

## **RESOLUTION NO. 2022-0167**

Adopted by the Sacramento City Council

May 31, 2022

### **Adopting the Panhandle Planned Unit Development Public Facilities Finance Plan and Development Impact Fee Nexus Study – 2022 Update**

#### **BACKGROUND**

- A. On July 14, 2016, and April 27, 2017, the City Planning and Design Commission held public hearings on the Panhandle Annexation Project.
- B. On June 14, 2018, the City Planning and Design Commission held a public hearing on the Panhandle Annexation Project and the Panhandle Planned Unit Development Public Facilities Finance Plan (the “Finance Plan”) received and considered evidence, and forwarded to the City Council a recommendation to adopt the Panhandle Annexation Project and the Finance Plan.
- C. On July 3, 2018, City Council (Council) held a public hearing in accordance with Sacramento City Code sections 17.812.010.2.b and 17.812.030, at which it received and considered evidence concerning the Panhandle Annexation Project and Finance Plan. On conclusion of the public hearing, the Council approved the Panhandle Annexation Project and Finance Plan (Resolution No. 2018-0285). This 2018 Finance Plan updated and replaced the 2007 Panhandle Planned Unit Development Public Facilities Finance Plan, based on revised land use plans, updated technical studies, and refined City and Applicant objectives.
- D. The Finance Plan has again been updated in 2022 by the City’s consultant (the “Panhandle Planned Unit Development Public Facilities Finance Plan and Development Impact Fee Study – 2022 Update,” attached hereto as Exhibit A) to capture increases in construction costs and to establish a reasonable nexus to apportion each land use’s “fair share” of development impact fees.
- E. City staff is seeking Council’s approval of the Panhandle Planned Unit Development Public Facilities Finance Plan and Development Impact Fee Study – 2022 Update, in accordance with the Mitigation Fee Act and AB 602. On May 31, 2022, the City Council held a public hearing, which was noticed pursuant to Government Code section 66016.5(a)(7) and was held as part of a regularly scheduled meeting of the City Council.

**BASED ON THE FACTS SET FORTH IN THE BACKGROUND, THE CITY COUNCIL  
RESOLVES AS FOLLOWS:**

Section 1. Findings.

The City Council hereby finds as follows:

- A. The recitals set forth in the Background above are true and correct and are incorporated herein by reference as findings.
- B. The Panhandle Planned Unit Development Public Facilities Finance Plan and Development Impact Fee Nexus Study – 2022 Update (the “Updated Finance Plan”) sets forth a rational, fair, and equitable method by which the cost of necessary public infrastructure and facilities in the Panhandle Planned Unit Development area (the “Plan Area”) is to be allocated to the various land uses in the Plan Area.
- C. The Updated Finance Plan properly and reasonably allocates the burden of financing Plan Area public infrastructure and facilities among development projects within the Plan Area. The burden is allocated in a manner that achieves proper proportionality in light of the impacts that may reasonably be anticipated from those projects.
- D. The Updated Finance Plan: (1) properly and reasonably identifies the purpose of the fee and its intended use; (2) establishes a reasonable relationship between the fee’s use and the type of development project on which the fee is imposed; (3) establishes a reasonable relationship between the need for the public infrastructure and facilities and the type of development project on which the fee is imposed; and (4) forms the basis for the finding that the imposition of the fee described therein is necessary in order to protect the public health, safety, and welfare within the Plan Area and the city.
- E. The Updated Finance Plan may be revised over time under future circumstances in order to achieve the purposes and policies of the Plan Area.
- F. The findings, conclusions, and methodologies set forth in the Updated Finance Plan are consistent with the North Natomas Community Plan.

Section 2. Adoption of the Updated Finance Plan.

- A. The Updated Finance Plan, attached hereto as Exhibit A, and other supporting data referred to in the Updated Finance Plan are hereby approved and adopted.

- B. The 2018 “Panhandle Planned Unit Development Public Facilities Finance Plan” is hereby replaced in its entirety by the Updated Finance Plan.
- C. A copy of the Updated Finance Plan will remain on file with the Infrastructure Finance Division of the Department of Finance.

Section 3. Exhibit A is part of this resolution.

**Table of Contents:**

Exhibit A - Panhandle Planned Unit Development Public Facilities Finance Plan and Development Impact Fee Nexus Study – 2022 Update

Adopted by the City of Sacramento City Council on May 31, 2022, by the following vote:

Ayes: Members Ashby, Guerra, Harris, Jennings, Loloee, Schenirer, Valenzuela, Vang, and Mayor Steinberg

Noes: None

Abstain: None

Absent: None

Attest:



06/22/2022

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Mindy Cuppy, City Clerk

*The presence of an electronic signature certifies that the foregoing is a true and correct copy as approved by the Sacramento City Council.*

*The Economics of Land Use*



## **Draft Report**

# Panhandle Planned Unit Development Public Facilities Finance Plan and Development Impact Fee Nexus Study— 2022 Update

### **Prepared for:**

City of Sacramento

### **Prepared by:**

Economic & Planning Systems, Inc. (EPS)

May 2022

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**May 31, 2022**

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# 1. Introduction and Summary

The Panhandle Planned Unit Development (PUD) project (Panhandle or Project) consists of approximately 589 acres of primarily vacant land located in the City of Sacramento (City) north of Del Paso Road, south of Elkhorn Boulevard, west of Sorento Road/East Levee Road, and east of the developed neighborhoods known as Natomas Park and Regency Park. The Project is located within the North Natomas Community Plan Area identified in the North Natomas Community Plan (NNCP). The NNCP was adopted by the City in 1986 per City Council Resolution #86-348 and amended in 1994 per City Council Resolution #94-259. A North Natomas Financing Plan (NNFP) was adopted by the City in 1994 per City Council Resolution #94-495 to identify the costs and funding sources required for development of the NNCP.

Panhandle was added to the NNCP in 1986 and was included in the Natomas Basin Habitat Conservation Plan area and the City's sphere of influence. It was originally contemplated that Panhandle would be included in the NNFP because the Panhandle area is adjacent to the NNFP area, but since development was delayed in Panhandle, the Project was excluded from the boundaries of the NNFP. Consequently, Panhandle is in the NNCP but outside of the NNFP. The Sacramento Local Agency Formation Commission (LAFCO) formally approved annexation of Panhandle into the City's territorial limits on April 3, 2019, per LAFCO Resolution #019-04-0403-02-18.

This Panhandle Planned Unit Development Public Facilities Finance Plan and Development Impact Fee Nexus Study—2022 Update (Finance Plan) updates the 2018 Panhandle Planned Unit Development Public Facilities Finance Plan (2018 Finance Plan), which was approved by the Sacramento City Council on July 3, 2018, per City Council Resolution #2018-0285. This document updates the financing strategy for backbone infrastructure and public facilities (as defined herein) based on improvement, cost, and funding revisions, details the proposed Panhandle Fee Program that will be a major funding source for the backbone infrastructure and public facilities, and provides the legally required findings necessary for the establishment of the proposed Panhandle Impact Fee Component of the Panhandle Fee Program.

## Project Background and Land Use

An initial application for the Project was submitted in 2006, and in 2007, the original Panhandle Planned Unit Development Public Facilities Finance Plan was prepared (2007 Finance Plan). However, because of the economic downturn and the U.S. Army Corps of Engineers' actions to decertify the levee system protecting the Natomas Basin, the Project did not proceed at that time, and the 2007



Finance Plan was never adopted by City Council. The Project applicant (Applicant), who coordinated with the City on behalf of six property owners, subsequently submitted revised plans for development of Panhandle. The 2018 Finance Plan was prepared to replace the 2007 Finance Plan based on the revised land use plan, updated technical studies, and refined City and Applicant objectives. This Finance Plan provides cost and funding updates to the 2018 Finance Plan and establishes the Panhandle Fee Program.

