek systems, and how proposed improvements align with current regulations and storm drain management standards. The drainage conditions modeled are for Alternative 1A of the current Land Use Plan, which is dated August 31, 2021. The

other two Alternatives, 1B and 1C, were not evaluated, as they propose less intensive land use and will produce less runoff.

Cost estimates were prepared for major drainage infrastructure for each of the three proposed Finance Areas, A, B, and C. Basin sizes account for possible expansion for climate change. Note that while flood control and levee improvements along Morrison Creek and Elder Creek were analyzed in the master study, they are not included in these cost estimates and are provided under separate memorandum. Similarly, the plugging of existing mining tunnels that cross beneath existing roads are included in the separate flood control memorandum.

### **Sewer**

A Master Sewer Study was previously prepared by Wood Rodgers based on the Land Use Plan dated April 3, 2017, and it was approved by SASD in June 2017. However, it required amendment to bring proposed trunk sewer alignments up to date with the latest land use, Alternative 1C, which is dated January 17, 2022. The amendment has been approved on March 30, 2023. Alternative 1C is a variation that considers development footprint based upon a draft noise contour associated with Mather Airfield. As part of the “refresh” effort, sewer calculations were revised to meet current SASD Standards and Specifications dated November 30, 2021. Proposed facilities and major shed delineations were also re-evaluated and found to be consistent with SASD’s System Capacity Plan (SCP) 2020 Update.

The 2022 Amendment to the Approved West Jackson Highway Master Plan Sewer Study, approved March 30, 2023, documents a slight overall decrease in sewer flow contribution expected from the project to the regional sewer interceptors and wastewater treatment plant. The Amendment includes an updated sewer facility and shed exhibit, updated sewer flow calculations, and a comparison of land use and ESD’s between the 2017 and 2022 analyses. The grading plan was revised in November 2022 to capture existing topography, and as a result, an additional sewer lift station is proposed on Vineyard Road north of Elder Creek Road.

Cost estimates for major sewer infrastructure are based on the revised 2022 trunk sewer layout (includes 12-inch and larger sewer facilities and public lift stations). Estimates are broken up into Finance Areas A, B, and C. Quantities are appropriate as a large-scale estimate, based on schematic proposed trunk alignments.

### **Water**

The planning area has two domestic water purveyors. The northwest portion of the plan area is served by California-American Water (CalAm) as part of the Suburban-Rosemont System. The remaining area is served by Sacramento County Water Agency as part of Zone 40 (Central Service Area).

Previously, a Level 1 Domestic Water Study dated August 22, 2018, was approved by CalAm on December 31, 2018. A separate Level 1 Domestic Water Study for Zone 40, dated March 13, 2019, was approved by SCWA on March 20, 2019. Both studies were given a refresh in October 2022 to reflect the January 2022 Land Use Alternative 1C and have been approved. Other than land use, all other assumptions remained unchanged from the previously approved study, including modeling assumptions for the CalAm area. (The plan area is estimated to require 519 acre-ft less (8% decrease) water annually from SCWA, and 72 acre-ft more (2.4% increase) from CalAm.) The studies show that the proposed water facilities are sufficiently designed to meet domestic and fire water needs for the project.

Cost estimates for major (transmission) water infrastructure are based on the 2022 backbone main layout. Quantities for the estimates are organized by Finance Areas (A, B, and C) and by water purveyor (Cal-Am or SCWA).

**Attachments**

1. Finance Plan Area Exhibit
2. Drainage Backbone Cost Estimates
3. Drainage Backbone Exhibits with Segment Key Mapping
4. Sewer Backbone Cost Estimates
5. Sewer Backbone Exhibits with Segment Key Mapping
6. Water Backbone Cost Estimates
7. Water Backbone Exhibits with Segment Key Mapping



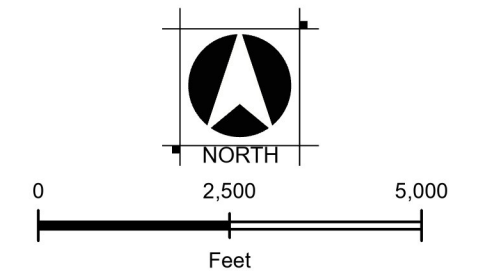
**ATTACHMENT 1: FINANCE PLAN AREA EXHIBIT**

# FINANCE PLAN AREA

## WEST JACKSON HIGHWAY MASTER PLAN

### COUNTY OF SACRAMENTO, CA

MARCH 21, 2025

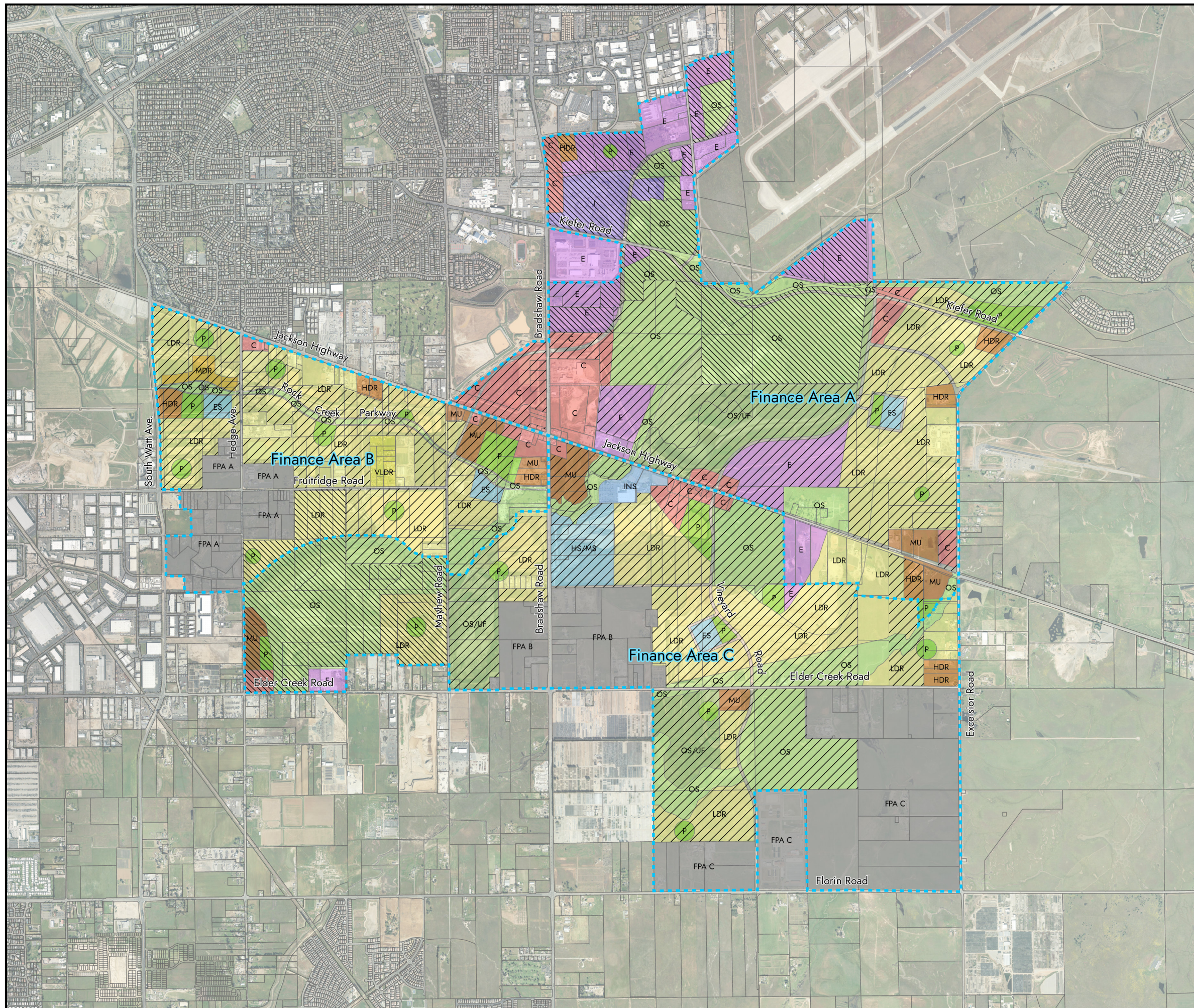


#### Legend

- Finance Area
- Parcel Boundary
- Granite Properties
- Teichert Properties

#### Proposed Land Use

- Very Low Density Residential
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Mixed Use
- Commercial
- Employment Center
- Industrial
- School
- Park
- Open Space
- Open Space/Urban Farm
- Institutional
- Future Planning Area (FPA)





**ATTACHMENT 2: DRAINAGE BACKBONE COST ESTIMATES**

**Preliminary Major (Backbone) Drainage Infrastructure***Updated: 1/30/2025*

Total Finance Area A Drain	\$ 72,010,000
Total Finance Area B Drain	\$ 39,400,000
Total Finance Area C Drain	\$ 38,490,000
<b>TOTAL DRAIN INFRASTRUCTURE</b>	<b>\$ 149,900,000</b>

**NOTES**

1. Unit cost for the same size pipe / manhole vary due to proposed depth of infrastructure.
2. Based on preliminary nature of studies, 30% contingency is applied.
3. Estimate based on level one drainage master study for WJHMP dated December 2022.
4. Estimate only includes 24-inch mains or greater and manholes required for their alignments, as it is intended to serve broad areas of development.
5. Estimate includes a 20% soft cost allowance. Assumed to be engineering (8%), mapping (1%), plan check (2%), inspection (3%), geotech (3%), and staking (3%).
6. Basin sizes account for possible expansion for climate change.
7. Detention basin cost is estimated as a sum of excavation, limited landscaping, vehicle access road and fencing. WJP1 basin Excavation costs based on preliminary grading analysis dated July 2020. Allowance for miscellaneous costs is also provided.
8. Cost of drainage pump stations with pumping capacity up to 40 cfs is estimated at \$750,000 base cost plus \$50,000 per CFS. For drainage pump stations with capacity beyond 40 cfs, cost is estimated based on data provided from WR team.
9. Estimate excludes flood control, levee improvements, and closure of existing mining tunnels that cross
10. Costs reflect 2023 dollars.
11. Quantities not explicitly detailed within are not included as part of this estimate.

**Preliminary Backbone Drain Infrastructure**  
**Finance Area A**

Identifier	Description	Quantity	Unit	\$ / Unit	Total
<b>WJP1</b>					
	Drainage Pump Station- Drains WJP1 - 195 CFS	1	EA	\$ 5,520,000	\$ 5,520,000
	Detention Basin - WJP1 - Excavation	600,000	CY	\$ 6	\$ 540,000
	Detention Basin - Miscellaneous / Allowance	1	LS	\$ 3,000,000	\$ 3,000,000
	36" Drain Pipe	2,300	LF	\$ 200	\$ 460,000
	42" Drain Pipe	5,300	LF	\$ 225	\$ 1,192,500
	48" Drain Pipe	2,100	LF	\$ 250	\$ 525,000
	54" Drain Pipe	1,200	LF	\$ 300	\$ 360,000
	60" Drain Pipe	1,100	LF	\$ 395	\$ 434,500
	66" Drain Pipe	2,000	LF	\$ 450	\$ 900,000
	60" Manhole	6	EA	\$ 10,000	\$ 60,000
	72" Manhole	14	EA	\$ 13,000	\$ 182,000
	84" Manhole	3	EA	\$ 17,500	\$ 52,500
	96" Manhole	3	EA	\$ 30,000	\$ 90,000
	Junction Box	5	EA	\$ 30,000	\$ 150,000
	Trash Capture	1	EA	\$ 500,000	\$ 500,000
	54" Outlet Structure/ Trash Rack	1	EA	\$ 21,500	\$ 21,500
	Soft Costs			20%	\$ 2,797,600
	Contingency			30%	\$ 5,035,680
					<b>\$ 21,820,000</b>
<b>WJP2</b>					
	Drainage Pump Station- Drains WJP2 - 8 CFS	1	EA	\$ 1,150,000	\$ 1,150,000
	Detention Basin - WJP2 - Excavation	107	Ac-Ft	\$ 9,680	\$ 1,033,630
	Detention Basin - Miscellaneous	8	AC	\$ 100,000	\$ 830,000
	24" Drain Pipe	200	LF	\$ 105	\$ 21,000
	30" Drain Pipe	1,100	LF	\$ 145	\$ 159,500
	36" Drain Pipe	400	LF	\$ 200	\$ 80,000
	42" Drain Pipe	500	LF	\$ 225	\$ 112,500
	48" Drain Pipe	700	LF	\$ 250	\$ 175,000
	60" Drain Pipe	1,600	LF	\$ 395	\$ 632,000
	72" Drain Pipe	1,300	LF	\$ 520	\$ 676,000
	48" Manhole	1	EA	\$ 9,500	\$ 9,500
	60" Manhole	4	EA	\$ 10,000	\$ 40,000
	72" Manhole	3	EA	\$ 13,000	\$ 39,000
	84" Manhole	4	EA	\$ 17,500	\$ 70,000
	Junction Box	4	EA	\$ 30,000	\$ 120,000
	Trash Capture	1	EA	\$ 500,000	\$ 500,000
	24" Outlet Structure/ Trash Rack	1	EA	\$ 9,500	\$ 9,500
	Soft Costs			20%	\$ 1,131,526
	Contingency			30%	\$ 2,036,747
					<b>\$ 8,830,000</b>

## WJP6

Drainage Pump Station- Drains WJP6 - 8 CFS	1 EA	\$	1,150,000	\$	1,150,000
Detention Basin - WJP6 - Excavation	82 Ac-Ft	\$	9,680	\$	792,502
Detention Basin - Miscellaneous	9 AC	\$	100,000	\$	860,000
24" Drain Pipe	2,500 LF	\$	105	\$	262,500
30" Drain Pipe	3,800 LF	\$	145	\$	551,000
42" Drain Pipe	700 LF	\$	225	\$	157,500
48" Manhole	6 EA	\$	9,500	\$	57,000
60" Manhole	9 EA	\$	10,000	\$	90,000
72" Manhole	2 EA	\$	13,000	\$	26,000
Trash Capture	1 EA	\$	500,000	\$	500,000
24" Outlet Structure/ Trash Rack	1 EA	\$	9,500	\$	9,500
Soft Costs			20%	\$	891,200
Contingency			30%	\$	1,604,161
				\$	<b>6,950,000</b>

## WJG1

Drainage Pump Station- Drains WJG106 - 1 CFS	1 EA	\$	800,000	\$	800,000
Detention Basins (WJG102, 104, 105, 106, 107, 108) - Excavation	58 Ac-Ft	\$	9,680	\$	559,504
Detention Basin - Miscellaneous	9 AC	\$	100,000	\$	910,000
30" Drain Pipe	400 LF	\$	145	\$	58,000
42" Drain Pipe	1,200 LF	\$	225	\$	270,000
48" Drain Pipe	1,200 LF	\$	250	\$	300,000
60" Drain Pipe	3,900 LF	\$	395	\$	1,540,500
60" Manhole	2 EA	\$	10,000	\$	20,000
72" Manhole	3 EA	\$	13,000	\$	39,000
96" Manhole	8 EA	\$	30,000	\$	240,000
Junction Box	1 EA	\$	30,000	\$	30,000
Trash Capture	5 EA	\$	500,000	\$	2,500,000
30" Outlet Structure/ Trash Rack	3 EA	\$	5,000	\$	15,000
42" Outlet Structure/ Trash Rack	1 EA	\$	16,000	\$	16,000
60" Creek Outfall / Trash Rack	1 EA	\$	23,500	\$	23,500
Soft Costs			20%	\$	1,459,601
Contingency			30%	\$	2,394,331
				\$	<b>10,380,000</b>

## WJG2

*Assume No Improvements to Existing 10 CFS Drainage Pump Station (See Figure 6.7, WJG207)*

*Existing trunkline is Bradshaw Road is anticipated to have capacity to drain WJG201. As Nolte analysis of*

Detention Basins - Excavation	108 Ac-Ft	\$	9,680	\$	1,049,990
Detention Basin - Miscellaneous	18 AC	\$	100,000	\$	1,750,000
24" Drain Pipe	550 LF	\$	105	\$	57,750
30" Drain Pipe	630 LF	\$	145	\$	91,350
36" Drain Pipe	2,200 LF	\$	200	\$	440,000
48" Drain Pipe	1,340 LF	\$	250	\$	335,000
54" Drain Pipe	810 LF	\$	300	\$	243,000
60" Drain Pipe	5,700 LF	\$	395	\$	2,251,500
48" Manhole	3 EA	\$	9,500	\$	28,500
60" Manhole	7 EA	\$	10,000	\$	70,000
72" Manhole	4 EA	\$	13,000	\$	52,000
84" Manhole	3 EA	\$	17,500	\$	52,500
96" Manhole	13 EA	\$	30,000	\$	390,000
Trash Capture	4 EA	\$	500,000	\$	2,000,000
24" Outlet Structure/ Trash Rack	2 EA	\$	9,500	\$	19,000
30" Outlet Structure/ Trash Rack	1 EA	\$	5,000	\$	5,000
60" Creek Outfall / Trash Rack	1 EA	\$	23,500	\$	23,500
Soft Costs			20%	\$	1,767,118
Contingency			30%	\$	3,187,862
				\$	<b>13,810,000</b>

## WJG3

Detention Basins - Excavation	24 Ac-Ft	\$	9,680	\$	230,384
Detention Basin - Miscellaneous / Allowance	1 LS	\$	1,500,000	\$	1,500,000
30" Drain Pipe	160 LF	\$	145	\$	23,200
54" Drain Pipe	810 LF	\$	300	\$	243,000
60" Manhole	2 EA	\$	10,000	\$	20,000
96" Manhole	3 EA	\$	30,000	\$	90,000
Trash Capture	1 EA	\$	500,000	\$	500,000
30" Creek Outfall / Trash Rack	1 EA	\$	5,000	\$	5,000
Soft Costs			20%	\$	522,317
Contingency			30%	\$	940,170
				\$	<b>4,070,000</b>

## WJG6

Detention Basin	16 Ac-Ft	\$	9,680	\$	150,524
Detention Basin - Miscellaneous	3 AC	\$	100,000	\$	320,000
30" Drain Pipe	590 LF	\$	145	\$	85,550
60" Manhole	3 EA	\$	10,000	\$	30,000
Trash Capture	1 EA	\$	500,000	\$	500,000
30" Creek Outfall / Trash Rack	1 EA	\$	5,000	\$	5,000
Soft Costs			20%	\$	117,215
Contingency			30%	\$	362,487
				\$	<b>1,570,000</b>

WJG11 *(In Finance Area C and A - counting toward A since first)*

Detention Basin (In Finance Area C) - Excavation	48 Ac-Ft	\$	9,680	\$	462,607
Detention Basin - Miscellaneous	9 AC	\$	100,000	\$	900,000
30" Drain Pipe	540 LF	\$	145	\$	78,300
42" Drain Pipe	600 LF	\$	225	\$	135,000
48" Drain Pipe	220 LF	\$	250	\$	55,000
54" Drain Pipe	1,200 LF	\$	300	\$	360,000
Junction Box	7 EA	\$	30,000	\$	210,000
Trash Capture	1 EA	\$	500,000	\$	500,000
48" Creek Outfall / Trash Rack	1 EA	\$	19,000	\$	19,000
Soft Costs			20%	\$	440,181
Contingency			30%	\$	948,027
				\$	<b>4,110,000</b>

## MISC.

Debris Master Plan	1 LS	\$	250,000	\$	250,000
Creek Stage Monitoring System	1 EA	\$	50,000	\$	50,000
Soft Costs			20%	\$	60,000
Contingency			30%	\$	108,000
				\$	<b>470,000</b>

## TOTAL FINANCE AREA A DRAIN

\$ 72,010,000

**Preliminary Backbone Drain Infrastructure  
Finance Area B**

Identifier	Description	Quantity	Unit	\$ / Unit	Total
WJP3	<i>Split with Area C</i>				
	Drainage Pump Station- Drains WJP3 - 45 CFS	1	LS	\$ 2,410,000	\$ 2,410,000
	Detention Basin - WJP3 - Excavation	400,000	CY	\$ 6	\$ 2,400,000
	Detention Basin - Miscellaneous / Allowance	1	LS	\$ 1,500,000	\$ 1,500,000
	6' x 6' Open Channel Grading	1,310	LF	\$ 55	\$ 72,050
	6' x 8' Open Channel Grading	820	LF	\$ 85	\$ 69,700
	6' x 8' Culvert Under Creek	730	LF	\$ 2,500	\$ 1,825,000
	24" Drain Pipe	1,100	LF	\$ 105	\$ 115,500
	30" Drain Pipe	3,500	LF	\$ 145	\$ 507,500
	36" Drain Pipe	6,000	LF	\$ 200	\$ 1,200,000
	42" Drain Pipe	1,300	LF	\$ 225	\$ 292,500
	48" Drain Pipe	800	LF	\$ 250	\$ 200,000
	48" Manhole	4	EA	\$ 9,500	\$ 38,000
	Junction Box	8	EA	\$ 30,000	\$ 240,000
	Trash Capture	1	EA	\$ 500,000	\$ 500,000
	36" Creek Outfall / Trash Rack	1	EA	\$ 12,000	\$ 12,000
	Soft Costs			20%	\$ 2,276,450
	Contingency			30%	\$ 4,097,610
					<b>\$ 17,760,000</b>
WJP4	<i>Split with Area C</i>				
	Drainage Pump Station- Drains WJP4 - 14 CFS	1	EA	\$ 1,450,000	\$ 1,450,000
	Detention Basin - WJP4 - Excavation	400,000	CY	\$ 6	\$ 2,400,000
	Detention Basin - Miscellaneous / Allowance	1	LS	\$ 1,500,000	\$ 1,500,000
	24" Drain Pipe	800	LF	\$ 105	\$ 84,000
	30" Drain Pipe	400	LF	\$ 145	\$ 58,000
	36" Drain Pipe	150	LF	\$ 200	\$ 30,000
	24" Drain Pipe Under Morrison Creek	430	LF	\$ 3,500	\$ 1,505,000
	3' x 6' Culvert Under Morrison Creek	540	LF	\$ 2,250	\$ 1,215,000
	48" Drain Pipe Under Morrison Creek	600	LF	\$ 2,000	\$ 1,200,000
	Open Channel Grading	4,510	LF	\$ 85	\$ 383,350
	48" Manhole	4	EA	\$ 9,500	\$ 38,000
	Junction Box	8	EA	\$ 30,000	\$ 240,000
	Trash Capture	1	EA	\$ 500,000	\$ 500,000
	30" Outlet Structure/ Trash Rack	1	EA	\$ 5,000	\$ 5,000
	Soft Costs			20%	\$ 2,121,670
	Contingency			30%	\$ 3,819,006
					<b>\$ 16,550,000</b>
WJG5					
	Detention Basin - WJG5 - Excavation	69	Ac-Ft	\$ 9,680	\$ 670,437
	Detention Basin - Miscellaneous	9	AC	\$ 100,000	\$ 940,000
	36" Drain Pipe	1,300	LF	\$ 200	\$ 260,000
	48" Drain Pipe	160	LF	\$ 250	\$ 40,000
	60" Drain Pipe	1,400	LF	\$ 395	\$ 553,000
	48" Manhole	4	EA	\$ 9,500	\$ 38,000
	Junction Box	8	EA	\$ 30,000	\$ 240,000
	Trash Capture	1	EA	\$ 500,000	\$ 500,000
	48" Creek Outfall / Trash Rack	1	EA	\$ 19,000	\$ 19,000
	Soft Costs			20%	\$ 652,087
	Contingency			30%	\$ 1,173,757
					<b>\$ 5,090,000</b>
<b>TOTAL FINANCE AREA B DRAIN</b>					<b>\$ 39,400,000</b>

**Preliminary Backbone Drain Infrastructure  
Finance Area C**

Identifier	Description	Quantity	Unit	\$ / Unit	Total
WJP3	<i>Split with Area B</i>				
	<i>Drainage Pump Station - Included with Area B</i>				
	<i>Detention Basin- Excavation, Miscellaneous, and Outfall to creek included with Area B</i>				
	4' x 6' Open Channel Grading	130	LF	\$ 45	\$ 5,850
	6' x 6' Open Channel Grading	340	LF	\$ 55	\$ 18,700
	24" Drain Pipe	400	LF	\$ 105	\$ 42,000
	36" Drain Pipe	2,100	LF	\$ 200	\$ 420,000
	48" Drain Pipe	1,100	LF	\$ 250	\$ 275,000
	60" Drain Pipe	1,000	LF	\$ 395	\$ 395,000
	48" Manhole	4	EA	\$ 9,500	\$ 38,000
	Junction Box	8	EA	\$ 30,000	\$ 240,000
	Soft Costs			20%	\$ 286,910
	Contingency			30%	\$ 516,438
					<b>\$ 2,240,000</b>
WJP4	<i>Split with Area B</i>				
	<i>Drainage Pump Station - Included with Area B</i>				
	<i>Detention Basin - Excavation &amp; Miscellaneous, and Outfall to creek included with Area B</i>				
	24" Drain Pipe	3,400	LF	\$ 105	\$ 357,000
	36" Drain Pipe	700	LF	\$ 200	\$ 140,000
	48" Manhole	4	EA	\$ 9,500	\$ 38,000
	Junction Box	8	EA	\$ 30,000	\$ 240,000
	Soft Costs			20%	\$ 155,000
	Contingency			30%	\$ 279,000
					<b>\$ 1,210,000</b>
WJP5	Drainage Pump Station- Drains WJP5 - 10 CFS	1	EA	\$ 1,250,000	\$ 1,250,000
	Detention Basin - WJP5 - Excavation	100,000	CY	\$ 6	\$ 600,000
	Detention Basin - Miscellaneous / Allowance	1	LS	\$ 1,500,000	\$ 1,500,000
	24" Drain Pipe	500	LF	\$ 105	\$ 52,500
	36" Drain Pipe	1,800	LF	\$ 200	\$ 360,000
	48" Drain Pipe	1,100	LF	\$ 250	\$ 275,000
	66" Drain Pipe	900	LF	\$ 450	\$ 405,000
	72" Drain Pipe	300	LF	\$ 520	\$ 156,000
	48" Manhole	4	EA	\$ 9,500	\$ 38,000
	Junction Box	8	EA	\$ 30,000	\$ 240,000
	Trash Capture	1	EA	\$ 500,000	\$ 500,000
	24" Outlet Structure/ Trash Rack	1	EA	\$ 9,500	\$ 9,500
	Soft Costs			20%	\$ 975,300
	Contingency			30%	\$ 1,908,390
					<b>\$ 8,270,000</b>
WJG4	Detention Basin- Drains WJG4	95	Ac-Ft	\$ 9,680	\$ 922,407
	Detention Basin - Miscellaneous	15	AC	\$ 100,000	\$ 1,470,000
	24" Drain Pipe	260	LF	\$ 105	\$ 27,300
	54" Drain Pipe	1,330	LF	\$ 300	\$ 399,000
	60" Drain Pipe	3,240	LF	\$ 395	\$ 1,279,800
	48" Manhole	4	EA	\$ 9,500	\$ 38,000
	Junction Box	8	EA	\$ 30,000	\$ 240,000
	Trash Capture	1	EA	\$ 500,000	\$ 500,000
	60" Outlet Structure/ Trash Rack	1	EA	\$ 23,500	\$ 23,500
	Soft Costs			20%	\$ 980,001
	Contingency			30%	\$ 1,764,003
					<b>\$ 7,640,000</b>

## WJG7

Detention Basin - WJG7 - Excavation	23 Ac-Ft	\$	9,680	\$	219,349
Detention Basin - Miscellaneous	4 AC	\$	100,000	\$	370,000
42" Drain Pipe	1,870 LF	\$	225	\$	420,750
48" Drain Pipe	130 LF	\$	250	\$	32,500
48" Manhole	4 EA	\$	9,500	\$	38,000
Junction Box	8 EA	\$	30,000	\$	240,000
48" Outlet Structure/ Trash Rack	1 EA	\$	19,000	\$	19,000
Soft Costs			20%	\$	267,920
Contingency			30%	\$	482,256
				\$	<b>2,090,000</b>

## WJG8

Detention Basin - WJG8 - Excavation	72 Ac-Ft	\$	9,680	\$	696,282
Detention Basin - Miscellaneous	12 AC	\$	100,000	\$	1,220,000
42" Drain Pipe	1,870 LF	\$	225	\$	420,750
48" Drain Pipe	130 LF	\$	250	\$	32,500
66" Drain Pipe	770 LF	\$	450	\$	346,500
48" Manhole	4 EA	\$	9,500	\$	38,000
Junction Box	8 EA	\$	30,000	\$	240,000
Trash Capture	1 EA	\$	500,000	\$	500,000
48" Outlet Structure/ Trash Rack	1 EA	\$	19,000	\$	19,000
Soft Costs			20%	\$	702,606
Contingency			30%	\$	1,264,692
				\$	<b>5,480,000</b>

## WJG9

Detention Basin - WJG9 - Excavation	89 Ac-Ft	\$	9,680	\$	859,584
Detention Basin - Miscellaneous	14 AC	\$	100,000	\$	1,390,000
60" Drain Pipe	1,410 LF	\$	395	\$	556,950
72" Drain Pipe	650 LF	\$	520	\$	338,000
48" Manhole	4 EA	\$	9,500	\$	38,000
Junction Box	8 EA	\$	30,000	\$	240,000
Trash Capture	1 EA	\$	500,000	\$	500,000
60" Outlet Structure/ Trash Rack	1 EA	\$	23,500	\$	23,500
Soft Costs			20%	\$	789,207
Contingency			30%	\$	1,420,572
				\$	<b>6,160,000</b>

## WJG10

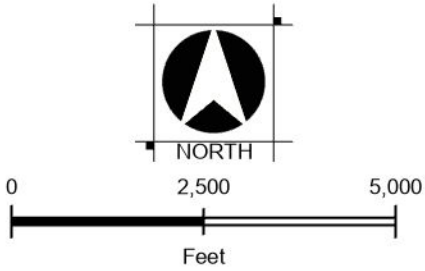
Detention Basin - WJG10 - Excavation	26 Ac-Ft	\$	9,680	\$	251,390
Detention Basin - Miscellaneous	5 AC	\$	100,000	\$	500,000
48" Drain Pipe	460 LF	\$	250	\$	115,000
54" Drain Pipe	1,180 LF	\$	300	\$	354,000
60" Manhole	4 EA	\$	10,000	\$	40,000
Junction Box	8 EA	\$	30,000	\$	240,000
Trash Capture	1 EA	\$	500,000	\$	500,000
48" Outlet Structure/ Trash Rack	1 EA	\$	19,000	\$	19,000
Soft Costs			20%	\$	403,878
Contingency			30%	\$	726,980
				\$	<b>3,150,000</b>

WJG12				
Detention Basin - WJG12 - Excavation	23 Ac-Ft	\$	9,680	\$ 222,640
Detention Basin - Miscellaneous	5 AC	\$	100,000	\$ 490,000
36" Drain Pipe	100 LF	\$	200	\$ 20,000
60" Manhole	4 EA	\$	10,000	\$ 40,000
Junction Box	8 EA	\$	30,000	\$ 240,000
Trash Capture	1 EA	\$	500,000	\$ 500,000
36" Outlet Structure/ Trash Rack	1 EA	\$	12,000	\$ 12,000
Soft Costs			20%	\$ 202,528
Contingency			30%	\$ 518,150
				<b>\$ 2,250,000</b>
<b>TOTAL FINANCE AREA C DRAIN</b>				<b>\$ 38,490,000</b>



**ATTACHMENT 3: DRAINAGE BACKBONE EXHIBITS WITH SEGMENT KEY MAPPING**

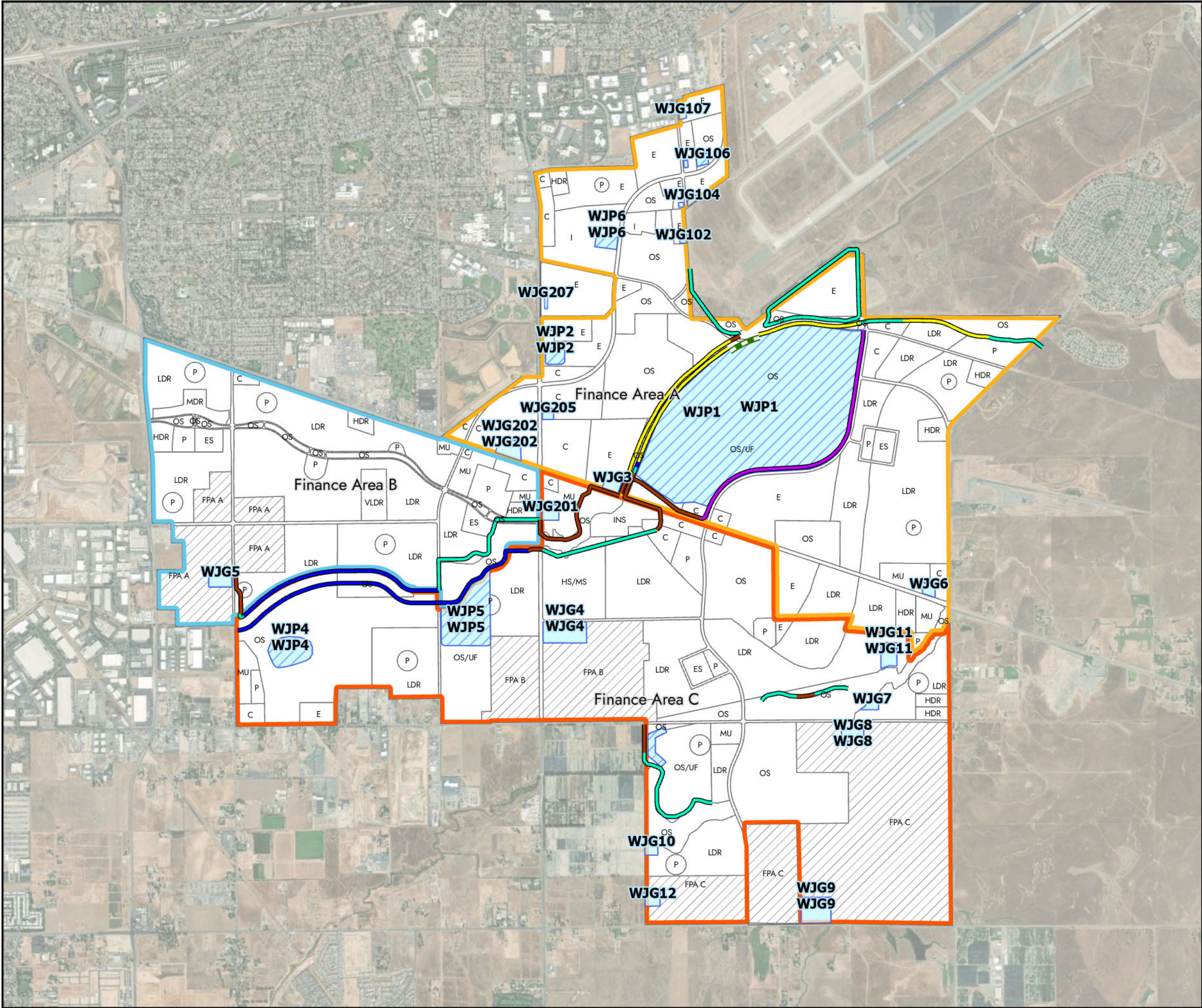
ATTACHMENT 4  
PROPOSED DRAINAGE AND LEVEE PLAN  
WEST JACKSON HIGHWAY MASTER PLAN  
COUNTY OF SACRAMENTO, CA  
MARCH 20, 2025



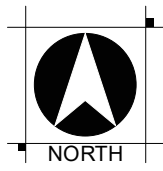
Levees (Miles)				
	Finance A	Finance B	Finance C	Total
Existing Levee:	0.0	0.5	2.2	2.7
Existing Levee to be Heightened:	2.5	-	-	2.5
Proposed Levee:	1.6	0.8	1.6	4.0
Setback Levee:	1.4	-	-	1.4
Total	5.6	1.3	3.8	10.6

- Legend**
- Finance Areas**
- A
  - B
  - C
- Levee Improvements**
- Existing Levee
  - Existing Levee to be Heightened
  - Proposed Levee
  - Setback Levee
  - Supplemental Levee
- Basins**
- Pumped Detention Basin
  - Gravity Detention Basin
  - Granite Weir 1

NOTES:  
1) Phasing Area B must include detention basin WJP3 if developed prior to Phasing Area C



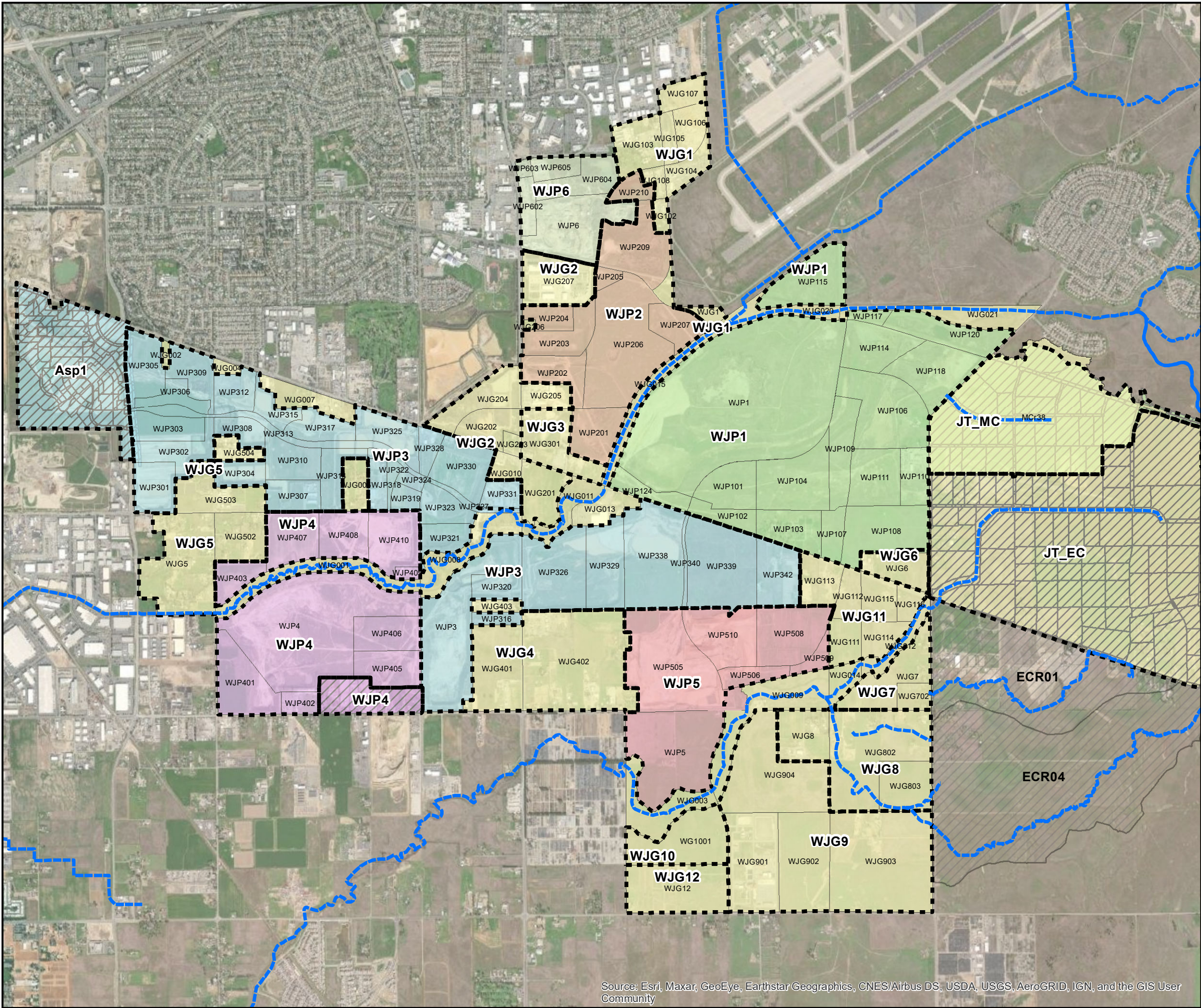
ATTACHMENT 4  
WJHMP FUTURE CONDITIONS WATERSHEDS  
WEST JACKSON HIGHWAY MASTER PLAN  
SACRAMENTO CO, CA  
DECEMBER 2022



0 1,000 2,000  
Feet

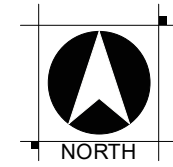
Legend

- Creeks
- Offsite Watershed
- Gravity Watersheds**
  - Gravity (WJG#)
- Pumped Watersheds**
  - WJP1
  - WJP2
  - WJP3
  - WJP4
  - WJP5
  - WJP6
- Overall Basin Watershed