As shown on **Table 1-1**, the Project as proposed contains 1,662 residential dwelling units. All units have the City General Plan designation of Suburban Neighborhood Low Density, which allows a development density of 3 to 8 dwelling units per net acre. The Panhandle PUD further differentiates the unit types by creating the three sub-designations of estate, traditional, and village lots. The planned units consist of 340 estate units with an average density of 4.5 units per acre, 869 traditional units with an average density of 5.9 units per acre, and 453 village units with an average density of 7.5 units per acre. The Project area also contains public facilities including parks, an elementary school site, a high school/middle school site, open space, a detention basin, and roadways.

## Purpose of the Finance Plan

The Finance Plan identifies all backbone infrastructure improvements, public facilities, and associated administrative costs needed to serve the proposed land uses. Because of the delayed timing of development of the Project, a significant portion of the NNFP infrastructure and public facilities already have been constructed. Therefore, instead of annexing into the NNFP, this Finance Plan includes a separate set of funding mechanisms that will work in conjunction with the NNFP funding strategy. This Finance Plan ensures that the infrastructure and public facilities necessary to serve the Project are constructed and describes the costs and financing mechanisms that will be used to construct these improvements in a timely manner. The Finance Plan is designed to achieve the following goals:

- Identify ways to finance construction of public infrastructure and facilities through public and private financing.
- Use existing City, Sacramento Area Sewer District (SASD), Sacramento Regional County Sanitation District (Regional San), and special district fee programs to the extent possible.
- Identify Project-specific fees to fund all or a portion of major backbone infrastructure and other public facilities not included in existing fee programs. These fees include a combination of fees based on Development Agreement (DA) requirements (Panhandle DA Fees) and fees established per nexus findings (Panhandle Impact Fees) in accordance with the Mitigation Fee Act.

**Table 1-1  
Panhandle Finance Plan  
Land Use Summary**

Land Use	Units per Net Acre	Gross Acres	Net Acres [1]	Dwelling Units
<b>Residential - Suburban Neighborhood Low Density (SNLD)</b>				
Estates (E)	4.5	88.0	75.7	340
Traditional (T)	5.9	162.2	147.7	869
Village (V)	7.5	66.4	60.5	453
<b>Subtotal Residential SNLD</b>		<b>316.6</b>	<b>283.9</b>	<b>1,662</b>
<b>Other Land Uses</b>				
Elementary School	-	11.7	10.0	-
Middle School/High School	-	65.5	60.4	-
Park - Quimby	-	18.0	15.5	-
Ninos Parkway [2]	-	36.0	32.6	-
Detention Basin - Open Space	-	13.6	13.4	-
Planned Development (non-participant)	-	123.0	119.0	-
Major Roads	-	5.0	5.0	-
Collector and Residential Streets [1]	-	0.0	49.6	-
<b>Subtotal Other Land Uses</b>	-	<b>272.8</b>	<b>305.5</b>	-
<b>Total Land Uses</b>		<b>589.4</b>	<b>589.4</b>	<b>1,662</b>

*lu*

Source: MacKay & Somps; City of Sacramento.

[1] Net acres reflect exclusion of collector and residential streets, accounted for in a separate line item.

[2] Includes the 12' Powerline Trail within the WAPA Corridor (Ninos Parkway).

- Provide legally required nexus findings to support City Council's consideration of the Panhandle Impact Fee Component of the Panhandle Fee Program.
- Make maximum use of "pay as you go" mechanisms.
- Make appropriate use of municipal debt-financing mechanisms.
- Build in flexibility to respond to market conditions.
- Provide developer funding for appropriate facilities.

## Summary

### Overview of Financing Strategy

Buildout of the Project will require construction of roadway, sewer, water, drainage, and a variety of other public facilities. Cost estimates for required backbone infrastructure and other public facilities have been derived from a combination of engineering data provided by MacKay & Soms and Harris & Associates (Harris) and other data obtained from the City, Economic & Planning Systems, Inc. (EPS), and other sources. Note that MacKay & Soms prepared the engineering cost estimates in the 2018 Finance Plan, and Harris updated those cost estimates for this Finance Plan. See **Appendix B** for the detailed engineering cost estimates prepared by Harris.

**Table 1-2** summarizes the total cost of backbone infrastructure and other public facilities required to serve the Project and compares the costs to the estimated costs in the 2018 Finance Plan. At buildout, backbone and other public facilities are estimated to cost approximately \$69.9 million, an increase of approximately 9.5% over the 2018 costs. This figure does not include the costs of in-tract and other subdivision-specific improvements, which are anticipated to be financed privately.

**Table 1-3** shows the financing sources used to fund backbone infrastructure and other public facilities for the Project. As shown, the major infrastructure required for development to proceed in the Project is anticipated to be funded through a combination of public and private financing. Fees (i.e., City, Sacramento County [County], other agencies, or plan area fees) will be used to fund required facilities when possible. The City and other agencies serving the Project have existing development impact fee programs to fund a portion of the sewer infrastructure and all of the water, park, and school facilities included in this Finance Plan. For most of the backbone infrastructure, the developer will construct the facilities and may be reimbursed through Mello-Roos Community Facilities District (CFD) bond proceeds and appropriate fee program credits and reimbursements if such arrangements are approved by the City and the appropriate reimbursement or credit agreement is executed.

**Table 1-2**  
**Panhandle Finance Plan**  
**Backbone Infrastructure and Public Facilities Cost Summary**

Item	Estimated Cost		
	2021\$	2018\$	Pct. Change
<b>Backbone Infrastructure</b>			
<b>Roadways</b>			
On-Site Roadways	\$14,096,000	\$12,053,000	16.95%
Off-Site Roadways	\$559,000	\$468,000	19.44%
<b>Subtotal Roadways</b>	<b>\$14,655,000</b>	<b>\$12,521,000</b>	<b>17.04%</b>
Sanitary Sewer	\$1,164,000	\$1,034,000	12.57%
Storm Drainage Construction	\$12,820,000	\$11,380,000	12.65%
Potable Water	\$2,948,000	\$2,694,000	9.43%
<b>Subtotal Backbone Infrastructure - Construction</b>	<b>\$31,587,000</b>	<b>\$27,629,000</b>	<b>14.33%</b>
Storm Drainage Land Acquisition	\$2,128,865	\$1,675,000	27.10%
<b>Subtotal Backbone Infrastructure</b>	<b>\$33,715,865</b>	<b>\$29,304,000</b>	<b>15.06%</b>
<b>Public Facilities</b>			
Ninos Parkway (Landscaping) [1]	\$4,612,000	\$4,297,500	7.32%
Trails [2]	\$1,810,000	\$1,425,100	27.01%
Neighborhood and Community Parks - Quimby [3]	\$6,501,744	\$5,617,560	15.74%
Regional Park Land Acquisition [4]	\$3,968,856	\$3,628,146	9.39%
Transit [4]	\$975,594	\$889,170	9.72%
Fire Facilities [4]	\$990,552	\$902,466	9.76%
Community Center [4]	\$611,616	\$3,456,960	-82.31%
Library [4]	\$1,555,632	\$1,416,024	9.86%
Schools [3]	\$15,141,900	\$12,915,150	17.24%
<b>Subtotal Public Facilities</b>	<b>\$36,167,894</b>	<b>\$34,548,076</b>	<b>4.69%</b>
<b>Total Backbone Infrastructure and Public Facilities Cost</b>	<b>\$69,883,759</b>	<b>\$63,852,076</b>	<b>9.45%</b>

cost sum

Source: MacKay & Soms (November 29, 2017); Harris (January 2022); City of Sacramento

- [1] Includes the Ninos Parkway 20' landscape area adjacent to the 12' Powerline Trail in the WAPA Corridor as well as remaining open space and landscaping within the WAPA Corridor (including areas adjacent to parks). Excludes the cost of the 12' Powerline Class I Bike Trail within the WAPA Corridor.
- [2] Includes the cost for the 12' Powerline (WAPA Corridor) Class I Bike Trail with decomposed granite shoulders within Ninos Parkway and Sotnip Trail. Excludes the landscape area adjacent to the 12' trail and any remaining open space and landscaping within the WAPA Corridor.
- [3] Assumes cost is equal to fee revenue generated by Panhandle PUD development. See Table C-1 for detail.
- [4] Panhandle cost obligation calculated assuming applicable North Natomas development impact fees apply to Panhandle development. See Table 3-9.

Table 1-3  
Panhandle Finance Plan  
Estimated Project Requirements and Funding at Buildout (2021\$)

Estimated Project Requirements and Funding													
Developer Funding via Construction and Fee Payments													
Item	Estimated Improvement Costs	Eligible for Land Secured Financing	Panhandle Fee Program [1]		City Fees		Other Fee Programs		Subtotal Plan Area and Fee Payments	Other Funding Sources			Total
			Impact Fee Component	DA Fee Component	Park Impact Fees	Water System Dev. Fees	SASD	School Mitigation Fees		Offsite Future Reimb.	Regional, State, and Federal/ Other [2]	Private Developer Funding	
Backbone Infrastructure													
Roadways													
On-Site Roadways	\$14,096,000	X	\$14,096,000	-	-	-	-	-	\$14,096,000	-	-	-	\$14,096,000
Off-Site Roadways	\$559,000	X	\$423,000	-	-	-	-	-	\$423,000	\$136,000 [3]	-	-	\$559,000
Subtotal Roadways	\$14,655,000		\$14,519,000	\$0	\$0	\$0	\$0	\$0	\$14,519,000	\$136,000	\$0	\$0	\$14,655,000
Sanitary Sewer	\$1,164,000	X	\$314,000	-	-	-	\$850,000	-	\$1,164,000	-	-	-	\$1,164,000
Storm Drainage	\$14,948,865	X	\$14,948,865	-	-	-	-	-	\$14,948,865	- [4]	-	-	\$14,948,865
Potable Water	\$2,948,000	X	\$0	-	-	\$2,948,000	-	-	\$2,948,000	-	-	-	\$2,948,000
Subtotal Backbone Infrastructure	\$33,715,865		\$29,781,865	\$0	\$0	\$2,948,000	\$850,000	\$0	\$33,579,865	\$136,000	\$0	\$0	\$33,715,865
Public Facilities													
Ninos Parkway (Landscaping) [5]	\$4,612,000	X	\$0	-	-	-	-	-	\$0	-	-	\$4,612,000	\$4,612,000
Trails [6]	\$1,810,000	X	\$1,048,000	-	-	-	-	-	\$1,048,000	\$762,000	-	-	\$1,810,000
Neighborhood and Community Parks - Quimby [7]	\$6,501,744	X	\$0	-	\$6,501,744	-	-	-	\$6,501,744	-	-	-	\$6,501,744
Regional Park Land Acquisition [7] [8]	\$3,968,856	X	\$0	\$3,968,856	-	-	-	-	\$3,968,856	-	-	-	\$3,968,856
Transit [7] [8]	\$975,594	X	\$0	\$975,594	-	-	-	-	\$975,594	-	-	-	\$975,594
Fire Facilities [7] [8]	\$990,552	X	\$0	\$990,552	-	-	-	-	\$990,552	-	-	-	\$990,552
Community Center [7] [9]	\$611,616	X	\$0	\$611,616	-	-	-	-	\$611,616	-	-	-	\$611,616
Library [7] [8]	\$1,555,632	X	\$0	\$1,555,632	-	-	-	-	\$1,555,632	-	-	-	\$1,555,632
Schools [7]	\$15,141,900		\$0	-	-	-	-	\$15,141,900	\$15,141,900	-	-	-	\$15,141,900
Subtotal Public Facilities	\$36,167,894		\$1,048,000	\$8,102,250	\$6,501,744	\$0	\$0	\$15,141,900	\$30,793,894	\$762,000	\$0	\$4,612,000	\$36,167,894
Total Backbone Infrastructure and Public Facilities Cost	\$69,883,759		\$30,829,865	\$8,102,250	\$6,501,744	\$2,948,000	\$850,000	\$15,141,900	\$64,373,759	\$898,000	\$0	\$4,612,000	\$69,883,759

Source: MacKay & Somps (November 29, 2017); Harris (January 2022); City of Sacramento; EPS

S/U

[1] The proposed Panhandle Fee Program is a plan area fee program with an Impact Fee component and a DA Fee component.

[2] "Other" funding may include grant or other sources of revenue such as capital campaigns by user groups.

[3] To the extent that development of the Krumenacher Ranch property proceeds, that property will reimburse Panhandle PUD constructing entities (or other funding parties) for the portion of the costs for off-site roadway improvements that benefit the site. Krumenacher Ranch percentage estimated as 24.4% (\$114,000/\$368,000) based on the 2018 Financing Plan.

[4] As shown on Table 3-4, to the extent that the Krumenacher Ranch property proceeds, the property will reimburse the Project approximately \$411,000 for drainage land acquisition if it utilizes the basin. The offsite reimbursement for drainage is currently excluded from this table because it is uncertain if Krumenacher Ranch will proceed. If Krumenacher Ranch does proceed, it is uncertain how the drainage system will be configured. In the event that Krumenacher Ranch does proceed and utilizes the Panhandle detention basin, the City will require them to pay their proportionate share of the land acquisition cost.

[5] Includes the Ninos Parkway 20' landscape area adjacent to the 12' Powerline Trail in the WAPA Corridor as well as remaining open space and landscaping within the WAPA Corridor (including areas adjacent to parks). Excludes the cost of the 12' Powerline Class I bike trail within the WAPA Corridor. The cost will be funded privately as each property owner has a relatively equal share of the trail and landscape cost and will construct their own portion of the parkway.

[6] Includes the cost for the 12' Powerline (WAPA Corridor) Class I Bike Trail with decomposed granite shoulders within Ninos Parkway and Sotnip trail. Excludes the landscape area adjacent to the 12' trail and any remaining open space and landscaping within the WAPA Corridor. The cost for the WAPA Corridor Trail and Panhandle's share of the Sotnip Trail will be funded through the Panhandle Fee Program. The remainder of the Sotnip Trail will be funded by other benefitting properties.

[7] Assumes cost is equal to fee revenue generated by Panhandle PUD development. See Table C-1 for detail.

[8] Panhandle cost obligation calculated assuming applicable FY 17-18 North Natomas development impact fees apply to Panhandle development. Fees escalated to 2021\$. See Table 3-9.

[9] Panhandle cost obligation calculated assuming FY 21-22 North Natomas community center development impact fees apply to Panhandle development. See Table 3-9.

The Panhandle Fee Program will be used to help fund backbone infrastructure costs and public facilities serving the Project that are not funded through existing public financing mechanisms or by Project developers through private cost-sharing agreements or other funding approaches.

Because the Project borders the NNFP area, there are several public facilities planned or already constructed in the NNFP area, including transit, fire, library, and community center facilities, and regional park land acquisition, that will benefit the Panhandle residents. Therefore, development in the Project will share costs for these facilities with the North Natomas developers, and the Panhandle development fees for these facilities will be based on the North Natomas fees for the same facilities.

Bond financing likely will be needed to help fund items required during the early years of development in the Project, as well as at other strategic times when accumulated development impact fees or other proposed public funding are insufficient to fund the necessary facilities required for new development in a timely manner. Debt financing, however, will be limited to prudent levels and shall be consistent with federal, State of California (State), and City requirements and guidelines.

School facilities will be funded through school mitigation fees and possibly through other funding sources, including the State School Building Program or local general obligation (GO) bonds.

It is expected that costs will change over time. As described in **Chapter 8**, if costs or land uses change significantly, or if other funding becomes available, the Panhandle Fee Program will need to be updated accordingly. **Chapter 8** also describes the annual fee inflation adjustment methodology for the Panhandle Fee Program.

### **Financing Strategy Implementation**

The strategy of the Finance Plan is detailed below:

- Fully fund or construct all backbone infrastructure and other public facilities needed to serve the entire Project.
- Use, when available, existing City and other agency fee programs to fund backbone infrastructure and other public facilities.
- Create the Panhandle Fee Program to help fund facilities not funded through other public financing mechanisms or private funding sources.
- Identify future beneficiaries of Panhandle infrastructure and establish appropriate funding mechanisms.