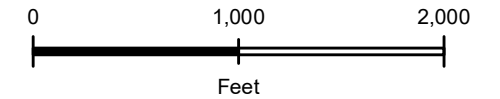


Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

ATTACHMENT 4  
WJP1 - PLANNED FACILITIES  
WEST JACKSON HIGHWAY MASTER PLAN  
SACRAMENTO CO, CA  
DECEMBER 2022



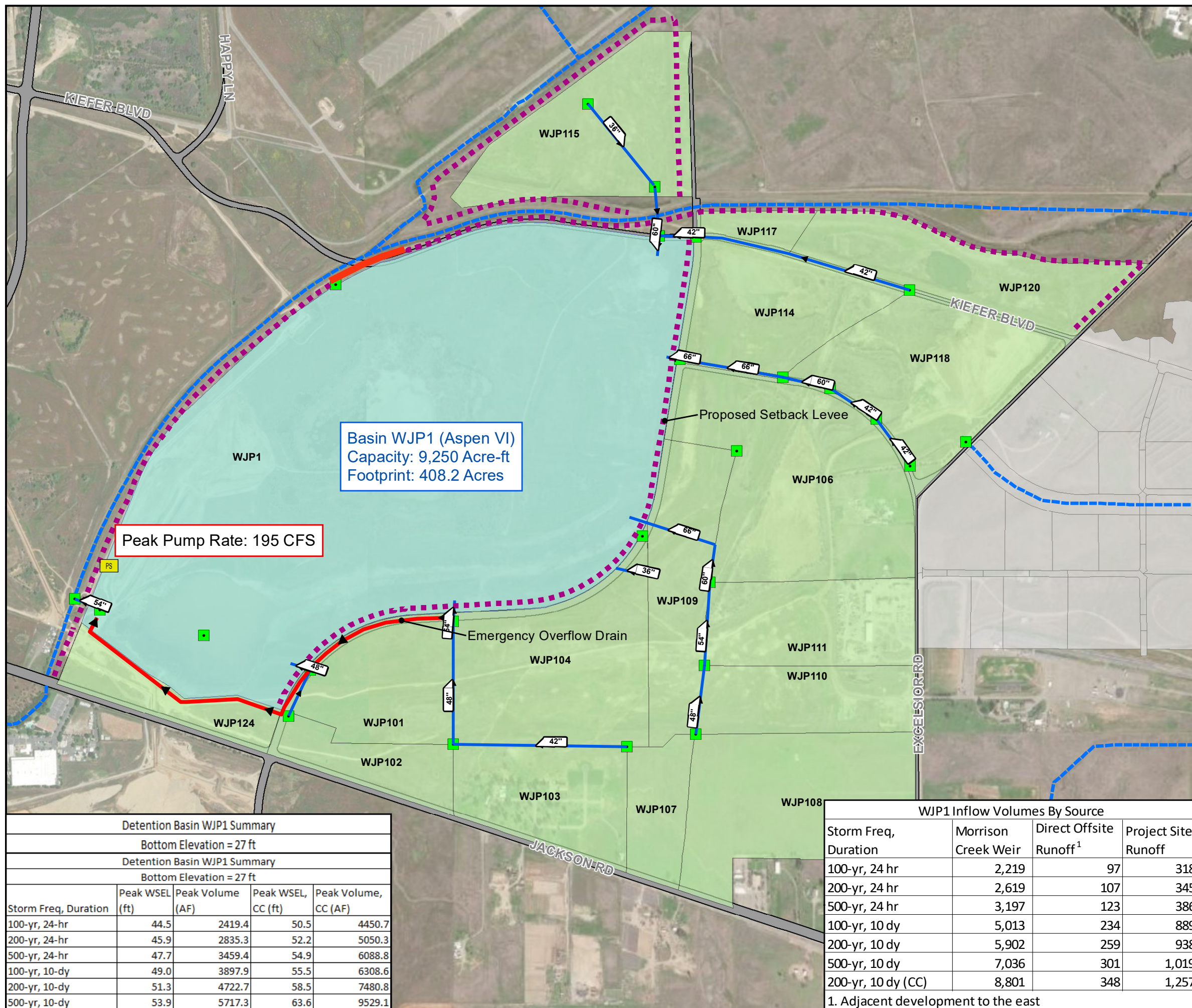
Vertical Datum:  
NAVD 88



Legend

- PS pumps
- Proposed/Existing Levee
- Nodes
- Aspen 6 Weir
- Open Channel
- Pipe
- Culvert
- Creeks
- WJP1 Detention Basin
- Offsite Watershed
- Future Roadways
- Watershed

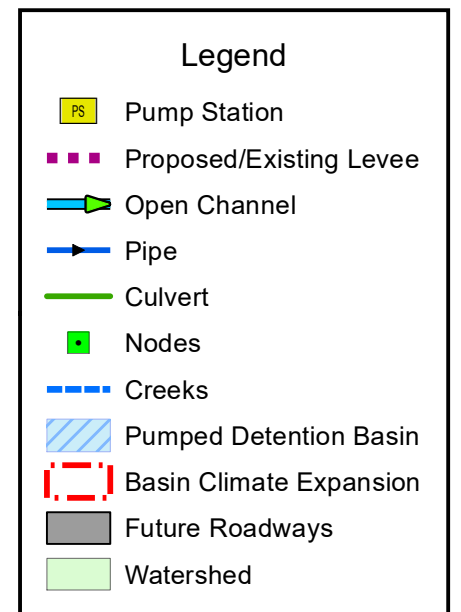
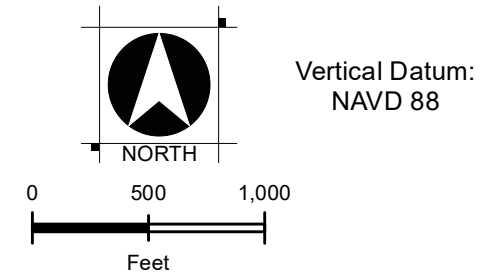
- NOTES:
- 1) Includes flows from on-site, Jackson Township, weir overflow reflecting ultimate conditions
  - 2) Peak volume and peak water surface elevation are based upon existing configuration of the weir
  - 3) Basin footprint is approximate and subject to change with final engineering design.
  - 4) Basin contours are assumed grading and subject to change with final engineering design.
  - 5) Outfalls in the Granite 1 / Aspen 6 basin will be fitted with flap gates.
  - 6) The emergency Overflow Drain will collect overland flow when the basin is above and direct flow directly to the pump station.
  - 7) WJP1 Detention Capacity is based on the capacity at water surface elevation 62.9 ft with 3 ft freeboard to the setback levee



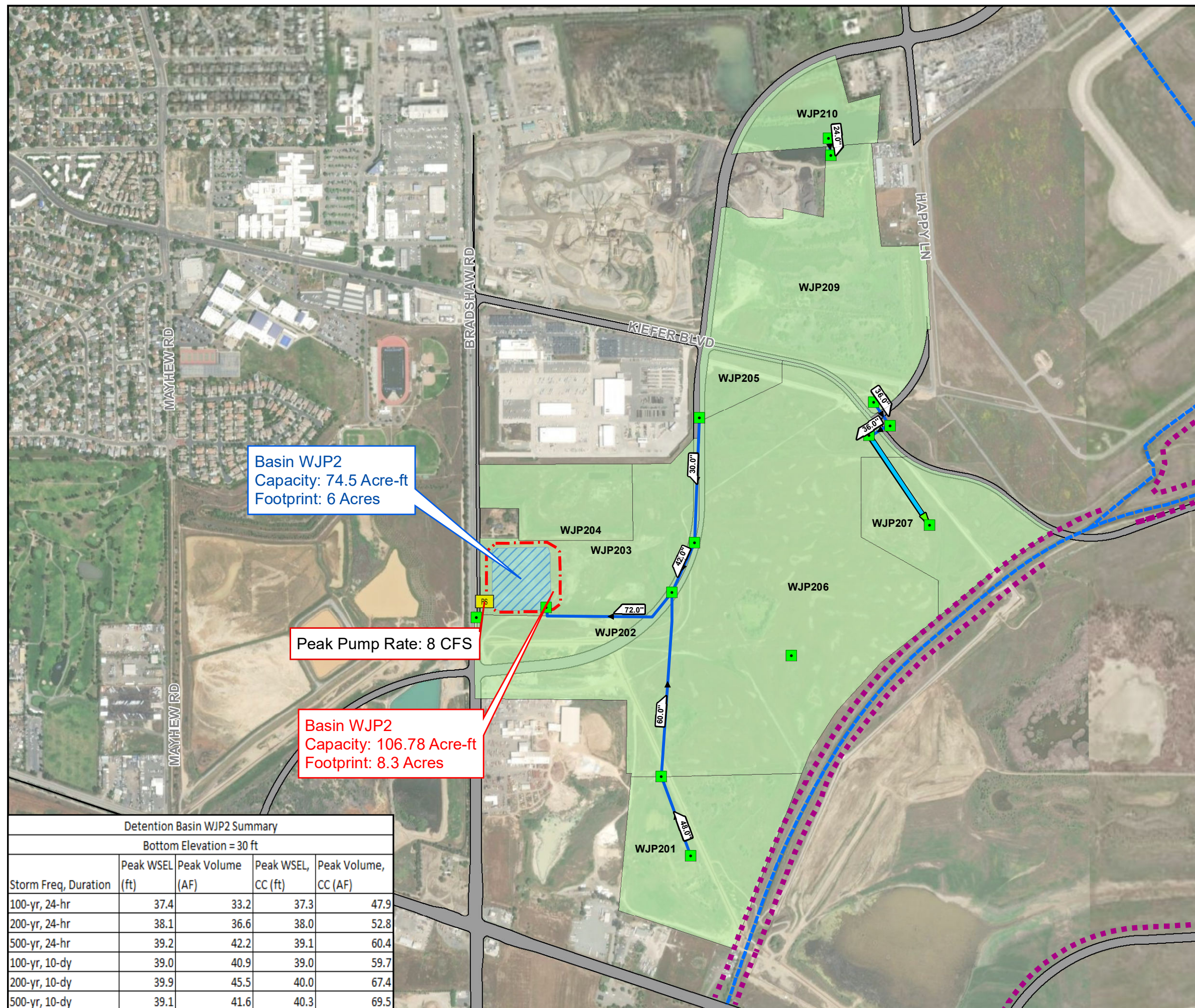
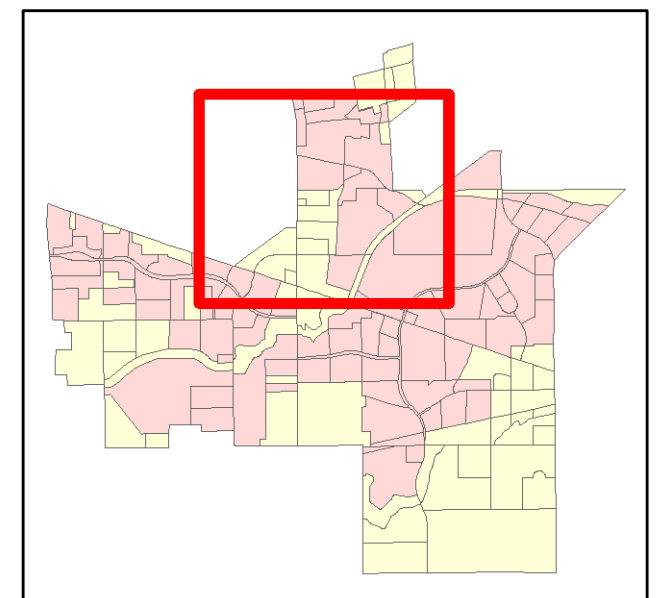
Detention Basin WJP1 Summary				
Bottom Elevation = 27 ft				
Detention Basin WJP1 Summary				
Bottom Elevation = 27 ft				
Storm Freq, Duration	Peak WSEL (ft)	Peak Volume (AF)	Peak WSEL, CC (ft)	Peak Volume, CC (AF)
100-yr, 24-hr	44.5	2419.4	50.5	4450.7
200-yr, 24-hr	45.9	2835.3	52.2	5050.3
500-yr, 24-hr	47.7	3459.4	54.9	6088.8
100-yr, 10-dy	49.0	3897.9	55.5	6308.6
200-yr, 10-dy	51.3	4722.7	58.5	7480.8
500-yr, 10-dy	53.9	5717.3	63.6	9529.1

WJP1 Inflow Volumes By Source			
Storm Freq, Duration	Morrison Creek Weir	Direct Offsite Runoff <sup>1</sup>	Project Site Runoff
100-yr, 24 hr	2,219	97	318
200-yr, 24 hr	2,619	107	345
500-yr, 24 hr	3,197	123	386
100-yr, 10 dy	5,013	234	889
200-yr, 10 dy	5,902	259	938
500-yr, 10 dy	7,036	301	1,019
200-yr, 10 dy (CC)	8,801	348	1,257
1. Adjacent development to the east			

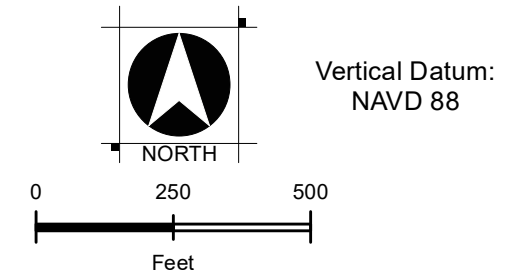
ATTACHMENT 4  
WJP2 - PLANNED FACILITIES  
WEST JACKSON HIGHWAY MASTER PLAN  
SACRAMENTO CO, CA  
DECEMBER 2022



Notes:  
1) Basin footprint is approximate and subject to change with final engineering design.



# ATTACHMENT 4 WJP6 - PLANNED FACILITIES WEST JACKSON HIGHWAY MASTER PLAN SACRAMENTO CO, CA DECEMBER 2022



Legend

PS

Pump Station

Open Channel

Pipe

Culvert

Nodes

Creeks

Pumped Detention Basin

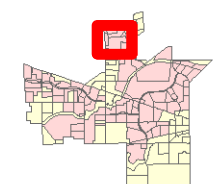
Gravity Detention Basin

Basin Climate Expansion

Watershed

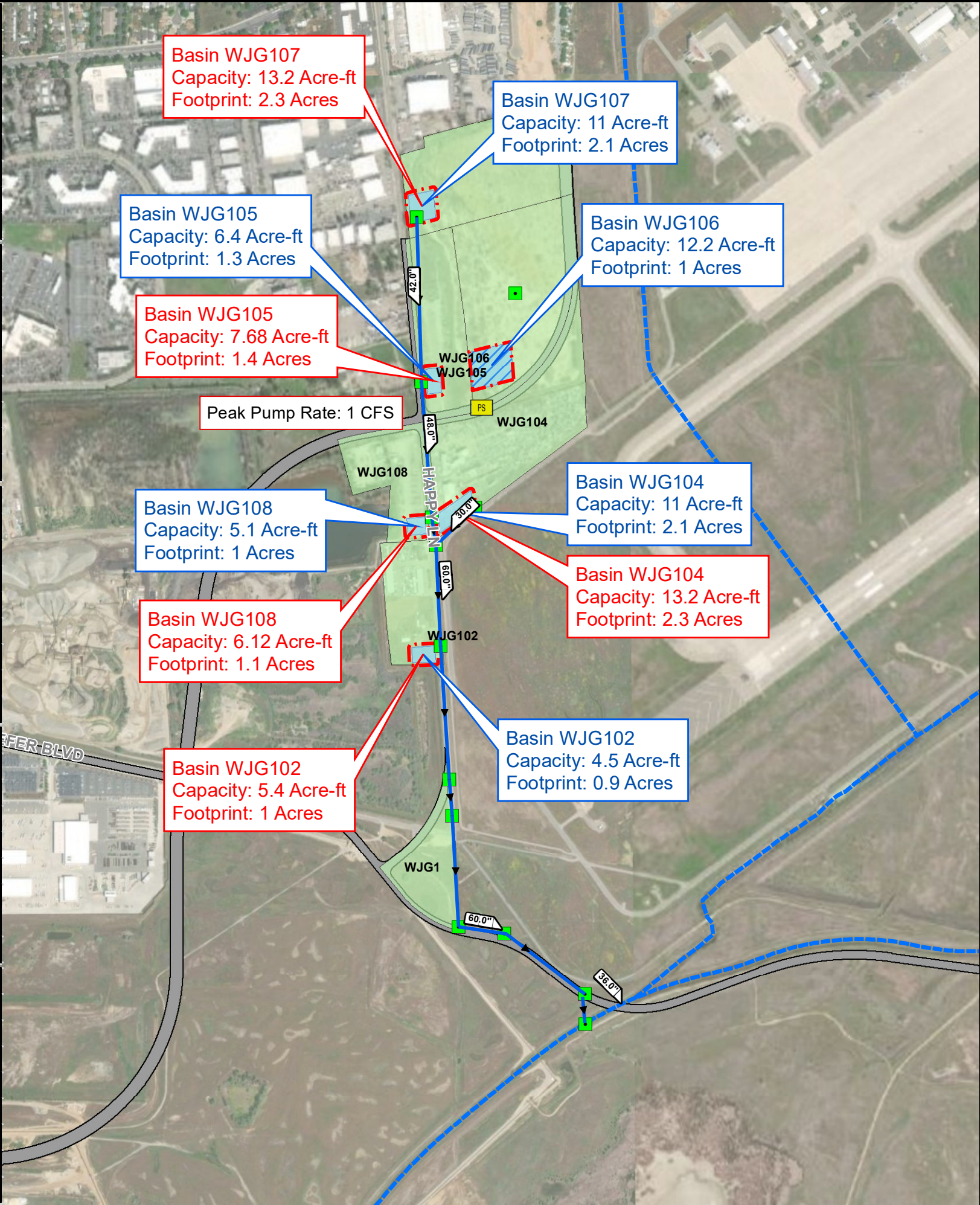
Future Roadways

Notes:  
1) Basin footprint is approximate and subject to change with final engineering design.



Detention Basin WJP6 Summary				
Bottom Elevation = 50 ft				
Storm Freq, Duration	Peak WSEL (ft)	Peak Volume (AF)	Peak WSEL, CC (ft)	Peak Volume, CC (AF)
100-yr, 24-hr	58.0	38.2	60.9	55.3
200-yr, 24-hr	58.7	42.3	61.8	61.2
500-yr, 24-hr	59.9	49.2	63.2	70.4
100-yr, 10-dy	59.2	44.8	60.3	51.5
200-yr, 10-dy	58.2	39.3	61.5	59.4
500-yr, 10-dy	59.5	46.8	63.6	73.0

Detention Basin WJG102 Summary		
Bottom Elevation = 66.9 ft		
Storm Freq, Duration	Peak WSEL (ft)	Peak Volume (AF)
100-yr, 24-hr	69.8	1.9
200-yr, 24-hr	70.0	2.1
500-yr, 24-hr	70.2	2.2
100-yr, 10-dy	69.9	2.0
200-yr, 10-dy	70.0	2.1
500-yr, 10-dy	70.1	2.2
Detention Basin WJG104 Summary		
Bottom Elevation = 67.48 ft		
Storm Freq, Duration	Peak WSEL (ft)	Peak Volume (AF)
100-yr, 24-hr	70.7	5.6
200-yr, 24-hr	70.9	5.9
500-yr, 24-hr	71.2	6.4
100-yr, 10-dy	70.9	6.0
200-yr, 10-dy	71.1	6.2
500-yr, 10-dy	71.3	6.6
Detention Basin WJG105 Summary		
Bottom Elevation = 69.7 ft		
Storm Freq, Duration	Peak WSEL (ft)	Peak Volume (AF)
100-yr, 24-hr	72.7	3.0
200-yr, 24-hr	72.9	3.2
500-yr, 24-hr	73.2	3.5
100-yr, 10-dy	72.9	3.2
200-yr, 10-dy	73.0	3.3
500-yr, 10-dy	73.3	3.6
Detention Basin WJG107 Summary		
Bottom Elevation = 71.3 ft		
Storm Freq, Duration	Peak WSEL (ft)	Peak Volume (AF)
100-yr, 24-hr	74.5	5.5
200-yr, 24-hr	74.7	5.8
500-yr, 24-hr	74.9	6.3
100-yr, 10-dy	74.7	5.9
200-yr, 10-dy	74.8	6.1
500-yr, 10-dy	75.0	6.5
Detention Basin WJG108 Summary		
Bottom Elevation = 68.3 ft		
Storm Freq, Duration	Peak WSEL (ft)	Peak Volume (AF)
100-yr, 24-hr	71.5	2.5
200-yr, 24-hr	71.8	2.8
500-yr, 24-hr	72.2	3.1
100-yr, 10-dy	71.7	2.7
200-yr, 10-dy	72.0	2.9
500-yr, 10-dy	72.4	3.3



ATTACHMENT 4

WJG1 - PLANNED FACILITIES

WEST JACKSON HIGHWAY MASTER PLAN

SACRAMENTO CO, CA

DECEMBER 2022

NORTH

05001,000

Feet

Vertical Datum:  
NAVD 88

Legend

PS

Pump Station

Open Channel

Pipe

Culvert

Nodes

Creeks

Pumped Detention Basin

Gravity Detention Basin

Basin Climate Expansion

Watershed

Future Roadways

Notes:

1) Basin footprint is approximate and subject to change with final engineering design.

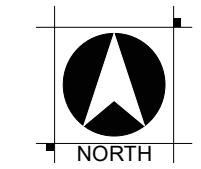
WOOD RODGERS

Page 142 of 228

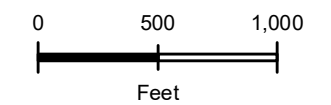
WJG2 - PLANNED FACILITIES

SACRAMENTO CO, CA














DECEMBER 2022



Vertical Datum:  
NAVD 88

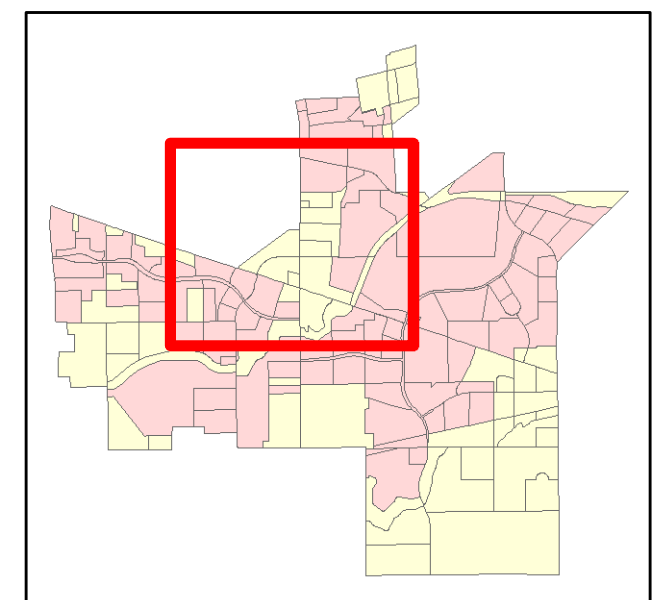


### Legend

-  Pump Station
-  Proposed/Existing Levee
-  Open Channel
-  Pipe
-  Culvert
-  Nodes
-  Creeks
-  Pumped Detention Basin
-  Gravity Detention Basin
-  Floodplain Mitigation
-  Basin Climate Expansion
-  Future Roadways
-  Watershed

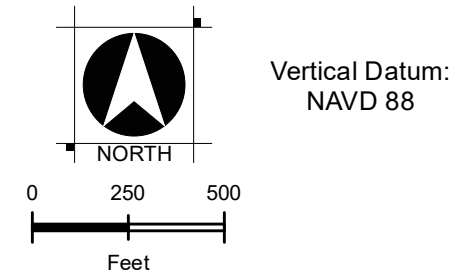
Notes:

1) Basin footprint is approximate and subject to change with final engineering design.



Detention Basin WJG201 Summary				
Bottom Elevation = 59.5 ft				
Storm Freq, Duration	Peak WSEL (ft)	Peak Volume (AF)	Peak WSEL, CC (ft)	Peak Volume, CC (AF)
100-yr, 24-hr	62.6	10.4	62.6	15.7
200-yr, 24-hr	62.7	10.9	62.8	16.3
500-yr, 24-hr	62.9	11.7	62.9	17.3
100-yr, 10-dy	62.9	11.5	63.0	17.6
200-yr, 10-dy	63.0	11.8	63.1	18.2
500-yr, 10-dy	63.1	12.3	63.3	19.3

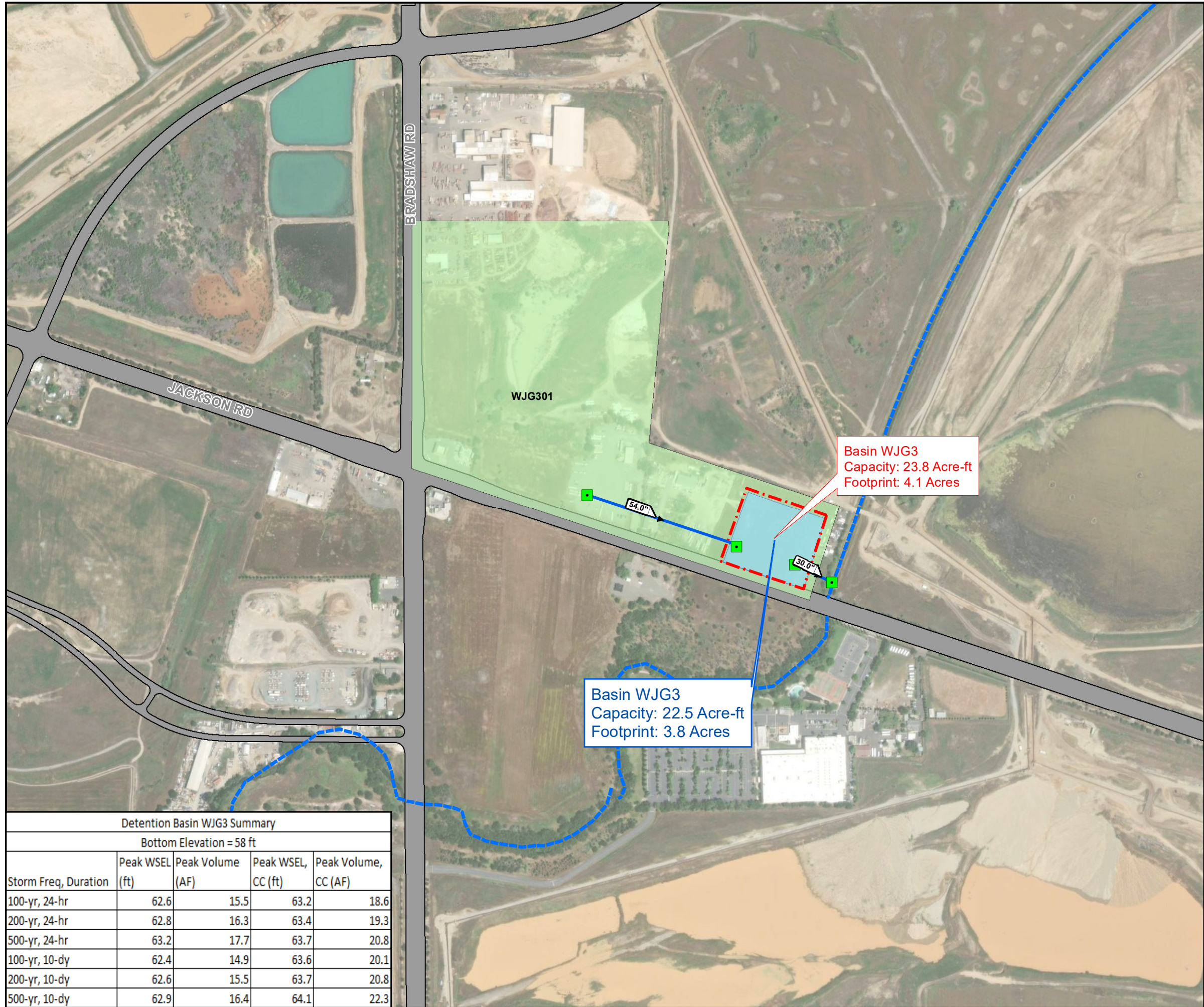
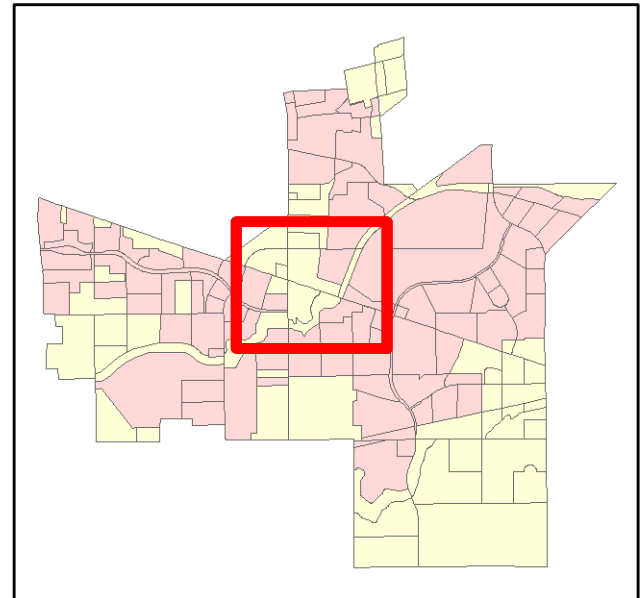
# ATTACHMENT 4 WJG3 - PLANNED FACILITIES WEST JACKSON HIGHWAY MASTER PLAN SACRAMENTO CO, CA DECEMBER 2022



Legend

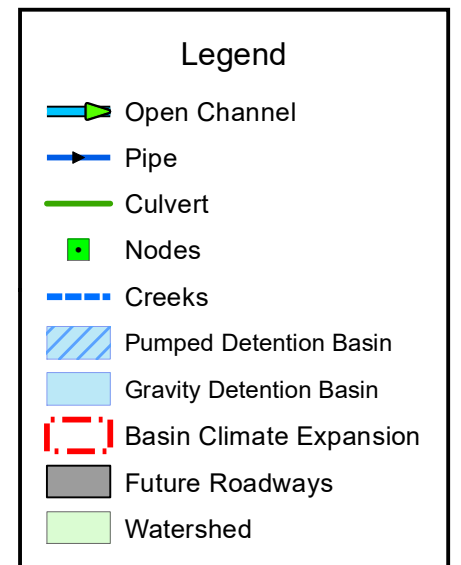
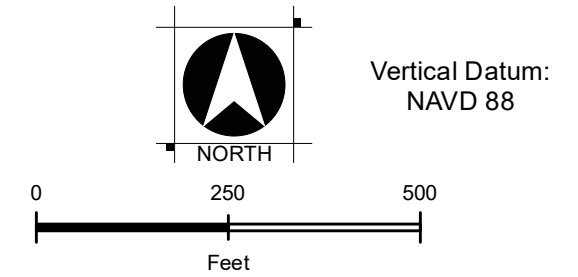
- Open Channel
- Pipe
- Culvert
- Nodes
- Creeks
- Pumped Detention Basin
- Gravity Detention Basin
- Basin Climate Expansion
- Watershed
- Future Roadways

Notes:  
1) Basin footprint is approximate and subject to change with final engineering design.

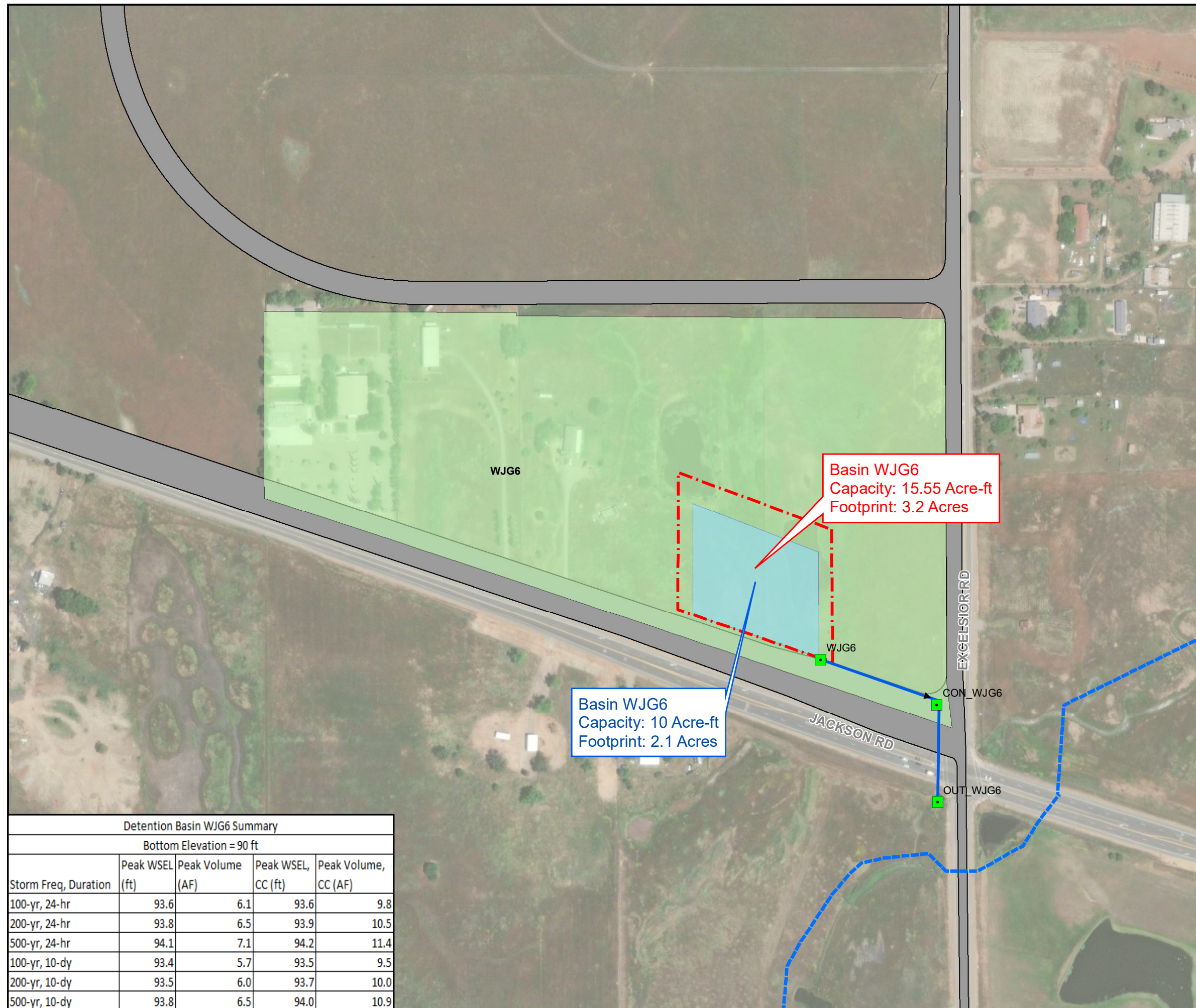
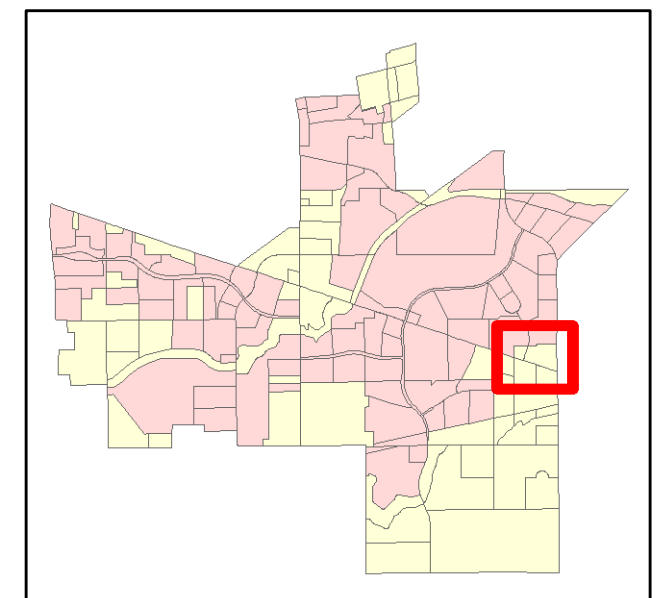


Detention Basin WJG3 Summary				
Bottom Elevation = 58 ft				
Storm Freq, Duration	Peak WSEL (ft)	Peak Volume (AF)	Peak WSEL, CC (ft)	Peak Volume, CC (AF)
100-yr, 24-hr	62.6	15.5	63.2	18.6
200-yr, 24-hr	62.8	16.3	63.4	19.3
500-yr, 24-hr	63.2	17.7	63.7	20.8
100-yr, 10-dy	62.4	14.9	63.6	20.1
200-yr, 10-dy	62.6	15.5	63.7	20.8
500-yr, 10-dy	62.9	16.4	64.1	22.3

ATTACHMENT 4  
WJG6 - PLANNED FACILITIES  
WEST JACKSON HIGHWAY MASTER PLAN  
SACRAMENTO CO, CA  
DECEMBER 2022



Notes:  
1) Basin footprint is approximate and subject to change with final engineering design.



Detention Basin WJG6 Summary				
Bottom Elevation = 90 ft				
Storm Freq, Duration	Peak WSEL (ft)	Peak Volume (AF)	Peak WSEL, CC (ft)	Peak Volume, CC (AF)
100-yr, 24-hr	93.6	6.1	93.6	9.8
200-yr, 24-hr	93.8	6.5	93.9	10.5
500-yr, 24-hr	94.1	7.1	94.2	11.4
100-yr, 10-dy	93.4	5.7	93.5	9.5
200-yr, 10-dy	93.5	6.0	93.7	10.0
500-yr, 10-dy	93.8	6.5	94.0	10.9

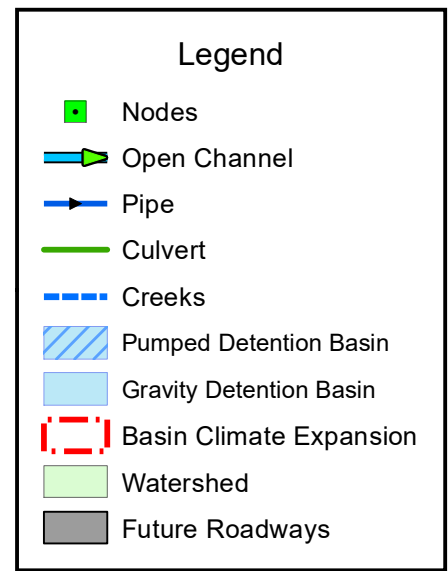
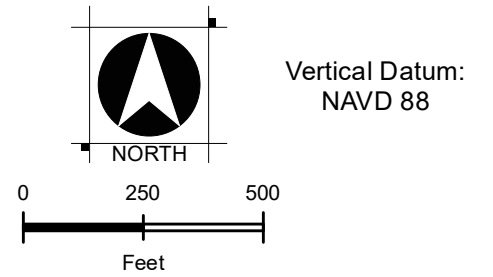
# ATTACHMENT 4

## WJG11 - PLANNED FACILITIES

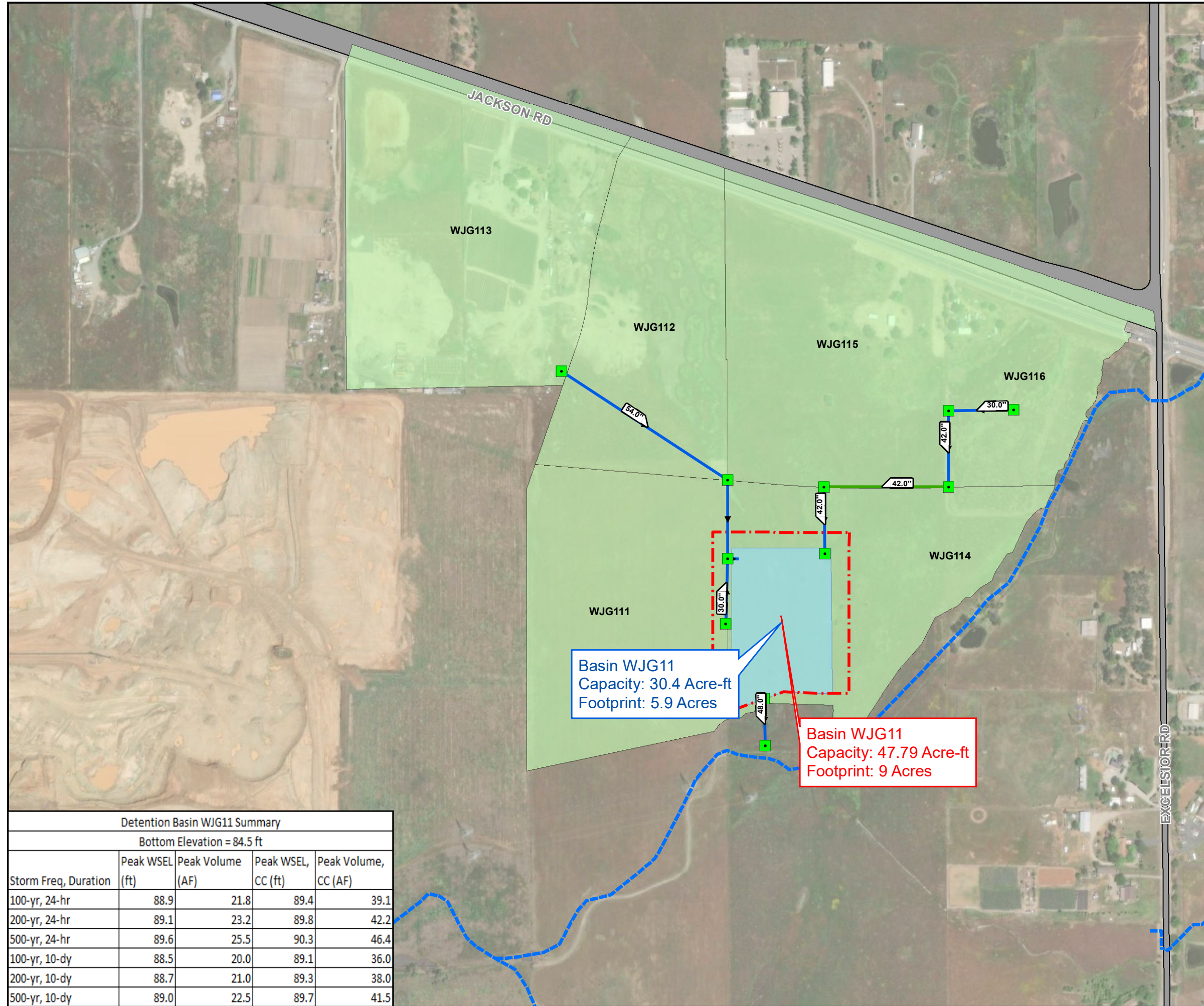
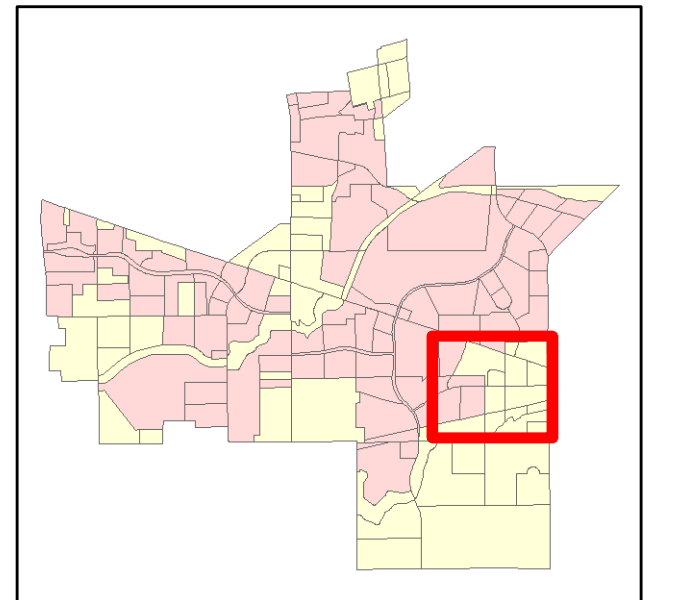
### WEST JACKSON HIGHWAY MASTER PLAN

#### SACRAMENTO CO, CA

#### DECEMBER 2022

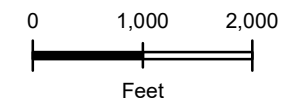


Notes:  
1) Basin footprint is approximate and subject to change with final engineering design.