- Phase backbone infrastructure and other public facility improvements to ensure they are constructed when necessary for new development and when funds are available to construct such public improvements.
- Permit the use of land-secured bond debt financing programs to provide up-front financing for necessary backbone infrastructure and other public facilities when other funding sources are unavailable to provide sufficient funds concurrent with development demands.
- Ensure financing mechanisms are flexible to accommodate different combinations of infrastructure timing and funding requirements.

The City will administer implementation of the Finance Plan, and such administration is anticipated to include the following actions:

- When appropriate, update relevant existing citywide fee programs (such as the Transportation Development Impact Fee (TDIF), Park Impact Fee (PIF) or Water System Development fee) to reflect updated Project land uses, facilities, costs, or revenue sources.
- Implement the Panhandle Fee Program.
- Form a Mello-Roos CFD for infrastructure.
- Form a Mello-Roos CFD for streetscapes, park and open space, and utilities maintenance and other services.
- Annex Project to the North Natomas Transportation Management Association (TMA) or other TMA.

The Finance Plan will need to be updated periodically to account for changes in land uses, infrastructure improvements or cost information, and funding sources. Changes in the Finance Plan should be re-evaluated within the context of the overall financing strategy to ensure required funding is available when needed.

## Organization of the Report

In addition to this introduction and summary chapter, the Finance Plan contains the following information:

- **Chapter 2** summarizes the proposed land uses.
- **Chapter 3** identifies the backbone infrastructure and other public facility costs.
- **Chapter 4** identifies the infrastructure financing strategy and likely funding sources.

- **Chapter 5** details the Panhandle Fee Program and provides the legally required nexus findings that the City Council relies upon for establishment of the Panhandle Impact Fee Component.
- **Chapter 6** evaluates the financial feasibility of the Finance Plan.
- **Chapter 7** identifies the services and ongoing operation and maintenance cost funding sources.
- **Chapter 8** outlines implementation and administration of the Finance Plan.



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## 2. Land Use

### Land Use Assumptions

The 589.4-acre Project is located at the eastern edge of the NNCP, generally bounded by Elkhorn Boulevard to the north, Del Paso Road to the south, Sorento Road/East Levee Road to the east, and the developed neighborhoods of Natomas Park and Regency Park to the west.

Comprising several properties owned by separate parties and entities, which are anticipated to develop as multiple individual subdivisions, the Project site is located on primarily vacant land. High-voltage power lines run in a north-south direction along the eastern part of the property, within a 250-foot powerline easement known as the Western Area Power Administration (WAPA) corridor, within which the Finance Plan calls for an open space/trail facility called Ninos Parkway. The Project area is designated Planned Development (PD) under the adopted City 2035 General Plan.

The Project area was annexed into the City in 2019. The land use plan is summarized below:

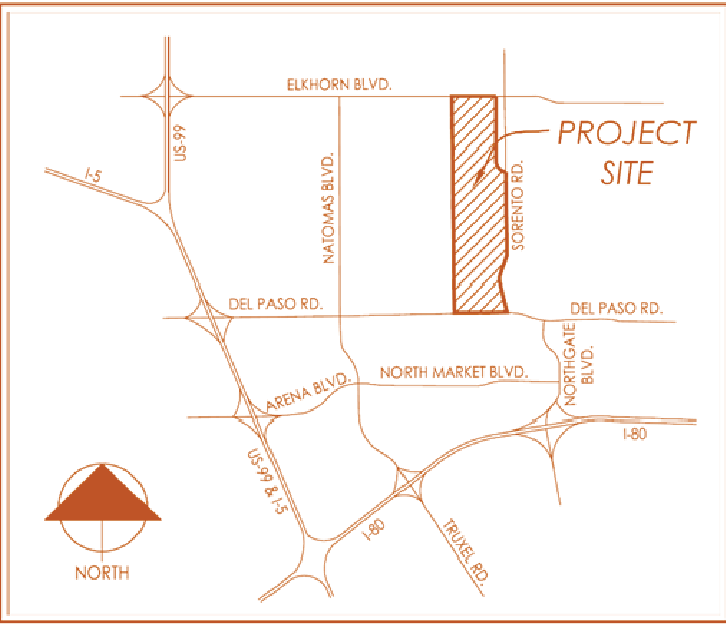
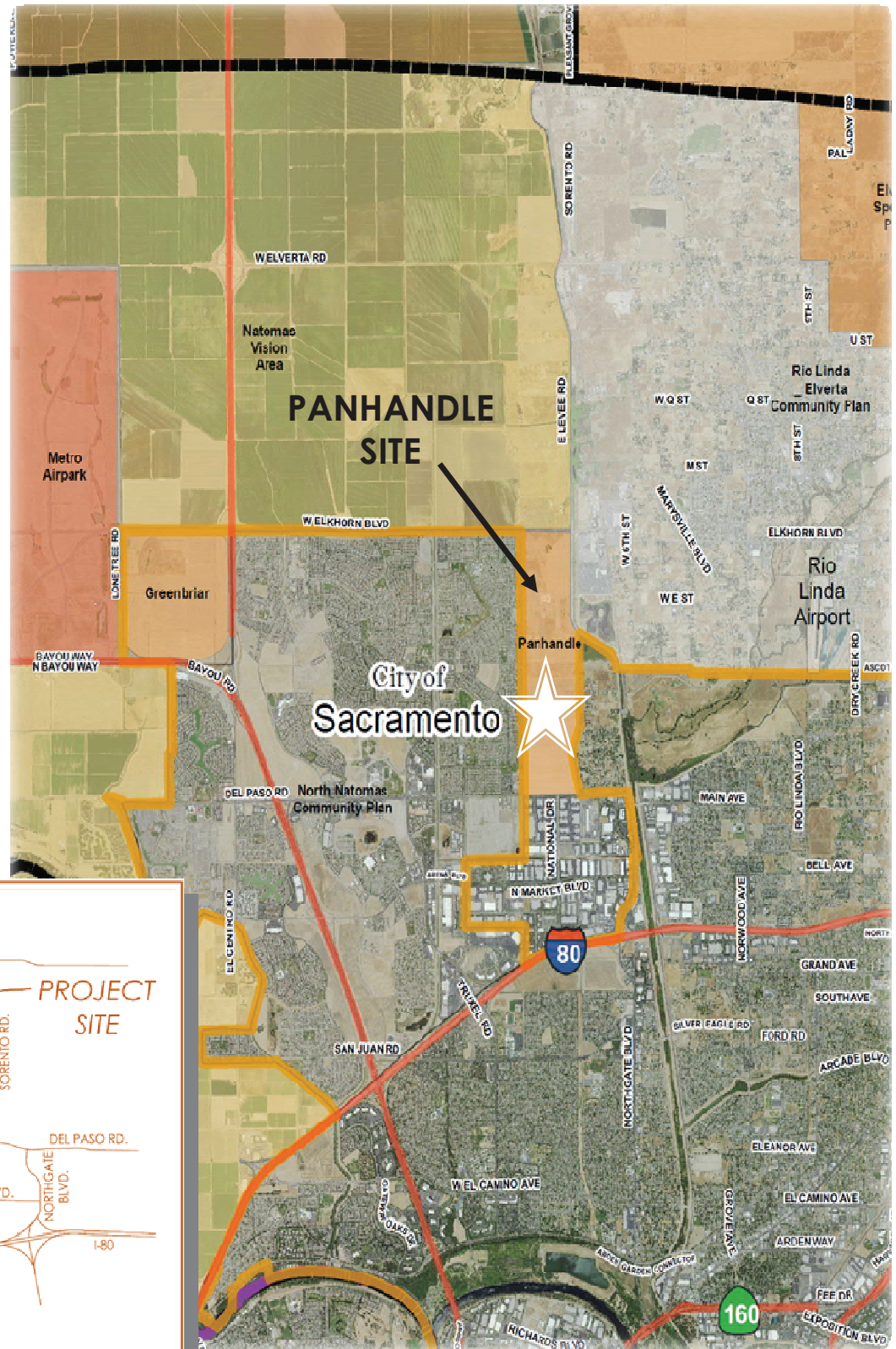
- 1,662 suburban neighborhood low-density single-family residential units are planned on 316.6 gross acres.<sup>1</sup>
- 123.0 gross acres located immediately south of Elkhorn Boulevard (Krumenacher Ranch) are designated as Planned Development and are zoned as Agriculture. These acres are owned by a developer who is not currently participating with the Applicant's Project. Although the Krumenacher Ranch area is excluded from the area subject to the Panhandle PUD Design Guidelines, it was annexed into the City and included in the Project area. No land use entitlements are being sought for this area at this time. The analysis in the Environmental Impact Report (EIR) for the Project assumed that Krumenacher Ranch eventually could be developed with residential uses, and thus the EIR evaluated the impacts of this possibility.
- 149.8 gross acres of the Project are reserved for public facilities such as parks, an elementary school site, a high school/middle school site, open space, a detention basin, and roadways.