Detention Basin WJG11 Summary				
Bottom Elevation = 84.5 ft				
Storm Freq, Duration	Peak WSEL (ft)	Peak Volume (AF)	Peak WSEL, CC (ft)	Peak Volume, CC (AF)
100-yr, 24-hr	88.9	21.8	89.4	39.1
200-yr, 24-hr	89.1	23.2	89.8	42.2
500-yr, 24-hr	89.6	25.5	90.3	46.4
100-yr, 10-dy	88.5	20.0	89.1	36.0
200-yr, 10-dy	88.7	21.0	89.3	38.0
500-yr, 10-dy	89.0	22.5	89.7	41.5

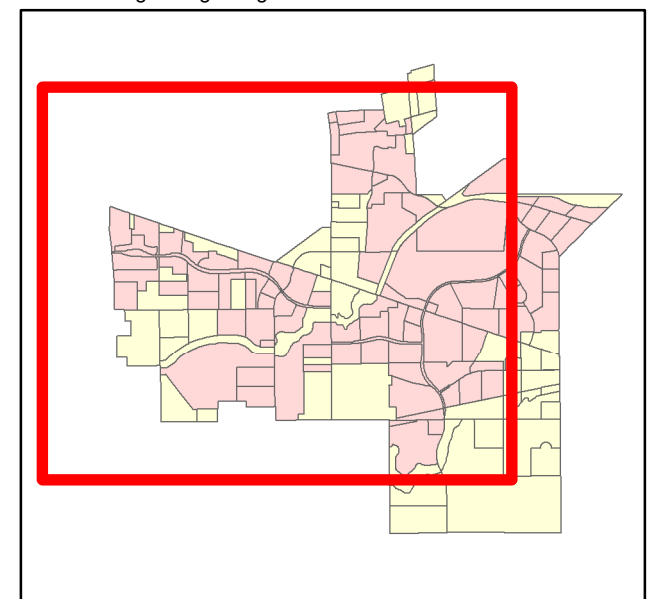
SACRAMENTO CO, CA  
JANUARY 2023

 Finance Area B

### Legend

-  Pump Station
-  Proposed/Existing Levee
-  Open Channel
-  Pipe
-  Culvert
-  Creeks
-  Basin Climate Expansion
-  Pumped Detention Basin
-  Future Roadways
-  Watershed
-  Offsite Watershed

Notes:  
1) Basin footprint is approximate and subject to change with final engineering design.



Detention Basin WJP3 Summary				
Bottom Elevation = 5 ft				
Storm Freq, Duration	Peak WSEL (ft)	Peak Volume (AF)	Peak WSEL, CC (ft)	Peak Volume, CC (AF)
100-yr, 24-hr	15.3	379.4	15.3	533.0
200-yr, 24-hr	16.1	409.4	16.6	600.7
500-yr, 24-hr	17.3	455.6	17.5	647.5
100-yr, 10-dy	19.4	530.8	20.9	823.6
200-yr, 10-dy	20.6	576.1	21.7	862.3
500-yr, 10-dy	21.2	597.8	21.7	864.1

Peak Pump Rate: 45 CFS

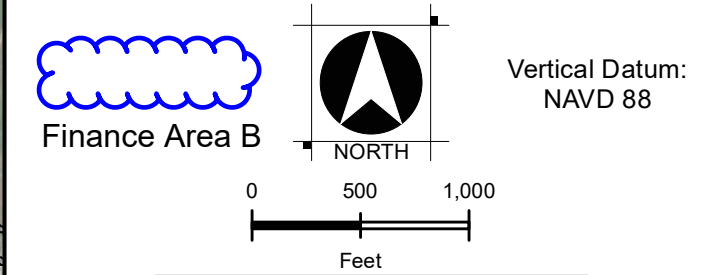
Basin WJP3  
Capacity: 740 Acre-ft  
Footprint: 39.9 Acres

Basin WJP3  
Capacity: 1030 Acre-ft  
Footprint: 52.1 Acres

Storm Freq, Duration	Direct Offsite Runoff <sup>1</sup>	Project Site Runoff
100-yr, 24 hr	69	30
200-yr, 24 hr	75	33
500-yr, 24 hr	86	38
100-yr, 10 dy	172	72
200-yr, 10 dy	188	80
500-yr, 10 dy	214	93
200-yr, 10 dy (CC)	252	1,078

1. Aspen 1 runoff

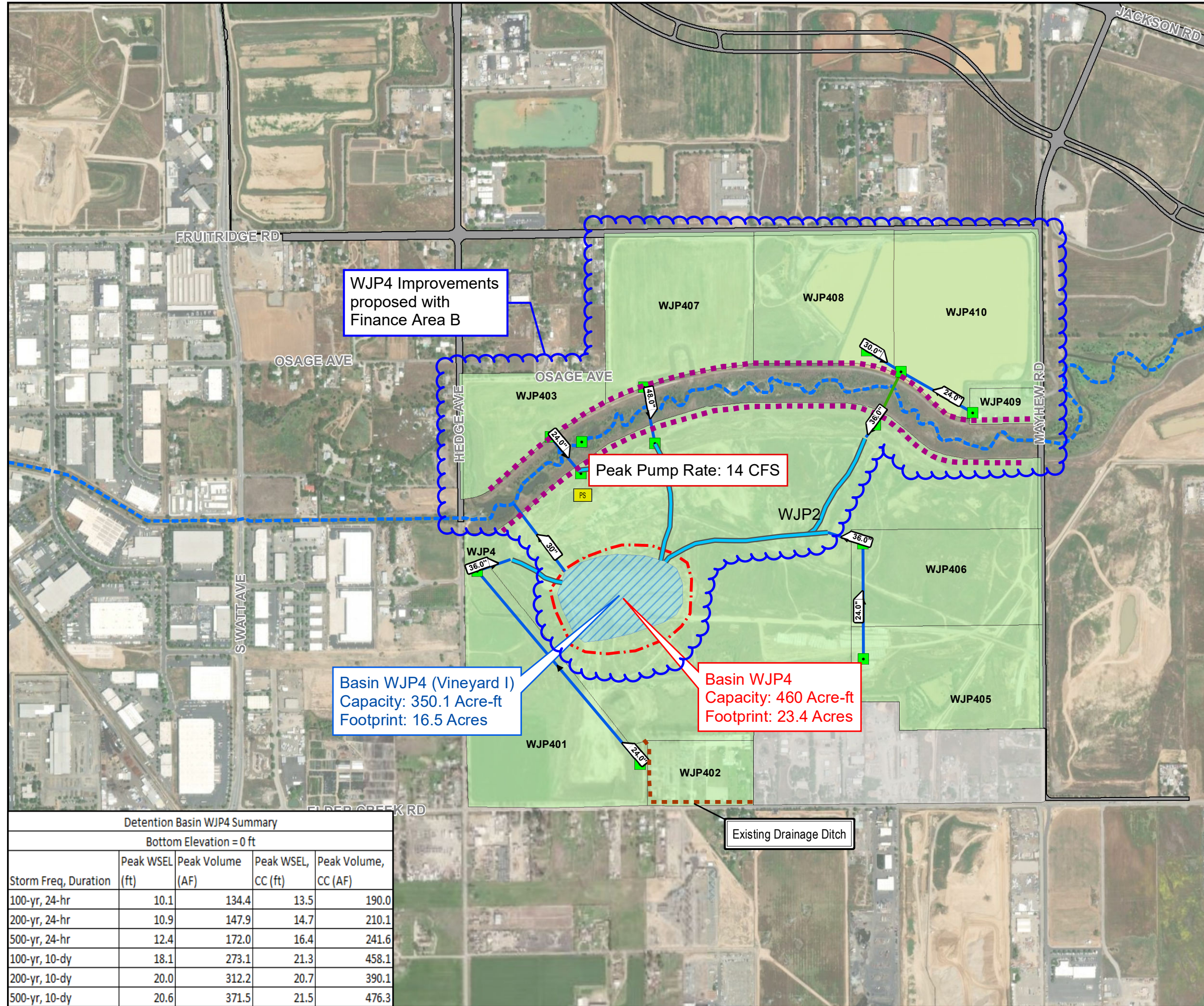
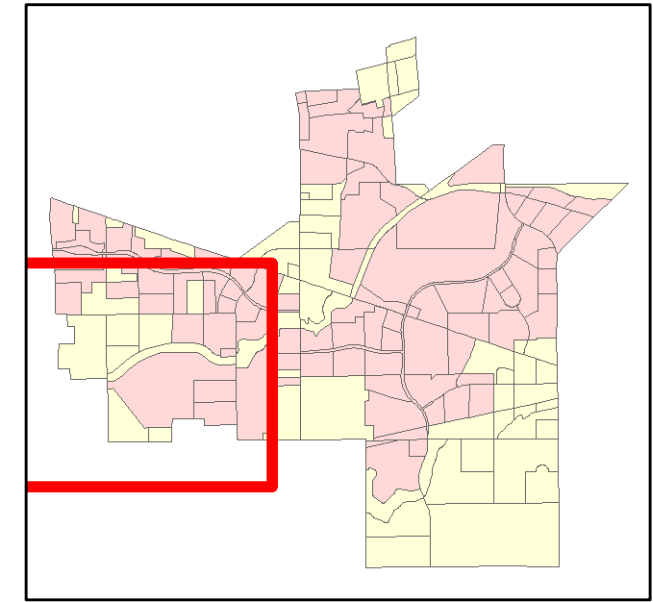
ATTACHMENT 4  
WJP4 - PLANNED FACILITIES  
WEST JACKSON HIGHWAY MASTER PLAN  
SACRAMENTO CO, CA  
DECEMBER 2022



**Legend**

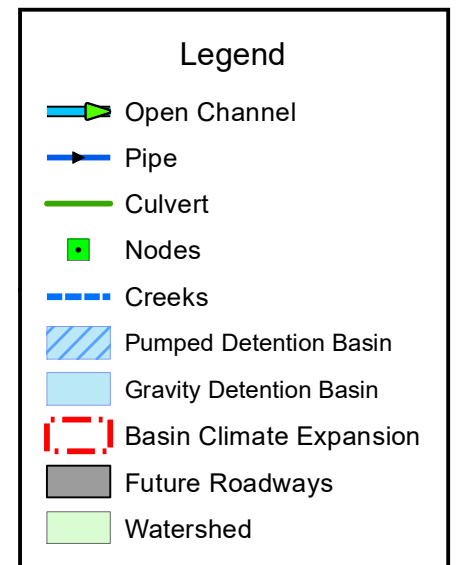
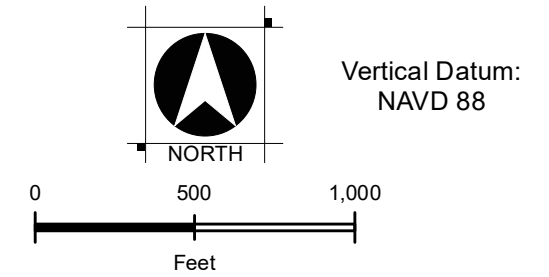
- PS Pump Station
- Proposed/Existing Levee
- Open Channel
- Pipe
- Culvert
- Nodes
- Creeks
- Basin Climate Expansion
- Pumped Detention Basin
- Future Roadways
- Watershed
- Offsite Shed

Notes:  
1) Basin footprint is approximate and subject to change with final engineering design.

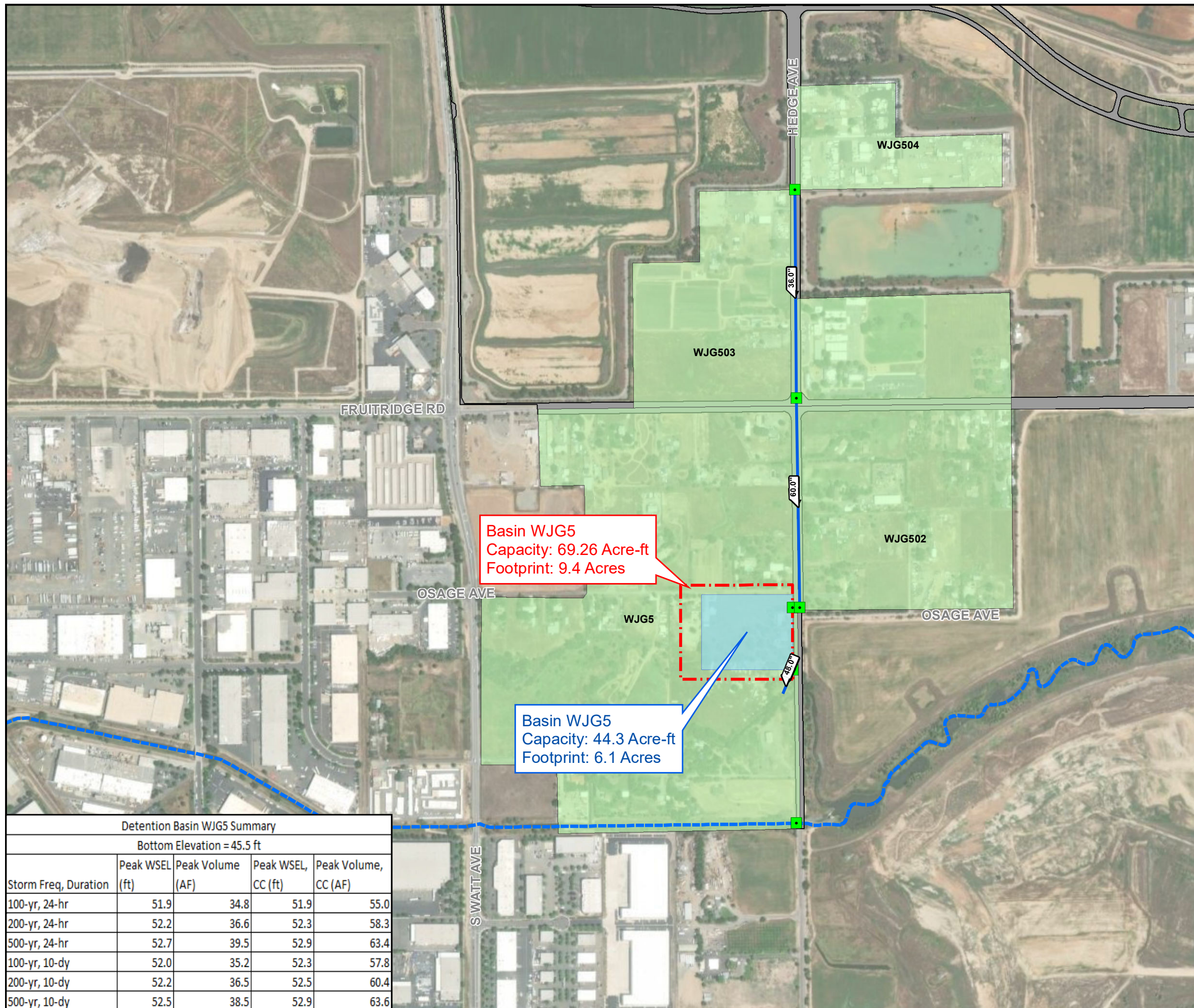
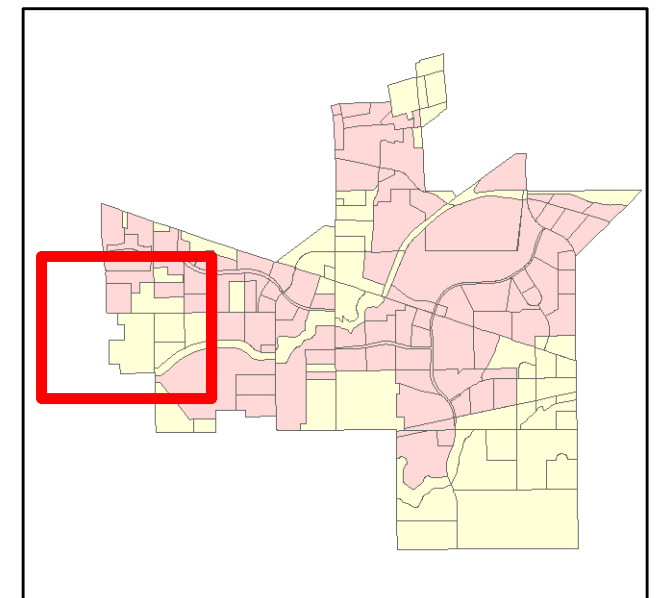


Detention Basin WJP4 Summary				
Bottom Elevation = 0 ft				
Storm Freq, Duration	Peak WSEL (ft)	Peak Volume (AF)	Peak WSEL, CC (ft)	Peak Volume, CC (AF)
100-yr, 24-hr	10.1	134.4	13.5	190.0
200-yr, 24-hr	10.9	147.9	14.7	210.1
500-yr, 24-hr	12.4	172.0	16.4	241.6
100-yr, 10-dy	18.1	273.1	21.3	458.1
200-yr, 10-dy	20.0	312.2	20.7	390.1
500-yr, 10-dy	20.6	371.5	21.5	476.3

ATTACHMENT 4  
WJG5 - PLANNED FACILITIES  
WEST JACKSON HIGHWAY MASTER PLAN  
SACRAMENTO CO, CA  
DECEMBER 2022

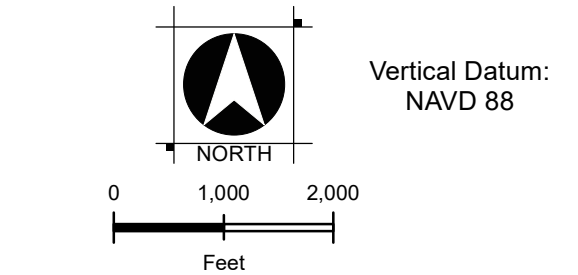


Notes:  
1) Basin footprint is approximate and subject to change with final engineering design.



Detention Basin WJG5 Summary				
Bottom Elevation = 45.5 ft				
Storm Freq, Duration	Peak WSEL (ft)	Peak Volume (AF)	Peak WSEL, CC (ft)	Peak Volume, CC (AF)
100-yr, 24-hr	51.9	34.8	51.9	55.0
200-yr, 24-hr	52.2	36.6	52.3	58.3
500-yr, 24-hr	52.7	39.5	52.9	63.4
100-yr, 10-dy	52.0	35.2	52.3	57.8
200-yr, 10-dy	52.2	36.5	52.5	60.4
500-yr, 10-dy	52.5	38.5	52.9	63.6

ATTACHMENT 4  
WJP3 - PLANNED FACILITIES  
WEST JACKSON HIGHWAY MASTER PLAN  
SACRAMENTO CO, CA  
JANUARY 2023

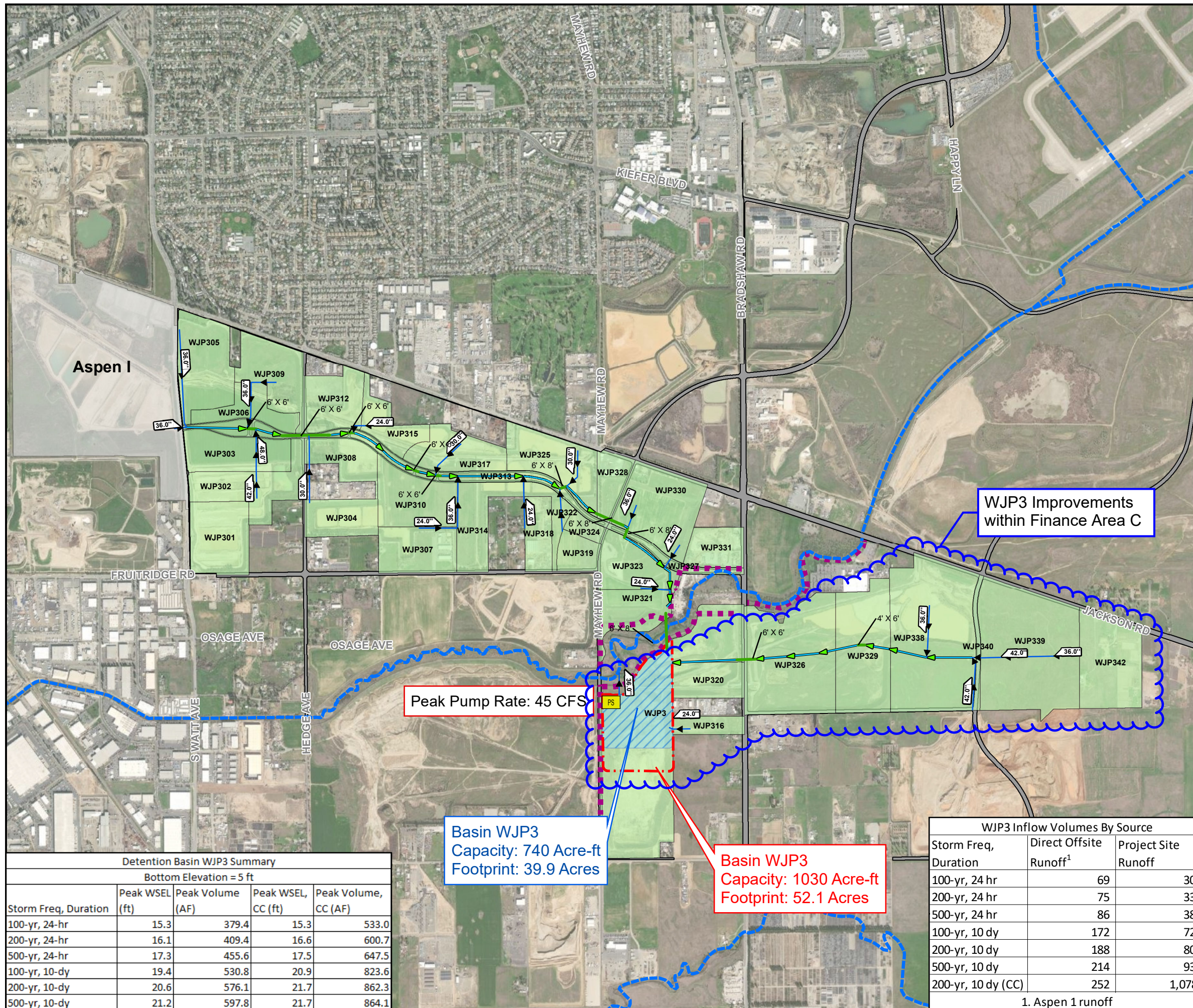
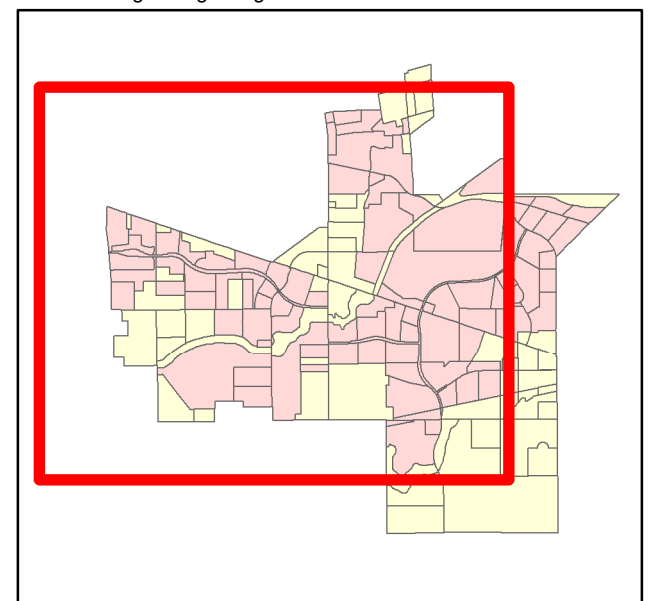


Finance Area C

Legend

- PS Pump Station
- Proposed/Existing Levee
- Open Channel
- Pipe
- Culvert
- Creeks
- Basin Climate Expansion
- Pumped Detention Basin
- Future Roadways
- Watershed
- Offsite Watershed

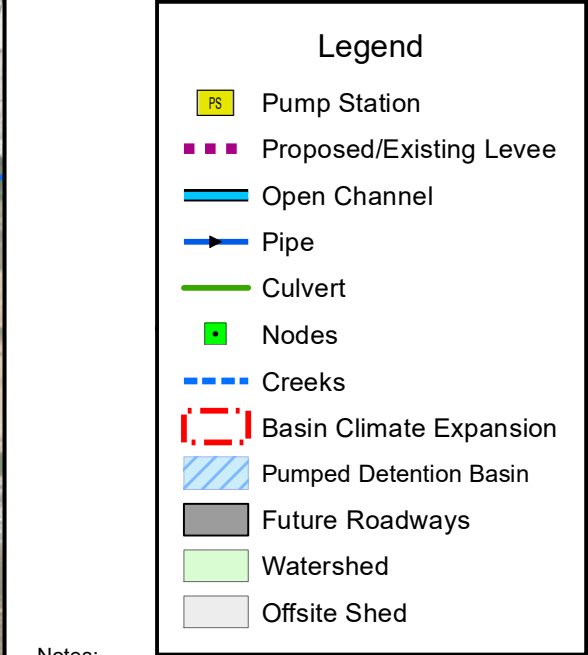
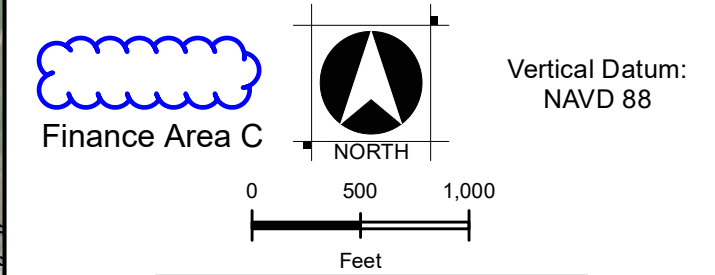
Notes:  
1) Basin footprint is approximate and subject to change with final engineering design.



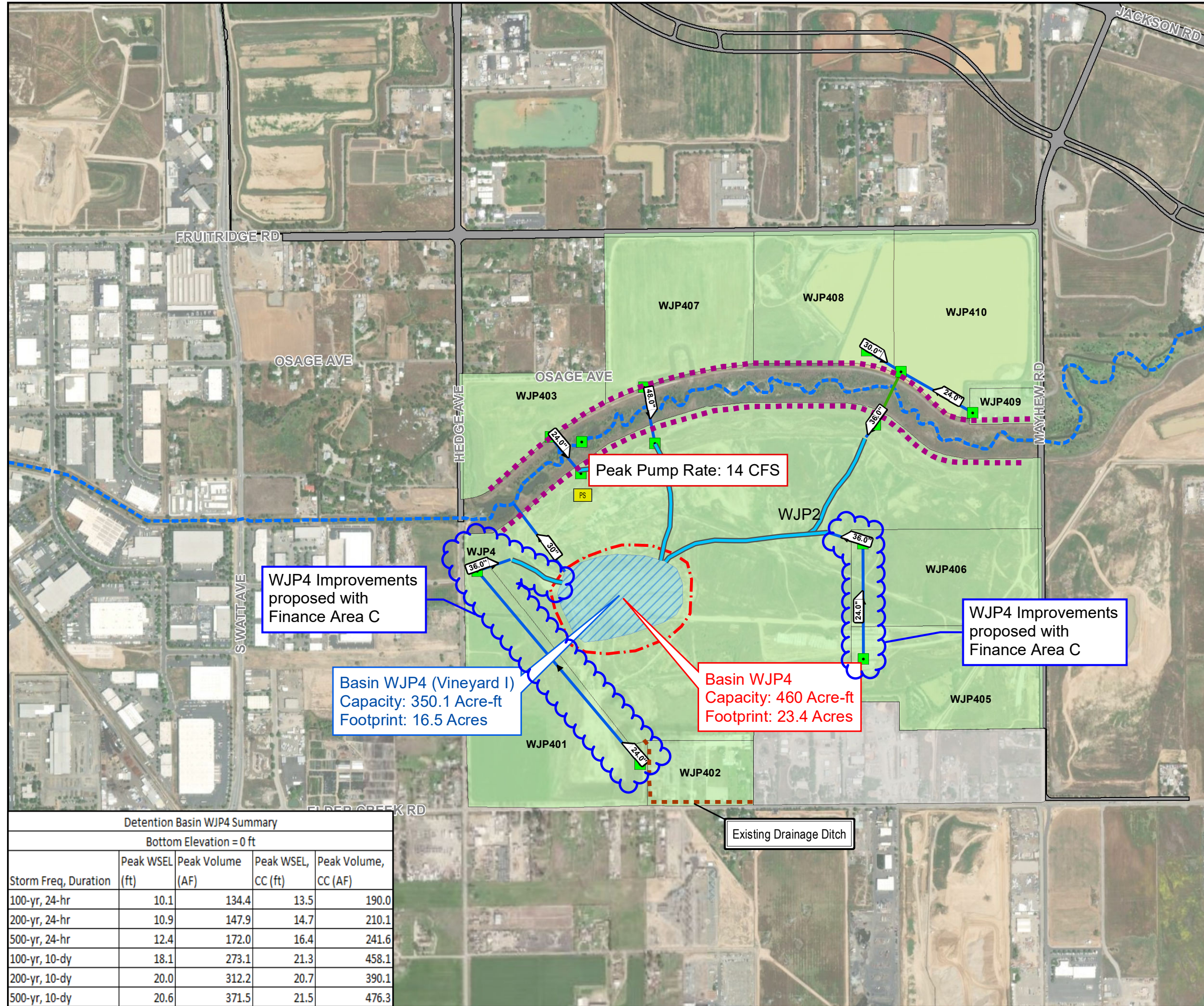
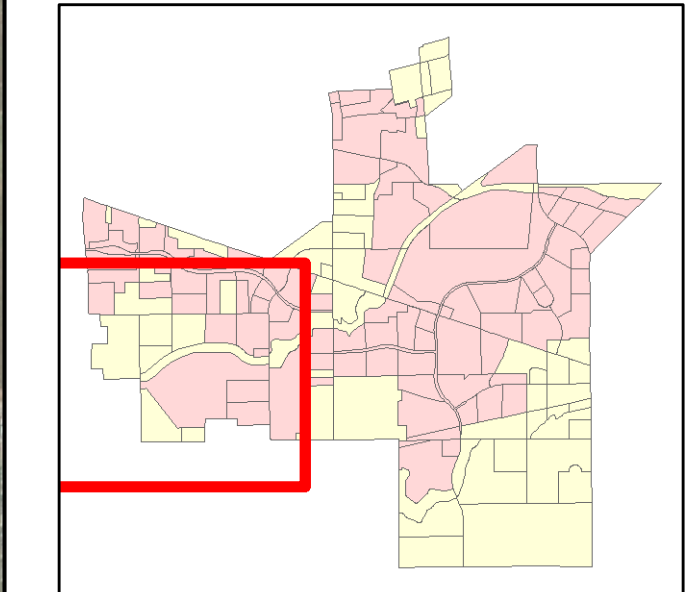
Detention Basin WJP3 Summary				
Bottom Elevation = 5 ft				
Storm Freq, Duration	Peak WSEL (ft)	Peak Volume (AF)	Peak WSEL, CC (ft)	Peak Volume, CC (AF)
100-yr, 24-hr	15.3	379.4	15.3	533.0
200-yr, 24-hr	16.1	409.4	16.6	600.7
500-yr, 24-hr	17.3	455.6	17.5	647.5
100-yr, 10-dy	19.4	530.8	20.9	823.6
200-yr, 10-dy	20.6	576.1	21.7	862.3
500-yr, 10-dy	21.2	597.8	21.7	864.1

WJP3 Inflow Volumes By Source		
Storm Freq, Duration	Direct Offsite Runoff <sup>1</sup>	Project Site Runoff
100-yr, 24 hr	69	300
200-yr, 24 hr	75	332
500-yr, 24 hr	86	385
100-yr, 10 dy	172	726
200-yr, 10 dy	188	804
500-yr, 10 dy	214	931
200-yr, 10 dy (CC)	252	1,078
1. Aspen 1 runoff		

# ATTACHMENT 4 WJP4 - PLANNED FACILITIES WEST JACKSON HIGHWAY MASTER PLAN SACRAMENTO CO, CA DECEMBER 2022

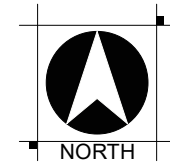


Notes:  
1) Basin footprint is approximate and subject to change with final engineering design.

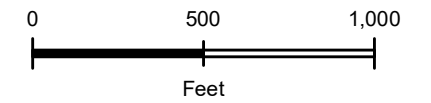


Detention Basin WJP4 Summary				
Bottom Elevation = 0 ft				
Storm Freq, Duration	Peak WSEL (ft)	Peak Volume (AF)	Peak WSEL, CC (ft)	Peak Volume, CC (AF)
100-yr, 24-hr	10.1	134.4	13.5	190.0
200-yr, 24-hr	10.9	147.9	14.7	210.1
500-yr, 24-hr	12.4	172.0	16.4	241.6
100-yr, 10-dy	18.1	273.1	21.3	458.1
200-yr, 10-dy	20.0	312.2	20.7	390.1
500-yr, 10-dy	20.6	371.5	21.5	476.3

ATTACHMENT 4  
WJP5 - PLANNED FACILITIES  
WEST JACKSON HIGHWAY MASTER PLAN  
SACRAMENTO CO, CA  
DECEMBER 2022



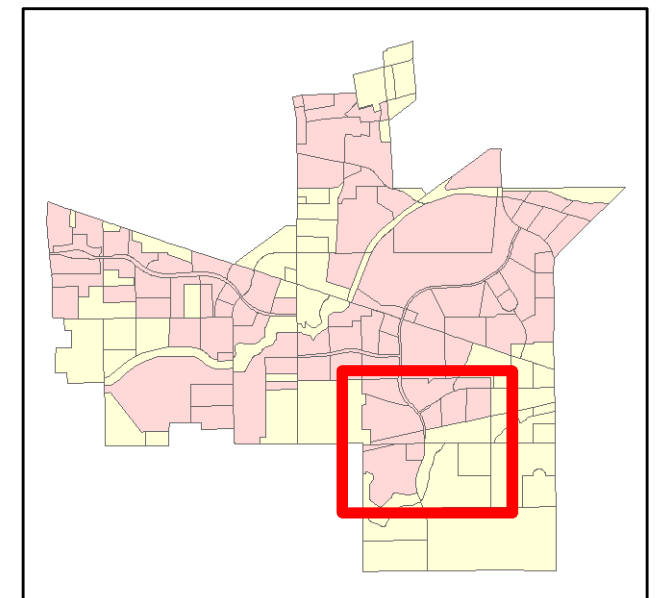
Vertical Datum:  
NAVD 88



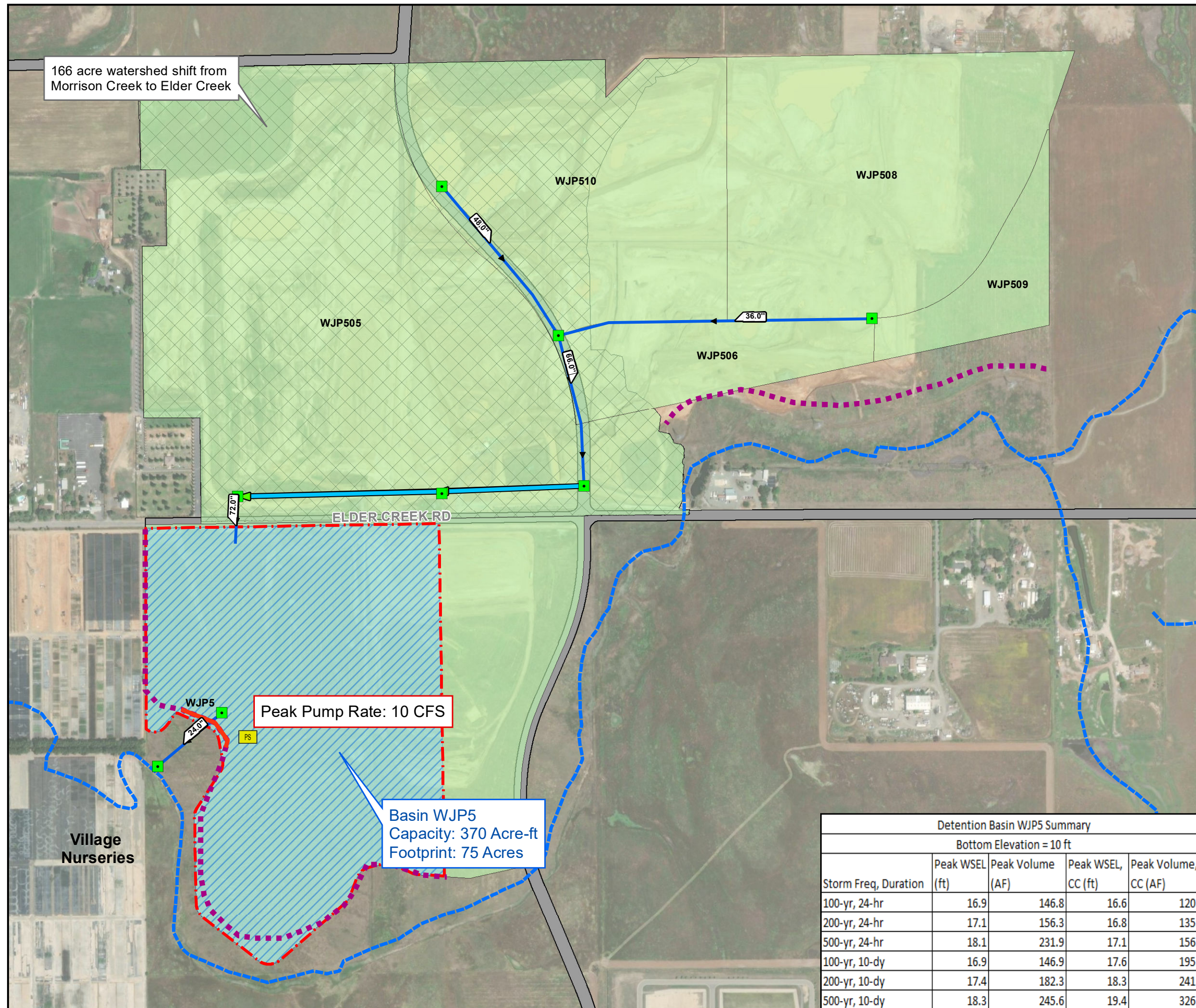
Legend

- PS Pump Station
- Open Channel
- Pipe
- Culvert
- Proposed Weir
- Proposed/Existing Levee
- Nodes
- Creeks
- Watershed Shift
- Pumped Detention Basin
- Future Roadways
- Watershed

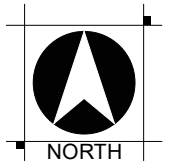
Notes:  
1) Basin footprint is approximate and subject to change with final engineering design.













Detention Basin WJP5 Summary				
Bottom Elevation = 10 ft				
Storm Freq, Duration	Peak WSEL (ft)	Peak Volume (AF)	Peak WSEL, CC (ft)	Peak Volume, CC (AF)
100-yr, 24-hr	16.9	146.8	16.6	120.8
200-yr, 24-hr	17.1	156.3	16.8	135.2
500-yr, 24-hr	18.1	231.9	17.1	156.6
100-yr, 10-dy	16.9	146.9	17.6	195.2
200-yr, 10-dy	17.4	182.3	18.3	241.0
500-yr, 10-dy	18.3	245.6	19.4	326.0

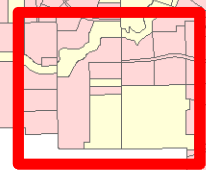


## ATTACHMENT 4



-  Open Channel
-  Pipe
-  Culvert
-  Nodes
-  Creeks
-  Pumped Detention Basin
-  Gravity Detention Basin
-  Basin Climate Expansion
-  Watershed
-  Future Roadways

Notes:

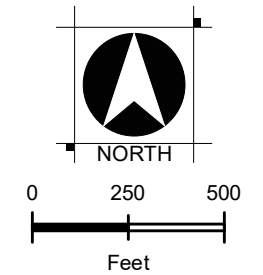


## Detention Basin WJG4 Summary

Bottom Elevation = 56.8 ft

Storm Freq, Duration	Peak WSEL (ft)	Peak Volume (AF)	Peak WSEL, CC (ft)	Peak Volume, CC (AF)
100-yr, 24-hr	62.3	46.3	62.5	77.3
200-yr, 24-hr	62.6	49.3	62.8	81.5
500-yr, 24-hr	63.2	54.1	63.4	90.3
100-yr, 10-dy	62.5	48.4	62.7	80.0
200-yr, 10-dy	62.8	50.9	63.1	84.9
500-yr, 10-dy	63.2	54.7	63.8	94.6

ATTACHMENT 4  
WJG7 - PLANNED FACILITIES  
WEST JACKSON HIGHWAY MASTER PLAN  
SACRAMENTO CO, CA  
DECEMBER 2022

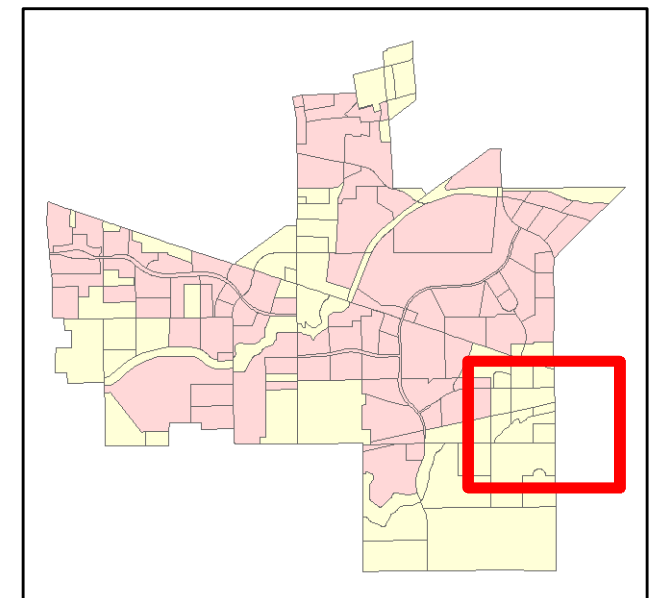


Vertical Datum:  
NAVD 88

Legend

- Open Channel
- Pipe
- Culvert
- Nodes
- Creeks
- Pumped Detention Basin
- Gravity Detention Basin
- Basin Climate Expansion
- Watershed
- Future Roadways

Notes:  
1) Basin footprint is approximate and subject to change with final engineering design.