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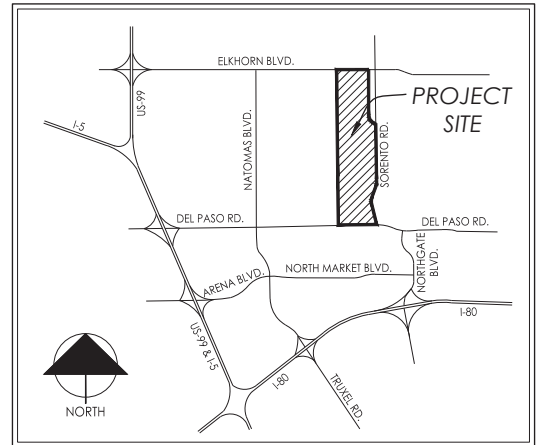
<sup>1</sup> Gross developable acreage is the total area identified on the PUD diagram for each land use. The net acreage used in this analysis excludes minor roadway and other public right-of-ways inside each subdivision, which will be dedicated as the subdivisions are created.

**Map 2-1** shows the regional location of the Project. **Map 2-2** shows the land use diagram of the Project. The land uses were summarized in **Table 1-1** in **Chapter 1**. The Project is planned to develop as entirely low-density residential units featuring several unit types and lot sizes.

**Map 2-1**  
**Panhandle Project Vicinity**



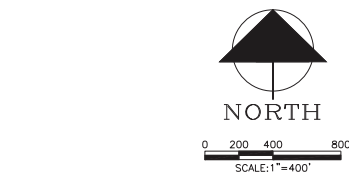
## Map 2-2 Panhandle PUD Schematic Plan



Parkland Dedication Summary Table						
PANHANDLE Planned Unit Development Plan					2013 parkland dedication formula	
land use	unit type	net acres	avg. net density	dwelling units	% of total residential units	parkland dedication formula
SNLD-E	SF	75.7	4.5	340	20%	0.0135
SNLD-T	SF	148.4	6.0	669	52%	0.0135
SNLD-V	SF	60.5	7.5	453	27%	0.0135
<b>TOTAL</b>				<b>1,462</b>		<b>22.43</b>
on-site park deficit -6.93 acres (to be paid in in-lieu fee)						
parkland provided		23.50				
creditable parkland		15.50				
NOTE: 8 AC. OF PARKLAND SHOWN IN PL CORRIDOR SEEKS NO QUIMBY CREDIT						
<b>park requirement</b>	<b>5/1000</b>	<b>adjust.</b>	<b>3.5/1000</b>			
3.5 ac/1000 actual parkland	22.43	0.7	15.70	acres on-site		15.50
1.5/1000 in-lieu fee		0.3	6.73	acres in-lieu fee		4.93
			<b>22.43</b>	<b>total reqmt.</b>		<b>22.43</b>

LAND USE SUMMARY					
PUD Land Use*	General Plan	Zoning	Acres (G)	Acres (N)	Units
SNLD-E	SNLD (3-8 du/ac)	R-1	88.0±	75.7±	340±
SNLD-T	SNLD (3-8 du/ac)	R1-A	162.2±	148.4±	869±
SNLD-V	SNLD (3-8 du/ac)	R1-A	66.4±	60.5±	453±
Elementary School	SNLD (3-8 du/ac)	R1-A	11.7±	10.0±	
High School / Middle School	SNLD (3-8 du/ac)	R1-A	65.5±	60.4±	
Park - Quimby	PR	A-OS	18.0±	15.5±	
Park - Ninos Parkway	PR	A-OS	8.9±	8.0±	
Open Space - Ninos Parkway	PR	A-OS	27.1±	24.6±	
Detention Basin - Open Space	PR	A-OS	13.6±	13.4±	
Planned Development (Krumenacher Property)	PD	A	123.0±	119.0±	
Major Roads (Del Paso Rd & Elkhorn Blvd)	varies	varies	5.0±	5.0±	
Collector and Residential Streets	varies	varies	0.0±	48.9±	
<b>TOTALS</b>			<b>589.4±</b>	<b>589.4±</b>	<b>1,662± DU</b>

\*SNLD = Suburban Neighborhood Low Density (Detached Single-Family Residential)  
 -E = Estate (4.5 du/ac average net density)  
 -T = Traditional (6.0 du/ac average net density)  
 -V = Village (7.5 du/ac average net density)  
 = Pedestrian Connection Only



## PUD SCHEMATIC PLAN PANHANDLE

City of Sacramento

**MACKAY & SOMPS**  
ENGINEERS PLANNERS SURVEYORS

January 30, 2018

### 3. Backbone Infrastructure and Public Facility Costs

Buildout of the Project will require construction of roadway, sewer, water, and drainage infrastructure, as well as a variety of other public facilities. The backbone infrastructure and public facility requirements summarized in this chapter are based on the infrastructure master plans for the Panhandle PUD, the mitigation measures set forth in the Panhandle PUD Draft EIR, and the NNFP improvements benefitting Panhandle development. The Finance Plan identifies those backbone infrastructure and public facility requirements that benefit the Panhandle PUD and are needed to satisfy Panhandle EIR mitigation requirements, including the following improvements:

**Backbone Infrastructure:**

- On- and Off-Site Roadways
- Sanitary Sewer
- Storm Drainage
- Potable Water

**Public Facilities:**

- Trails
- Ninos Parkway
- Neighborhood and Community Parks
- Regional Park Land Acquisition
- Transit
- Fire Facilities
- Community Center
- Library
- School Facilities

This chapter discusses all of the required infrastructure and public facilities for the Project and provides the estimated construction costs (in 2021\$) associated with each category. **Table 1-2 in Chapter 1** summarizes the estimated costs and the assumed funding sources. The cost estimates were developed from a variety of sources, as summarized below.

MacKay & Somps prepared the original construction cost estimates included in the 2018 Finance Plan for all backbone infrastructure except off-site roadways, as well as for planned trails and the Ninos Parkway landscaping. The City provided the cost estimates included in the 2018 Finance Plan for off-site roadways based on Panhandle's anticipated contribution to Elkhorn Boulevard trips obtained from a

traffic analysis prepared by DKS Associates. Harris prepared updated cost estimates for this 2022 Finance Plan, which are detailed in **Appendix B**.

The cost estimates for the remainder of the public facilities necessitated by the Project are based on estimated fee revenue from existing and proposed development impact fee programs that would be generated by the Project's planned residential units. The cost estimates included in the 2018 Finance Plan have been updated for this 2022 Finance Plan to reflect revenue generated by fees in 2021 dollars, as detailed later in this chapter.