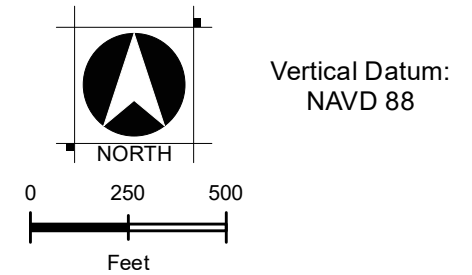


Basin WJG7  
Capacity: 13.9 Acre-ft  
Footprint: 2.2 Acres

Basin WJG7  
Capacity: 22.66 Acre-ft  
Footprint: 3.7 Acres

Detention Basin WJG7 Summary				
Bottom Elevation = 83 ft				
Storm Freq, Duration	Peak WSEL (ft)	Peak Volume (AF)	Peak WSEL, CC (ft)	Peak Volume, CC (AF)
100-yr, 24-hr	89.5	12.9	89.4	20.7
200-yr, 24-hr	89.8	13.4	89.6	21.3
500-yr, 24-hr	90.3	14.5	89.9	22.4
100-yr, 10-dy	89.5	12.8	89.4	20.5
200-yr, 10-dy	89.6	13.2	89.5	21.0
500-yr, 10-dy	89.9	13.7	89.7	21.7

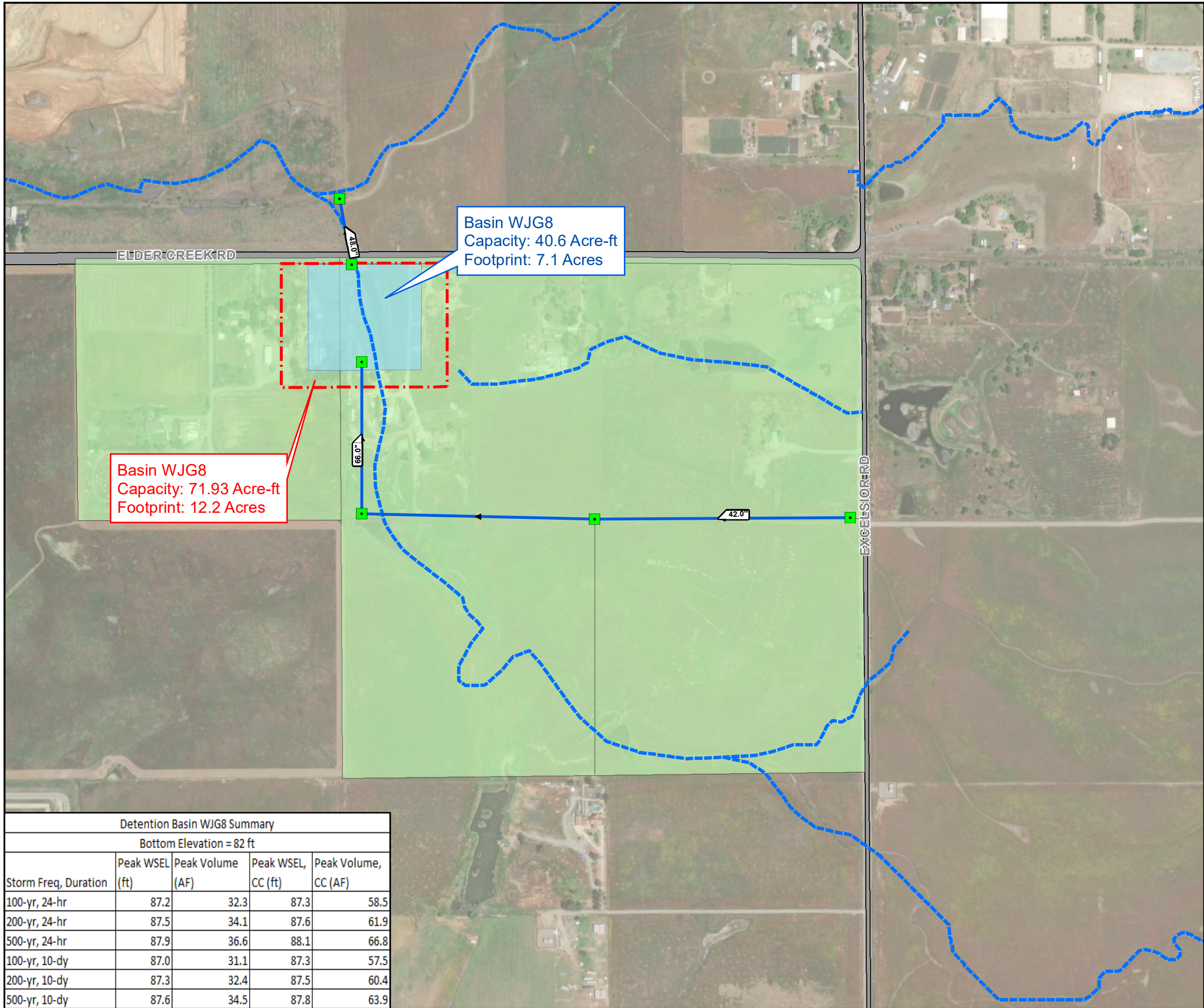
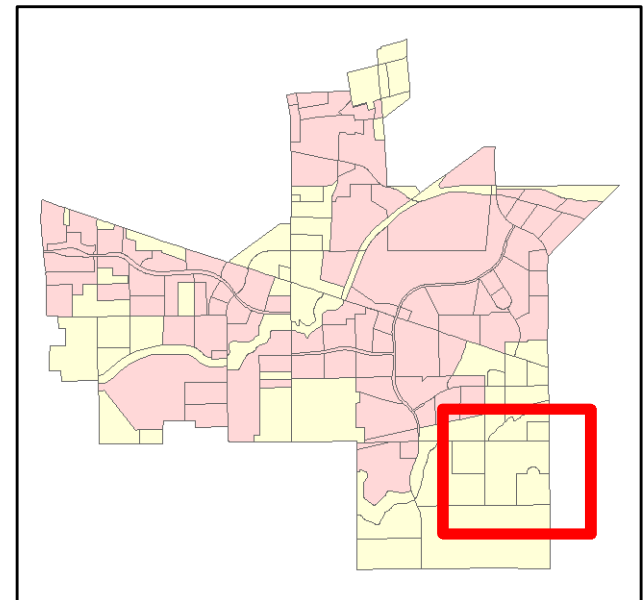
# ATTACHMENT 4 WJG8 - PLANNED FACILITIES WEST JACKSON HIGHWAY MASTER PLAN SACRAMENTO CO, CA DECEMBER 2022



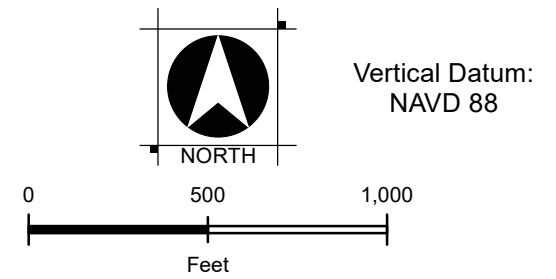
Legend

- Open Channel
- Pipe
- Culvert
- Nodes
- Creeks
- Pumped Detention Basin
- Gravity Detention Basin
- Basin Climate Expansion
- Watershed
- Future Roadways

Notes:  
1) Basin footprint is approximate and subject to change with final engineering design.



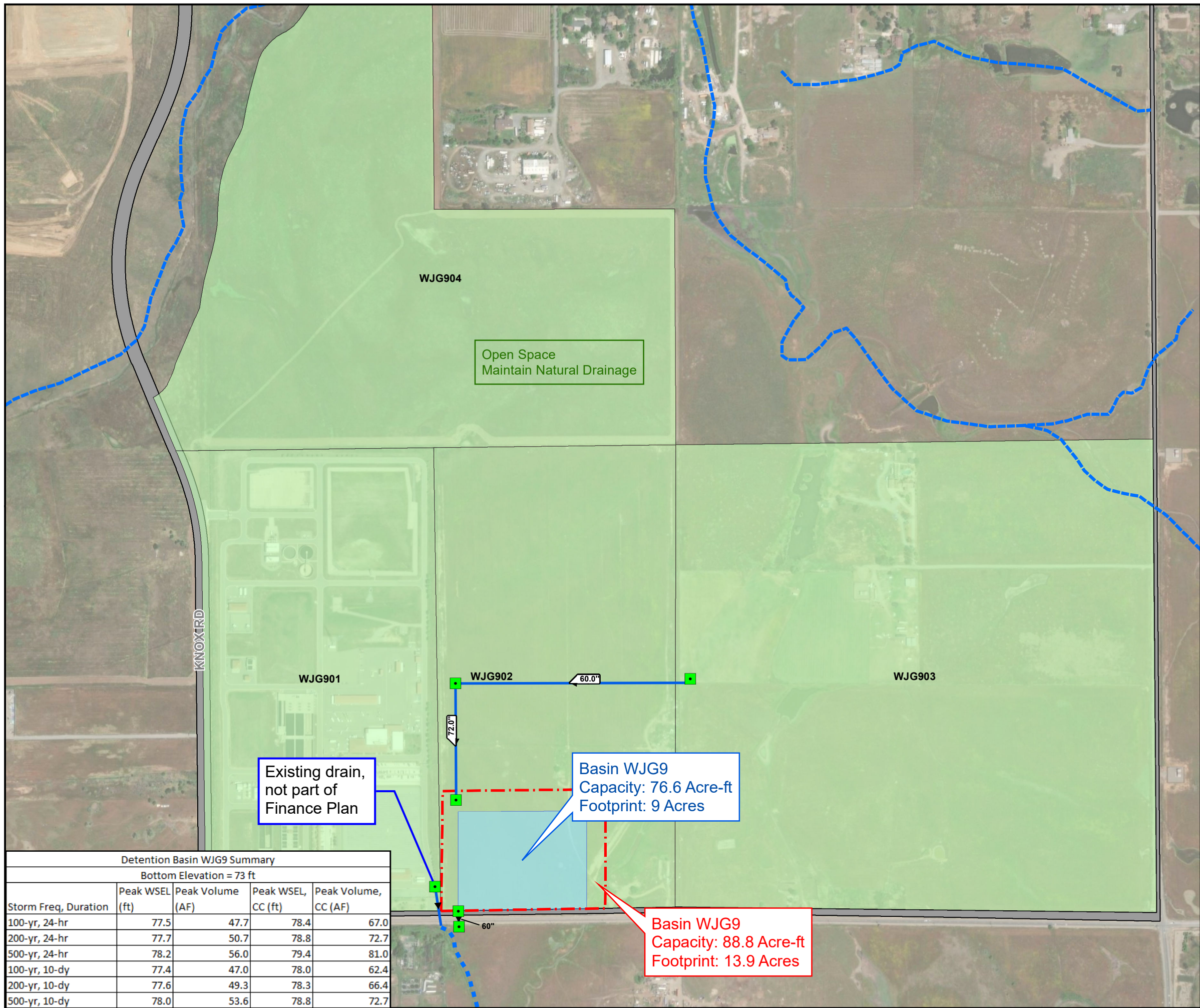
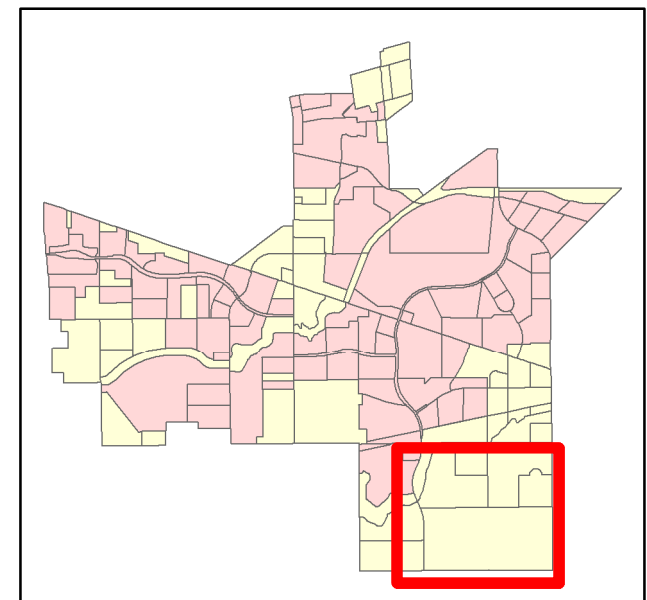
# ATTACHMENT 4 WJG9 - PLANNED FACILITIES WEST JACKSON HIGHWAY MASTER PLAN SACRAMENTO CO, CA JANUARY 2023

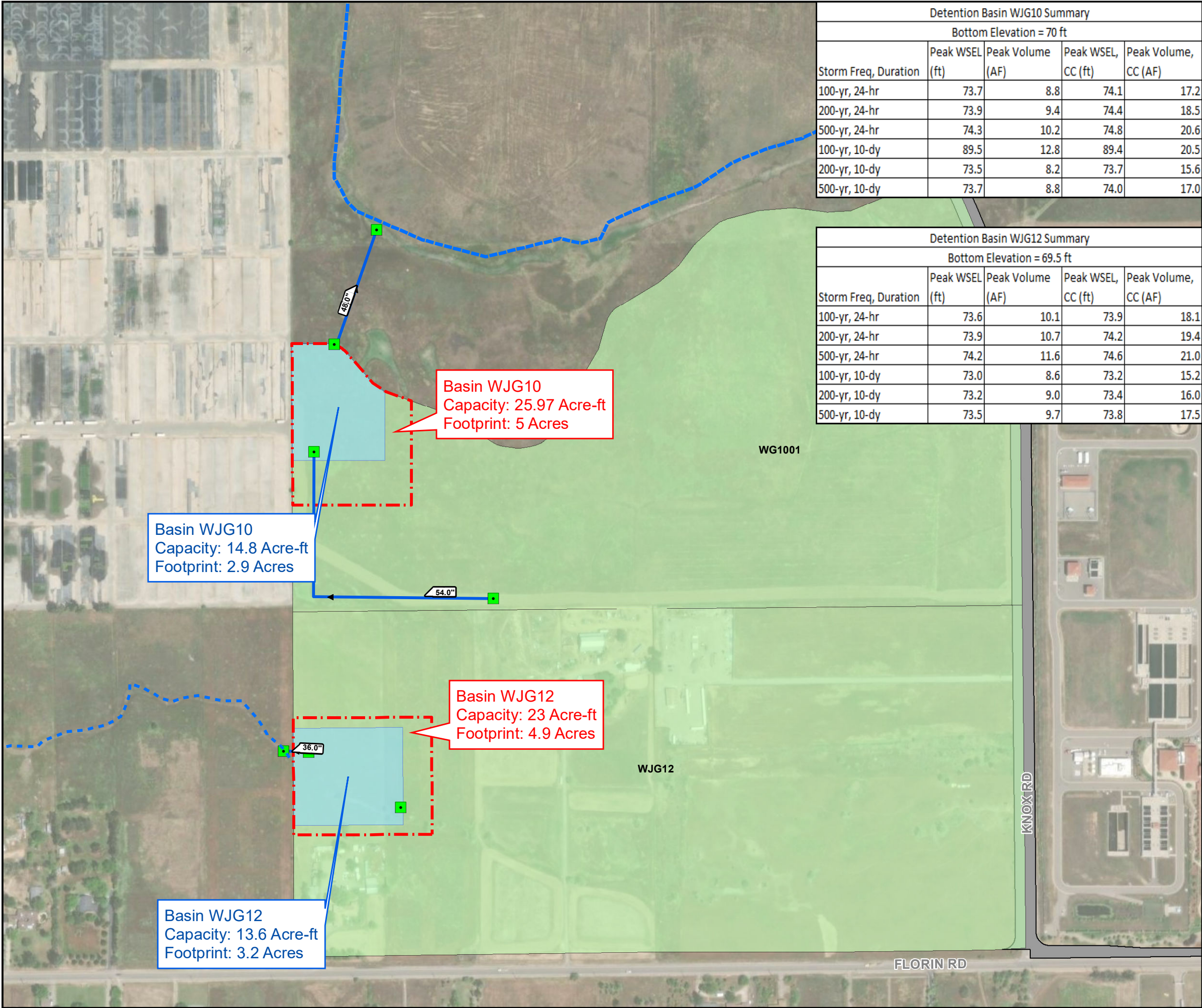


Legend

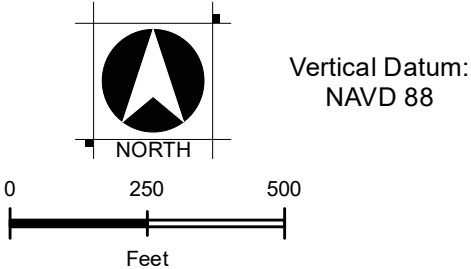
- Open Channel
- Pipe
- Culvert
- Nodes
- Creeks
- Basin Climate Expansion
- Pumped Detention Basin
- Gravity Detention Basin
- Watershed
- Future Roadways

Notes:  
1) Basin footprint is approximate and subject to change with final engineering design.





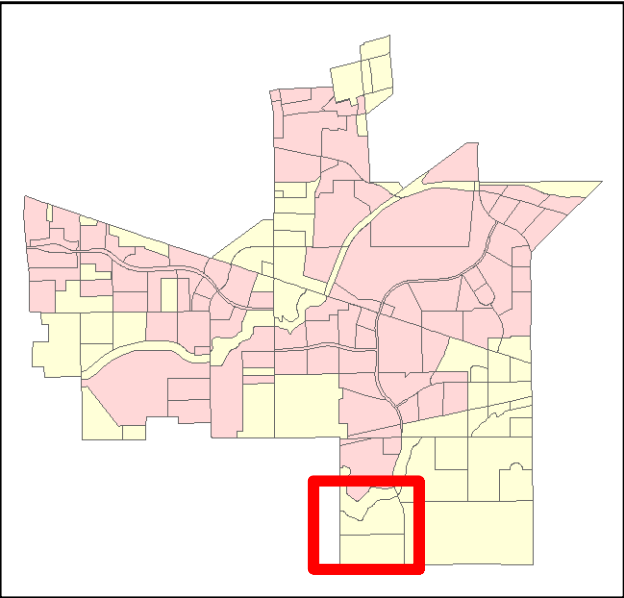
ATTACHMENT 4  
WJG10/WJG12 - PLANNED FACILITIES  
WEST JACKSON HIGHWAY MASTER PLAN  
SACRAMENTO CO, CA  
DECEMBER 2022



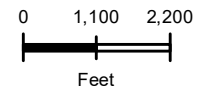
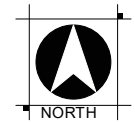
**Legend**

- Open Channel
- Pipe
- Culvert
- Nodes
- Creeks
- Pumped Detention Basin
- Gravity Detention Basin
- Basin Climate Expansion
- Future Roadways
- Watershed

Notes:  
1) Basin footprint is approximate and subject to change with final engineering design.



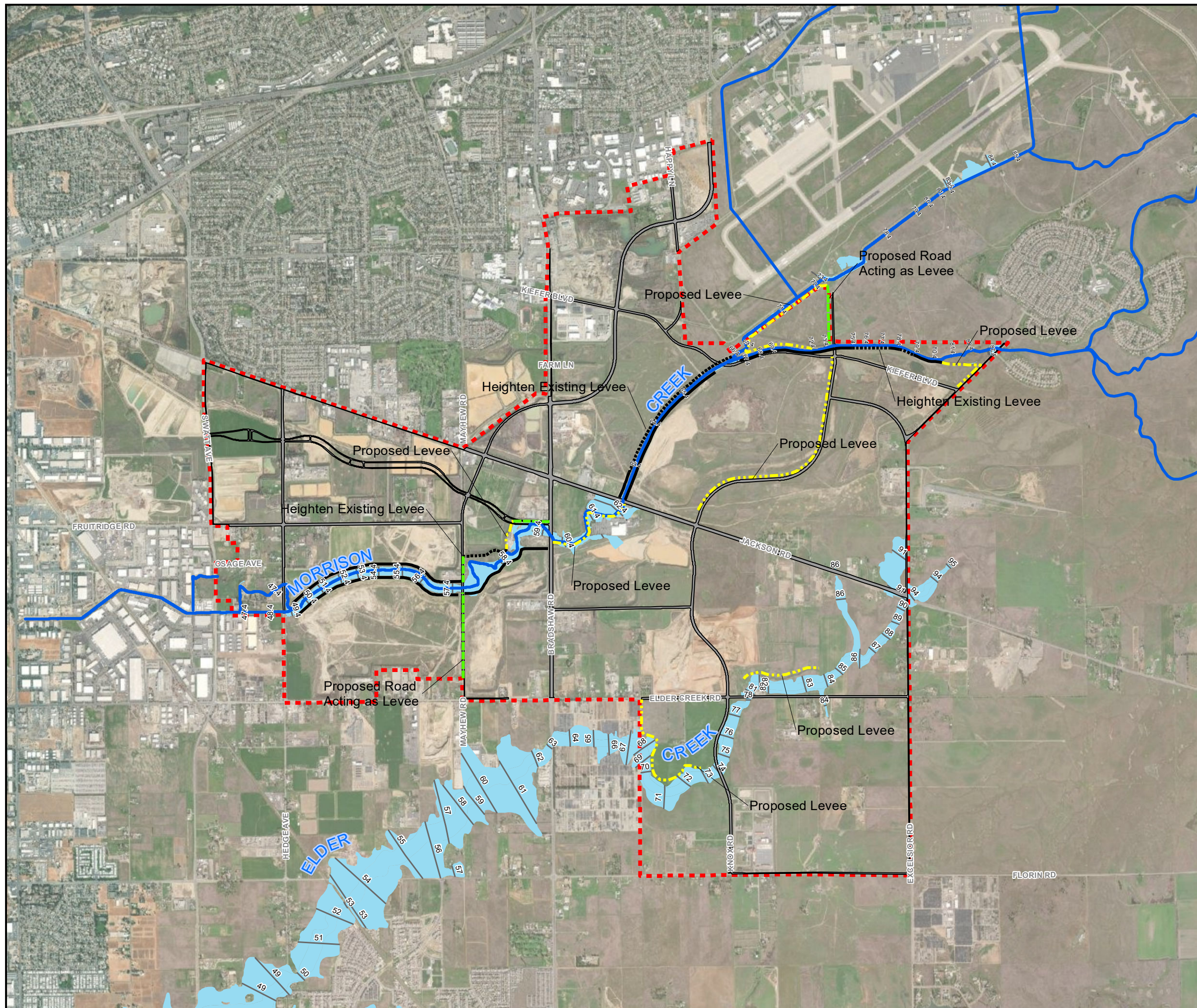
ATTACHMENT 4  
PRELIMINARY LEVEE LOCATIONS  
WEST JACKSON HIGHWAY MASTER PLAN  
SACRAMENTO CO, CA  
DECEMBER 2022



- ..... Existing Levee to be Heightened
- Existing Levee to Remain
- - - Proposed Levee
- - - Proposed Road Acting As Levee
- Channels
- Future Roadways
- ▤ Project Boundary
- Floodplain (100-year 24-hour storm event)
- Flood Elevation (100-year 24-hour storm event)

Notes:  
1) Levee Improvements and locations are preliminary and are subject to change with final engineering

**WR NOTE: LEVEE IMPROVEMENTS ARE NOT INCLUDED IN THE BACKBONE DRAINAGE INFRASTRUCTURE ESTIMATES. LEVEE ESTIMATES ARE A SEPARATE PACKAGE.**





**ATTACHMENT 4: SEWER BACKBONE COST ESTIMATES**

**Engineer's Opinion of Preliminary Cost  
Preliminary Backbone (Trunk) Sewer Infrastructure**

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Updated: 9/28/2023

Total Finance Area A Sewer	\$ 22,820,000
Total Finance Area B Sewer	\$ 10,190,000
Total Finance Area C Sewer	\$ 25,570,000
<b>TOTAL SEWER INFRASTRUCTURE</b>	<b>\$ 58,580,000</b>

---

NOTES

1. Unit cost for the same size pipe / manhole vary due to proposed depth of infrastructure.
2. Based on preliminary nature of studies, 30% contingency is applied.
3. Estimate based on level one sewer study update (Amendment) for WJHMP approved March 30, 2023.
4. Estimate only includes sewer infrastructure that is 12-inch gravity main or greater and lift stations, as it is intended to serve broad areas of development.
5. Estimate does not include surface repair at roadway crossings with proposed sewer.
6. Estimate includes a 20% soft cost allowance. Assumed to be engineering (8%), mapping (1%), plan check (2%), inspection (3%), geotech (3%), and staking (3%).
7. Lift Station cost is estimated at \$1.1 million plus \$1.05 million per 1 mgd pumped and includes general site work, underground, and electrical.
8. Costs reflect 2023 dollars.
9. Quantities not explicitly detailed within are not included as part of this estimate.

**Preliminary Backbone (Trunk) Sewer Infrastructure**  
**Finance Area A**

Identifier	Description	Quantity	Unit	\$ / Unit	Total
A-S1	<u>Jackson Hwy (Bradshaw to Excelsior)</u>				
	27" Sanitary Sewer (20' deep)	3,500	LF	\$ 440	\$ 1,540,000
	30" Sanitary Sewer (24' deep)	7,900	LF	\$ 480	\$ 3,792,000
	72" Sewer Manholes (22'deep)	25	EA	\$ 20,000	\$ 500,000
	Soft Costs			20%	\$ 1,166,400
	Contingency			30%	\$ 2,099,520
					<b>\$ 9,100,000</b>
A-S2	<u>Excelsior Road ( Jackson Hwy and 3200 LF North)</u>				
	18" Sanitary Sewer (12' deep)	1,050	LF	\$ 275	\$ 288,750
	21" Sanitary Sewer (14' deep)	2,150	LF	\$ 300	\$ 645,000
	60" Sewer Manholes (14' deep)	8	EA	\$ 15,000	\$ 120,000
	Soft Costs			20%	\$ 210,750
	Contingency			30%	\$ 379,350
					<b>\$ 1,650,000</b>
A-S3	<u>Aspen VI Basin (Vineyard Road N. of Jackson) - Greenfield</u>				
	15" Sanitary Sewer (16' deep)	2,300	LF	\$ 200	\$ 460,000
	Sewer Lift Station	1.91	mgd	-	\$ 3,105,500
	10" Force Main	2,600	LF	\$ 140	\$ 364,000
	60" Sewer Manholes (16' deep)	8	EA	\$ 15,500	\$ 124,000
	Soft Costs			20%	\$ 810,700
	Contingency			30%	\$ 1,459,260
					<b>\$ 6,330,000</b>
A-S4	<u>Granite Property (North of and along Kiefer) - Greenfield</u>				
	12" Sanitary Sewer (North of Kiefer, D=14')	1,600	LF	\$ 160	\$ 256,000
	60" Sewer Manholes (North of Kiefer, D=14')	5	EA	\$ 15,000	\$ 75,000
	15" Sanitary Sewer (Kiefer E. of Bradshaw, D=20')	3,200	LF	\$ 210	\$ 672,000
	18" Sanitary Sewer (Kiefer E. of Bradshaw, D=22')	450	LF	\$ 260	\$ 117,000
	60" Sewer Manholes(Kiefer E. of Bradshaw,D=22')	7	EA	\$ 16,000	\$ 112,000
	Soft Costs			20%	\$ 246,400
	Contingency			30%	\$ 443,520
					<b>\$ 1,930,000</b>
A-S5	<u>Bradshaw Road (Just North of Jackson Hwy)</u>				
	12" Sanitary Sewer (16' deep)	1,700	LF	\$ 210	\$ 357,000
	15" Sanitary Sewer (20' deep)	950	LF	\$ 245	\$ 232,750
	60" Sewer Manholes (18' deep)	7	EA	\$ 15,750	\$ 110,250
	Sewer Lift Station	0.56	mgd	-	\$ 1,688,000
	8" Force Main	400	LF	\$ 130	\$ 52,000
	Soft Costs			20%	\$ 488,000
	Contingency			30%	\$ 878,400
					<b>\$ 3,810,000</b>
<b>TOTAL FINANCE AREA A SEWER</b>					<b>\$ 22,820,000</b>

**Preliminary Backbone (Trunk) Sewer Infrastructure  
Finance Area B**

Identifier	Description	Quantity	Unit	\$ / Unit	Total
B-S1	<u>Aspen 2 Basin (North of Fruitridge just East of South Watt) - Partial Greenfield</u>				
	12" Sanitary Sewer (16' deep)	900	LF	\$ 180	\$ 162,000
	15" Sanitary Sewer (20' deep)	1,600	LF	\$ 210	\$ 336,000
	Sanitary Sewer Lift Station - South Watt	1.06	mgd	-	\$ 2,213,000
	10" Force Main- South Watt	1,400	LF	\$ 140	\$ 196,000
	60" Sewer Manholes (18' deep)	6	EA	\$ 15,750	\$ 94,500
	Soft Costs			20%	\$ 600,300
	Contingency			30%	\$ 1,080,540
					<b>\$ 4,680,000</b>
B-S2	<u>Aspen 3 Basin (North of Fruitridge just West of Mayhew) - Greenfield</u>				
	18" Sanitary Sewer (20' deep)	1,500	LF	\$ 250	\$ 375,000
	Sanitary Sewer Lift Station (Fruitridge Road)	1.90	mgd	-	\$ 3,095,000
	60" Sewer Manholes (20' deep)	4	EA	\$ 15,900	\$ 63,600
	Soft Costs			20%	\$ 706,720
	Contingency			30%	\$ 1,272,096
					<b>\$ 5,510,000</b>
<b>TOTAL FINANCE AREA B SEWER</b>					<b>\$ 10,190,000</b>

**Preliminary Backbone (Trunk) Sewer Infrastructure**  
**Finance Area C**

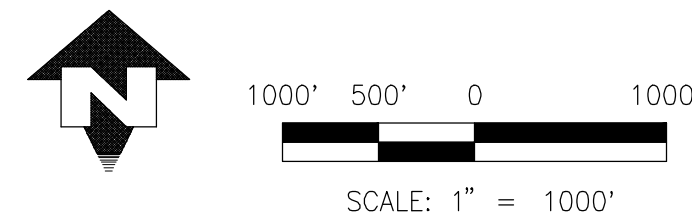
Identifier	Description	Quantity	Unit	\$ / Unit	Total
C-S1	<u>Elder Creek Rd (Outfall West to S. Watt)</u>				
	21" Sanitary Sewer (28' deep)	2,200	LF	\$ 300	\$ 660,000
	60" Sewer Manholes (28' deep)	5	EA	\$ 16,500	\$ 82,500
	Soft Costs			20%	\$ 148,500
	Contingency			30%	\$ 267,300
					<b>\$ 1,160,000</b>
C-S2	<u>Aspen 4 South (Bradshaw N of Elder Creek Rd) - Partial Greenfield</u>				
	12" Sanitary Sewer (16' deep)	4,200	LF	\$ 180	\$ 756,000
	15" Sanitary Sewer (26' deep)	2,300	LF	\$ 240	\$ 552,000
	21" Sanitary Sewer (26' deep)	1,300	LF	\$ 290	\$ 377,000
	60" Sewer Manholes (22' deep)	15	EA	\$ 16,000	\$ 240,000
	Sanitary Sewer Lift Station - Bradshaw South	1.33	mgd	-	\$ 2,496,500
	Soft Costs			20%	\$ 884,300
	Contingency			30%	\$ 1,591,740
					<b>\$ 6,900,000</b>
C-S3	<u>Elder Creek Rd (Bradshaw to Excelsior) - Partial Greenfield</u>				
	12" Sanitary Sewer(Future Vineyard Rd, 28' deep)	1,300	LF	\$ 240	\$ 312,000
	15" Sanitary Sewer (26' deep)	2,600	LF	\$ 275	\$ 715,000
	15" Sanitary Sewer(Future Vineyard Rd, 26' deep)	1,100	LF	\$ 240	\$ 264,000
	18" Sanitary Sewer(22' deep)	200	LF	\$ 300	\$ 60,000
	21" Sanitary Sewer (28' deep)	1,700	LF	\$ 300	\$ 510,000
	24" Sanitary Sewer (28' deep)	4,700	LF	\$ 370	\$ 1,739,000
	60" Sewer Manholes (28' deep)	28	EA	\$ 16,500	\$ 462,000
	Sanitary Sewer Lift Station - Vineyard North	1.35	mgd	-	\$ 2,517,500
	Soft Costs			20%	\$ 1,315,900
	Contingency			30%	\$ 2,368,620
					<b>\$ 10,260,000</b>
C-S4	<u>Florin Road (SCWA Property to the East)</u>				
	12" Sanitary Sewer (26' deep)	1,300	LF	\$ 260	\$ 338,000
	15" Sanitary Sewer (22' deep)	1,300	LF	\$ 255	\$ 331,500
	18" Sanitary Sewer (26' deep)	250	LF	\$ 320	\$ 80,000
	18" San. Sewer (size TBD to Florin Road) 26' deep	10,700	LF	\$ 320	\$ 3,424,000
	60" Sewer Manholes (26' deep)	29	EA	\$ 16,300	\$ 472,700
	Soft Costs			20%	\$ 929,240
	Contingency			30%	\$ 1,672,632
					<b>\$ 7,250,000</b>
<b>TOTAL FINANCE AREA C SEWER</b>					<b>\$ 25,570,000</b>



**ATTACHMENT 5: SEWER BACKBONE EXHIBITS WITH SEGMENT KEY MAPPING**

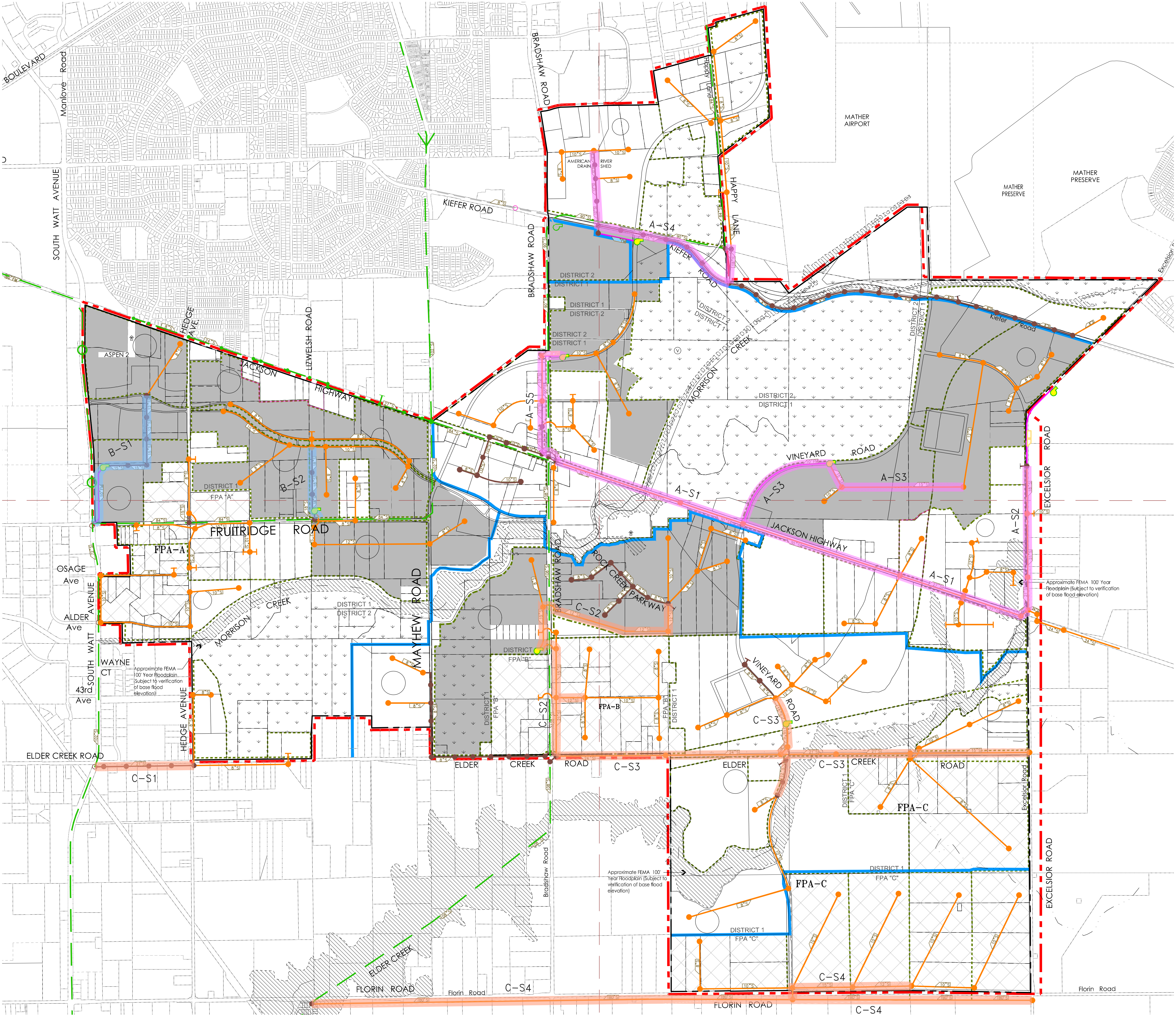
EXISTING AND PROPOSED SEWER FACILITIES  
WEST JACKSON HIGHWAY  
MASTER PLAN

FINANCE PLAN  
COUNTY OF SACRAMENTO, CALIFORNIA  
BASE ON NOVEMBER, 2022, SEWER STUDY



LEGEND

- MINED AREAS (BELOW GRADE) THAT MAY REQUIRE PUMPING
- UNMINED REBUILT AREAS OR UNMINED AREAS AT ORIGINAL GRADE THAT GRAVITY DRAIN
- OPEN SPACE AREAS THAT HAVE BEEN MINED AND MAY REQUIRE PUMPING
- FPA - FUTURE PLANNING AREA (USE 7 ESD/AC)
- EXISTING CREEK
- SEWER SHED BNDRY
- WEST JACKSON HIGHWAY MASTER PLAN BORDER
- MAJOR SEWER SHED BOUNDARY
- EXISTING SEWER PUMP STATION
- EXISTING SEWER (INTERCEPTOR OR TRUNK)
- PROPOSED SEWER PUMP OR LIFT STATION
- PROPOSED SEWER PIPE/SEWER MANHOLE
- PROPOSED SEWER PIPE/SEWER MANHOLE (SCHEMATIC LAYOUT)
- PROPOSED SEWER FORCE MAIN/SEWER MANHOLE
- SEWER JUMPER
- A-W1  
FINANCE PLAN A PIPE, SEGMENT LABEL
- B-W1  
FINANCE PLAN B PIPE, SEGMENT LABEL
- C-W1  
FINANCE PLAN C PIPE, SEGMENT LABEL





**ATTACHMENT 6: WATER BACKBONE COST ESTIMATES**

**Preliminary Backbone (Transmission) Water Infrastructure***Updated: 9/29/2023***California American Water (CA)**

Finance Area A	\$	3,680,000
Off-Site for Finance Area A	\$	780,000
Finance Area B	\$	18,360,000
<b>SUBTOTAL BACKBONE CAL-AM WATER INFRASTRUCTURE</b>	<b>\$</b>	<b>22,820,000</b>

**Sacramento County Water Agency (SCWA)**

Finance Area A	\$	7,080,000
Off-Site for Finance Area A	\$	16,740,000
Finance Area B	\$	3,240,000
Off-Site for Finance Area B	\$	10,570,000
Finance Area C	\$	3,910,000
<b>SUBTOTAL BACKBONE SCWA WATER INFRASTRUCTURE</b>	<b>\$</b>	<b>41,540,000</b>

<b>TOTAL BACKBONE WATER INFRASTRUCTURE</b>	<b>\$</b>	<b>64,360,000</b>
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**NOTES**

1. Linear footage cost for pipes include valves and appurtenances.
2. Based on preliminary nature of studies, 30% contingency is applied.
3. Estimate based on level one water study updates for WJHMP for two water purveyors: SCWA water study approved January 31, 2023; and CalAm water study approved February 3, 2023.
4. Estimate only includes water infrastructure that is 12-inch main or greater, as it is intended to serve broad areas of development. For SCWA, only transmission mains identified in the SCWA WSIP are creditable.
5. Estimate includes a 20% soft cost allowance. Assumed to be engineering (8%), mapping (1%), plan check (2%), inspection (3%), geotech (3%), and staking (3%).
6. Costs reflect 2023 dollars.
7. Quantities not explicitly detailed within are not included as part of this estimate.