## Definitions of Backbone Infrastructure and Public Facilities

This Finance Plan will use the following definitions to more precisely define these terms:

- **Backbone Infrastructure:** This term includes most of the essential public service-based items that are underground or on the surface. It includes roads, water, sewer, drainage, recycled water, levees, erosion control, and dry utilities. Backbone infrastructure is sized to serve numerous individual development projects in the Project and in some cases serves the broader region's development areas.
- **Public Facilities:** This term includes parks, trails, schools, libraries, fire stations and equipment, police facilities and equipment, transit facilities, public buildings, and open space. This group of items provides amenities to the Project (e.g., park facilities and libraries) or houses employees providing services to the area (e.g., police, fire, public administration).
- **Facilities:** This term is used in the Finance Plan to generically include a combination of backbone infrastructure and public facilities when a precise breakdown is not required.
- **Subdivision Improvements** include in-tract improvements (roads, sewer, water, drainage, recycled water, erosion control, and dry utilities) that are in or adjacent to individual subdivision projects. These improvements are funded privately, and the costs of these improvements are not estimated in the Finance Plan.



- **Roadway Frontage Improvements** include outside travel lanes, bike lanes, curb, gutter, sidewalks, sound wall, and landscape corridors bordering a subdivision. Generally, the center lanes and medians of a multilane roadway are considered backbone infrastructure, while roadway frontage provides access to the adjacent development and is considered a subdivision improvement. However, in certain cases a roadway fronting public property may be included as a backbone infrastructure cost to the extent that it is adjacent to public uses or traversing a public right-of-way that benefits multiple individual subdivision projects.

## Infrastructure Phasing

Some backbone infrastructure and public facilities will need to be installed at the outset of development of the Project before any homes are constructed. Any remaining infrastructure items are to be built before certain timing triggers, which will be determined by the City and likely identified in the DAs.

## Backbone Infrastructure Improvements, Costs, and Phasing

### Roadways

Project development will generate vehicular trips in and outside of the Project, which result in the need for additional roadway capacity to maintain adequate levels of service. The proposed roadway system comprises major arterials, collectors, and residential streets that work together to provide convenient and safe access to all areas in the Project and adequate off-site access to proposed development in the Project.

Roadway center lanes and medians for multilane facilities generally are considered backbone infrastructure and therefore are included in the Finance Plan. Construction of roadway frontage (outside travel lanes, bike lanes, curb, gutter, sidewalk, sound walls, and landscape corridors) generally is considered the obligation of adjacent development. However, where a roadway abuts or traverses a public facility or right-of-way (e.g., WAPA Corridor or detention basin), those frontage facilities are providing access to or through that facility and offer plan-wide benefits. Roadway frontage adjacent to public facilities and rights-of-way that is not otherwise funded or reimbursed via other mechanisms therefore is included in the Finance Plan. Roadway frontage adjacent to schools and parks is excluded because construction of frontage facilities will be considered as part of the acquisition cost for those facilities.



As depicted in **Map 3-1**, on-site roadways identified in the Finance Plan include the following facilities:

- Del Paso Road—median and travel lane on south side; frontage improvements along north side.
- Street G—eastern portion adjacent to the WAPA corridor.
- Faletto Avenue—southern portion adjacent to the detention basin.
- Club Central Drive—northern portion adjacent to the detention basin.
- Street F—full section through the WAPA corridor.
- Club Center Drive—full section through the WAPA corridor.
- Club Center Drive—western portion adjacent to the WAPA corridor, excluding portion of WAPA corridor adjacent to Park 2.
- Street C—Full section in the WAPA corridor, excluding the frontage adjacent to Park 1.
- Sorento Road—frontage improvements and fencing along Sorento Road along west side.

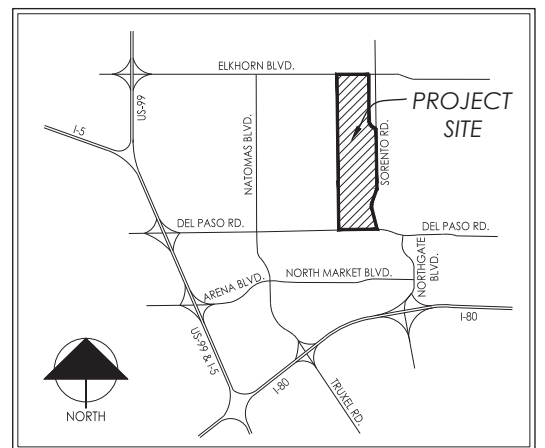
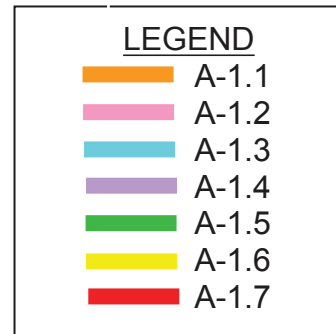
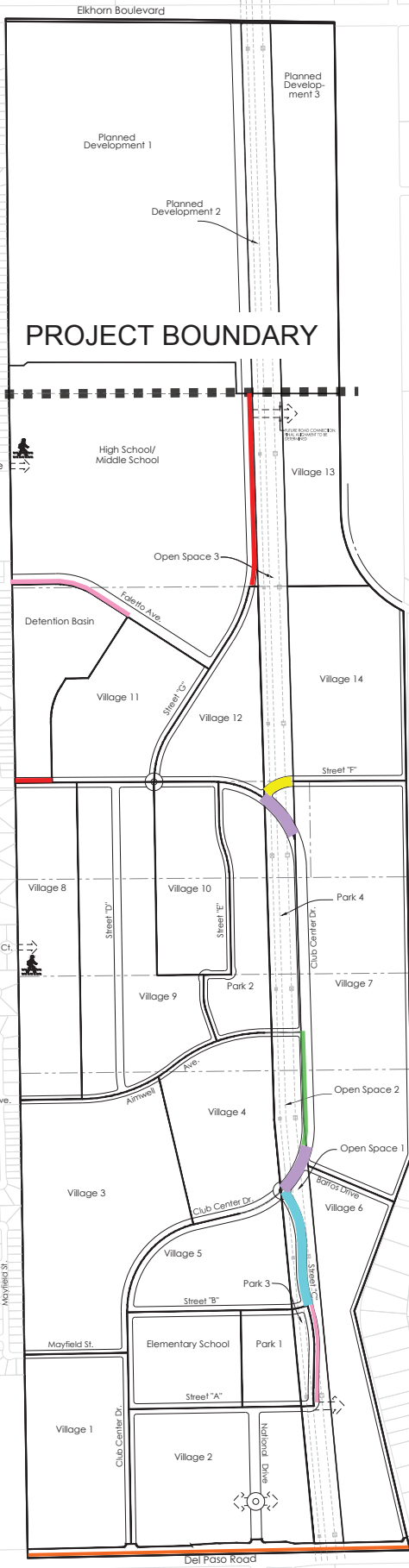
In addition, costs associated with traffic signals on major facilities, as well as traffic circles on Club Center and National Drives, are included in the Finance Plan. Entry monumentations at National Drive and Del Paso Road and at Club Center Drive and Del Paso Road are also included in the Finance Plan.

Off-site roadway requirements include contributions to Elkhorn Boulevard from State Route 99 to the eastern limit of the Project. The City provided estimates of the Project's fair share contribution to four specified Elkhorn Boulevard segments. The Project will contribute to the first segment of Elkhorn Boulevard from State Route 99 to East Commerce Way to accommodate the additional traffic coming off the freeway onto Elkhorn Boulevard. The Project also will contribute to the next three segments of Elkhorn Boulevard: East Commerce Way to Natomas Boulevard, Natomas Boulevard to the city limit, and the city limit to the eastern limit of the Project.

As shown on **Table 3-1**, the on-site roadway costs total approximately \$14.1 million, an increase of 17 percent over the 2018 estimated costs. Off-site roadway costs total approximately \$559,000, an increase of 19.4 percent over the 2018 estimated costs. All of the on-site roadway costs from **Table 3-1** and \$423,000 of the off-site roadway costs are proposed to be funded through the Panhandle Impact Fees. It is anticipated that the remaining off-site roadway costs will be funded by reimbursements from Krumenacher Ranch when it develops to account for its fair share of the improvements that will benefit its site.