**Preliminary Backbone (Transmission) Water Infrastructure  
Finance Area A**

CA= Cal-American Water Agency, SC=Sac County Water Agency

Identifier	Description	Quantity	Unit	\$ / Unit	Total
A-W1 (CA)	<u>Jackson Hwy (Mayhew to Bradshaw Road)</u>				
(Jackson Hwy)	16" Water	2,740	LF	\$ 185	\$ 506,900
(Bradshaw)	16" Water	4,000	LF	\$ 185	\$ 740,000
	Soft Costs			20%	\$ 249,380
	Contingency			30%	\$ 448,884
					<b>\$ 1,950,000</b>
A-W2 (CA)	<u>Property North of Jackson Hwy to Granite Prop - Greenfield</u>				
	12" Water Greenfield	7,660	LF	\$ 145	\$ 1,110,700
	Soft Costs			20%	\$ 222,140
	Contingency			30%	\$ 399,852
					<b>\$ 1,730,000</b>
A-W3 (SC)	<u>Vineyard Road from Jackson Hwy to Kiefer Road - Greenfield</u>				
	16" Water Greenfield	7,560	LF	\$ 165	\$ 1,247,400
	Soft Costs			20%	\$ 249,480
	Contingency			30%	\$ 449,064
					<b>\$ 1,950,000</b>
A-W4 (SC)	<u>Jackson Hwy from CA/SC Border to Excelsior Rd</u>				
	18" Water	6,620	LF	\$ 210	\$ 1,390,200
	Soft Costs			20%	\$ 278,040
	Contingency			30%	\$ 500,472
					<b>\$ 2,170,000</b>
A-W5 (SC)	<u>Excelsior Rd from Jackson Hwy to Vineyard Rd - Partial Greenfield</u>				
	16" Water	6,850	LF	\$ 185	\$ 1,267,250
	<u>Kiefer Road from Vineyard Rd to Excelsior Rd - Greenfield</u>				
	16" Water Greenfield	3,810	LF	\$ 165	\$ 628,650
	Soft Costs			20%	\$ 379,180
	Contingency			30%	\$ 682,524
					<b>\$ 2,960,000</b>
<b>TOTAL FINANCE AREA A WATER</b>					<b>\$ 10,760,000</b>

**OFF-SITE (REQUIRED WATER TO COMPLETE FINANCE AREA A)**

OS-AW1 (CA)	<u>Mayhew Road north of Jackson Hwy</u>				
	12" Water	3,030 LF	\$	165	\$ 499,950
	Soft Costs			20%	\$ 99,990
	Contingency			30%	\$ 179,982
					<b>\$ 780,000</b>
OS-AW2 (SC)	<u>Bradshaw Road from OS-AW3 Connection to Elder Creek Rd</u>				
	16" Water	2,680 LF	\$	185	\$ 495,800
	Soft Costs			20%	\$ 99,160
	Contingency			30%	\$ 178,488
					<b>\$ 780,000</b>
OS-AW3 (SC)	<u>Connection from Bradshaw Rd to Vineyard Rd - Greenfield (cross country)</u>				
	16" Water	4,190 LF	\$	185	\$ 775,150
	AB Access Road	4,190 LF	\$	55	\$ 230,450
	Soft Costs			20%	\$ 201,120
	Contingency			30%	\$ 301,680
					<b>\$ 1,510,000</b>
OS-AW4 (SC)	<u>Excelsior Road from Jackson Hwy to Elder Creek Rd</u>				
	24" Water	3,000 LF	\$	265	\$ 795,000
	Soft Costs			20%	\$ 159,000
	Contingency			30%	\$ 286,200.00
					<b>\$ 1,250,000</b>
OS-AW5 (SC)	<u>Excelsior Road from Elder Creek Road to Florin Rd</u>				
	24" Water	5,440 LF	\$	265	\$ 1,441,600
[Placeholder]	Tank, Booster Pump, Tank Site Development	1 EA	\$	5,000,000	\$ 5,000,000
	Soft Costs			20%	\$ 1,288,320
	Contingency			30%	\$ 2,318,976
					<b>\$ 10,050,000</b>
OS-AW6 (SC)	<u>Bradshaw Road from Elder Creek Rd to Florin Road</u>				
	24" Water	5,450 LF	\$	265	\$ 1,444,250
	Soft Costs			20%	\$ 288,850
	Contingency			30%	\$ 519,930
					<b>\$ 2,260,000</b>
OS-AW7 (SC)	<u>Vineyard Road from Jackson Hwy heading south - Greenfield (cross country)</u>				
	16" Water	2,460 LF	\$	185	\$ 455,100
	AB Access Road	2,460 LF	\$	55	\$ 135,300
	Soft Costs			20%	\$ 118,080
	Contingency			30%	\$ 177,120
					<b>\$ 890,000</b>
	<b><u>OFF-SITE (REQUIRED WATER TO COMPLETE FINANCE AREA A)</u></b>				<b>\$ 17,520,000</b>
	<b>GRAND TOTAL</b>				<b>\$ 28,280,000</b>

**Preliminary Backbone (Transmission) Water Infrastructure  
Finance Area B**

CA= Cal-American Water Agency, SC=Sac County Water Agency

Identifier	Description	Quantity	Unit	\$ / Unit	Total
B-W1 (CA)	<u>Jackson Hwy from S. Watt to Mayhew</u>				
	24" Water	8,140	LF	\$ 265	\$ 2,157,100
[Placeholder]	Tank, Booster Pump, Tank Site Development	1	EA	\$ 5,000,000	\$ 5,000,000
	Soft Costs			20%	\$ 1,431,420
	Contingency			30%	\$ 2,576,556
					<b>\$ 11,170,000</b>
B-W2 (CA)	<u>Rock Creek Pkwy from S.Watt to Bradshaw - Greenfield</u>				
	16" Water Greenfield	11,040	LF	\$ 165	\$ 1,821,600
	Soft Costs			20%	\$ 364,320
	Contingency			30%	\$ 655,776
					<b>\$ 2,840,000</b>
B-W3 (CA)	<u>Mayhew Road from Jackson Rd to Fruitridge Road - Greenfield</u>				
	16" Water Greenfield	2,100	LF	\$ 165	\$ 346,500
	Soft Costs			20%	\$ 69,300
	Contingency			30%	\$ 124,740
					<b>\$ 540,000</b>
B-W4 (SC)	<u>Fruitridge Road from Hedge to Bradshaw Rd</u>				
	16" Water	8,880	LF	\$ 185	\$ 1,642,800
	Soft Costs			20%	\$ 328,560
	Contingency			30%	\$ 591,408
					<b>\$ 2,560,000</b>
B-W5 (SC)	<u>Hedge from Fruitridge to Morrison Creek</u>				
	12" Water	2,650	LF	\$ 165	\$ 437,250
	Soft Costs			20%	\$ 87,450
	Contingency			30%	\$ 157,410
					<b>\$ 680,000</b>
B-W6 (CA)	<u>S. Watt from Jackson Hwy to Rock Creek Pkwy</u>				
	16" Water	3,200	LF	\$ 185	\$ 592,000
	Pavement Cut/ Replacement & Traffic Control	3,200	LF	\$ 50	\$ 160,000
	Soft Costs			20%	\$ 118,400
	Contingency			30%	\$ 261,120
					<b>\$ 1,130,000</b>
B-W7 (CA)	<u>S. Watt from Folsom Blvd to Jackson Hwy</u>				
	24" Water	5,600	LF	\$ 265	\$ 1,484,000
	Pavement Cut/ Replacement & Traffic Control	5,600	LF	\$ 50	\$ 280,000
	Soft Costs			20%	\$ 296,800
	Contingency			30%	\$ 618,240
					<b>\$ 2,680,000</b>
<b>TOTAL FINANCE AREA B WATER</b>					<b>\$ 21,600,000</b>

**OFF-SITE (REQUIRED WATER TO COMPLETE FINANCE AREA B)**

OS-BW1 (CA)	<u>Bradshaw from Jackson Hwy to Fruitridge Rd</u>				
	16" Water	1,320 LF	\$	185	\$ 244,200
	Soft Costs			20%	\$ 48,840
	Contingency			30%	\$ 87,912
					<b>\$ 380,000</b>
OS-BW2 (SC)	<u>Hedge Ave from Morrison Creek to Elder Creek Rd</u>				
	16" Water	2,650 LF	\$	185	\$ 490,250
	Soft Costs			20%	\$ 98,050
	Contingency			30%	\$ 176,490
					<b>\$ 760,000</b>
OS-BW3 (SC)	<u>Elder Creek Road from S. Watt to Bradshaw</u>				
	16" Water	10,100 LF	\$	185	\$ 1,868,500
	Soft Costs			20%	\$ 373,700
	Contingency			30%	\$ 672,660
					<b>\$ 2,910,000</b>
OS-BW4 (SC)	<u>Elder Creek Road from Bradshaw to Excelsior</u>				
	30" Water	5,230 LF	\$	335	\$ 1,752,050
	42" Water	5,400 LF	\$	435	\$ 2,349,000
	Soft Costs			20%	\$ 350,410
	Contingency			30%	\$ 1,335,438
					<b>\$ 5,790,000</b>
OS-BW5 (SC)	<u>Bradshaw from Fruitridge Rd to OS-AW3 Connection</u>				
	16" Water	2,540 LF	\$	185	\$ 469,900
	Soft Costs			20%	\$ 93,980
	Contingency			30%	\$ 169,164
					<b>\$ 730,000</b>

**OFF-SITE (REQUIRED WATER TO COMPLETE FINANCE AREA B)** **\$ 10,570,000**

**GRAND TOTAL** **\$ 32,170,000**

**Preliminary Backbone (Transmission) Water Infrastructure  
Finance Area C**

CA= Cal-American Water Agency, SC=Sac County Water Agency

Identifier	Description	Quantity	Unit	\$ / Unit	Total
C-W1 (SC)	<u>Vineyard Road from Elder Creek Rd heading north to meet OS-AW7 - Greenfield</u>				
	16" Water Greenfield	3,020	LF	\$ 165	\$ 498,300
	Soft Costs			20% \$	99,660
	Contingency			30% \$	179,388
				\$	<b>780,000</b>
C-W2 (SC)	<u>Vineyard Road from Elder Creek Rd to Florin - Greenfield</u>				
	36" Water Greenfield	5,500	LF	\$ 365	\$ 2,007,500
	Soft Costs			20% \$	401,500
	Contingency			30% \$	722,700
				\$	<b>3,130,000</b>
<b>TOTAL FINANCE AREA C WATER</b>					<b>\$ 3,910,000</b>



**ATTACHMENT 7: WATER BACKBONE EXHIBITS WITH SEGMENT KEY MAPPING**



**Technical Memorandum****WOOD RODGERS**  
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME

**To:** Mike Isle, Stonebridge Properties  
Yasha Saber, Compass Land Group

**From:** Peter Blum, P.E.  
Matt Zimmerman, P.E.

**CC:** Mike Motroni, P.E.

**Date:** November 13, 2024

**Subject:** West Jackson Highway Master Plan  
Levee Improvements Opinion of Probable Construction Costs

---

**INTRODUCTION**

This technical memorandum summarizes the opinion of probable costs (OPC) for improving the levee system for portions of Morrison Creek and Elder Creek in Sacramento County, California as part of the West Jackson Highway Master Plan (WJHMP) project. The purpose of this OPC is to estimate, at a high level, the construction costs to bring the flood protection system for the proposed development into compliance with the California Department of Water Resources (DWR) Urban Level of Flood Protection Criteria (ULOP) (**Reference 1**) and the Sacramento County Floodplain Management Ordinance No. SZC-2016-0023 (**Reference 2**). The DWR Urban Levee Design Criteria (ULDC) (**Reference 3**) outlines the engineering criteria for levees to provide the level of flood protection required by ULOP.

Hydrology and hydraulics (H&H) analyses were conducted by Wood Rodgers, Inc. (Wood Rodgers) as outlined in the Technical Memorandum entitled: *Morrison Creek Levee Deficiency Analysis* dated August 23, 2024 (**Reference 4**). A preliminary geotechnical analysis was also conducted by Blackburn Consulting (Blackburn) for this study and is outlined in the report entitled: *Draft Preliminary Geotechnical Evaluation Report, Morrison Creek Basin Levee System, West Jackson Highway Master Plan* dated October 2024 (**Reference 5**). These analyses only evaluated if the existing levees meet ULDC requirements with respect to levee geometry and freeboard. Other considerations for levee ULDC compliance, including levee slope stability, seepage, erosion, wind/wave runup, penetrations and encroachments were not a part of the evaluation. However, for the purposes of developing planning-level cost estimates, seepage and stability mitigation measures were anticipated to potentially be required where the levees are situated adjacent to existing mining pits.

**BASIS FOR LEVEE IMPROVEMENTS QUANTITY AND COST ESTIMATE**

To estimate construction quantities for development of the OPC for the levee improvements, potential remediation measures for improving the levee system were developed. It is noted that the remediation measures selected are preliminary and were developed solely for finance planning purposes and the levees may require more or less robust remediation measures pending more in-depth engineering design analyses.

The existing levee geometries and topography along the project levee alignments were analyzed by developing cross sections cut from an existing ground topographic model at 50-foot intervals. The existing

ground topographic model was informed by a one-meter resolution digital elevation model (DEM) titled *USGS one meter x64y427 CA NoCAL Wildfires B5a 2018* (**Reference 6**) which was developed from Light Detection and Ranging (LiDAR) data collected by the United States Geological Survey (USGS) between August 2018 and March 2019. Additional topographic information used to supplement the USGS DEM were informed by field surveys of the Aspen VI site (within Finance Area A as shown on Figure 1, attached) performed by Wood Rodgers in July 2023.

Where a levee currently exists, the existing geometry was reviewed to see if a theoretical levee prism meeting the requirements of the DWR ULDC was contained within the existing physical levee prism. The theoretical levee prism for existing levees is defined as the following:

- Top of the levee prism placed a minimum of 3 feet above the 200-year design water surface elevation (DWSE)
- Crown width of 20 feet
- Landside slope of 2 Horizontal:1 Vertical (2H:1V)
- Waterside slope of 3H:1V

Where the theoretical levee prism was determined to not be fully contained within the existing levee, levee geometry remediation was assumed to be required. Levee geometry remediation would involve reconstructing the existing levee embankment by raising the levee crown and/or shifting the levee centerline alignment landward to meet the ULDC geometry requirements for existing levees (listed above).

Where there is no existing levee, or where the 200-year floodplain is not contained, a new levee was assumed to be required. New levees were preliminarily designed to meet the following requirements:

- Top of the prism placed a minimum of 3 feet above the 200-year design water surface elevation (DWSE)
- Crown width of 20 feet
- Landside and waterside slopes of 3H:1V

Per the Sacramento County Floodplain Management Ordinance No. SZC-2016-0023 (Reference 2), Section 906-02 "Residential Elevation," Part F, "New residential construction subject to Urban Level of Flood Protection must have the lowest floor at or above the 200-year water surface elevation or be protected by a levee that provides an Urban Level of Flood Protection." Per the 2018 Sacramento County Improvement Standards (**Reference 7**), Section 9, Part 9-1G, "All new structures shall be protected from the 100-year (1%) flood event. Certified pad elevations shall be set at least one and two tenths foot (1.2') above all sources of 100-year flooding." Given these requirements, where the existing ground is 1 foot above the 200-year DWSE and 1.2 foot above the 100-year DWSE, it was determined that high ground is present, and a new levee would not be required. However, final design may allow for pads to be at or above the 200-year DWSE.

Much of the levee segments are aligned adjacent to existing mining pits situated on the landside of the levee. The pit bottoms are up to 45' below the top of levee elevations and are significantly lower in elevation than the Morrison Creek channel bottom. Given this, there is potential for seepage through the levees and mined slopes, which could lead to internal levee or underlying foundation erosion and possible levee failure. Therefore, it was assumed that soil bentonite seepage cutoff walls would be required through the levees and into the underlying levee foundation where mining pits are present to mitigate for potential seepage failure. It was assumed that the cutoff walls would extend 20 feet below the lowest levee toe elevation in a reach. Future geotechnical explorations and analyses (slope stability, though seepage, underseepage) should be

conducted on the levees to determine what remediation is actually required to bring the levee system into compliance with ULDC.

There are 12 total levee alignments reviewed along Morrison Creek and Elder Creek. Each levee alignment was divided into segments (18 total) that were determined based on their locations and were grouped by financial plan area per the WJHMP. Each levee segment was further divided into reaches where the existing conditions were similar and would be addressed by a common potential remediation measure. The proposed levee segments and reaches, along with the potential remediation measures, are shown in Figure 1 (attached). It is noted that the Wood Rodgers H&H analysis (Reference 4) and the Blackburn geotechnical evaluation (Reference 5) do not include the Elder Creek Levees.

It is noted that Morrison Creek South 2 Segment 2 is aligned to cross Excelsior Road and into high ground approximately 110' east of the roadway. This would require Excelsior Road to be raised to correspond to the minimum levee height (approximately 4').

## **GRANITE I WEIR**

Included in the OPC is a cost estimate for improvements to the existing Granite I Weir (Weir). The Weir is located at the south bank of Morrison Creek in between Morrison Creek South 1 Segment 4 and Morrison Creek South 2 Segment 1 (see Figure 1). The weir is approximately 850 feet long and is between 6' and 7' below the adjacent tops of levees. The Weir is currently armored with a geogrid reinforced surface (per Reference 4) and rock slope protection (RSP) at the landside toe. The condition of the existing erosion protection is unknown but was assumed to be inadequate for providing the necessary erosion protection due to overtopping flows from Morrison Creek. It was assumed that placement of new RSP armoring on the existing weir slopes would be an adequate method for providing erosion protection.

The RSP was sized based on the estimated weir overtopping depth at the 200-year WSE (5'±). Using this information to estimate the weir flowrate and applying to the recommendations from the technical report Design of Rock Chutes (Reference 8), it is estimated that a 4-foot-thick layer of Caltrans Class VII RSP underlain by Caltrans Class 8 RSP Fabric would be sufficient to provide the necessary erosion protection for the Weir at the 200-year WSE. A 20' wide concrete weir cap is also recommended to maintain operation and maintenance (O&M) access across the weir to the levees on either side.

It is noted that these recommendations for the proposed improvements to the Granite I Weir were determined at a high level and should be further analyzed from a hydraulic and geotechnical perspective to develop and implement the most appropriate measure.

## **QUANTITY & COST ESTIMATE**

Preliminary quantity and cost estimates were prepared for the potential remediation measures in each of the levee segments and the Weir and are presented in **Appendix A**. The estimated quantities for construction of the improvements were developed using a representative cross section taken at each reach. The quantities developed from the representative cross section were then applied to the entire reach.

Unit prices for typical levee construction items (e.g.: clearing and grubbing, levee stripping, levee embankment fill, etc.) were determined based upon recent contractor bid summaries for similar levee improvement projects in Northern California.

For the purposes of developing the quantity and cost estimates, and because the existing levee material composition has not undergone thorough engineering evaluations, it was assumed that material generated from levee degrade and excavations cannot be reused as levee embankment fill. However, it was assumed that this material could be used for fills required at the proposed development adjacent to the levees. All required levee embankment fill used to grade, regrade, and/or reconstruct the levees is assumed to be imported from yet-to-be identified borrow sites located within 15 miles of the project. Material shrinkage from in-place (bank) yardage to ultimate placement and compaction was assumed to be 20 percent. Borrow acreages for determining the limits of stripping, clearing and grubbing, etc., were estimated assuming a borrow depth of five feet.

Land acquisition, including permanent easements and temporary construction easements for the levee improvements, were not included in the cost estimates. It was assumed that the lands will be acquired as part of the overall development or are already owned by the participating developers.

Because the estimates are based on a preliminary planning-level design, a contingency amount of fifty percent was included. Planning, Engineering, and Design were included at 12% of the construction cost and Construction Management was estimated at 15% of the construction cost.

It is noted that the existing ground along the "Supplemental 3" alignment from Station 0+00 to 20+75 is high ground. The current grading plan for the lands north of the "Supplemental 4" alignment calls for filling the location above the minimum requirements for the area to be considered high ground. As such, these levee reaches do not require any improvements and thus were not included in the quantity and cost estimate.

The cost estimates reflect 2024 cost levels.

**REFERENCES**

1. State of California, Natural Resources Agency, Department of Water Resources, *Urban Level of Flood Protection Criteria*, November 2013. Sacramento, CA.
2. State of California, Natural Resources Agency, Department of Water Resources, *Urban Levee Design Criteria*, May 2012, Sacramento, CA.
3. Sacramento County Department of Water Resources, *Sacramento County Floodplain Management Ordinance No. SZC-2016-0023*, Effective January 13, 2017.
4. Wood Rodgers, *Technical Memorandum – Morrison Creek Levee Deficiency Analysis*, August 23, 2024.
5. Blackburn, *Draft Preliminary Geotechnical Evaluation Report, Morrison Creek Basin Levee System, West Jackson Highway Master Plan*, October 2024.
6. U.S. Geological Survey, *20200108, USGS one meter x64y427 CA NoCAL Wildfires B5a 2018*: U.S. Geological Survey, Publication Date January 8 2020.
7. Sacramento County, *Sacramento County Improvement Standards, Section 9 “Storm Drainage Design,”* Adopted April 1, 2018.
8. Robinson K.M., Rice C.E., Kadavy K.C., 1998 American Society of Agricultural Engineers, *Design of Rock Chutes*, 1998.

**FIGURES**

Figure 1 – West Jackson Highway Master Plan – Levee Improvements Opinion of Probable Construction Costs Exhibit, November 13, 2024.

**APPENDICES**

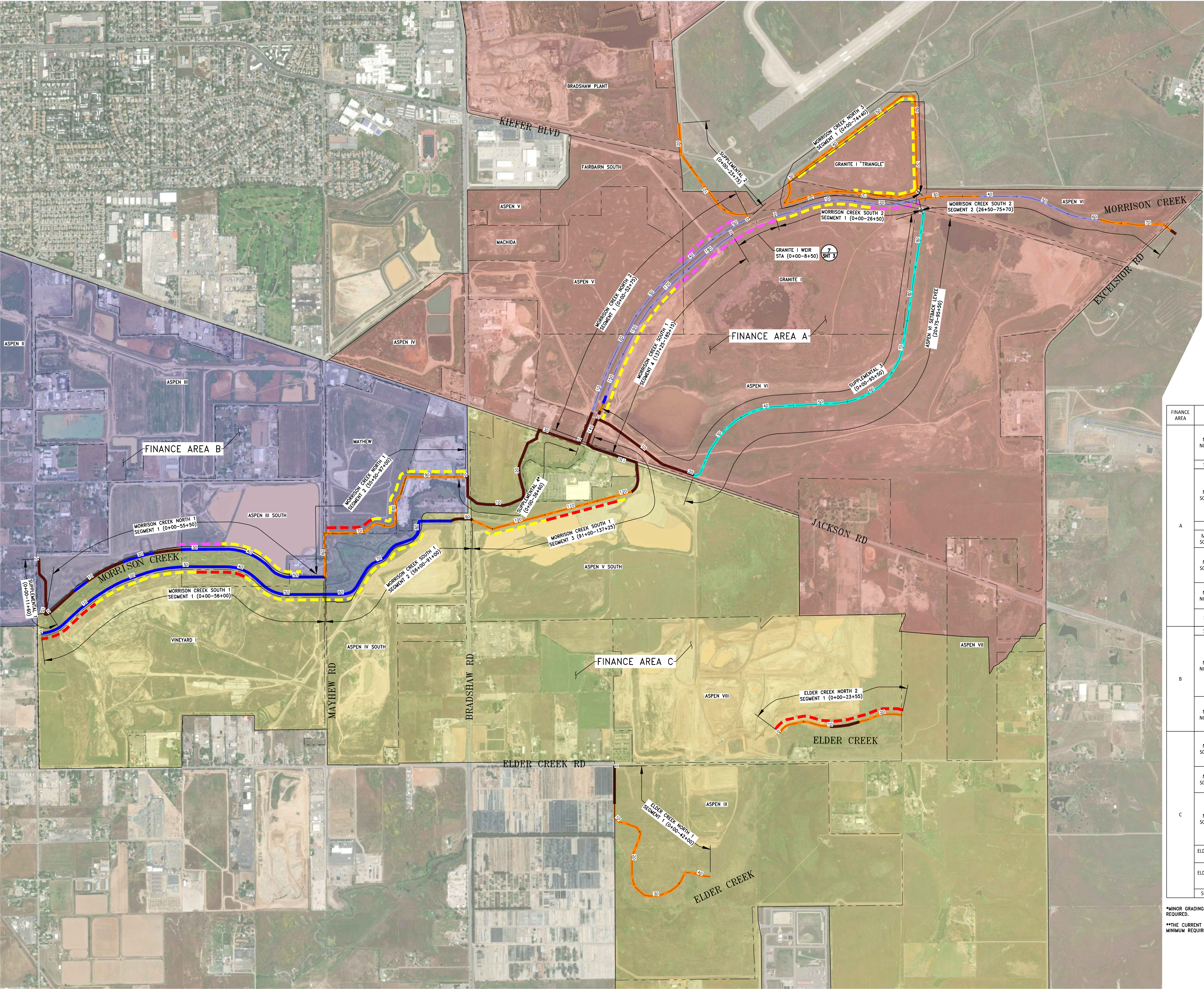
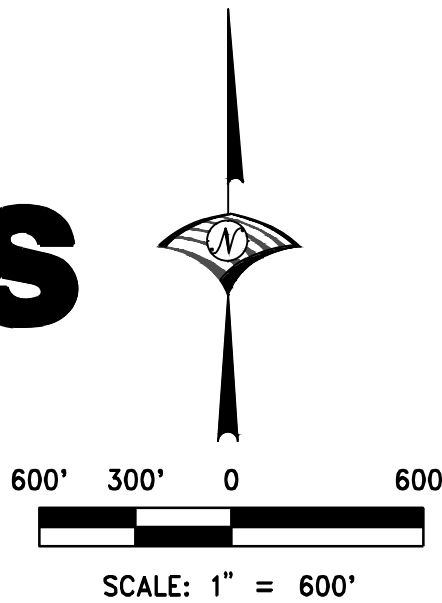
Appendix A – West Jackson Highway Master Plan Levee Improvements Opinion of Probable Construction Costs, November 13, 2024.

## FIGURES

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WEST JACKSON HIGHWAY MASTER PLAN  
LEVEE IMPROVEMENTS OPINION OF PROBABLE CONSTRUCTION COSTS  
COUNTY OF SACRAMENTO, CALIFORNIA

NOVEMBER 13, 2024  
SHEET (1 OF 3)



LEGEND:	ITEM	SECTION REFERENCE
---	PROJECT / UNIT BOUNDARY	N/A
---	LEVEE ALIGNMENT	N/A
	FINANCE AREA A	N/A
	FINANCE AREA B	N/A
	FINANCE AREA C	N/A
	EXISTING LEVEE GEOMETRY & HEIGHT ULDC COMPLIANT	1 SHT 2
	EXISTING LEVEE GEOMETRY/HEIGHT DEFICIENCY REMEDIATION	2 SHT 2
	CONSTRUCT NEW LEVEE	3 SHT 2
	HIGH GROUND	4 SHT 2
	CONSTRUCT CUTOFF WALL - SOIL BENTONITE (20'-40' DEPTH)	5 SHT 2
	CONSTRUCT CUTOFF WALL - SOIL BENTONITE (40'-60' DEPTH)	5 SHT 2
	CONSTRUCT CUTOFF WALL - SOIL BENTONITE (60'-80' DEPTH)	5 SHT 2
	ASPEN VI SETBACK LEVEE	6 SHT 2

LEVEE REMEDIATION MEASURES TABLE:

FINANCE AREA	LEVEE SEGMENT	STA (REACH)	HIGH GROUND	EXIST LEVEE GEOMETRY OK*	GEOMETRY/HEIGHT REMEDIATION	NEW LEVEE	20'-40' C/O WALL	40'-60' C/O WALL	60'-80' C/O WALL	
A	MORRISON CREEK NORTH 2 SEGMENT 1	0+00-5+50	x							
		5+50-37+50			x					
		37+50-50+00			x		x			
		50+00-52+75			x					
	SUPPLEMENTAL 2	0+00-23+75				x				
	MORRISON CREEK SOUTH 1 SEGMENT 4	137+25-142+25	x							
		142+25-143+75	x						x	
		143+75-145+25					x		x	
		145+25-146+75			x				x	
		146+75-170+75				x				x
		170+75-185+15				x		x		
	GRANITE I WEIR	0+00-8+50						x		
	MORRISON CREEK SOUTH 2 SEGMENT 1	0+00-18+00			x				x	
		18+00-26+50			x		x			
MORRISON CREEK SOUTH 2 SEGMENT 2	26+50-38+00				x					
	38+00-61+00				x					
	61+00-74+50					x				
	74+50-75+70	x								
MORRISON CREEK NORTH 3 SEGMENT 1	0+00-12+00									
	12+00-31+00					x		x		
	31+00-74+40					x			x	
	0+00-20+75	x								
	SUPPLEMENTAL 3	20+75-95+50								
B	SUPPLEMENTAL 1	0+00-11+60	x				x			
	MORRISON CREEK NORTH 1 SEGMENT 1	0+00-6+00	x							
		6+00-9+00			x					
		9+00-16+50	x							
		16+50-22+50			x					
		22+50-27+00	x							
		27+00-35+00			x			x		
		35+00-51+00			x				x	
	MORRISON CREEK NORTH 1 SEGMENT 2	51+00-55+50			x					
		55+50-63+50					x			
		63+50-73+00					x			x
		73+00-97+00					x		x	
	C	MORRISON CREEK SOUTH 1 SEGMENT 1	0+00-11+50		x					x
			11+15-32+00		x					x
32+00-41+50				x						x
MORRISON CREEK SOUTH 1 SEGMENT 2		41+50-56+00			x				x	
		56+00-79+50			x				x	
		79+50-87+00			x					
		87+00-91+00	x							
		91+00-94+00					x			
MORRISON CREEK SOUTH 1 SEGMENT 3		94+00-105+00					x		x	
		105+00-118+50					x			
		118+50-120+00					x			
		120+00-121+50					x		x	
		121+50-137+25	x							
ELDER CREEK NORTH 1 SEGMENT 1		0+00-7+00	x							
	7+00-42+00					x				
ELDER CREEK NORTH 2 SEGMENT 1	0+00-10+00					x			x	
	10+00-15+50		x						x	
	15+50-23+55					x			x	
SUPPLEMENTAL 4**	0+00-36+60	x								

\*MINOR GRADING ACTIVITIES TO ESTABLISH A UNIFORM LEVEE CREST AND TO ADDRESS MINOR SLOPE INCLINATION DEFICIENCIES MAY BE REQUIRED.

\*\*THE CURRENT GRADING PLAN FOR THE LAND NORTH OF THE SUPPLEMENTAL 4 ALIGNMENT CALLS FOR FILLING THE LOCATION ABOVE THE MINIMUM REQUIREMENTS FOR THE AREA TO BE CONSIDERED HIGH GROUND.

**DRAFT**

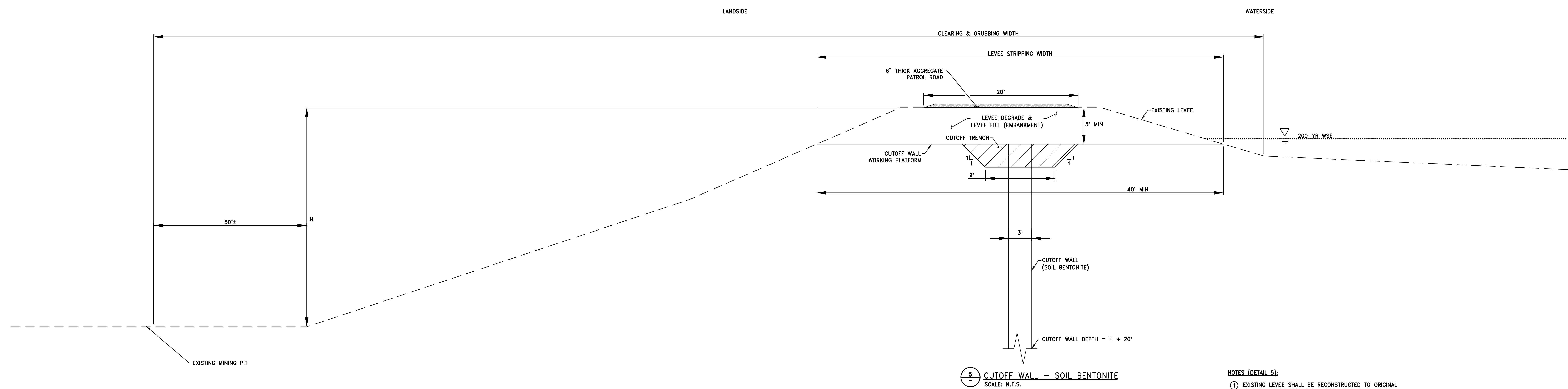
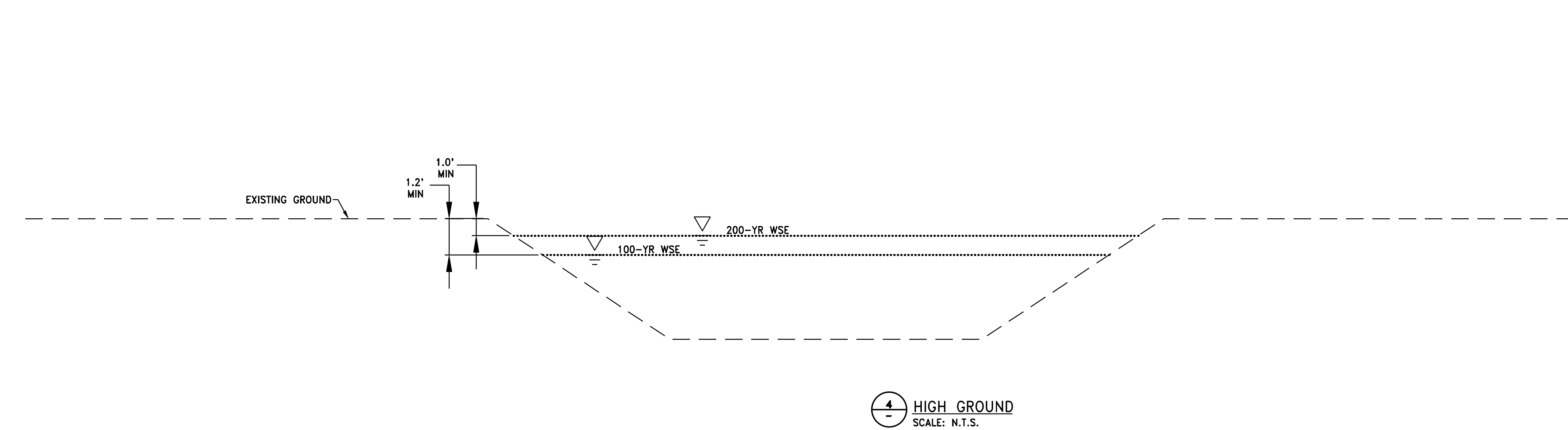
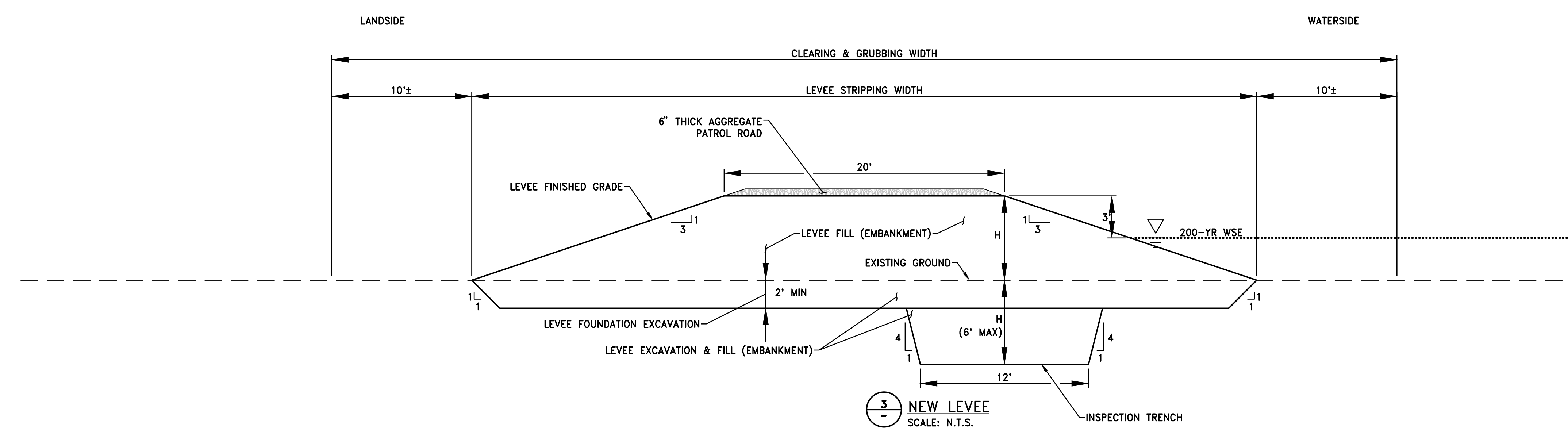
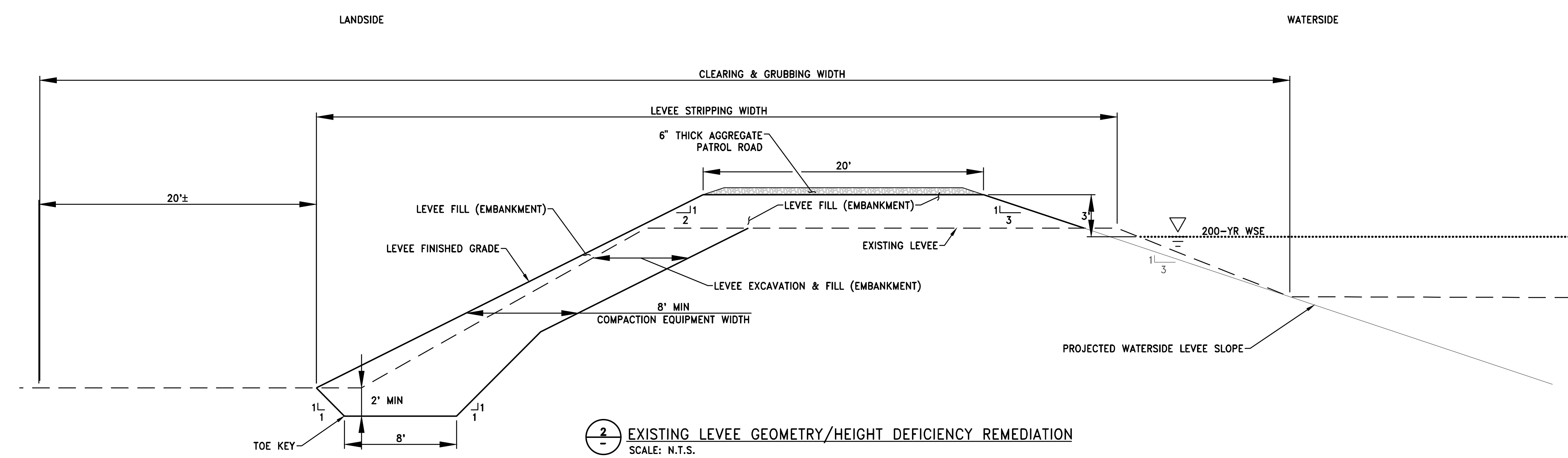
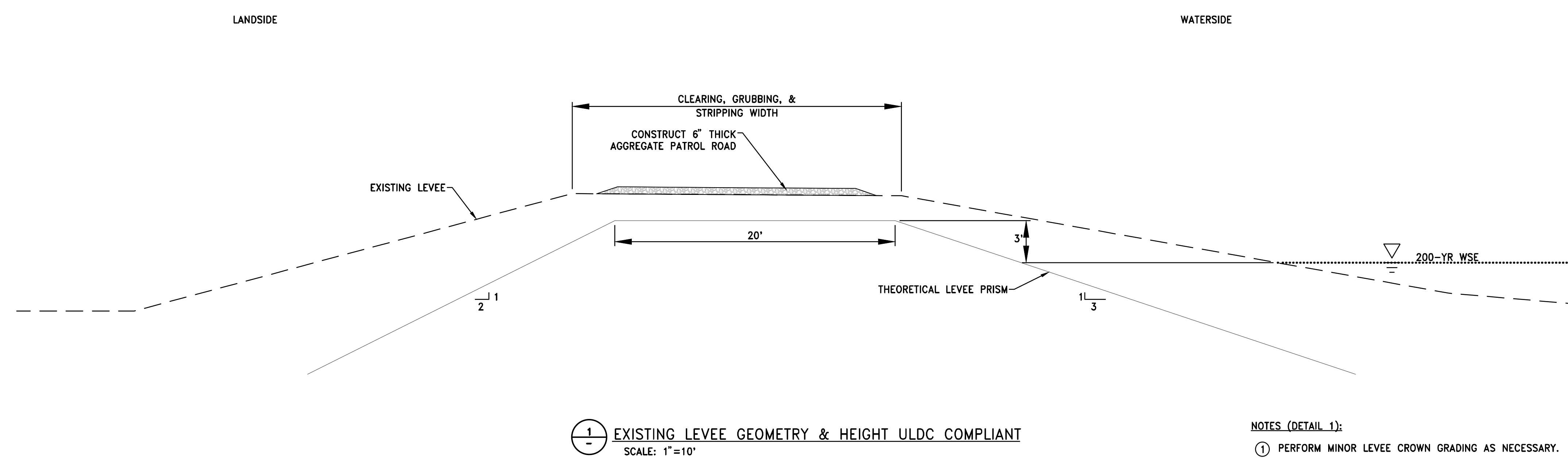
# WEST JACKSON HIGHWAY MASTER PLAN

## LEVEE IMPROVEMENTS OPINION OF PROBABLE CONSTRUCTION COSTS

COUNTY OF SACRAMENTO, CALIFORNIA

NOVEMBER 13, 2024

SHEET (2 OF 3)



**DRAFT**

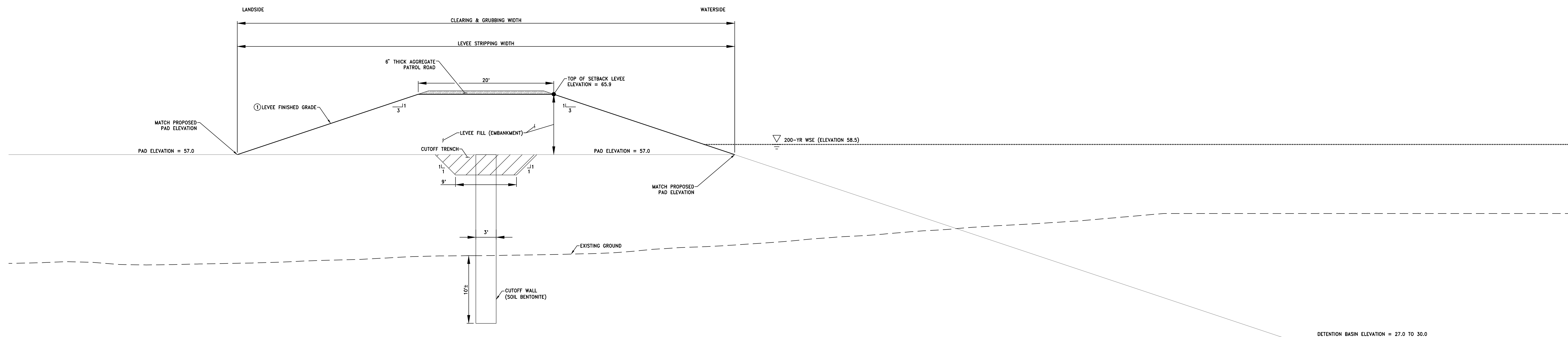
# WEST JACKSON HIGHWAY MASTER PLAN

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COUNTY OF SACRAMENTO, CALIFORNIA

NOVEMBER 13, 2024

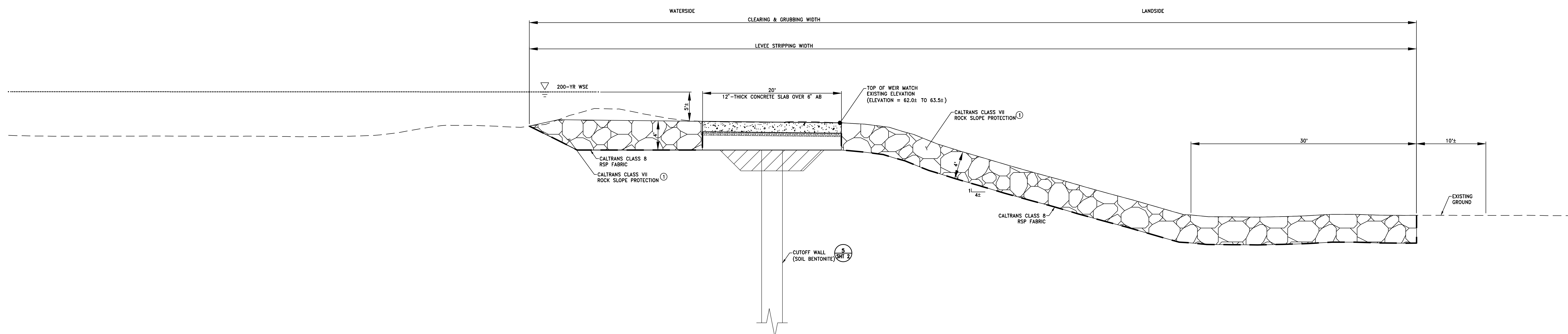
SHEET (3 OF 3)



**6 ASPEN VI SETBACK LEVEE**  
SCALE: N.T.S.

## NOTES (DETAIL 6):

- ① IT IS ASSUMED THAT THE PROPOSED ASPEN VI SETBACK LEVEE WILL BE CONSTRUCTED AFTER ADJACENT PAD AND DETENTION BASIN GRADING HAVE BEEN COMPLETED.