# ROADWAY SEGMENTS

## MAP 3-1



**PANHANDLE**  
City of Sacramento

**Mackay & Soms**  
ENGINEERS PLANNERS SURVEYORS

April 18, 2017

**Table 3-1**  
**Panhandle Finance Plan**  
**Estimated Backbone Roadway Facilities Costs - Rounded [1]**

Item	Estimated Cost		
	2021\$	2018\$	Pct. Change
<b>On-Site Roadway Costs</b>			
<b>Roadway Segments</b>			
Del Paso Median and Travel Lane (South Side)	\$1,558,900	\$1,337,900	16.5%
Del Paso Frontage Improvements (North Side)	\$1,267,000	\$1,084,000	16.9%
Sorento Road Horse Fence (West Side)	\$201,000	\$184,000	9.2%
Sorento Road Frontage Improvements (West Side)	\$733,000	\$630,000	16.3%
Street "C"/Faletto Avenue	\$1,313,200	\$1,093,400	20.1%
Street "C"	\$1,260,600	\$1,049,600	20.1%
Club Center Drive - Full (Segment 4 and 6)	\$1,371,800	\$1,149,800	19.3%
Club Center Drive - Half (Segment 5)	\$823,300	\$690,000	19.3%
Street "F"	\$347,800	\$297,300	17.0%
Club Center Drive/Street "G"	\$1,293,000	\$1,084,400	19.2%
<b>Subtotal Roadway Segments (Rounded)</b>	<b>\$10,170,000</b>	<b>\$8,600,000</b>	<b>18.3%</b>
<b>Entry Monumentation</b>			
National Drive at Del Paso Road	\$88,550	\$74,750	18.5%
Club Center Drive at Del Paso Road	\$88,550	\$74,750	18.5%
<b>Subtotal Entry Monumentation (Rounded)</b>	<b>\$177,000</b>	<b>\$150,000</b>	<b>18.0%</b>
<b>Traffic Signals</b>			
Del Paso Road/National Drive	\$547,700	\$500,800	9.4%
Del Paso Road/Club Center Drive	\$755,200	\$690,700	9.3%
Del Paso Road/Sorento Road	\$755,200	\$690,700	9.3%
<b>Subtotal Traffic Signals (Rounded)</b>	<b>\$2,058,000</b>	<b>\$1,882,000</b>	<b>9.4%</b>
<b>Traffic Circles</b>			
Traffic Circle - Club Center/Street "C"	\$563,800	\$473,600	19.0%
Traffic Circle - Club Center/Street "G"	\$563,800	\$473,600	19.0%
Traffic Circle - National Drive	\$563,800	\$473,600	19.0%
<b>Subtotal Traffic Circles (Rounded)</b>	<b>\$1,691,000</b>	<b>\$1,421,000</b>	<b>19.0%</b>
<b>Total On-Site Roadway Costs (Rounded)</b>	<b>\$14,096,000</b>	<b>\$12,053,000</b>	<b>17.0%</b>
<b>Off-Site Roadway Cost (Elkhorn Boulevard)</b>			
Elkhorn Blvd. Segment - State Route 99 to East Commerce	\$28,800	\$24,000	20.0%
Elkhorn Blvd. Segment - East Commerce Way to Natomas Blvd.	\$288,700	\$242,000	19.3%
Elkhorn Blvd. Segment - Natomas Blvd. to City Limit East	\$149,500	\$125,000	19.6%
Elkhorn Blvd. Segment - City Limit East to Panhandle Limit East	\$92,000	\$77,000	19.5%
<b>Total Off-Site Roadway Cost (Rounded)</b>	<b>\$559,000</b>	<b>\$468,000</b>	<b>19.4%</b>
<b>Total Roadway Costs (Rounded)</b>	<b>\$14,655,000</b>	<b>\$12,521,000</b>	<b>17.0%</b>

roads

Source: MacKay & Soms (November 29, 2017); Harris (January 2022)

[1] Includes contingencies and engineering/management costs.

## Sanitary Sewer

SASD will serve the Project with sanitary sewer collection and treatment. The Finance Plan includes backbone sanitary sewer improvements needed to convey sanitary sewer flows to the Upper Northwest Interceptor. Existing off-site collector and trunk sewer pipelines stubbed to the Project's western boundary are sufficient to accommodate sanitary sewer flows generated by the Project, and therefore no off-site improvements will be required to accommodate Panhandle development. On-site backbone sewer improvements consist of trunk lines sized 15 inches and greater, as well as associated manholes sized 48 inches and greater. Sanitary sewer improvement costs are based on the assumption of construction concurrent with road improvements; cost estimates therefore exclude pavement removal and replacement, roadway, and erosion control-related items.

As shown on **Table 3-2**, sanitary sewer improvement costs total approximately \$1.2 million, an increase of 12.6 percent over the 2018 estimated costs.

This Finance Plan is based on the assumption the Project is eligible for SASD credits or reimbursements for Panhandle sanitary sewer trunk improvements included in the SASD fee program. The total net cost after SASD credits of approximately \$314,000 is proposed to be funded through the Panhandle Impact Fees.

## Storm Drainage

Backbone storm drainage infrastructure serving the Project is designed to meet City design criteria. In addition, because the Project is located in the Natomas Basin, the storm drainage system is designed to modify peak flows such that they do not exceed Reclamation District 1000 post-development runoff criteria.

Stormwater flows generated in the Project generally will drain from east to west to a proposed detention basin and then will be pumped to existing trunk line facilities located in Club Center Drive. The detention basin is designed to accommodate the Project's flood control and stormwater quality treatment requirements.

The backbone storm drain system includes a network of backbone storm drain lines, expansion of an existing detention basin owned by Twin Rivers Joint Unified School District, and associated outfall structures and pumps. The Finance Plan also includes acquisition of approximately 6.7 acres of land needed to expand the existing detention basin.

As shown on **Table 3-3**, drainage improvement and land acquisition costs total approximately \$14.9 million, an increase of 14.5 percent over the 2018 estimated costs. This total amount is proposed to be funded through the Panhandle Impact Fees.

**Table 3-2**  
**Panhandle Finance Plan**  
**Estimated Sanitary Sewer Costs - Rounded**

Sewer

Item	2021 Cost Estimate			2018 Cost Estimate			Net Cost Pct. Change
	Cost	SASD Credits/ Reimb.	Net Cost	Cost	SASD Credits/ Reimb.	Net Cost	
		[2]			[2]		
<b>Trunk Sanitary Sewer [1] [2]</b>							
15" Trunk Sewer Line	\$176,400	(\$131,756)	\$44,644	\$153,600	(\$114,726)	\$38,874	<b>14.8%</b>
18" Trunk Sewer Line	\$308,400	(\$245,144)	\$63,256	\$286,200	(\$227,497)	\$58,703	<b>7.8%</b>
21" Trunk Sewer Line	\$136,500	(\$112,145)	\$24,355	\$118,800	(\$97,603)	\$21,197	<b>14.9%</b>
48" Trunk Sewer Manhole	\$123,300	(\$58,953)	\$64,347	\$104,000	(\$49,725)	\$54,275	<b>18.6%</b>
60" Trunk Sewer Manhole	\$33,700	(\$20,890)	\$12,810	\$28,500	(\$17,667)	\$10,833	<b>18.2%</b>
<b>Subtotal Trunk Sanitary Sewer (Rounded)</b>	<b>\$778,000</b>	<b>(\$569,000)</b>	<b>\$209,000</b>	<b>\$691,000</b>	<b>(\$507,000)</b>	<b>\$184,000</b>	<b>13.6%</b>
15% Contingency	\$117,000	(\$85,000)	\$32,000	\$104,000	(\$76,000)	\$28,000	<b>14.3%</b>
<b>Subtotal with Contingency</b>	<b>\$895,000</b>	<b>(\$654,000)</b>	<b>\$241,000</b>	<b>\$795,000</b>	<b>(\$583,000)</b>	<b>\$212,000</b>	<b>13.7%</b>
30% Engineering and Management	\$269,000	(\$196,000)	\$73,000	\$239,000	(\$175,000)	\$64,000	<b>14.1%</b>
<b>Total Sanitary Sewer Costs (Rounded)</b>	<b>\$1,164,000</b>	<b>(\$850,000)</b>	<b>\$314,000</b>	<b>\$1,034,000</b>	<b>(\$758,000)</b>	<b>\$276,000</b>	<b>13.8%</b>
<b>Percentage Change</b>	<b>12.6%</b>	<b>12.1%</b>	<b>13.8%</b>				

sewer

Source: MacKay & Soms (November 29, 2017); Harris (January 2022)

- [1] Trunk sewer assumes construction concurrent with road improvements, excludes pavement removal and replacement, roadway and erosion control related items.  
 [2] Eligible for SASD reimbursements/credits for trunk sanitary sewer facilities. MacKay & Soms estimated credits/reimbursements in 2018. 2021 credits/reimbursements applies same percentage as in 2018.