**7 GRANITE I WEIR**  
SCALE: N.T.S.

## NOTES (DETAIL 7):

- ① ROCK SLOPE PROTECTION IS SIZED PER RECOMMENDATIONS PROVIDED WITHIN "DESIGN OF ROCK CHUTES", K.M. ROBINSON, C.E. RICE, K.C. KADAVY (1998).
- ② WEIR DESIGN SHOWN IS PRELIMINARY AND FOR PLANNING PURPOSES ONLY.

## **APPENDIX A**

**WEST JACKSON HIGHWAY MASTER PLAN  
LEVEE IMPROVEMENTS  
OPINION OF PROBABLE CONSTRUCTION COSTS  
LEVEE SEGMENT BREAKDOWN**



Levee Segment	Estimated Cost			
	Construction Sub- Total	Planning, Engineering, & Design (12%)	Construction Management (15%)	Total
<b>Finance Area A</b>				
MORRISON CREEK NORTH 2 - SEGMENT 1 (STA 0+00-52+75) (ASPEN V, ASPEN VI, GRANITE I)	\$2,550,500	\$306,100	\$382,600	\$3,239,200
SUPPLEMENTAL 2 (STA 0+00-23+75) (GRANITE I)	\$1,437,100	\$172,500	\$215,600	\$1,825,200
MORRISON CREEK SOUTH 1 - SEGMENT 4 (STA 137+25-185+15) (ASPEN V, ASPEN VI, GRANITE I)	\$6,651,000	\$798,200	\$997,700	\$8,446,900
GRANITE I WEIR (STA 0+00-8+50) (GRANITE I)	\$1,202,600	\$144,400	\$180,400	\$1,527,400
MORRISON CREEK SOUTH 2 - SEGMENT 1 (STA 0+00-26+50) (GRANITE I)	\$4,749,200	\$570,000	\$712,400	\$6,031,600
MORRISON CREEK SOUTH 2 - SEGMENT 2 (STA 26+50-75+70) (ASPEN IV)	\$2,668,500	\$320,300	\$400,300	\$3,389,100
MORRISON CREEK NORTH 3 - SEGMENT 1 (STA 0+00-74+40) (GRANITE I "TRIANGLE")	\$10,848,000	\$1,301,800	\$1,627,200	\$13,777,000
SUPPLEMENTAL 3 - ASPEN VI SETBACK LEVEE (STA 20+75-95+50) (ASPEN VI)	\$12,938,500	\$1,552,700	\$1,940,800	\$16,432,000
<b>TOTAL (FINANCE AREA A):</b>	<b>\$43,045,400</b>	<b>\$5,166,000</b>	<b>\$6,457,000</b>	<b>\$54,668,400</b>
<b>Finance Area B</b>				
SUPPLEMENTAL 1 (STA 0+00-11+60) (ASPEN III SOUTH)	\$101,600	\$12,200	\$15,300	\$129,100
MORRISON CREEK NORTH 1 - SEGMENT 1 (STA 0+00-55+50) (VINEYARD 1, ASPEN III SOUTH)	\$3,744,700	\$449,400	\$561,800	\$4,755,900
MORRISON CREEK NORTH 1 - SEGMENT 2 (STA 55+50-97+00) (ASPEN III SOUTH, Mayhew)	\$5,430,900	\$651,800	\$814,700	\$6,897,400
<b>TOTAL (FINANCE AREA B):</b>	<b>\$9,277,200</b>	<b>\$1,113,400</b>	<b>\$1,391,800</b>	<b>\$11,782,400</b>
<b>Finance Area C</b>				
MORRISON CREEK SOUTH 1 - SEGMENT 1 (STA 0+00-56+00) (VINEYARD I, ASPEN III SOUTH)	\$9,295,600	\$1,115,500	\$1,394,400	\$11,805,500
MORRISON CREEK SOUTH 1 - SEGMENT 2 (STA 56+00-91+00) (ASPEN IV SOUTH)	\$3,751,700	\$450,300	\$562,800	\$4,764,800
MORRISON CREEK SOUTH 1 - SEGMENT 3 (STA 91+00-137+25) (ASPEN V SOUTH)	\$5,636,300	\$676,400	\$845,500	\$7,158,200
ELDER CREEK NORTH 1 - SEGMENT 1 (STA 0+00-42+00) (ASPEN IX)	\$2,051,600	\$246,200	\$307,800	\$2,605,600
ELDER CREEK NORTH 2 - SEGMENT 1 (STA 0+00-23+55) (ASPEN VIII)	\$3,828,000	\$459,400	\$574,200	\$4,861,600
<b>TOTAL (FINANCE AREA C):</b>	<b>\$24,563,200</b>	<b>\$2,947,800</b>	<b>\$3,684,700</b>	<b>\$31,195,700</b>
<b>LEVEE IMPROVEMENTS TOTAL:</b>	<b>\$76,885,800</b>	<b>\$9,227,200</b>	<b>\$11,533,500</b>	<b>\$97,646,500</b>

**NOTES:**

1. These cost estimates do not include costs associated with land acquisition (including permanent and temporary levee easements), royalties for levee embankment fill borrow, or environmental mitigation.
2. Levee Segment "Supplemental 4" is not included in this cost estimate, as no construction work is anticipated.

November 13, 2024

WEST JACKSON HIGHWAY MASTER PLAN  
LEVEE IMPROVEMENTS  
OPINION OF PROBABLE CONSTRUCTION COSTS  
MORRISON CREEK NORTH 2 - SEGMENT 1 (STA 0+00-52+75)  
FINANCE AREA A (ASPEN V, ASPEN VI, GRANITE I)



Item No.	Item	Quantity	Unit	Unit Price	Cost	Contingency (%)	Contingency (\$)	Cost w/Contingency
<b>1</b>	<b>Levees</b>							
1.1	Mobilization and Demobilization	1	LS	5%	\$77,287	50%	\$38,643	\$115,930
1.2	Traffic Control (Rural)	1	LS	1%	\$15,457	50%	\$7,729	\$23,186
1.3	Storm Water Pollution Control	1	LS	4%	\$61,829	50%	\$30,915	\$92,744
1.4	Project Fencing	9,050	LF	\$4.30	\$38,915	50%	\$19,458	\$58,373
1.5	Clearing and Grubbing	8.3	AC	\$5,000	\$41,500	50%	\$20,750	\$62,250
1.6	Levee Stripping	4.8	AC	\$6,000	\$28,800	50%	\$14,400	\$43,200
1.7	Levee Degrading/ Excavation	9,130	CY	\$6.50	\$59,345	50%	\$29,673	\$89,018
1.8	Levee Fill (Embankment)	22,690	CY	\$8	\$181,520	50%	\$90,760	\$272,280
1.9	Cutoff Wall - Soil Bentonite (20'-40' Depth)	1,250	LF	\$290	\$362,500	50%	\$181,250	\$543,750
1.10	Cutoff Wall - Soil Bentonite (40'-60' Depth)	0	LF	\$500	\$0	50%	\$0	\$0
1.11	Cutoff Wall - Soil Bentonite (60'-80' Depth)	0	LF	\$670	\$0	50%	\$0	\$0
1.12	Class 2 Aggregate Surfacing	1,730	CY	\$90	\$155,700	50%	\$77,850	\$233,550
1.13	Levee Erosion Control Seeding	6.1	AC	\$6,500	\$39,650	50%	\$19,825	\$59,475
1.14	Borrow Site Clearing and Grubbing	4.0	AC	\$5,000	\$20,000	50%	\$10,000	\$30,000
1.15	Borrow Site Stripping	4.0	AC	\$6,000	\$24,000	50%	\$12,000	\$36,000
1.16	Borrow Site Excavation and Hauling	28,390	CY	\$20	\$567,800	50%	\$283,900	\$851,700
1.17	Borrow Site Erosion Control Seeding	4.0	AC	\$6,500	\$26,000	50%	\$13,000	\$39,000
	<b>Subtotal - Levees</b>				<b>\$1,700,400</b>		<b>\$850,200</b>	<b>\$2,550,500</b>
	<b>ESTIMATED SEGMENT SUB-TOTAL</b>				<b>\$1,700,400</b>		<b>\$850,200</b>	<b>\$2,550,500</b>
<b>2</b>	<b>Planning, Engineering and Design</b>							
2.1	Planning, Engineering and Design (12%)				\$306,060	0%	\$0	\$306,100
<b>3</b>	<b>Construction Management</b>							
3.1	Construction Management (15%)				\$382,575	0%	\$0	\$382,600
	<b>ESTIMATED SEGMENT TOTAL</b>				<b>\$2,389,035</b>		<b>\$850,200</b>	<b>\$3,239,200</b>

WEST JACKSON HIGHWAY MASTER PLAN  
LEVEE IMPROVEMENTS  
OPINION OF PROBABLE CONSTRUCTION COSTS  
Supplemental 2 (STA 0+00-23+75)  
FINANCE AREA A (GRANITE I)



Item No.	Item	Quantity	Unit	Unit Price	Cost	Contingency (%)	Contingency (\$)	Cost w/Contingency
<b>1</b>	<b>Levees</b>							
1.1	Mobilization and Demobilization	1	LS	5%	\$43,547	50%	\$21,773	\$65,320
1.2	Traffic Control (Rural)	1	LS	1%	\$8,709	50%	\$4,355	\$13,064
1.3	Storm Water Pollution Control	1	LS	4%	\$34,837	50%	\$17,419	\$52,256
1.4	Project Fencing	4,750	LF	\$4.30	\$20,425	50%	\$10,213	\$30,638
1.5	Clearing and Grubbing	3.5	AC	\$5,000	\$17,500	50%	\$8,750	\$26,250
1.6	Levee Stripping	2.4	AC	\$6,000	\$14,400	50%	\$7,200	\$21,600
1.7	Levee Degrading/ Excavation	6,870	CY	\$6.50	\$44,655	50%	\$22,328	\$66,983
1.8	Levee Fill (Embankment)	18,900	CY	\$8	\$151,200	50%	\$75,600	\$226,800
1.9	Cutoff Wall - Soil Bentonite (20'-40' Depth)	0	LF	\$290	\$0	50%	\$0	\$0
1.10	Cutoff Wall - Soil Bentonite (40'-60' Depth)	0	LF	\$500	\$0	50%	\$0	\$0
1.11	Cutoff Wall - Soil Bentonite (60'-80' Depth)	0	LF	\$670	\$0	50%	\$0	\$0
1.12	Class 2 Aggregate Surfacing	890	CY	\$90	\$80,100	50%	\$40,050	\$120,150
1.13	Levee Erosion Control Seeding	2.4	AC	\$6,500	\$15,600	50%	\$7,800	\$23,400
1.14	Borrow Site Clearing and Grubbing	3.1	AC	\$5,000	\$15,500	50%	\$7,750	\$23,250
1.15	Borrow Site Stripping	3.1	AC	\$6,000	\$18,600	50%	\$9,300	\$27,900
1.16	Borrow Site Excavation and Hauling	23,640	CY	\$20	\$472,800	50%	\$236,400	\$709,200
1.17	Borrow Site Erosion Control Seeding	3.1	AC	\$6,500	\$20,150	50%	\$10,075	\$30,225
	<b>Subtotal - Levees</b>				<b>\$958,100</b>		<b>\$479,100</b>	<b>\$1,437,100</b>
	<b>ESTIMATED SEGMENT SUB-TOTAL</b>				<b>\$958,100</b>		<b>\$479,100</b>	<b>\$1,437,100</b>
<b>2</b>	<b>Planning, Engineering and Design</b>							
2.1	Planning, Engineering and Design (12%)				\$172,452	0%	\$0	\$172,500
<b>3</b>	<b>Construction Management</b>							
3.1	Construction Management (15%)				\$215,565	0%	\$0	\$215,600
	<b>ESTIMATED SEGMENT TOTAL</b>				<b>\$1,346,117</b>		<b>\$479,100</b>	<b>\$1,825,200</b>

WEST JACKSON HIGHWAY MASTER PLAN  
LEVEE IMPROVEMENTS  
OPINION OF PROBABLE CONSTRUCTION COSTS  
MORRISON CREEK SOUTH 1 - SEGMENT 4 (STA 137+25-185+15)  
FINANCE AREA A (ASPEN V, ASPEN VI, GRANITE I)



Item No.	Item	Quantity	Unit	Unit Price	Cost	Contingency (%)	Contingency (\$)	Cost w/Contingency
<b>1</b>	<b>Levees</b>							
1.1	Mobilization and Demobilization	1	LS	5%	\$201,545	50%	\$100,773	\$302,318
1.2	Traffic Control (Rural)	1	LS	1%	\$40,309	50%	\$20,155	\$60,464
1.3	Storm Water Pollution Control	1	LS	4%	\$161,236	50%	\$80,618	\$241,855
1.4	Project Fencing	8,580	LF	\$4.30	\$36,894	50%	\$18,447	\$55,341
1.5	Clearing and Grubbing	11.6	AC	\$5,000	\$58,000	50%	\$29,000	\$87,000
1.6	Levee Stripping	6.7	AC	\$6,000	\$40,200	50%	\$20,100	\$60,300
1.7	Levee Degrading/ Excavation	31,650	CY	\$6.50	\$205,725	50%	\$102,863	\$308,588
1.8	Levee Fill (Embankment)	46,130	CY	\$8	\$369,040	50%	\$184,520	\$553,560
1.9	Cutoff Wall - Soil Bentonite (20'-40' Depth)	1,400	LF	\$290	\$406,000	50%	\$203,000	\$609,000
1.10	Cutoff Wall - Soil Bentonite (40'-60' Depth)	2,850	LF	\$500	\$1,425,000	50%	\$712,500	\$2,137,500
1.11	Cutoff Wall - Soil Bentonite (60'-80' Depth)	0	LF	\$670	\$0	50%	\$0	\$0
1.12	Class 2 Aggregate Surfacing	1,640	CY	\$90	\$147,600	50%	\$73,800	\$221,400
1.13	Levee Erosion Control Seeding	9.6	AC	\$6,500	\$62,400	50%	\$31,200	\$93,600
1.14	Borrow Site Clearing and Grubbing	7.5	AC	\$5,000	\$37,500	50%	\$18,750	\$56,250
1.15	Borrow Site Stripping	7.5	AC	\$6,000	\$45,000	50%	\$22,500	\$67,500
1.16	Borrow Site Excavation and Hauling	57,440	CY	\$20	\$1,148,800	50%	\$574,400	\$1,723,200
1.17	Borrow Site Erosion Control Seeding	7.5	AC	\$6,500	\$48,750	50%	\$24,375	\$73,125
	<b>Subtotal - Levees</b>				<b>\$4,434,000</b>		<b>\$2,217,000</b>	<b>\$6,651,000</b>
	<b>ESTIMATED SEGMENT SUB-TOTAL</b>				<b>\$4,434,000</b>		<b>\$2,217,000</b>	<b>\$6,651,000</b>
<b>2</b>	<b>Planning, Engineering and Design</b>							
2.1	Planning, Engineering and Design (12%)				\$798,120	0%	\$0	\$798,200
<b>3</b>	<b>Construction Management</b>							
3.1	Construction Management (15%)				\$997,650	0%	\$0	\$997,700
	<b>ESTIMATED SEGMENT TOTAL</b>				<b>\$6,229,770</b>		<b>\$2,217,000</b>	<b>\$8,446,900</b>

WEST JACKSON HIGHWAY MASTER PLAN  
LEVEE IMPROVEMENTS  
OPINION OF PROBABLE CONSTRUCTION COSTS  
Granite I Weir (STA 0+00-8+50)  
FINANCE AREA A (GRANITE I)



Item No.	Item	Quantity	Unit	Unit Price	Cost	Contingency (%)	Contingency (\$)	Cost w/Contingency
<b>1</b>	<b>Levees</b>							
1.1	Mobilization and Demobilization	1	LS	5%	\$163,676	50%	\$81,838	\$245,513
1.2	Traffic Control (Rural)	1	LS	1%	\$32,735	50%	\$16,368	\$49,103
1.3	Storm Water Pollution Control	1	LS	4%	\$130,940	50%	\$65,470	\$196,411
1.4	Project Fencing	1,700	LF	\$4.30	\$7,310	50%	\$3,655	\$10,965
1.5	Clearing and Grubbing	2.7	AC	\$5,000	\$13,500	50%	\$6,750	\$20,250
1.6	Levee Stripping	2.5	AC	\$6,000	\$15,000	50%	\$7,500	\$22,500
1.7	Levee Degrading/ Excavation	15,560	CY	\$6.50	\$101,140	50%	\$50,570	\$151,710
1.8	Levee Fill (Embankment)	2,410	CY	\$8	\$19,280	50%	\$9,640	\$28,920
1.9	Cutoff Wall - Soil Bentonite (20'-40' Depth)	860	LF	\$290	\$249,400	50%	\$124,700	\$374,100
1.10	Cutoff Wall - Soil Bentonite (40'-60' Depth)	0	LF	\$500	\$0	50%	\$0	\$0
1.11	Cutoff Wall - Soil Bentonite (60'-80' Depth)	0	LF	\$670	\$0	50%	\$0	\$0
1.12	Class 2 Aggregate Surfacing	0	CY	\$90	\$0	50%	\$0	\$0
1.13	Levee Erosion Control Seeding	0.2	AC	\$6,500	\$1,300	50%	\$650	\$1,950
1.14	Borrow Site Clearing and Grubbing	0.4	AC	\$5,000	\$2,000	50%	\$1,000	\$3,000
1.15	Borrow Site Stripping	0.4	AC	\$6,000	\$2,400	50%	\$1,200	\$3,600
1.16	Borrow Site Excavation and Hauling	3,020	CY	\$20	\$60,400	50%	\$30,200	\$90,600
1.17	Borrow Site Erosion Control Seeding	0.4	AC	\$6,500	\$2,600	50%	\$1,300	\$3,900
1.18	Concrete Weir Cap	30	CY	\$1,500	\$45,000	50%	\$22,500	\$67,500
1.19	Class 2 Aggregate Base	320	CY	\$90	\$28,800	50%	\$14,400	\$43,200
1.20	Caltrans Class VII Rock Slope Protection	13,230	CY	\$200	\$2,646,000	50%	\$1,323,000	\$3,969,000
1.21	Caltrans Class 8 RSP Fabric	11,340	SY	\$7	\$79,380	50%	\$39,690	\$119,070
	<b>Subtotal - Levees</b>				<b>\$3,600,900</b>		<b>\$400,900</b>	<b>\$1,202,600</b>
	<b>ESTIMATED SEGMENT SUB-TOTAL</b>				<b>\$3,600,900</b>		<b>\$400,900</b>	<b>\$1,202,600</b>
<b>2</b>	<b>Planning, Engineering and Design</b>							
2.1	Planning, Engineering and Design (12%)				\$144,312	0%	\$0	\$144,400
<b>3</b>	<b>Construction Management</b>							
3.1	Construction Management (15%)				\$180,390	0%	\$0	\$180,400
	<b>ESTIMATED SEGMENT TOTAL</b>				<b>\$3,925,602</b>		<b>\$400,900</b>	<b>\$1,527,400</b>

WEST JACKSON HIGHWAY MASTER PLAN  
LEVEE IMPROVEMENTS  
OPINION OF PROBABLE CONSTRUCTION COSTS  
MORRISON CREEK SOUTH 2 - SEGMENT 1 (STA 0+00-26+50)  
FINANCE AREA A (GRANITE I)



Item No.	Item	Quantity	Unit	Unit Price	Cost	Contingency (%)	Contingency (\$)	Cost w/Contingency
<b>1</b>	<b>Levees</b>							
1.1	Mobilization and Demobilization	1	LS	5%	\$143,914	50%	\$71,957	\$215,871
1.2	Traffic Control (Rural)	1	LS	1%	\$28,783	50%	\$14,391	\$43,174
1.3	Storm Water Pollution Control	1	LS	4%	\$115,131	50%	\$57,566	\$172,697
1.4	Project Fencing	5,300	LF	\$4.30	\$22,790	50%	\$11,395	\$34,185
1.5	Clearing and Grubbing	7.7	AC	\$5,000	\$38,500	50%	\$19,250	\$57,750
1.6	Levee Stripping	5.2	AC	\$6,000	\$31,200	50%	\$15,600	\$46,800
1.7	Levee Degrading/ Excavation	11,750	CY	\$6.50	\$76,375	50%	\$38,188	\$114,563
1.8	Levee Fill (Embankment)	40,040	CY	\$8	\$320,320	50%	\$160,160	\$480,480
1.9	Cutoff Wall - Soil Bentonite (20'-40' Depth)	850	LF	\$290	\$246,500	50%	\$123,250	\$369,750
1.10	Cutoff Wall - Soil Bentonite (40'-60' Depth)	1,800	LF	\$500	\$900,000	50%	\$450,000	\$1,350,000
1.11	Cutoff Wall - Soil Bentonite (60'-80' Depth)	0	LF	\$670	\$0	50%	\$0	\$0
1.12	Class 2 Aggregate Surfacing	990	CY	\$90	\$89,100	50%	\$44,550	\$133,650
1.13	Levee Erosion Control Seeding	6.5	AC	\$6,500	\$42,250	50%	\$21,125	\$63,375
1.14	Borrow Site Clearing and Grubbing	6.3	AC	\$5,000	\$31,500	50%	\$15,750	\$47,250
1.15	Borrow Site Stripping	6.3	AC	\$6,000	\$37,800	50%	\$18,900	\$56,700
1.16	Borrow Site Excavation and Hauling	50,050	CY	\$20	\$1,001,000	50%	\$500,500	\$1,501,500
1.17	Borrow Site Erosion Control Seeding	6.3	AC	\$6,500	\$40,950	50%	\$20,475	\$61,425
	<b>Subtotal - Levees</b>				<b>\$3,166,200</b>		<b>\$1,583,100</b>	<b>\$4,749,200</b>
	<b>ESTIMATED SEGMENT SUB-TOTAL</b>				<b>\$3,166,200</b>		<b>\$1,583,100</b>	<b>\$4,749,200</b>
<b>2</b>	<b>Planning, Engineering and Design</b>							
2.1	Planning, Engineering and Design (12%)				\$569,904	0%	\$0	\$570,000
<b>3</b>	<b>Construction Management</b>							
3.1	Construction Management (15%)				\$712,380	0%	\$0	\$712,400
	<b>ESTIMATED SEGMENT TOTAL</b>				<b>\$4,448,484</b>		<b>\$1,583,100</b>	<b>\$6,031,600</b>

WEST JACKSON HIGHWAY MASTER PLAN  
LEVEE IMPROVEMENTS  
OPINION OF PROBABLE CONSTRUCTION COSTS  
MORRISON CREEK SOUTH 2 - SEGMENT 2 (STA 26+50-75+70)  
FINANCE AREA A (ASPEN IV)



Item No.	Item	Quantity	Unit	Unit Price	Cost	Contingency (%)	Contingency (\$)	Cost w/Contingency
<b>1</b>	<b>Levees</b>							
1.1	Mobilization and Demobilization	1	LS	5%	\$80,862	50%	\$40,431	\$121,293
1.2	Traffic Control (Rural)	1	LS	1%	\$16,172	50%	\$8,086	\$24,259
1.3	Storm Water Pollution Control	1	LS	4%	\$64,690	50%	\$32,345	\$97,034
1.4	Project Fencing	9,600	LF	\$4.30	\$41,280	50%	\$20,640	\$61,920
1.5	Clearing and Grubbing	7.6	AC	\$5,000	\$38,000	50%	\$19,000	\$57,000
1.6	Levee Stripping	5.2	AC	\$6,000	\$31,200	50%	\$15,600	\$46,800
1.7	Levee Degrading/ Excavation	8,700	CY	\$6.50	\$56,550	50%	\$28,275	\$84,825
1.8	Levee Fill (Embankment)	34,820	CY	\$8	\$278,560	50%	\$139,280	\$417,840
1.9	Cutoff Wall - Soil Bentonite (20'-40' Depth)	0	LF	\$290	\$0	50%	\$0	\$0
1.10	Cutoff Wall - Soil Bentonite (40'-60' Depth)	0	LF	\$500	\$0	50%	\$0	\$0
1.11	Cutoff Wall - Soil Bentonite (60'-80' Depth)	0	LF	\$670	\$0	50%	\$0	\$0
1.12	Class 2 Aggregate Surfacing	1,830	CY	\$90	\$164,700	50%	\$82,350	\$247,050
1.13	Levee Erosion Control Seeding	5.3	AC	\$6,500	\$34,450	50%	\$17,225	\$51,675
1.14	Borrow Site Clearing and Grubbing	5.8	AC	\$5,000	\$29,000	50%	\$14,500	\$43,500
1.15	Borrow Site Stripping	5.8	AC	\$6,000	\$34,800	50%	\$17,400	\$52,200
1.16	Borrow Site Excavation and Hauling	43,550	CY	\$20	\$871,000	50%	\$435,500	\$1,306,500
1.17	Borrow Site Erosion Control Seeding	5.8	AC	\$6,500	\$37,700	50%	\$18,850	\$56,550
	<b>Subtotal - Levees</b>				<b>\$1,779,000</b>		<b>\$889,500</b>	<b>\$2,668,500</b>
	<b>ESTIMATED SEGMENT SUB-TOTAL</b>				<b>\$1,779,000</b>		<b>\$889,500</b>	<b>\$2,668,500</b>
<b>2</b>	<b>Planning, Engineering and Design</b>							
2.1	Planning, Engineering and Design (12%)				\$320,220	0%	\$0	\$320,300
<b>3</b>	<b>Construction Management</b>							
3.1	Construction Management (15%)				\$400,275	0%	\$0	\$400,300
	<b>ESTIMATED SEGMENT TOTAL</b>				<b>\$2,499,495</b>		<b>\$889,500</b>	<b>\$3,389,100</b>

WEST JACKSON HIGHWAY MASTER PLAN  
LEVEE IMPROVEMENTS  
OPINION OF PROBABLE CONSTRUCTION COSTS  
MORRISON CREEK NORTH 3 - SEGMENT 1 (STA 0+00-74+40)  
FINANCE AREA A (GRANITE I "TRIANGLE")



Item No.	Item	Quantity	Unit	Unit Price	Cost	Contingency (%)	Contingency (\$)	Cost w/Contingency
<b>1</b>	<b>Levees</b>							
1.1	Mobilization and Demobilization	1	LS	5%	\$328,726	50%	\$164,363	\$493,089
1.2	Traffic Control (Rural)	1	LS	1%	\$65,745	50%	\$32,873	\$98,618
1.3	Storm Water Pollution Control	1	LS	4%	\$262,981	50%	\$131,490	\$394,471
1.4	Project Fencing	14,880	LF	\$4.30	\$63,984	50%	\$31,992	\$95,976
1.5	Clearing and Grubbing	15.9	AC	\$5,000	\$79,500	50%	\$39,750	\$119,250
1.6	Levee Stripping	9.3	AC	\$6,000	\$55,800	50%	\$27,900	\$83,700
1.7	Levee Degrading/ Excavation	33,120	CY	\$6.50	\$215,280	50%	\$107,640	\$322,920
1.8	Levee Fill (Embankment)	89,450	CY	\$8	\$715,600	50%	\$357,800	\$1,073,400
1.9	Cutoff Wall - Soil Bentonite (20'-40' Depth)	0	LF	\$290	\$0	50%	\$0	\$0
1.10	Cutoff Wall - Soil Bentonite (40'-60' Depth)	5,590	LF	\$500	\$2,795,000	50%	\$1,397,500	\$4,192,500
1.11	Cutoff Wall - Soil Bentonite (60'-80' Depth)	0	LF	\$670	\$0	50%	\$0	\$0
1.12	Class 2 Aggregate Surfacing	2,770	CY	\$90	\$249,300	50%	\$124,650	\$373,950
1.13	Levee Erosion Control Seeding	12.4	AC	\$6,500	\$80,600	50%	\$40,300	\$120,900
1.14	Borrow Site Clearing and Grubbing	13.1	AC	\$5,000	\$65,500	50%	\$32,750	\$98,250
1.15	Borrow Site Stripping	13.1	AC	\$6,000	\$78,600	50%	\$39,300	\$117,900
1.16	Borrow Site Excavation and Hauling	104,510	CY	\$20	\$2,090,200	50%	\$1,045,100	\$3,135,300
1.17	Borrow Site Erosion Control Seeding	13.1	AC	\$6,500	\$85,150	50%	\$42,575	\$127,725
	<b>Subtotal - Levees</b>				<b>\$7,232,000</b>		<b>\$3,616,000</b>	<b>\$10,848,000</b>
	<b>ESTIMATED SEGMENT SUB-TOTAL</b>				<b>\$7,232,000</b>		<b>\$3,616,000</b>	<b>\$10,848,000</b>
<b>2</b>	<b>Planning, Engineering and Design</b>							
2.1	Planning, Engineering and Design (12%)				\$1,301,760	0%	\$0	\$1,301,800
<b>3</b>	<b>Construction Management</b>							
3.1	Construction Management (15%)				\$1,627,200	0%	\$0	\$1,627,200
	<b>ESTIMATED SEGMENT TOTAL</b>				<b>\$10,160,960</b>		<b>\$3,616,000</b>	<b>\$13,777,000</b>

WEST JACKSON HIGHWAY MASTER PLAN  
LEVEE IMPROVEMENTS  
OPINION OF PROBABLE CONSTRUCTION COSTS  
SUPPLEMENTAL 3 - ASPEN VI SETBACK LEVEE (STA 20+75-95+50)  
FINANCE AREA A (Aspen VI)



Item No.	Item	Quantity	Unit	Unit Price	Cost	Contingency (%)	Contingency (\$)	Cost w/Contingency
<b>1</b>	<b>Levees</b>							
1.1	Mobilization and Demobilization	1	LS	5%	\$392,074	50%	\$196,037	\$588,111
1.2	Traffic Control (Rural)	1	LS	1%	\$78,415	50%	\$39,207	\$117,622
1.3	Storm Water Pollution Control	1	LS	4%	\$313,659	50%	\$156,830	\$470,489
1.4	Project Fencing	14,950	LF	\$4.30	\$64,285	50%	\$32,143	\$96,428
1.5	Clearing and Grubbing	12.6	AC	\$5,000	\$63,000	50%	\$31,500	\$94,500
1.6	Levee Stripping	12.6	AC	\$6,000	\$75,600	50%	\$37,800	\$113,400
1.7	Levee Degrading/ Excavation	9,970	CY	\$6.50	\$64,805	50%	\$32,403	\$97,208
1.8	Levee Fill (Embankment)	142,680	CY	\$8	\$1,141,440	50%	\$570,720	\$1,712,160
1.9	Cutoff Wall - Soil Bentonite (20'-40' Depth)	7,475	LF	\$290	\$2,167,750	50%	\$1,083,875	\$3,251,625
1.10	Cutoff Wall - Soil Bentonite (40'-60' Depth)	0	LF	\$500	\$0	50%	\$0	\$0
1.11	Cutoff Wall - Soil Bentonite (60'-80' Depth)	0	LF	\$670	\$0	50%	\$0	\$0
1.12	Class 2 Aggregate Surfacing	2,770	CY	\$90	\$249,300	50%	\$124,650	\$373,950
1.13	Levee Erosion Control Seeding	9.2	AC	\$6,500	\$59,800	50%	\$29,900	\$89,700
1.14	Borrow Site Clearing and Grubbing	22.2	AC	\$5,000	\$111,000	50%	\$55,500	\$166,500
1.15	Borrow Site Stripping	22.2	AC	\$6,000	\$133,200	50%	\$66,600	\$199,800
1.16	Borrow Site Excavation and Hauling	178,350	CY	\$20	\$3,567,000	50%	\$1,783,500	\$5,350,500
1.17	Borrow Site Erosion Control Seeding	22.2	AC	\$6,500	\$144,300	50%	\$72,150	\$216,450
	<b>Subtotal - Levees</b>				<b>\$8,625,700</b>		<b>\$4,312,900</b>	<b>\$12,938,500</b>
	<b>ESTIMATED SEGMENT SUB-TOTAL</b>				<b>\$8,625,700</b>		<b>\$4,312,900</b>	<b>\$12,938,500</b>
<b>2</b>	<b>Planning, Engineering and Design</b>							
2.1	Planning, Engineering and Design (12%)				\$1,552,620	0%	\$0	\$1,552,700
<b>3</b>	<b>Construction Management</b>							
3.1	Construction Management (15%)				\$1,940,775	0%	\$0	\$1,940,800
	<b>ESTIMATED SEGMENT TOTAL</b>				<b>\$12,119,095</b>		<b>\$4,312,900</b>	<b>\$16,432,000</b>

WEST JACKSON HIGHWAY MASTER PLAN  
LEVEE IMPROVEMENTS  
OPINION OF PROBABLE CONSTRUCTION COSTS  
Supplemental 1 (STA 0+00-11+60)  
FINANCE AREA B (ASPEN III SOUTH)



Item No.	Item	Quantity	Unit	Unit Price	Cost	Contingency (%)	Contingency (\$)	Cost w/Contingency
<b>1</b>	<b>Levees</b>							
1.1	Mobilization and Demobilization	1	LS	5%	\$3,078	50%	\$1,539	\$4,616
1.2	Traffic Control (Rural)	1	LS	1%	\$616	50%	\$308	\$923
1.3	Storm Water Pollution Control	1	LS	4%	\$2,462	50%	\$1,231	\$3,693
1.4	Project Fencing	2,320	LF	\$4.30	\$9,976	50%	\$4,988	\$14,964
1.5	Clearing and Grubbing	0.8	AC	\$5,000	\$4,000	50%	\$2,000	\$6,000
1.6	Levee Stripping	0.8	AC	\$6,000	\$4,800	50%	\$2,400	\$7,200
1.7	Levee Degrading/ Excavation	350	CY	\$6.50	\$2,275	50%	\$1,138	\$3,413
1.8	Levee Fill (Embankment)	0	CY	\$8	\$0	50%	\$0	\$0
1.9	Cutoff Wall - Soil Bentonite (20'-40' Depth)	0	LF	\$290	\$0	50%	\$0	\$0
1.10	Cutoff Wall - Soil Bentonite (40'-60' Depth)	0	LF	\$500	\$0	50%	\$0	\$0
1.11	Cutoff Wall - Soil Bentonite (60'-80' Depth)	0	LF	\$670	\$0	50%	\$0	\$0
1.12	Class 2 Aggregate Surfacing	450	CY	\$90	\$40,500	50%	\$20,250	\$60,750
1.13	Levee Erosion Control Seeding	0.0	AC	\$6,500	\$0	50%	\$0	\$0
1.14	Borrow Site Clearing and Grubbing	0.0	AC	\$5,000	\$0	50%	\$0	\$0
1.15	Borrow Site Stripping	0.0	AC	\$6,000	\$0	50%	\$0	\$0
1.16	Borrow Site Excavation and Hauling	0	CY	\$20	\$0	50%	\$0	\$0
1.17	Borrow Site Erosion Control Seeding	0.0	AC	\$6,500	\$0	50%	\$0	\$0
<b>Subtotal - Levees</b>					<b>\$67,800</b>		<b>\$33,900</b>	<b>\$101,600</b>
<b>ESTIMATED SEGMENT SUB-TOTAL</b>					<b>\$67,800</b>		<b>\$33,900</b>	<b>\$101,600</b>
<b>2</b>	<b>Planning, Engineering and Design</b>							
2.1	Planning, Engineering and Design (12%)				\$12,192	0%	\$0	\$12,200
<b>3</b>	<b>Construction Management</b>							
3.1	Construction Management (15%)				\$15,240	0%	\$0	\$15,300
<b>ESTIMATED SEGMENT TOTAL</b>					<b>\$95,232</b>		<b>\$33,900</b>	<b>\$129,100</b>

WEST JACKSON HIGHWAY MASTER PLAN  
LEVEE IMPROVEMENTS  
OPINION OF PROBABLE CONSTRUCTION COSTS  
MORRISON CREEK NORTH 1 - SEGMENT 1 (STA 0+00-55+50)  
FINANCE AREA B (VINEYARD 1, ASPEN III SOUTH)



Item No.	Item	Quantity	Unit	Unit Price	Cost	Contingency (%)	Contingency (\$)	Cost w/Contingency
<b>1</b>	<b>Levees</b>							
1.1	Mobilization and Demobilization	1	LS	5%	\$113,473	50%	\$56,737	\$170,210
1.2	Traffic Control (Rural)	1	LS	1%	\$22,695	50%	\$11,347	\$34,042
1.3	Storm Water Pollution Control	1	LS	4%	\$90,779	50%	\$45,389	\$136,168
1.4	Project Fencing	11,100	LF	\$4.30	\$47,730	50%	\$23,865	\$71,595
1.5	Clearing and Grubbing	9.9	AC	\$5,000	\$49,500	50%	\$24,750	\$74,250
1.6	Levee Stripping	4.8	AC	\$6,000	\$28,800	50%	\$14,400	\$43,200
1.7	Levee Degrading/ Excavation	18,450	CY	\$6.50	\$119,925	50%	\$59,963	\$179,888
1.8	Levee Fill (Embankment)	21,120	CY	\$8	\$168,960	50%	\$84,480	\$253,440
1.9	Cutoff Wall - Soil Bentonite (20'-40' Depth)	800	LF	\$290	\$232,000	50%	\$116,000	\$348,000
1.10	Cutoff Wall - Soil Bentonite (40'-60' Depth)	1,600	LF	\$500	\$800,000	50%	\$400,000	\$1,200,000
1.11	Cutoff Wall - Soil Bentonite (60'-80' Depth)	0	LF	\$670	\$0	50%	\$0	\$0
1.12	Class 2 Aggregate Surfacing	2,070	CY	\$90	\$186,300	50%	\$93,150	\$279,450
1.13	Levee Erosion Control Seeding	7.2	AC	\$6,500	\$46,800	50%	\$23,400	\$70,200
1.14	Borrow Site Clearing and Grubbing	3.5	AC	\$5,000	\$17,500	50%	\$8,750	\$26,250
1.15	Borrow Site Stripping	3.5	AC	\$6,000	\$21,000	50%	\$10,500	\$31,500
1.16	Borrow Site Excavation and Hauling	26,410	CY	\$20	\$528,200	50%	\$264,100	\$792,300
1.17	Borrow Site Erosion Control Seeding	3.5	AC	\$6,500	\$22,750	50%	\$11,375	\$34,125
	<b>Subtotal - Levees</b>				<b>\$2,496,500</b>		<b>\$1,248,300</b>	<b>\$3,744,700</b>
	<b>ESTIMATED SEGMENT SUB-TOTAL</b>				<b>\$2,496,500</b>		<b>\$1,248,300</b>	<b>\$3,744,700</b>
<b>2</b>	<b>Planning, Engineering and Design</b>							
2.1	Planning, Engineering and Design (12%)				\$449,364	0%	\$0	\$449,400
<b>3</b>	<b>Construction Management</b>							
3.1	Construction Management (15%)				\$561,705	0%	\$0	\$561,800
	<b>ESTIMATED SEGMENT TOTAL</b>				<b>\$3,507,569</b>		<b>\$1,248,300</b>	<b>\$4,755,900</b>

WEST JACKSON HIGHWAY MASTER PLAN  
LEVEE IMPROVEMENTS  
OPINION OF PROBABLE CONSTRUCTION COSTS  
MORRISON CREEK NORTH 1 - SEGMENT 2 (STA 55+50-97+00)  
FINANCE AREA B (ASPEN III SOUTH, MAYHEW)



Item No.	Item	Quantity	Unit	Unit Price	Cost	Contingency (%)	Contingency (\$)	Cost w/Contingency
<b>1</b>	<b>Levees</b>							
1.1	Mobilization and Demobilization	1	LS	5%	\$164,571	50%	\$82,286	\$246,857
1.2	Traffic Control (Rural)	1	LS	1%	\$32,914	50%	\$16,457	\$49,371
1.3	Storm Water Pollution Control	1	LS	4%	\$131,657	50%	\$65,828	\$197,485
1.4	Project Fencing	8,000	LF	\$4.30	\$34,400	50%	\$17,200	\$51,600
1.5	Clearing and Grubbing	6.6	AC	\$5,000	\$33,000	50%	\$16,500	\$49,500
1.6	Levee Stripping	4.4	AC	\$6,000	\$26,400	50%	\$13,200	\$39,600
1.7	Levee Degrading/ Excavation	14,500	CY	\$6.50	\$94,250	50%	\$47,125	\$141,375
1.8	Levee Fill (Embankment)	30,690	CY	\$8	\$245,520	50%	\$122,760	\$368,280
1.9	Cutoff Wall - Soil Bentonite (20'-40' Depth)	0	LF	\$290	\$0	50%	\$0	\$0
1.10	Cutoff Wall - Soil Bentonite (40'-60' Depth)	2,400	LF	\$500	\$1,200,000	50%	\$600,000	\$1,800,000
1.11	Cutoff Wall - Soil Bentonite (60'-80' Depth)	950	LF	\$670	\$636,500	50%	\$318,250	\$954,750
1.12	Class 2 Aggregate Surfacing	1,510	CY	\$90	\$135,900	50%	\$67,950	\$203,850
1.13	Levee Erosion Control Seeding	4.7	AC	\$6,500	\$30,550	50%	\$15,275	\$45,825
1.14	Borrow Site Clearing and Grubbing	5.0	AC	\$5,000	\$25,000	50%	\$12,500	\$37,500
1.15	Borrow Site Stripping	5.0	AC	\$6,000	\$30,000	50%	\$15,000	\$45,000
1.16	Borrow Site Excavation and Hauling	38,370	CY	\$20	\$767,400	50%	\$383,700	\$1,151,100
1.17	Borrow Site Erosion Control Seeding	5.0	AC	\$6,500	\$32,500	50%	\$16,250	\$48,750
	<b>Subtotal - Levees</b>				<b>\$3,620,600</b>		<b>\$1,810,300</b>	<b>\$5,430,900</b>
	<b>ESTIMATED SEGMENT SUB-TOTAL</b>				<b>\$3,620,600</b>		<b>\$1,810,300</b>	<b>\$5,430,900</b>
<b>2</b>	<b>Planning, Engineering and Design</b>							
2.1	Planning, Engineering and Design (12%)				\$651,708	0%	\$0	\$651,800
<b>3</b>	<b>Construction Management</b>							
3.1	Construction Management (15%)				\$814,635	0%	\$0	\$814,700
	<b>ESTIMATED SEGMENT TOTAL</b>				<b>\$5,086,943</b>		<b>\$1,810,300</b>	<b>\$6,897,400</b>

WEST JACKSON HIGHWAY MASTER PLAN  
LEVEE IMPROVEMENTS  
OPINION OF PROBABLE CONSTRUCTION COSTS  
MORRISON CREEK SOUTH 1 - SEGMENT 1 (STA 0+00-56+00)  
FINANCE AREA C (VINEYARD I, ASPEN III SOUTH)



Item No.	Item	Quantity	Unit	Unit Price	Cost	Contingency (%)	Contingency (\$)	Cost w/Contingency
<b>1</b>	<b>Levees</b>							
1.1	Mobilization and Demobilization	1	LS	5%	\$281,684	50%	\$140,842	\$422,525
1.2	Traffic Control (Rural)	1	LS	1%	\$56,337	50%	\$28,168	\$84,505
1.3	Storm Water Pollution Control	1	LS	4%	\$225,347	50%	\$112,673	\$338,020
1.4	Project Fencing	11,200	LF	\$4.30	\$48,160	50%	\$24,080	\$72,240
1.5	Clearing and Grubbing	13.9	AC	\$5,000	\$69,500	50%	\$34,750	\$104,250
1.6	Levee Stripping	7.5	AC	\$6,000	\$45,000	50%	\$22,500	\$67,500
1.7	Levee Degrading/ Excavation	43,580	CY	\$6.50	\$283,270	50%	\$141,635	\$424,905
1.8	Levee Fill (Embankment)	49,380	CY	\$8	\$395,040	50%	\$197,520	\$592,560
1.9	Cutoff Wall - Soil Bentonite (20'-40' Depth)	0	LF	\$290	\$0	50%	\$0	\$0
1.10	Cutoff Wall - Soil Bentonite (40'-60' Depth)	3,500	LF	\$500	\$1,750,000	50%	\$875,000	\$2,625,000
1.11	Cutoff Wall - Soil Bentonite (60'-80' Depth)	2,100	LF	\$670	\$1,407,000	50%	\$703,500	\$2,110,500
1.12	Class 2 Aggregate Surfacing	2,100	CY	\$90	\$189,000	50%	\$94,500	\$283,500
1.13	Levee Erosion Control Seeding	11.3	AC	\$6,500	\$73,450	50%	\$36,725	\$110,175
1.14	Borrow Site Clearing and Grubbing	7.9	AC	\$5,000	\$39,500	50%	\$19,750	\$59,250
1.15	Borrow Site Stripping	7.9	AC	\$6,000	\$47,400	50%	\$23,700	\$71,100
1.16	Borrow Site Excavation and Hauling	61,750	CY	\$20	\$1,235,000	50%	\$617,500	\$1,852,500
1.17	Borrow Site Erosion Control Seeding	7.9	AC	\$6,500	\$51,350	50%	\$25,675	\$77,025
	<b>Subtotal - Levees</b>				<b>\$6,197,100</b>		<b>\$3,098,600</b>	<b>\$9,295,600</b>
	<b>ESTIMATED SEGMENT SUB-TOTAL</b>				<b>\$6,197,100</b>		<b>\$3,098,600</b>	<b>\$9,295,600</b>
<b>2</b>	<b>Planning, Engineering and Design</b>							
2.1	Planning, Engineering and Design (12%)				\$1,115,472	0%	\$0	\$1,115,500
<b>3</b>	<b>Construction Management</b>							
3.1	Construction Management (15%)				\$1,394,340	0%	\$0	\$1,394,400
	<b>ESTIMATED SEGMENT TOTAL</b>				<b>\$8,706,912</b>		<b>\$3,098,600</b>	<b>\$11,805,500</b>

WEST JACKSON HIGHWAY MASTER PLAN  
LEVEE IMPROVEMENTS  
OPINION OF PROBABLE CONSTRUCTION COSTS  
MORRISON CREEK SOUTH 1 - SEGMENT 2 (STA 56+00-91+00)  
FINANCE AREA C (ASPEN IV SOUTH)



Item No.	Item	Quantity	Unit	Unit Price	Cost	Contingency (%)	Contingency (\$)	Cost w/Contingency
<b>1</b>	<b>Levees</b>							
1.1	Mobilization and Demobilization	1	LS	5%	\$113,687	50%	\$56,844	\$170,531
1.2	Traffic Control (Rural)	1	LS	1%	\$22,737	50%	\$11,369	\$34,106
1.3	Storm Water Pollution Control	1	LS	4%	\$90,950	50%	\$45,475	\$136,425
1.4	Project Fencing	6,700	LF	\$4.30	\$28,810	50%	\$14,405	\$43,215
1.5	Clearing and Grubbing	6.4	AC	\$5,000	\$32,000	50%	\$16,000	\$48,000
1.6	Levee Stripping	4.1	AC	\$6,000	\$24,600	50%	\$12,300	\$36,900
1.7	Levee Degrading/ Excavation	18,250	CY	\$6.50	\$118,625	50%	\$59,313	\$177,938
1.8	Levee Fill (Embankment)	20,970	CY	\$8	\$167,760	50%	\$83,880	\$251,640
1.9	Cutoff Wall - Soil Bentonite (20'-40' Depth)	0	LF	\$290	\$0	50%	\$0	\$0
1.10	Cutoff Wall - Soil Bentonite (40'-60' Depth)	2,350	LF	\$500	\$1,175,000	50%	\$587,500	\$1,762,500
1.11	Cutoff Wall - Soil Bentonite (60'-80' Depth)	0	LF	\$670	\$0	50%	\$0	\$0
1.12	Class 2 Aggregate Surfacing	1,260	CY	\$90	\$113,400	50%	\$56,700	\$170,100
1.13	Levee Erosion Control Seeding	4.8	AC	\$6,500	\$31,200	50%	\$15,600	\$46,800
1.14	Borrow Site Clearing and Grubbing	3.3	AC	\$5,000	\$16,500	50%	\$8,250	\$24,750
1.15	Borrow Site Stripping	3.3	AC	\$6,000	\$19,800	50%	\$9,900	\$29,700
1.16	Borrow Site Excavation and Hauling	26,230	CY	\$20	\$524,600	50%	\$262,300	\$786,900
1.17	Borrow Site Erosion Control Seeding	3.3	AC	\$6,500	\$21,450	50%	\$10,725	\$32,175
	<b>Subtotal - Levees</b>				<b>\$2,501,200</b>		<b>\$1,250,600</b>	<b>\$3,751,700</b>
	<b>ESTIMATED SEGMENT SUB-TOTAL</b>				<b>\$2,501,200</b>		<b>\$1,250,600</b>	<b>\$3,751,700</b>
<b>2</b>	<b>Planning, Engineering and Design</b>							
2.1	Planning, Engineering and Design (12%)				\$450,204	0%	\$0	\$450,300
<b>3</b>	<b>Construction Management</b>							
3.1	Construction Management (15%)				\$562,755	0%	\$0	\$562,800
	<b>ESTIMATED SEGMENT TOTAL</b>				<b>\$3,514,159</b>		<b>\$1,250,600</b>	<b>\$4,764,800</b>

WEST JACKSON HIGHWAY MASTER PLAN  
LEVEE IMPROVEMENTS  
OPINION OF PROBABLE CONSTRUCTION COSTS  
MORRISON CREEK SOUTH 1 - SEGMENT 3 (STA 91+00-137+25)  
FINANCE AREA C (ASPEN V SOUTH)



Item No.	Item	Quantity	Unit	Unit Price	Cost	Contingency (%)	Contingency (\$)	Cost w/Contingency
<b>1</b>	<b>Levees</b>							
1.1	Mobilization and Demobilization	1	LS	5%	\$170,796	50%	\$85,398	\$256,194
1.2	Traffic Control (Rural)	1	LS	1%	\$34,159	50%	\$17,080	\$51,239
1.3	Storm Water Pollution Control	1	LS	4%	\$136,637	50%	\$68,318	\$204,955
1.4	Project Fencing	7,200	LF	\$4.30	\$30,960	50%	\$15,480	\$46,440
1.5	Clearing and Grubbing	6.2	AC	\$5,000	\$31,000	50%	\$15,500	\$46,500
1.6	Levee Stripping	4.1	AC	\$6,000	\$24,600	50%	\$12,300	\$36,900
1.7	Levee Degrading/ Excavation	15,170	CY	\$6.50	\$98,605	50%	\$49,303	\$147,908
1.8	Levee Fill (Embankment)	43,400	CY	\$8	\$347,200	50%	\$173,600	\$520,800
1.9	Cutoff Wall - Soil Bentonite (20'-40' Depth)	0	LF	\$290	\$0	50%	\$0	\$0
1.10	Cutoff Wall - Soil Bentonite (40'-60' Depth)	1,250	LF	\$500	\$625,000	50%	\$312,500	\$937,500
1.11	Cutoff Wall - Soil Bentonite (60'-80' Depth)	1,350	LF	\$670	\$904,500	50%	\$452,250	\$1,356,750
1.12	Class 2 Aggregate Surfacing	1,340	CY	\$90	\$120,600	50%	\$60,300	\$180,900
1.13	Levee Erosion Control Seeding	4.5	AC	\$6,500	\$29,250	50%	\$14,625	\$43,875
1.14	Borrow Site Clearing and Grubbing	6.8	AC	\$5,000	\$34,000	50%	\$17,000	\$51,000
1.15	Borrow Site Stripping	6.8	AC	\$6,000	\$40,800	50%	\$20,400	\$61,200
1.16	Borrow Site Excavation and Hauling	54,260	CY	\$20	\$1,085,200	50%	\$542,600	\$1,627,800
1.17	Borrow Site Erosion Control Seeding	6.8	AC	\$6,500	\$44,200	50%	\$22,100	\$66,300
	<b>Subtotal - Levees</b>				<b>\$3,757,600</b>		<b>\$1,878,800</b>	<b>\$5,636,300</b>
	<b>ESTIMATED SEGMENT SUB-TOTAL</b>				<b>\$3,757,600</b>		<b>\$1,878,800</b>	<b>\$5,636,300</b>
<b>2</b>	<b>Planning, Engineering and Design</b>							
2.1	Planning, Engineering and Design (12%)				\$676,356	0%	\$0	\$676,400
<b>3</b>	<b>Construction Management</b>							
3.1	Construction Management (15%)				\$845,445	0%	\$0	\$845,500
	<b>ESTIMATED SEGMENT TOTAL</b>				<b>\$5,279,401</b>		<b>\$1,878,800</b>	<b>\$7,158,200</b>

WEST JACKSON HIGHWAY MASTER PLAN  
LEVEE IMPROVEMENTS  
OPINION OF PROBABLE CONSTRUCTION COSTS  
ELDER CREEK NORTH 1 - SEGMENT 1 (STA 0+00-42+00)  
FINANCE AREA C (ASPEN IX)



Item No.	Item	Quantity	Unit	Unit Price	Cost	Contingency (%)	Contingency (\$)	Cost w/Contingency
<b>1</b>	<b>Levees</b>							
1.1	Mobilization and Demobilization	1	LS	5%	\$62,168	50%	\$31,084	\$93,251
1.2	Traffic Control (Rural)	1	LS	1%	\$12,434	50%	\$6,217	\$18,650
1.3	Storm Water Pollution Control	1	LS	4%	\$49,734	50%	\$24,867	\$74,601
1.4	Project Fencing	8,400	LF	\$4.30	\$36,120	50%	\$18,060	\$54,180
1.5	Clearing and Grubbing	5.3	AC	\$5,000	\$26,500	50%	\$13,250	\$39,750
1.6	Levee Stripping	3.7	AC	\$6,000	\$22,200	50%	\$11,100	\$33,300
1.7	Levee Degrading/ Excavation	10,180	CY	\$6.50	\$66,170	50%	\$33,085	\$99,255
1.8	Levee Fill (Embankment)	26,020	CY	\$8	\$208,160	50%	\$104,080	\$312,240
1.9	Cutoff Wall - Soil Bentonite (20'-40' Depth)	0	LF	\$290	\$0	50%	\$0	\$0
1.10	Cutoff Wall - Soil Bentonite (40'-60' Depth)	0	LF	\$500	\$0	50%	\$0	\$0
1.11	Cutoff Wall - Soil Bentonite (60'-80' Depth)	0	LF	\$670	\$0	50%	\$0	\$0
1.12	Class 2 Aggregate Surfacing	1,560	CY	\$90	\$140,400	50%	\$70,200	\$210,600
1.13	Levee Erosion Control Seeding	3.3	AC	\$6,500	\$21,450	50%	\$10,725	\$32,175
1.14	Borrow Site Clearing and Grubbing	4.1	AC	\$5,000	\$20,500	50%	\$10,250	\$30,750
1.15	Borrow Site Stripping	4.1	AC	\$6,000	\$24,600	50%	\$12,300	\$36,900
1.16	Borrow Site Excavation and Hauling	32,530	CY	\$20	\$650,600	50%	\$325,300	\$975,900
1.17	Borrow Site Erosion Control Seeding	4.1	AC	\$6,500	\$26,650	50%	\$13,325	\$39,975
	<b>Subtotal - Levees</b>				<b>\$1,367,700</b>		<b>\$683,900</b>	<b>\$2,051,600</b>
	<b>ESTIMATED SEGMENT SUB-TOTAL</b>				<b>\$1,367,700</b>		<b>\$683,900</b>	<b>\$2,051,600</b>
<b>2</b>	<b>Planning, Engineering and Design</b>							
2.1	Planning, Engineering and Design (12%)				\$246,192	0%	\$0	\$246,200
<b>3</b>	<b>Construction Management</b>							
3.1	Construction Management (15%)				\$307,740	0%	\$0	\$307,800
	<b>ESTIMATED SEGMENT TOTAL</b>				<b>\$1,921,632</b>		<b>\$683,900</b>	<b>\$2,605,600</b>

WEST JACKSON HIGHWAY MASTER PLAN  
LEVEE IMPROVEMENTS  
OPINION OF PROBABLE CONSTRUCTION COSTS  
ELDER CREEK NORTH 2 - SEGMENT 1 (STA 0+00-23+55)  
FINANCE AREA C (ASPEN VIII)



Item No.	Item	Quantity	Unit	Unit Price	Cost	Contingency (%)	Contingency (\$)	Cost w/Contingency
<b>1</b>	<b>Levees</b>							
1.1	Mobilization and Demobilization	1	LS	5%	\$115,999	50%	\$57,999	\$173,998
1.2	Traffic Control (Rural)	1	LS	1%	\$23,200	50%	\$11,600	\$34,800
1.3	Storm Water Pollution Control	1	LS	4%	\$92,799	50%	\$46,400	\$139,199
1.4	Project Fencing	4,710	LF	\$4.30	\$20,253	50%	\$10,127	\$30,380
1.5	Clearing and Grubbing	3.1	AC	\$5,000	\$15,500	50%	\$7,750	\$23,250
1.6	Levee Stripping	2.3	AC	\$6,000	\$13,800	50%	\$6,900	\$20,700
1.7	Levee Degrading/ Excavation	7,890	CY	\$6.50	\$51,285	50%	\$25,643	\$76,928
1.8	Levee Fill (Embankment)	15,280	CY	\$8	\$122,240	50%	\$61,120	\$183,360
1.9	Cutoff Wall - Soil Bentonite (20'-40' Depth)	0	LF	\$290	\$0	50%	\$0	\$0
1.10	Cutoff Wall - Soil Bentonite (40'-60' Depth)	0	LF	\$500	\$0	50%	\$0	\$0
1.11	Cutoff Wall - Soil Bentonite (60'-80' Depth)	2,355	LF	\$670	\$1,577,850	50%	\$788,925	\$2,366,775
1.12	Class 2 Aggregate Surfacing	890	CY	\$90	\$80,100	50%	\$40,050	\$120,150
1.13	Levee Erosion Control Seeding	2.0	AC	\$6,500	\$13,000	50%	\$6,500	\$19,500
1.14	Borrow Site Clearing and Grubbing	2.5	AC	\$5,000	\$12,500	50%	\$6,250	\$18,750
1.15	Borrow Site Stripping	2.5	AC	\$6,000	\$15,000	50%	\$7,500	\$22,500
1.16	Borrow Site Excavation and Hauling	19,110	CY	\$20	\$382,200	50%	\$191,100	\$573,300
1.17	Borrow Site Erosion Control Seeding	2.5	AC	\$6,500	\$16,250	50%	\$8,125	\$24,375
	<b>Subtotal - Levees</b>				<b>\$2,552,000</b>		<b>\$1,276,000</b>	<b>\$3,828,000</b>
	<b>ESTIMATED SEGMENT SUB-TOTAL</b>				<b>\$2,552,000</b>		<b>\$1,276,000</b>	<b>\$3,828,000</b>
<b>2</b>	<b>Planning, Engineering and Design</b>							
2.1	Planning, Engineering and Design (12%)				\$459,360	0%	\$0	\$459,400
<b>3</b>	<b>Construction Management</b>							
3.1	Construction Management (15%)				\$574,200	0%	\$0	\$574,200
	<b>ESTIMATED SEGMENT TOTAL</b>				<b>\$3,585,560</b>		<b>\$1,276,000</b>	<b>\$4,861,600</b>

DRAFT

# Memorandum

**WOOD RODGERS**  
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME

**To:** StoneBridge Properties, LLC  
Granite Construction Company

**From:** Jason Reed, PE

**Cc:** Mike Motroni, PE

**Date:** December 18, 2023

**Subject:** West Jackson Highway Master Plan: Tunnel Closure Estimate and Narrative

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## **Introduction**

West Jackson Highway Master Plan (WJHMP) covers approximately 5,913 acres of land in Sacramento County straddling Jackson Highway, between South Watt Avenue and Excelsior Road. The plan area includes multiple aggregate mines that have been in operation for decades.

## **Tunnel Closures**

The conveyor facilities for the mining operations have multiple locations where tunnels are located beneath existing roads. Specific tunnels will need to be closed as not all are intended to convey flows as part of the drainage solutions of the plan area. The existing tunnels to be closed range from as small as 6-feet diameter to upwards of 9-feet diameter. The existing 24-foot diameter tunnel at Hedge Road is anticipated to remain and not be closed. Refer to Figure 1 for depiction of tunnel locations and sizes.

The methodology for closure of the tunnels anticipates use of flowable sand slurry mixture to fill the tunnel and temporary bulkhead (soil basket and earth backfill bulkheads) during placement and curing of slurry for tunnel up to 9-feet in diameter.

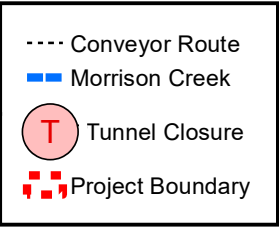
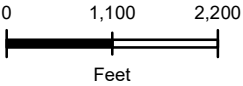
Quantities are appropriate as a large-scale estimate, based on preliminary information of each tunnel.

This estimate memo does not include backbone roadway, trails, drainage, sewer, water or levees as those are subject of a separate memo.

## **Attachments**

1. Tunnel Closures Exhibit
2. Tunnel Closures Cost Estimates

ATTACHMENT 4  
TUNNEL CLOSURES  
WEST JACKSON HIGHWAY MASTER PLAN  
SACRAMENTO CO, CA  
DECEMBER 18, 2023



Notes:  
1) Diameter and Length are estimated.

Source J:\1000-s\1426-RockCreek\MC\_EC\_LOMR\GIS\Data\StrSurvey\_Processing\SurveyData.gdb  
FID FIA diam U/SInV D/SInV Additional

4 D1\_FIA2 45.9 44.7 J:\1000-s\1426-RockCreek\MC\_EC\_LOMR\Geomatics\FieldData\MOR-0170  
5 D1\_FIA2 49.7 39.8 J:\1000-s\1426-RockCreek\MC\_EC\_LOMR\Geomatics\FieldData\MOR-0180  
8 D1\_FIA2 53.6 53.6 J:\1000-s\1426-RockCreek\MC\_EC\_LOMR\Geomatics\FieldData\MOR-0120

Source J:\1000-s\1426-RockCreek\New\_Brighton\_SP\New\_Brighton\_SP-OA\Civil\Dwg\FIA\_3\SRC\_TOPO\_WJMP\_FIA3.dwg  
0 D1\_FIA3 56.7 56.7  
1 D1\_FIA3 56.7 56.7

FIGURE 1

Engineer's Opinion of Preliminary Cost  
Preliminary Tunnel Closures

Updated: 12/18/2023

TOTAL TUNNEL CLOSURES	\$ 1,370,000
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NOTES

- 1. Soil Basket Headwall bulkhead (temporary) anticipated at each end of structure to contain slurry.
- 2. Estimate includes a 20% soft cost allowance. Assumed to be engineering (8%), mapping (1%), plan check (2%), inspection (3%), geotech (3%), and staking (3%).
- 3. Based on preliminary nature of studies, 30% contingency is applied.
- 4. Costs reflect 2023 dollars.
- 5. Quantities not explicitly detailed within are not included as part of this estimate.

**APPENDIX B**  
**WEST JACKSON HIGHWAY MASTER PLAN**  
**EDU CALCULATIONS**

Category	Buildout									Total
	Residential					Non-Residential				
	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	
Backbone Infrastructure	Acres	2600	2200	1800	1000	1000				
	Units	115.59	1,955.07	58.62	121.23	67.53	45.02	290.73	492.42	154.35
	Bldg SF	230	9,774	820	3,636	2,024				
	EDU Factor						1,225,703	3,166,067	6,434,904	2,017,073
		1.17	1	1	0.57	0.57	1.09	1.09	0.96	0.6
		<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per KSF</u>	<u>Per KSF</u>	<u>Per KSF</u>	<u>Per KSF</u>
	Transportation/Transit	269.10	9,774.00	820.00	2,072.52	1,153.68	1,336.02	3,451.01	6,177.51	1,210.24
		1.02%	37.21%	3.12%	7.89%	4.39%	5.09%	13.14%	23.52%	4.61%
Trails		269.10	9,774.00	820.00	2,072.52	1,153.68	1,336.02	3,451.01	6,177.51	1,210.24
		1.02%	37.21%	3.12%	7.89%	4.39%	5.09%	13.14%	23.52%	4.61%

Category	Area A									Total
	Residential					Non-Residential				
	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	
Backbone Infrastructure	Acres	2600	2200	1800	1000	1000				
	Units	-	402.94	-	39.53	18.62	12.41	217.15	426.04	75.05
	Bldg SF	-	2,016	-	1,185	558				
	EDU Factor	1.17	1	1	0.57	0.57	337,897	2,364,722	5,567,482	980,781
		<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per KSF</u>	<u>Per KSF</u>	<u>Per KSF</u>	<u>Per KSF</u>
	Transportation/Transit	-	2,016	-	675.45	318.06	368.31	2,577.55	5,344.78	588.47
		0.00%	16.96%	0.00%	5.68%	2.68%	3.10%	21.68%	44.96%	4.95%
	Trails	-	2,016	-	675	318	368	2,578	5,345	588
		0.00%	16.96%	0.00%	5.68%	2.68%	3.10%	21.68%	44.96%	4.95%

Category	Area B									Total
	Residential					Non-Residential				
	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	
Backbone Infrastructure	Acres	2600	2200	1800	1000	1000				
	Units	20	672	18	34	15	10	21	49	839
	Bldg SF	40	3,365	246	1,023	459				5,133
	EDU Factor						277,241	225,680	636,412	1,139,333
		1.17	1	1	0.57	0.57	1.09	1.09	0.96	0.6
		<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per KSF</u>	<u>Per KSF</u>	<u>Per KSF</u>	<u>Per KSF</u>
	Transportation/Transit	46.80	3,365.00	246.00	583.11	261.63	302.19	245.99	610.96	-
		0.83%	59.43%	4.35%	10.30%	4.62%	5.34%	4.34%	10.79%	0.00%
	Trails	47	3,365	246	583	262	302	246	611	-
		0.83%	59.43%	4.35%	10.30%	4.62%	5.34%	4.34%	10.79%	0.00%

Category	Area C									Total	
	Residential					Non-Residential					
	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial		
Backbone Infrastructure	Acres	2,600	2,200	1,800	1,000	1,000					
	Units	95	880	41	48	34	22	53	18	79	1,270
	Bldg SF	190	4,393	574	1,428	1,007					7,592
	EDU Factor						610,565	575,665	231,010	1,036,292	2,453,532
		1.17	1	1	0.57	0.57	1.09	1.09	0.96	0.6	
	Transportation/Transit										
		222	4,393	574	814	574	666	627	222	622	8,714
		2.55%	50.41%	6.59%	9.34%	6.59%	7.64%	7.20%	2.55%	7.14%	100%
	Trails										
		222	4,393	574	814	574	666	627	222	622	8,714
	2.55%	50.41%	6.59%	9.34%	6.59%	7.64%	7.20%	2.55%	7.14%	100%	

SCWA		Buildout								
		Residential				Non-Residential				
Category	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	Total
Acres	95.40	1,468.50	41.00	82.03	37.57	25.05	80.92	199.54	79.30	2,109.31
Units	190	7,341	574	2,461	1,126	-	-	-	-	11,692
Bldg SF						681,945	881,181	2,607,531	1,036,292	5,206,949
EDU Factor	1.00	1.00	1.00	0.75	0.75	0.40	0.40	0.40	0.40	
	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Acre</i>	<i>Per Acre</i>	<i>Per Acre</i>	<i>Per Acre</i>	
Backbone Infrastructure										
Water Off-Site	190.00	7,340.75	574.00	1,845.56	844.50	10.02	32.37	79.81	31.72	10,949
Water On-site	190.00	7,340.75	574.00	1,845.56	844.50	10.02	32.37	79.81	31.72	10,949
	1.74%	67.05%	5.24%	16.86%	7.71%	0.09%	0.30%	0.73%	0.29%	100%

SCWA		Area A									
		Residential				Non-Residential					
Category	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	Total	
Backbone Infrastructure	Acres	-	402.94	-	32.52	18.62	12.41	33.73	169.68	669.90	
	Units	-	2,016	-	975	558				3,549	
	Bldg SF						337,897	367,329	2,217,418	2,922,644	
	EDU Factor	1.00	1.00	1.00	0.75	0.75	0.40	0.40	0.40		
	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Acre</i>	<i>Per Acre</i>	<i>Per Acre</i>	<i>Per Acre</i>		
	Water Off-Site	-	2,016.00	-	731.25	418.50	4.96	13.49	67.87	-	3,252
	Water On-site	-	2,016.00	-	731.25	418.50	4.96	13.49	67.87	-	3,252
		0.00%	61.99%	0.00%	22.49%	12.87%	0.15%	0.41%	2.09%	0.00%	100%

SCWA	Area B									
	Residential					Non-Residential				
Category	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	Total
Acres	-	186	-	2	-	-	-	12	-	200
Units	-	932	-	58	-					990
Bldg SF						-	-	159,103	-	159,103
EDU Factor	1.00	1.00	1.00	0.75	0.75	0.40	0.40	0.40	0.40	
	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Acre</i>	<i>Per Acre</i>	<i>Per Acre</i>	<i>Per Acre</i>	
Backbone Infrastructure										
Water Off-Site	-	931.75	-	43.31	-	-	-	4.87	-	980
Water On-site	-	931.75	-	43.31	-	-	-	4.87	-	980
	0.00%	95.08%	0.00%	4.42%	0.00%	0.00%	0.00%	0.50%	0.00%	100%

SCWA		Area C									
		Residential				Non-Residential					
Category	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	Total	
Backbone Infrastructure	Acres	95	880	41	48	19	13	47	18	79	1,239
	Units	190	4,393	574	1,428	568					7,153
	Bldg SF						344,048	513,852	231,010	1,036,292	2,125,202
	EDU Factor	1.00	1.00	1.00	0.75	0.75	0.40	0.40	0.40	0.40	
	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Acre</i>	<i>Per Acre</i>	<i>Per Acre</i>	<i>Per Acre</i>		
	Water Off-Site	190.00	4,393.00	574.00	1,071.00	426.00	5.05	18.87	7.07	31.72	6,717
	Water On-site	190.00	4,393.00	574.00	1,071.00	426.00	5.05	18.87	7.07	31.72	6,717
		2.83%	65.40%	8.55%	15.95%	6.34%	0.08%	0.28%	0.11%	0.47%	100%

Cal Am		Buildout								
		Residential				Non-Residential				
Category	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	Total
Acres	20.19	486.57	17.62	39.20	29.96	19.97	209.81	292.88	75.05	1,191.26
Units	40.00	2,433.25	246.00	1,175.25	898.00	-	-	-	-	4,793
Bldg SF						543,758	2,284,886	3,827,373	980,781	7,636,798
EDU Factor	1.00	1.00	1.00	0.75	0.75	0.40	0.40	0.40	0.40	
	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Acre</i>	<i>Per Acre</i>	<i>Per Acre</i>	<i>Per Acre</i>	
Backbone Infrastructure										
Water Off-Site	40.00	2,433.25	246.00	881.44	673.50	7.99	83.93	117.15	30.02	4,513
Water On-site	40.00	2,433.25	246.00	881.44	673.50	7.99	83.93	117.15	30.02	4,513
	0.89%	53.91%	5.45%	19.53%	14.92%	0.18%	1.86%	2.60%	0.67%	100%

Cal Am		Area A									
		Residential				Non-Residential					
Category		Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	Total
Backbone Infrastructure	Acres	-	-	-	7.01	-		183.42	256.36	75.05	521.83
	Units	-	-	-	210	-					210
	Bldg SF						-	1,997,393	3,350,064	980,781	6,328,238
	EDU Factor	1.00	1.00	1.00	0.75	0.75	0.40	0.40	0.40	0.40	
		<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	
	Water Off-Site	-	-	-	157.50	-	-	73.37	102.54	30.02	363
	Water On-site	-	-	-	157.50	-	-	73.37	102.54	30.02	363
		0.00%	0.00%	0.00%	43.34%	0.00%	0.00%	20.19%	28.22%	8.26%	100%

Cal Am		Area B									
		Residential				Non-Residential					
Category		Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	Total
Backbone Infrastructure	Acres	20	486	18	32	15	10	21	37	-	639
	Units	40	2,433	246	965	459					4,144
	Bldg SF						277,241	225,680	477,309		980,230
	EDU Factor	1.00	1.00	1.00	0.75	0.75	0.40	0.40	0.40	0.40	
		<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Acre</i>	<i>Per Acre</i>	<i>Per Acre</i>	<i>Per Acre</i>	
	Water Off-Site	40.00	2,433.25	246.00	723.94	344.25	4.07	8.29	14.61	-	3,814
	Water On-site	40.00	2,433.25	246.00	723.94	344.25	4.07	8.29	14.61	-	3,814
		1.05%	63.79%	6.45%	18.98%	9.02%	0.11%	0.22%	0.38%	0.00%	100%

Cal Am		Area C									
		Residential				Non-Residential					
Category		Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	Total
Backbone Infrastructure	Acres	-	0	-	-	15	10	6	-	-	30
	Units	-	-	-	-	439					439
	Bldg SF						266,517	61,813	-	-	328,330
	EDU Factor	1.00	1.00	1.00	0.75	0.75	0.40	0.40	0.40	0.40	
		<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	
	Water Off-Site	-	-	-	-	329.25	3.92	2.27	-	-	335
	Water On-site	-	-	-	-	329.25	3.92	2.27	-	-	335
		0.00%	0.00%	0.00%	0.00%	98.16%	1.17%	0.68%	0.00%	0.00%	100%

SASD/SRCSD		Buildout								
		Residential				Non-Residential				
Category	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	Total
Acres	116	1,955	59	121	41	27	247	419	131	3,114.92
	Units	230	9,774	820	3,636	2,024	-	-	-	16,484
	Bldg SF	-	-	-	-	-	1,225,703	3,166,067	6,434,904	2,017,073
	EDU Factor	310.00	310.00	310.00	233.00	310.00	1,900.00	1,900.00	1,900.00	1,900.00
	Per Unit	Per Unit	Per Unit	Per Unit	Per Unit	Per Net Acre	Per Net Acre	Per Net Acre	Per Net Acre	
Backbone Infrastructure										
Sewer Improvements	71,300	3,029,940	254,200	847,188	627,440	51,324	469,531	795,254	249,279	6,395,456
	1.11%	47.38%	3.97%	13.25%	9.81%	0.80%	7.34%	12.43%	3.90%	100%

SASD/SRCSD	Area A									
	Residential					Non-Residential				
	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	
Category										Total
Acres	-	402.94	-	39.53	11.17	7.45	184.57	362.13	63.79	1,071.58
Units	-	2,016	-	1,185	558					3,759
Bldg SF						337,897	2,364,722	5,567,482	980,781	9,250,882
EDU Factor - Flow Rate (GPD)	310.00	310.00	310.00	233.00	310.00	1,900.00	1,900.00	1,900.00	1,900.00	
	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Net Acre</u>	<u>Per Net Acre</u>	<u>Per Net Acre</u>	<u>Per Net Acre</u>	
Backbone Infrastructure										
Sewer Improvements	-	624,960	-	276,105	172,980	14,149	350,691	688,054	121,209	2,248,148
	0.00%	27.80%	0.00%	12.28%	7.69%	0.63%	15.60%	30.61%	5.39%	100%

SASD/SRCSD	Area B									
	Residential					Non-Residential				
	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	
Category										Total
Acres	20	672	18	34	9	6	18	41	-	819
Units	40	3,365	246	1,023	459					5,133
Bldg SF						277,241	225,680	636,412	-	1,139,333
EDU Factor	310.00	310.00	310.00	233.00	310.00	1,900.00	1,900.00	1,900.00	1,900.00	
	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Net Acre</i>	<i>Per Net Acre</i>	<i>Per Net Acre</i>	<i>Per Net Acre</i>	
Backbone Infrastructure										
Sewer Improvements	12,400	1,043,150	76,260	238,359	142,290	11,609	33,469	78,651	-	1,636,187
	0.76%	63.75%	4.66%	14.57%	8.70%	0.71%	2.05%	4.81%	0.00%	100%

SASD/SRCSD	Area C									
	Residential					Non-Residential				
	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	
Category										Total
Acres	95	880	41	48	20	13	45	15	67	1,225
Units	190	4,393	574	1,428	1,007					7,592
Bldg SF						610,565	575,665	231,010	1,036,292	2,453,532
EDU Factor	310.00	310.00	310.00	233.00	310.00	1,900.00	1,900.00	1,900.00	1,900.00	
	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Net Acre</u>	<u>Per Net Acre</u>	<u>Per Net Acre</u>	<u>Per Net Acre</u>	
Backbone Infrastructure										
Sewer Improvements	58,900	1,361,830	177,940	332,724	312,170	25,566	85,371	28,549	128,070	2,511,120
	2.35%	54.23%	7.09%	13.25%	12.43%	1.02%	3.40%	1.14%	5.10%	100%

Zone 11A		Buildout								
		Residential				Non-Residential				
Category	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	Total
Net Acres	98.25	1,661.81	49.83	103.05	57.40	38.27	247.12	418.55	131.20	2,805.48
Units										
Bldg SF										
EDU Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	
Backbone Infrastructure										
Drainage Improvements	98.25	1,661.81	49.83	103.05	57.40	38.27	247.12	418.55	131.20	2,805
	3.50%	59.23%	1.78%	3.67%	2.05%	1.36%	8.81%	14.92%	4.68%	100%

Zone 11A		Area A								
		Residential				Non-Residential				
Category	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	Total
Net Acres	-	342.49	-	33.60	15.82	10.55	184.57	362.13	63.79	1,012.97
Units										-
Bldg SF										-
EDU Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	
Backbone Infrastructure										
Drainage Improvements	-	342.49	-	33.60	15.82	10.55	184.57	362.13	63.79	1,013
	0.00%	33.81%	0.00%	3.32%	1.56%	1.04%	18.22%	35.75%	6.30%	100%

Zone 11A		Area B								
		Residential				Non-Residential				
Category	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	Total
Net Acres	17.16	571.60	14.98	29.00	12.98	8.66	17.62	41.40	-	713.39
Units										-
Bldg SF										-
EDU Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	
Backbone Infrastructure										
Drainage Improvements	17.16	571.60	14.98	29.00	12.98	8.66	17.62	41.40	-	713
	2.41%	80.12%	2.10%	4.07%	1.82%	1.21%	2.47%	5.80%	0.00%	100%

Zone 11A		Area C									
		Residential				Non-Residential					
Category		Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	Total
Backbone Infrastructure	Net Acres	81.09	747.71	34.85	40.45	28.59	19.06	44.93	15.03	67.41	1,079.12
	Units										
	Bldg SF										
	EDU Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
		<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	
	Drainage Improvements	81.09	747.71	34.85	40.45	28.59	19.06	44.93	15.03	67.41	1,079
		7.51%	69.29%	3.23%	3.75%	2.65%	1.77%	4.16%	1.39%	6.25%	100%

CRPD	Buildout									
	Residential					Non-Residential				
	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	Total
Acres	20.19	818.13	17.62	59.17	44.64	29.76	241.66	429.60	75.05	1,735.83
Units	40	4,092	246	1,775	1,338	-	-	-	-	7,491
Bldg SF						810,240	2,631,704	5,613,962	980,781	10,036,687
EDU Factor - PPH	2.91	2.91	2.91	2.20	2.20	2.25	2.25	3.50	1.50	
	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Bldg SF</u>	<u>Per Bldg SF</u>	<u>Per Bldg SF</u>	<u>Per Bldg SF</u>	
Backbone Infrastructure										
Parks - Neighborhood	116	11,908	716	3,905	2,944	912	2,961	9,824	736	34,021
Parks - Community	116	11,908	716	3,905	2,944	912	2,961	9,824	736	34,021
	0.34%	35.00%	2.10%	11.48%	8.65%	2.68%	8.70%	28.88%	2.16%	100%

CRPD	Area A									
	Residential					Non-Residential				
	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	Total
Acres	-	336.17	-	26.98	11.59	7.73	217.15	393.07	75.05	1,067.74
Units	-	1,682	-	810	347					2,839
Bldg SF						210,383	2,364,722	5,136,653	980,781	8,692,539
EDU Factor - PPH	2.91	2.91	2.91	2.20	2.20	2.25	2.25	3.50	1.50	
	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Bldg SF</u>	<u>Per Bldg SF</u>	<u>Per Bldg SF</u>	<u>Per Bldg SF</u>	
Backbone Infrastructure										
Parks - Neighborhood	-	4,895	-	1,782	763	237	2,660	8,989	736	20,062
Parks - Community	-	4,895	-	1,782	763	237	2,660	8,989	736	20,062
	0.00%	24.40%	0.00%	8.88%	3.81%	1.18%	13.26%	44.81%	3.67%	100%

CRPD	Area B									
	Residential					Non-Residential				
	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	Total
Acres	20	482	18	32	15	10	21	37	-	635
Units	40	2,410	246	965	459					4,120
Bldg SF						277,241	225,680	477,309		980,230
EDU Factor - pph	2.91	2.91	2.91	2.20	2.20	2.25	2.25	3.50	1.50	
	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Bldg SF</u>	<u>Per Bldg SF</u>	<u>Per Bldg SF</u>	<u>Per Bldg SF</u>	
Backbone Infrastructure										
Parks - Neighborhood	116	7,013	716	2,123	1,010	312	254	835	-	12,379
Parks - Community	116	7,013	716	2,123	1,010	312	254	835	-	12,379
	0.94%	56.65%	5.78%	17.15%	8.16%	2.52%	2.05%	6.75%	0.00%	100%

CRPD	Area C									
	Residential					Non-Residential				
	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	Total
Acres	-	0	-	-	18	12	4	-	-	34
Units	-	-	-	-	532					532
Bldg SF						322,616	41,302	-	-	363,918
EDU Factor - pph	2.91	2.91	2.91	2.20	2.20	2.25	2.25	3.50	1.50	
	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Bldg SF</u>	<u>Per Bldg SF</u>	<u>Per Bldg SF</u>	<u>Per Bldg SF</u>	
Backbone Infrastructure										
Parks - Neighborhood	-	-	-	-	1,170	363	46	-	-	1,580
Parks - Community	-	-	-	-	1,170	363	46	-	-	1,580
	0.00%	0.00%	0.00%	0.00%	74.08%	22.97%	2.94%	0.00%	0.00%	100%

SRPD	Buildout									
	Residential					Non-Residential				
Category	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	Total
Acres	95.40	1,136.94	41.00	62.06	22.89	15.26	49.07	62.82	79.30	1,564.74
Units	190.00	5,682.00	574.00	1,861.00	686.00					8,993
Bldg SF						415,463	534,363	820,942	1,036,292	2,807,060
EDU Factor	2.88	2.88	2.88	1.98	1.98	2.10	2.10	3.20	1.50	
Backbone Infrastructure	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Unit</i>	<i>Per Bldg SF</i>	<i>Per Bldg SF</i>	<i>Per Bldg SF</i>	<i>Per Bldg SF</i>	
	Parks - Neighborhood	547	16,364	1,653	3,685	1,358	436	561	1,314	777
	Parks - Community	547	16,364	1,653	3,685	1,358	436	561	1,314	777
		2.05%	61.30%	6.19%	13.80%	5.09%	1.63%	2.10%	4.92%	2.91%
										100%

SRPD	Area A									
	Residential					Non-Residential				
	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	
Category										Total
Acres	-	66.76	-	12.55	7.03	4.68	-	32.97	-	123.99
Units	-	334	-	375	211					920
Bldg SF						127,514	-	430,829	-	558,343
EDU Factor	2.88	2.88	2.88	1.98	1.98	2.10	2.10	3.20	1.50	
	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Bldg SF</u>	<u>Per Bldg SF</u>	<u>Per Bldg SF</u>	<u>Per Bldg SF</u>	
Backbone Infrastructure										
Parks - Neighborhood	-	962	-	743	418	134	-	689	-	2,945
Parks - Community	-	962	-	743	418	134	-	689	-	2,945
	0.00%	32.66%	0.00%	25.21%	14.18%	4.55%	0.00%	23.40%	0.00%	100%

SRPD	Area B									
	Residential					Non-Residential				
	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	
Category										Total
Acres	-	191	-	2	-	-	-	12	-	205
Units	-	955	-	58	-					1,013
Bldg SF						-	-	159,103	-	159,103
EDU Factor	2.88	2.88	2.88	1.98	1.98	2.10	2.10	3.20	1.50	
	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Bldq SF</u>	<u>Per Bldq SF</u>	<u>Per Bldq SF</u>	<u>Per Bldq SF</u>	
Backbone Infrastructure										
Parks - Neighborhood	-	2,750	-	115	-	-	-	255	-	3,120
Parks - Community	-	2,750	-	115	-	-	-	255	-	3,120
	0.00%	88.16%	0.00%	3.68%	0.00%	0.00%	0.00%	8.16%	0.00%	100%

SRPD	Area C									
	Residential					Non-Residential				
	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	
Category										Total
Acres	95	880	41	48	16	11	49	18	79	1,236
Units	190	4,393	574	1,428	475					7,060
Bldg SF						287,949	534,363	231,010	1,036,292	2,089,614
EDU Factor	2.88	2.88	2.88	1.98	1.98	2.10	2.10	3.20	1.50	
	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Unit</u>	<u>Per Bldg SF</u>	<u>Per Bldg SF</u>	<u>Per Bldg SF</u>	<u>Per Bldg SF</u>	
Backbone Infrastructure										
Parks - Neighborhood	547	12,652	1,653	2,827	941	302	561	370	777	20,630
Parks - Community	547	12,652	1,653	2,827	941	302	561	370	777	20,630
	2.65%	61.33%	8.01%	13.71%	4.56%	1.47%	2.72%	1.79%	3.77%	100%

Category	Buildout									Total
	Residential					Non-Residential				
	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	
Acres	116	1,955	59	121	68	45	291	492	154	3,301
Units										
Bldg SF										
EDU Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Backbone Infrastructure	<i>Per Acre</i>	<i>Per Acre</i>	<i>Per Acre</i>	<i>Per Acre</i>	<i>Per Acre</i>	<i>Per Acre</i>	<i>Per Acre</i>	<i>Per Acre</i>	<i>Per Acre</i>	
Open Space Improvements	115.59	1,955.07	58.62	121.23	67.53	45.02	290.73	492.42	154.35	3,301
	3.50%	59.23%	1.78%	3.67%	2.05%	1.36%	8.81%	14.92%	4.68%	100%

Category	Area A									Total
	Residential					Non-Residential				
	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	
Acres	-	403	-	40	19	12	217	426	75	1,192
Units										
Bldg SF										
EDU Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	
Backbone Infrastructure										
Open Space Improvements	-	402.94	-	39.53	18.62	12.41	217.15	426.04	75.05	1,192
	0.00%	33.81%	0.00%	3.32%	1.56%	1.04%	18.22%	35.75%	6.30%	100%

Category	Area B									Total
	Residential					Non-Residential				
	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	
Acres	20	672	18	34	15	10	21	49	-	839
Units										
Bldg SF										
EDU Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Backbone Infrastructure	<i>Per Acre</i>	<i>Per Acre</i>	<i>Per Acre</i>	<i>Per Acre</i>	<i>Per Acre</i>	<i>Per Acre</i>	<i>Per Acre</i>	<i>Per Acre</i>	<i>Per Acre</i>	
Open Space Improvements	20.19	672.47	17.62	34.12	15.27	10.18	20.72	48.70	-	839
	2.41%	80.12%	2.10%	4.07%	1.82%	1.21%	2.47%	5.80%	0.00%	100%

Zone 11A	Area C									
	Residential					Non-Residential				
	Very Low Density	Low Density	Medium Density	High Density	Mixed Use	Mixed Use Commercial	Commercial	Employment	Industrial	
Category										Total
Acres	95	880	41	48	34	22	53	18	79	1,270
Units										
Bldg SF										
EDU Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	<u>Per Acre</u>	
Backbone Infrastructure										
Open Space Improvements	95.40	879.66	41.00	47.59	33.64	22.43	52.86	17.68	79.30	1,270
	7.51%	69.29%	3.23%	3.75%	2.65%	1.77%	4.16%	1.39%	6.25%	100%

**APPENDIX C**  
**WEST JACKSON HIGHWAY MASTER PLAN**  
**CFD ANALYSIS**

Appendix C  
West Jackson Highway Master Plan  
CFD Tax Rate Analysis

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Finance Area A CRPD

Land Use	Residential		Mixed Use		Total
	Low Density	High Density	Residential		
No. of Homes (i)	1682	810	347		2,839
Average Size of Home (i)	2200	1000	1000		1,711
Estimated Average Home Price (Base)(i)	\$ 655,000	\$ 360,000	\$ 315,000	\$	\$ 529,276
Less Homeowner's Exemption	(7,000)	(7,000)	(7,000)	\$	(7,000)
Assessed Value	\$ 648,000	\$ 353,000	\$ 308,000	\$	\$ 522,276
Tax/Assessment Information	Ad Valorem: (ii)	%			
	General	1.00000%	\$ 6,480	\$ 3,530	\$ 3,080 \$ 5,223
	Los Rios GOB	0.01920%	\$ 124	\$ 68	\$ 59 \$ 100
	Elk Grove Unified GOB	0.03180%	\$ 206	\$ 112	\$ 98 \$ 166
	Subtotal	1.05100%	\$ 6,810	\$ 3,710	\$ 3,237 \$ 5,489
	Special Taxes/Assessment:				
	CSA 1 LIGHTS SAC UNICORP ZONE 1	\$ 18	\$ 18	\$ 18	\$ 18
	CSA 10 BENEFIT ZONE TBD	\$ 105	\$ 127	\$ 72	\$ 105
	POLICE SERVICES CFD NO 2005-1	\$ 437	\$ 491	\$ 360	\$ 437
	CRPD CFD No. 2018-1	\$ 473	\$ 515	\$ 412	\$ 473
	ELK GROVE UNIFIED SCHOOL DIST CFD 1	\$ 200	\$ 200	\$ 200	\$ 200
	WJHMP Services CFD (Proposed)	\$ 743	\$ 906	\$ 508	\$ 743
	Jackson Corridor Trail Maint. CFD (Proposed)	\$ 22	\$ 27	\$ 15	\$ 22
	WJHMP Transit CSA/CFD (Proposed)	\$ 165	\$ 200	\$ 114	\$ 165
	Water Drainage Studies - SCWA 13	\$ 7	\$ 7	\$ 7	\$ 7
	Subtotal	\$ 2,170	\$ 2,490	\$ 1,707	\$ 1,702 \$ 2,170
	Proposed New Infrastructure CFD Special Tax				
	Infrastructure CFD Special Tax (iv)	\$ 2,489	\$ 1,063	\$ 731	\$ 1,867
	Subtotal	\$ 2,489	\$ 1,063	\$ 731	\$ 1,867
	Total Tax/Assessment Per Land Use	\$ 11,790	\$ 6,480	\$ 5,670	\$ 9,527
	Target Total Tax/Assessment Rate %	1.80%	1.80%	1.80%	1.80%
	BOLD Special Tax for Bonding	\$ 4,186,885	\$ 861,211	\$ 253,655	\$ 5,301,751
Bond Analysis	<u>Sources of Funds:</u>				5.5%
	Principal Amount of Bond				\$ 84,315,000
	Less Underwriter's Discount	2.0%			\$ (1,686,300)
	Net Bond Proceeds				\$ 82,628,700
	<u>Use of Funds:</u>				
	Debt Service Reserve Fund				\$ 7,836,572
	Capitalized Interest				\$ 4,637,325
	Costs of Issuance	3.0%			\$ 2,529,450
	Improvement Fund				\$ 67,625,353
	Total Uses of Funds				\$ 82,628,700
	Improvement Fund per Unit				\$ 23,820

Footnotes:

(i) Per developer.

## Finance Area B CRPD

Land Use	Residential	Very Low Density		Low Density		Medium Density		High Density		Mixed Use Residential	Total
	No. of Homes (i)	40	2,410	246	965	459	4,120				
	Average Size of Home (i)	2600	2200	1800	1000	1000	1,765				
	Estimated Average Home Price (Base)(i)	\$ 850,000	\$ 655,000	\$ 575,000	\$ 360,000	\$ 315,000	\$ 545,142				
	Less Homeowner's Exemption	(7,000)	(7,000)	(7,000)	(7,000)	(7,000)	(7,000)				
	Assessed Value	\$ 843,000	\$ 648,000	\$ 568,000	\$ 353,000	\$ 308,000	\$ 538,142				
PER HOME TAX / ASSESSMENT											
Tax/Assessment Information	Ad Valorem: (ii)	%									
	General	1.00000%	\$ 8,430	\$ 6,480	\$ 5,680	\$ 3,530	\$ 3,080	\$ 5,381			
	Los Rios GOB	0.01920%	\$ 162	\$ 124	\$ 109	\$ 68	\$ 59	\$ 103			
	Elk Grove Unified GOB	0.03180%	\$ 268	\$ 206	\$ 181	\$ 112	\$ 98	\$ 171			
	Subtotal	1.05100%	\$ 8,860	\$ 6,810	\$ 5,970	\$ 3,710	\$ 3,237	\$ 5,656			
	Special Taxes/Assessment:										
	CSA 1 LIGHTS SAC UNICORP ZONE 1	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18			
	CSA 10 BENEFIT ZONE TBD	\$ 108	\$ 148	\$ 127	\$ 127	\$ 72	\$ 72	\$ 108			
	POLICE SERVICES CFD NO 2005-1	\$ 445	\$ 491	\$ 491	\$ 491	\$ 360	\$ 360	\$ 445			
	CRPD CFD No. 2018-1	\$ 479	\$ 515	\$ 515	\$ 515	\$ 412	\$ 412	\$ 479			
	ELK GROVE UNIFIED SCHOOL DIST CFD 1	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200			
	WJHMP Services CFD (Proposed)	\$ 761	\$ 1,348	\$ 906	\$ 729	\$ 508	\$ 503	\$ 761			
	Jackson Corridor Trail Maint. CFD (Proposed)	\$ 23	\$ 32	\$ 27	\$ 27	\$ 15	\$ 15	\$ 23			
	WJHMP Transit CSA/CFD (Proposed)	\$ 171	\$ 234	\$ 200	\$ 200	\$ 114	\$ 114	\$ 171			
	Water Drainage Studies - SCWA 13	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7			
	Subtotal	\$ 2,213	\$ 2,993	\$ 2,490	\$ 2,314	\$ 1,707	\$ 1,702	\$ 2,213			
	Proposed New Infrastructure CFD Special Tax										
	Infrastructure CFD Special Tax (iv)	\$ 3,447	\$ 2,489	\$ 2,066	\$ 1,063	\$ 731	\$ 1,943				
	Subtotal	\$ 3,447	\$ 2,489	\$ 2,066	\$ 1,063	\$ 731	\$ 1,943				
	Total Tax/Assessment Per Land Use	\$ 15,300	\$ 11,790	\$ 10,350	\$ 6,480	\$ 5,670	\$ 9,813				
	Target Total Tax/Assessment Rate %	1.80%	1.80%	1.80%	1.80%	1.80%	1.80%				
	BOLD Special Tax for Bonding	\$ 137,889	\$ 5,999,045	\$ 508,352	\$ 1,026,010	\$ 335,526	\$ 8,006,823				
Bond Analysis	Sources of Funds:										
											5.50%
	Principal Amount of Bond										\$ 129,040,000
	Less Underwriter's Discount										(2,580,800)
	Net Bond Proceeds										\$ 126,459,200
	Use of Funds:										
	Debt Service Reserve Fund										\$ 11,993,132
	Capitalized Interest										\$ 7,097,200
	Costs of Issuance										\$ 3,871,200
	Improvement Fund										\$ 103,497,668
	Total Uses of Funds										\$ 126,459,200
	Improvement Fund per Unit										\$ 25,121

Footnotes:

(i) Per developer.

Finance Area C CRPD

Land Use	Residential	Mixed Use	
		Residential	Total
No. of Homes (i)		532	532
Average Size of Home (i)		1000	1,000
Estimated Average Home Price (Base)(i)	\$	315,000	\$ 315,000
Less Homeowner's Exemption		(7,000)	\$ (7,000)
Assessed Value	\$	308,000	\$ 308,000
Tax/Assessment Information	Ad Valorem: (ii)	%	
	General	1.00000%	\$ 3,080 \$ 3,080
	Los Rios GOB	0.01920%	\$ 59 \$ 59
	Elk Grove Unified GOB	0.03180%	\$ 98 \$ 98
	Subtotal	1.05100%	\$ 3,237 \$ 3,237
	Special Taxes/Assessment:		
	CSA 1 LIGHTS SAC UNICORP ZONE 1	\$ 18	\$ 18 \$ 18
	CSA 10 BENEFIT ZONE TBD	\$ 72	\$ 72 \$ 72
	POLICE SERVICES CFD NO 2005-1	\$ 360	\$ 360 \$ 360
	CRPD CFD No. 2018-1	\$ 412	\$ 412 \$ 412
	ELK GROVE UNIFIED SCHOOL DIST CFD 1	\$ 200	\$ 200 \$ 200
	WJHMP Services CFD (Proposed)	\$ 503	\$ 503 \$ 503
	Jackson Corridor Trail Maint. CFD (Proposed)	\$ 15	\$ 15 \$ 15
	WJHMP Transit CSA/CFD (Proposed)	\$ 114	\$ 114 \$ 114
	Water Drainage Studies - SCWA 13	\$ 7	\$ 7 \$ 7
	Subtotal	\$ 1,702	\$ 1,702 \$ 1,702
	Proposed New Infrastructure CFD Special Tax		
	Infrastructure CFD Special Tax (iv)	\$ 731	\$ 731
	Subtotal	\$ 731	\$ 731
	Total Tax/Assessment Per Land Use	\$ 5,670	\$ 5,670
	Target Total Tax/Assessment Rate %	1.80%	1.80%
	BOLD Special Tax for Bonding	\$ 388,888	\$ 388,888
Bond Analysis	<b>Sources of Funds:</b>		<b>5.50%</b>
	Principal Amount of Bond		\$ 5,570,000
	Less Underwriter's Discount	2.0%	(111,400)
	Net Bond Proceeds		<u>\$ 5,458,600</u>
	<b>Use of Funds:</b>		
	Debt Service Reserve Fund		\$ 518,015
	Capitalized Interest		\$ 306,350
	Costs of Issuance	3.0%	\$ 167,100
	Improvement Fund		<u>\$ 4,467,135</u>
	Total Uses of Funds		<u>\$ 5,458,600</u>
			\$ 8,397

Footnotes:

(i) Per developer.

Appendix C  
West Jackson Highway Master Plan  
CFD Tax Rate Analysis

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## Finance Area A SRPD

Land Use	Residential		Mixed Use			
		Low Density	High Density	Residential	Total	
No. of Homes (i)		334	375	211	920	
Average Size of Home (i)		2200	1000	1000	1,436	
Estimated Average Home Price (Base)(i)		\$ 655,000	\$ 360,000	\$ 315,000	\$ 456,777	
Less Homeowner's Exemption		(7,000)	(7,000)	(7,000)	(7,000)	
Assessed Value		\$ 648,000	\$ 353,000	\$ 308,000	\$ 449,777	
Tax/Assessment Information	Ad Valorem: (ii)	%				
	General	1.00000%	\$ 6,480	\$ 3,530	\$ 3,080	\$ 4,498
	Los Rios GOB	0.01920%	\$ 124	\$ 68	\$ 59	\$ 86
	Elk Grove Unified GOB	0.03180%	\$ 206	\$ 112	\$ 98	\$ 143
	Subtotal	1.05100%	\$ 6,810	\$ 3,710	\$ 3,237	\$ 4,727
	Special Taxes/Assessment:					
	CSA 1 LIGHTS SAC UNICORP ZONE 1	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18
	CSA 10 BENEFIT ZONE TBD	\$ 92	\$ 127	\$ 72	\$ 72	\$ 92
	POLICE SERVICES CFD NO 2005-1	\$ 407	\$ 491	\$ 360	\$ 360	\$ 407
	SRPD CFD No. TBD	\$ 438	\$ 548	\$ 375	\$ 375	\$ 438
	ELK GROVE UNIFIED SCHOOL DIST CFD 1	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200
	WJHMP Services CFD (Proposed)	\$ 651	\$ 906	\$ 508	\$ 503	\$ 651
	Jackson Corridor Trail Maint. CFD (Proposed)	\$ 20	\$ 27	\$ 15	\$ 15	\$ 20
	WJHMP Transit CSA/CFD (Proposed)	\$ 146	\$ 200	\$ 114	\$ 114	\$ 146
	Water Drainage Studies - SCWA 13	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7
	Subtotal	\$ 1,979	\$ 2,524	\$ 1,670	\$ 1,665	\$ 1,979
	Proposed New Infrastructure CFD Special Tax					
	Infrastructure CFD Special Tax (iv)	\$ 2,456	\$ 1,100	\$ 768	\$ 1,516	
	Subtotal	\$ 2,456	\$ 1,100	\$ 768	\$ 1,516	
	Total Tax/Assessment Per Land Use	\$ 11,790	\$ 6,480	\$ 5,670	\$ 8,222	
	Target Total Tax/Assessment Rate %	1.80%	1.80%	1.80%	1.80%	
	BOLD Special Tax for Bonding	\$ 820,213	\$ 412,609	\$ 162,061	\$ 1,394,883	
Bond Analysis	<b>Sources of Funds:</b>					<b>5.50%</b>
	Principal Amount of Bond					\$ 21,365,000
	Less Underwriter's Discount		2.0%			(427,300)
	Net Bond Proceeds					\$ 20,937,700
	<b>Use of Funds:</b>					
	Debt Service Reserve Fund					\$ 1,986,129
	Capitalized Interest					\$ 1,175,075
	Costs of Issuance		3.0%			\$ 640,950
	Improvement Fund					\$ 17,135,546
	Total Uses of Funds					\$ 20,937,700
	Improvement Fund per Unit					\$ 18,626

Footnotes:

(i) Per developer.

Appendix C  
West Jackson Highway Master Plan  
CFD Tax Rate Analysis

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## Finance Area B SRPD

Land Use	Residential			
		Low Density	High Density	Total
	No. of Homes (i)	955	58	1013
	Average Size of Home (i)	2200	1000	2,131
	Estimated Average Home Price (Base)(i)	\$ 655,000	\$ 360,000	\$ 638,110
Tax/Assessment Information	Less Homeowner's Exemption	(7,000)	(7,000)	\$ (7,000)
	Assessed Value	\$ 648,000	\$ 353,000	\$ 631,110
	Ad Valorem: (ii)	%		
	General	1.00000%	\$ 6,480	\$ 3,530 \$ 6,311
	Los Rios GOB	0.01920%	\$ 124	\$ 68 \$ 121
	Elk Grove Unified GOB	0.03180%	\$ 206	\$ 112 \$ 201
	Subtotal	1.05100%	\$ 6,810	\$ 3,710 \$ 6,633
	Special Taxes/Assessment:			
	CSA 1 LIGHTS SAC UNICORP ZONE 1	\$ 18	\$ 18	\$ 18
	CSA 10 BENEFIT ZONE TBD	\$ 124	\$ 127	\$ 124
	POLICE SERVICES CFD NO 2005-1	\$ 483	\$ 491	\$ 483
	SRPD CFD No. TBD	\$ 538	\$ 548	\$ 538
	ELK GROVE UNIFIED SCHOOL DIST CFD 1	\$ 200	\$ 200	\$ 200
	WJHMP Services CFD (Proposed)	\$ 883	\$ 906	\$ 883
	Jackson Corridor Trail Maint. CFD (Proposed)	\$ 26	\$ 27	\$ 26
	WJHMP Transit CSA/CFD (Proposed)	\$ 195	\$ 200	\$ 195
	Water Drainage Studies - SCWA 13	\$ 7	\$ 7	\$ 7
	Subtotal	\$ 2,475	\$ 2,524	\$ 1,670 \$ 2,475
	Proposed New Infrastructure CFD Special Tax			
	Infrastructure CFD Special Tax (iv)	\$ 2,456	\$ 1,100	\$ 2,378
	Subtotal	\$ 2,456	\$ 1,100	\$ 2,378
	Total Tax/Assessment Per Land Use	\$ 11,790	\$ 6,480	\$ 11,486
	Target Total Tax/Assessment Rate %	1.80%	1.80%	1.80%
Bond Analysis	BOLD Special Tax for Bonding	\$ 2,345,219	\$ 63,817	\$ 2,409,035
	<b>Sources of Funds:</b>			<b>5.50%</b>
	Principal Amount of Bond			\$ 36,490,000
	Less Underwriter's Discount	2.0%		(729,800)
	Net Bond Proceeds			\$ 35,760,200
	<b>Use of Funds:</b>			
	Debt Service Reserve Fund			\$ 3,391,643
	Capitalized Interest			\$ 2,006,950
	Costs of Issuance	3.0%		\$ 1,094,700
	Improvement Fund			\$ 29,266,907
	Total Uses of Funds			\$ 35,760,200
	Improvement Fund per Unit			\$ 28,891

Footnotes:

(i) Per developer.

## Finance Area C SRPD

Land Use	Residential	Very Low Density		Low Density		Medium Density		High Density		Mixed Use Residential	Total
	No. of Homes (i)	190		4393		574		1428		475	7060
	Average Size of Home (i)	2600		2200		1800		1000		1000	1,855
	Estimated Average Home Price (Base)(i)	\$ 850,000	\$	655,000	\$	575,000	\$	360,000	\$	315,000	\$ 571,200
	Less Homeowner's Exemption	(7,000)		(7,000)		(7,000)		(7,000)		(7,000)	\$ (7,000)
	Assessed Value	\$ 843,000	\$	648,000	\$	568,000	\$	353,000	\$	308,000	\$ 564,200
PER HOME TAX / ASSESSMENT											
Tax/Assessment Information	Ad Valorem: (ii)	%									
	General	1.00000%	\$	8,430	\$	6,480	\$	5,680	\$	3,530	\$ 5,642
	Los Rios GOB	0.01920%	\$	162	\$	124	\$	109	\$	68	\$ 108
	Elk Grove Unified GOB	0.03180%	\$	268	\$	206	\$	181	\$	112	\$ 179
	Subtotal	1.05100%	\$	8,860	\$	6,810	\$	5,970	\$	3,710	\$ 5,930
	Special Taxes/Assessment:										
	CSA 1 LIGHTS SAC UNICORP ZONE 1	\$ 18	\$	18	\$	18	\$	18	\$	18	\$ 18
	CSA 10 BENEFIT ZONE TBD	\$ 113	\$	148	\$	127	\$	127	\$	72	\$ 113
	POLICE SERVICES CFD NO 2005-1	\$ 455	\$	491	\$	491	\$	491	\$	360	\$ 455
	SRPD CFD No. TBD	\$ 502	\$	548	\$	548	\$	548	\$	375	\$ 502
	ELK GROVE UNIFIED SCHOOL DIST CFD 1	\$ 200	\$	200	\$	200	\$	200	\$	200	\$ 200
	WJHMP Services CFD (Proposed)	\$ 796	\$	1,348	\$	906	\$	729	\$	508	\$ 796
	Jackson Corridor Trail Maint. CFD (Proposed)	\$ 24	\$	32	\$	27	\$	27	\$	15	\$ 24
	WJHMP Transit CSA/CFD (Proposed)	\$ 178	\$	234	\$	200	\$	200	\$	114	\$ 178
	Water Drainage Studies - SCWA 13	\$ 7	\$	7	\$	7	\$	7	\$	7	\$ 7
	Subtotal	\$ 2,292	\$	3,026	\$	2,524	\$	2,347	\$	1,670	\$ 2,292
	Proposed New Infrastructure CFD Special Tax										
	Infrastructure CFD Special Tax (iv)	\$ 3,414	\$	2,456	\$	2,033	\$	1,100	\$	768	\$ 2,059
	Subtotal	\$ 3,414	\$	2,456	\$	2,033	\$	1,100	\$	768	\$ 2,059
	Total Tax/Assessment Per Land Use	\$ 15,300	\$	11,790	\$	10,350	\$	6,480	\$	5,670	\$ 10,282
	Target Total Tax/Assessment Rate %	1.80%		1.80%		1.80%		1.80%		1.80%	1.80%
	BOLD Special Tax for Bonding	\$ 648,608	\$	10,788,005	\$	1,166,924	\$	1,571,216	\$	364,829	\$ 14,539,583
Bond Analysis	<b>Sources of Funds:</b>										
											5.50%
	Principal Amount of Bond										\$ 235,400,000
	Less Underwriter's Discount										(4,708,000)
	Net Bond Proceeds										\$ 230,692,000
	<b>Use of Funds:</b>										
	Debt Service Reserve Fund										\$ 21,878,393
	Capitalized Interest										\$ 12,947,000
	Costs of Issuance										\$ 7,062,000
	Improvement Fund										\$ 188,804,607
	Total Uses of Funds										\$ 230,692,000
	Improvement Fund per Unit										\$ 26,743

Footnotes:

(i) Per developer.

**APPENDIX D**  
**WEST JACKSON HIGHWAY MASTER PLAN**  
**PLAN AREA FEE ANALYSIS**

Item	Buildout					Fee Amount
	Units	EDIU Factor	EDUs	% of Total	Cost Allocation	
					\$ 183,460,850	
<b>Residential Land Uses</b>	<u>Per Unit</u>	<u>Per Unit</u>				<u>Units</u>
Very Low Density	230	1.17	269	1%	\$ 1,879,727	8,173
Low Density	9,774	1	9,774	37%	\$ 68,273,714	6,985
Medium Density	820	1	820	3%	\$ 5,727,895	6,985
High Density	3,636	0.57	2,073	8%	\$ 14,477,045	3,982
Mixed Use Residential	2,024	0.57	1,154	4%	\$ 8,058,729	3,982
<b>Total Residential Land Uses</b>	16,484		<b>14,089</b>	<b>53.6%</b>	<b>\$ 98,417,110</b>	
<b>Non-Residential Land Uses</b>	<u>Bldg SF</u>	<u>per 1,000 Bldg SF</u>				<u>Bldg. Sq. Ft.</u>
Mixed Use Commercial	1,225,703	1.09	1,336	5%	\$ 9,332,391	\$ 7.61
Commercial	3,166,067	1.09	3,451	13%	\$ 24,106,147	\$ 7.61
Employment	6,434,904	0.96	6,178	24%	\$ 43,151,361	\$ 6.71
Industrial	2,017,073	0.6	1,210	5%	\$ 8,453,841	\$ 4.19
<b>Total Non-Residential Land Uses</b>	12,843,747		<b>12,174.8</b>	<b>46.4%</b>	<b>\$ 85,043,740</b>	
<b>Total Transportation - Local Costs</b>			<b>26,264</b>	<b>100%</b>	<b>\$ 183,460,850</b>	

Item	Buildout					Fee	
	Units	EDIU Factor	EDUs	% of Total	Cost Allocation	Amount	
					\$	18,388,084	
<b>Residential Land Uses</b>	<u>Per Unit</u>	<u>Per Unit</u>					<u>Units</u>
Very Low Density	230	1.17	269	1%	\$ 188,403		819
Low Density	9,774	1	9,774	37%	\$ 6,843,001		700
Medium Density	820	1	820	3%	\$ 574,101		700
High Density	3,636	0.57	2,073	8%	\$ 1,451,019		399
Mixed Use Residential	2,024	0.57	1,154	4%	\$ 807,718		399
<b>Total Residential Land Uses</b>	16,484		<b>14,089</b>	<b>53.6%</b>	<b>\$ 9,864,241</b>		
<b>Non-Residential Land Uses</b>	<u>Bldg SF</u>	<u>per 1,000 Bldg SF</u>					<u>Bldg. Sq. Ft.</u>
Mixed Use Commercial	1,225,703	1.09	1,336	5%	\$ 935,376		\$ 0.76
Commercial	3,166,067	1.09	3,451	13%	\$ 2,416,133		\$ 0.76
Employment	6,434,904	0.96	6,178	24%	\$ 4,325,015		\$ 0.67
Industrial	2,017,073	0.6	1,210	5%	\$ 847,319		\$ 0.42
<b>Total Non-Residential Land Uses</b>	12,843,747		<b>12,174.8</b>	<b>46.4%</b>	<b>\$ 8,523,843</b>		
<b>Total Trails</b>			<b>26,264</b>	<b>100%</b>	<b>\$ 18,388,084</b>		

## Appendix D

## WJHMP Fee Water Component Rates - SCWA (2023\$)

## West Jackson Highway Master Plan

Buildout							
Item	Connections Per Unit/Acre [1]	Units/Acres	Total Connections	% of Total	Cost Allocation	Res. Units/ Non- Res Bldg. Sq. Ft./Acres	Cost per Unit/ Non-Res Bldg. Sq. Ft./Acres
					\$ 11,310,740		
<b>Residential Land Uses</b>	<u>Per Unit</u>	<u>Units</u>				<u>Units</u>	
Very Low Density	1.00	190	190	1.7%	\$ 196,282	190	\$ 1,033
Low Density	1.00	7,341	7,341	67.0%	\$ 7,583,463	7,341	\$ 1,033
Medium Density	1.00	574	574	5.2%	\$ 592,979	574	\$ 1,033
High Density	0.75 [2]	2,461	1,846	16.9%	\$ 1,906,584	2,461	\$ 775
Mixed Use Residential	0.75	1,126	845	7.7%	\$ 872,422	1,126	\$ 775
<b>Total Residential Land Uses</b>		<b>11,692</b>	<b>10,795</b>	<b>98.6%</b>	<b>\$ 11,151,730</b>	<b>11,692</b>	
<b>Non-Residential Land Uses</b>	<u>Per Acre</u>	<u>Acres</u>				<u>Bldg. Sq. Ft.</u>	
Mixed Use Commercial	0.40	25.0	10	0.1%	\$ 10,351	681,945	\$ 0.02
Commercial	0.40	80.9	32	0.3%	\$ 33,437	881,181	\$ 0.04
Employment	0.40	199.5	80	0.7%	\$ 82,453	2,607,531	\$ 0.03
Industrial	0.40	79.3	32	0.3%	\$ 32,769	1,036,292	\$ 0.03
<b>Total Non-Residential Land Uses</b>		<b>384.8</b>	<b>153.9</b>	<b>1.4%</b>	<b>\$ 159,009</b>	<b>5,206,949</b>	
<b>Total Residential and Non-Residential</b>			<b>10,949</b>	<b>100%</b>	<b>\$ 11,310,740</b>		

## Appendix D

## WJHMP Fee Sewer Component Rates (2023\$)

West Jackson Highway Master Plan

Item	Flow Rate (GPD)	# of Units	Total GPD	% of Total	Cost Allocation [1]	Residential Units/ Non-Res Bldg. Sq. Ft.	Cost per Unit/ Non-Res Bldg. Sq. Ft.
					\$ 21,105,872		
<b>Residential Land Uses</b>	<u>per unit</u>	<u>DUs</u>				<u>dwelling units</u>	
Very Low Density	310	230	71,300	1%	\$ 234,516	230	\$ 1,020
Low Density	310	9,774	3,029,940	47%	\$ 9,965,889	9,774	\$ 1,020
Medium Density	310	820	254,200	4%	\$ 836,099	820	\$ 1,020
High Density	233	3,636	847,188	13%	\$ 2,786,518	3,636	\$ 766
Mixed Use Residential [2]	310	2,024	627,440	10%	\$ 2,063,736	2,024	\$ 1,020
<b>Total Residential Land Uses</b>		<b>16,484</b>	<b>4,830,068</b>	<b>75%</b>	<b>\$ 15,886,758</b>	<b>16,484</b>	
<b>Non-Residential Land Uses</b>	<u>per acre</u>	<u>net acres</u>				<u>bldg. sq. ft.</u>	
Mixed Use Commercial	1,900	38	72,709	1%	\$ 239,151	1,225,703	\$ 0.20
Commercial	1,900	247	469,531	7%	\$ 1,544,353	3,166,067	\$ 0.49
Employment	1,900	419	795,254	12%	\$ 2,615,699	6,434,904	\$ 0.41
Industrial	1,900	131	249,279	4%	\$ 819,912	2,017,073	\$ 0.41
<b>Total Non-Residential Land Uses</b>		<b>835.1</b>	<b>1,586,773</b>	<b>25%</b>	<b>\$ 5,219,114</b>	<b>12,843,747</b>	
<b>Total Residential and Non-Residential</b>			<b>6,416,841</b>	<b>100%</b>	<b>\$ 21,105,872</b>		

Appendix D

WJHMP Fee Drainage Component Rates (2023\$)  
West Jackson Highway Master Plan

Buildout							
Item	Net Acres	Units/ Bldg. Sq. Ft.	FAR	Percentage Distribution	Cost Allocation	Cost per Acre	Cost per Unit/ Bldg. Sq. Ft.
					\$ 223,056,265		
<b>Residential Land Uses</b>		<u>units</u>					
Very Low Density	98.3	230	N/A	3.50%	\$ 7,811,820	\$ 79,507	\$ 33,964
Low Density	1,661.8	9,774	N/A	59.23%	\$ 132,125,562	\$ 79,507	\$ 13,518
Medium Density	49.8	820	N/A	1.78%	\$ 3,961,929	\$ 79,507	\$ 4,832
High Density	103.0	3,636		3.67%	\$ 8,193,116	\$ 79,507	\$ 2,253
Mixed Use Residential	57.4	2,024	N/A	2.05%	\$ 4,563,874	\$ 79,507	\$ 2,255
<b>Total Residential Land Uses</b>	<b>1,970.3</b>	<b>16,484</b>		<b>70.23%</b>	<b>\$ 156,656,300</b>		
<b>Non-Residential Land Uses</b>		<u>bldg. sq. ft.</u>					
Mixed Use Commercial	38.3	1,225,703		1.36%	\$ 3,042,583	\$ 79,507	\$ 2.48
Commercial	247.1	3,166,067		8.81%	\$ 19,647,967	\$ 79,507	\$ 6.21
Employment	418.6	6,434,904		14.92%	\$ 33,278,118	\$ 79,507	\$ 5.17
Industrial	131.2	2,017,073		4.68%	\$ 10,431,297	\$ 79,507	\$ 5.17
<b>Total Non-Residential Land Uses</b>	<b>835.1</b>	<b>12,843,747</b>		<b>29.77%</b>	<b>\$ 66,399,965</b>		
<b>Total Residential and Non-Residential</b>	<b>2,805.5</b>			<b>100.00%</b>	<b>\$ 223,056,265</b>		

**Appendix D** *Open Space Cost Allocation for Development (2023\$)*  
*West Jackson Highway Master Plan*

Buildout							
Item	Acres	Units/ Sq. Ft.	FAR	Percentage Distribution	Cost Allocation	Cost per Acre	Cost per Unit/ Bldg. Sq. Ft.
					\$ 13,531,343		
<b>Residential Land Uses</b>		<u>Units</u>					<u>Per Unit</u>
Very Low Density	116	230	N/A	4%	\$ 473,891	\$ 4,100	\$ 2,060
Low Density	1,955	9,774	N/A	59%	\$ 8,015,181	\$ 4,100	\$ 820
Medium Density	59	820	N/A	2%	\$ 240,344	\$ 4,100	\$ 293
High Density	121	3,636	N/A	4%	\$ 497,022	\$ 4,100	\$ 137
Mixed Use Residential	68	2,024	N/A	2%	\$ 276,860	\$ 4,100	\$ 137
<b>Total Residential Land Uses</b>	<b>2,318</b>	<b>16,484</b>		<b>70%</b>	<b>\$9,503,298</b>		
<b>Non-Residential</b>		<u>Bldg. Sq. Ft.</u>					<u>Per Bldg. Sq. Ft.</u>
Mixed Use Commercial	45	1,225,703	N/A	1%	\$ 184,573	\$ 4,100	\$ 0.15
Commercial	291	3,166,067	N/A	9%	\$ 1,191,912	\$ 4,100	\$ 0.38
Employment	492	6,434,904	N/A	15%	\$ 2,018,763	\$ 4,100	\$ 0.31
Industrial	154	2,017,073	N/A	5%	\$ 632,798	\$ 4,100	\$ 0.31
<b>Subtotal Non-Residential</b>	<b>983</b>	<b>12,843,747</b>		<b>30%</b>	<b>\$4,028,045</b>		
<b>Total Residential and Non-Residential</b>	<b>3,301</b>			<b>100%</b>	<b>\$ 13,531,343</b>	<b>\$4,100</b>	

**Engineer's Opinion of Preliminary Cost  
Preliminary Tunnel Closures**

Identifier	Description	Quantity	Unit	\$ / Unit	Total
<b>Tunnel 0</b>	<b><u>Jackson Highway - 6' Diameter, 180' Long</u></b>				
	Soil Basket Bulkhead	72	SF	\$ 200.00	\$ 14,400
	Flowable Slurry Backfill	188	CY	\$ 270.00	\$ 50,868
	Soft Costs			20%	\$ 13,054
	Contingency			30%	\$ 19,580
					<b>\$ 100,000</b>
<b>Tunnel 1</b>	<b><u>Jackson Highway - 6' Diameter, 175' Long</u></b>				
	Soil Basket Bulkhead	72	SF	\$ 200.00	\$ 14,400
	Flowable Slurry Backfill	183	CY	\$ 270.00	\$ 49,455
	Soft Costs			20%	\$ 12,771
	Contingency			30%	\$ 19,157
					<b>\$ 100,000</b>
<b>Tunnel 2</b>	<b><u>Bradshaw Road - 9' Diameter, 230' Long</u></b>				
	Soil Basket Bulkhead	162	SF	\$ 200.00	\$ 32,400
	Flowable Slurry Backfill	542	CY	\$ 270.00	\$ 146,246
	Soft Costs			20%	\$ 35,729
	Contingency			30%	\$ 53,594
					<b>\$ 270,000</b>
<b>Tunnel 3</b>	<b><u>Fruitridge Road - 9' Diameter, 190' Long</u></b>				
	Soil Basket Bulkhead	162	SF	\$ 200.00	\$ 32,400
	Flowable Slurry Backfill	447	CY	\$ 270.00	\$ 120,812
	Soft Costs			20%	\$ 30,642
	Contingency			30%	\$ 45,963
					<b>\$ 230,000</b>
<b>Tunnel 4</b>	<b><u>Bradshaw Road - 7.5' Diameter, 160' Long</u></b>				
	Soil Basket Bulkhead	113	SF	\$ 200.00	\$ 22,500
	Flowable Slurry Backfill	262	CY	\$ 270.00	\$ 70,650
	Soft Costs			20%	\$ 18,630
	Contingency			30%	\$ 27,945
					<b>\$ 140,000</b>
<b>Tunnel 5</b>	<b><u>Bradshaw Road - 8' Diameter, 245' Long</u></b>				
	Soil Basket Bulkhead	128	SF	\$ 200.00	\$ 25,600
	Flowable Slurry Backfill	456	CY	\$ 270.00	\$ 123,088
	Soft Costs			20%	\$ 29,738
	Contingency			30%	\$ 44,606
					<b>\$ 220,000</b>
<b>Tunnel 6</b>	<b><u>Jackson Highway - 8' Diameter, 360' Long</u></b>				
	Soil Basket Bulkhead	128	SF	\$ 200.00	\$ 25,600
	Flowable Slurry Backfill	670	CY	\$ 270.00	\$ 180,864
	Soft Costs			20%	\$ 41,293
	Contingency			30%	\$ 61,939
					<b>\$ 310,000</b>