**Table 3-3**  
**Panhandle Finance Plan**  
**Estimated Storm Drainage Costs - Rounded**

Drainage

Item	Assumption	Estimated Cost		
		2021\$	2018\$	Pct. Change
Storm Drainage Costs				
Storm Drain System [1]				
24" Storm Drain		\$147,700	\$132,600	11.4%
27" Storm Drain		\$75,000	\$67,900	10.5%
30" Storm Drain		\$37,800	\$35,300	7.1%
42" Storm Drain		\$83,600	\$75,100	11.3%
48" Storm Drain		\$241,700	\$217,000	11.4%
60" Storm Drain		\$256,200	\$230,000	11.4%
66" Storm Drain		\$218,100	\$189,800	14.9%
72" Storm Drain		\$1,694,000	\$1,595,800	6.2%
78" Storm Drain		\$3,637,100	\$3,080,000	18.1%
78" Storm Drain Outfall		\$65,600	\$60,000	9.3%
Subtotal Storm Drain System (Rounded)		\$6,457,000	\$5,684,000	13.6%
15% Contingency		\$969,000	\$853,000	13.6%
Subtotal with Contingency		\$7,425,800	\$6,536,500	13.6%
30% Engineering and Management		\$2,228,000	\$1,961,000	13.6%
Total Storm Drain System (Rounded) [2]		\$9,654,000	\$8,498,000	13.6%
Detention Basin				
Detention Pond - Excavation		\$489,000	\$444,500	10.0%
Detention Pond - Finish Grading		\$48,600	\$44,400	9.5%
Pump Station Outlet Structure		\$16,400	\$15,000	9.3%
Pump Station Inlet Structure		\$21,900	\$20,000	9.5%
Pump Station		\$546,700	\$500,000	9.3%
Weir Erosion Protection - Rip Rap 1' Deep		\$20,800	\$19,100	8.9%
Detention Pond - Maintenance Path		\$67,000	\$59,400	12.8%
Metal Access Gate		\$5,200	\$5,000	4.0%
12 Concrete Access Ramp		\$24,100	\$22,100	9.0%
6" Concrete Spillway		\$31,300	\$28,800	8.7%
Geotextiles		\$97,100	\$88,800	9.3%
Rip Rap/Cobble Rock Protection at Outfall Structure		\$2,000	\$1,800	11.1%
Hydroseed/Landscaping		\$36,100	\$32,800	10.1%
Detention Pond - Fencing		\$36,300	\$33,000	10.0%
Detention Pond - Fencing: Tubular Steel (Housing)		\$31,500	\$28,900	9.0%
Detention Pond - Landscaping (25% coverage & trees)		\$642,700	\$584,300	10.0%
Subtotal Detention Basin (Rounded)		\$2,117,000	\$1,928,000	9.8%
15% Contingency		\$318,000	\$289,000	10.0%
Subtotal with Contingency		\$2,435,000	\$2,216,900	9.8%
30% Engineering and Management		\$731,000	\$665,000	9.9%
Total Detention Basin (Rounded) [3]		\$3,166,000	\$2,882,000	9.9%
Subtotal Storm Drainage Costs		\$12,820,000	\$11,380,000	12.7%
Land Acquisition (6.7 acres) [4]	\$317,741 per acre	\$2,128,865	\$1,675,000	27.1%
Total Storm Drainage Costs (Rounded)		\$14,948,865	\$13,055,000	14.5%

drain

Source: MacKay &amp; Soms (November 29, 2017); Harris (January 2022)

[1] Assumes construction concurrent with road improvements, and excludes pavement removal and replacement.

[2] Storm drain system includes the components listed above because each segment of pipe is required for a complete functioning system.

[3] The school has already acquired the land and excavated their portion of the basin (6.9 acres). Dirtwork and above quantities are based on basin expansion and completion.

[4] 2021 value per acre based on North Natomas public land acquisition value as of November 1, 2021 as presented in the appraisal report prepared by BBG on April 15, 2022.

### ***Kruemanacher Ranch***

Based on the City drainage system design criteria and state regulatory requirements, the Project's drainage system must be constructed to accommodate existing condition flows from Krumenacher Ranch. In the event the Krumenacher Ranch project develops at a later date, additional improvements may be required to accommodate additional flows generated by that development activity. These improvements may be constructed independent of the rest of the Panhandle drainage system or via expansion of and upgrades to Panhandle drainage facilities. The Krumenacher Ranch property will be responsible for drainage system improvements needed to accommodate that site's developed condition, including any upgrades to the rest of the Panhandle drainage system (e.g., expansion of the detention basin).

To the extent Krumenacher Ranch development uses the Panhandle detention basin, expanding drainage capacity within its planned footprint, Krumenacher Ranch should fund its fair share of land acquisition costs associated with the detention basin facility. Should Krumenacher Ranch development proceed and use the Panhandle detention basin facility, the City will condition that project on reimbursement of Panhandle property owners, based on the calculations presented in **Table 3-4** and subject to inflation adjustments. In addition, to the extent that Krumenacher Ranch ties into or otherwise uses Panhandle drainage facilities, the City may consider updates to this Finance Plan to reflect revised cost participation and allocation with consideration to the Krumenacher property.

### ***Regional Drainage Improvements***

This Finance Plan assumes the Project will fulfill its obligation to regional drainage improvements through the payment of Sacramento Area Flood Control Agency (SAFCA) and Reclamation District 1000 fees and assessments.

### ***Water***

The City will provide water service to the Project upon its connection to the existing water supply and distribution network. Existing water distribution facilities near the Project include facilities located along Faletto Avenue, Club Center Drive, Aimwell Avenue, Mayfield Street, and Del Paso Road. The City determines placement of new water distribution facilities as development plans are formulated. Provision of water service to the Project land uses will require the construction of onsite water transmission and distribution facilities. No offsite improvements will be required to provide water service to the Project.

Transmission mains used to convey large volumes of water from the treatment plants to selected points throughout the distribution system are generally considered backbone infrastructure while distribution facilities are typically considered subdivision infrastructure. This Finance Plan therefore includes the onsite 18-inch and 24-inch transmission lines that will connect to City facilities for the delivery of water to Project land uses.

**Table 3-4**  
**Panhandle Finance Plan**  
**Krumenacher Ranch Drainage Cost - Offsite Future Reimbursement [1]**

Item	Formula	Amount
Total Acres [2]	$a$	635.4
Krumenacher Ranch Acres [2]	$b$	122.7
Krumenacher Ranch as a Percent of Total	$c = b / a$	19%
Project Land Acquisition Cost [3]	$d$	\$2,128,865
<b>Krumenacher Ranch Drainage Cost</b>		
Land Acquisition	$e = d * c$	\$411,000
<b>Total Krumenacher Ranch Drainage Cost</b>		<b>\$411,000</b>

*offsite*

Source: MacKay & Somps; City of Sacramento.

[1] In the event that Krumenacher Ranch proceeds and uses the Panhandle detention basin, the City will seek reimbursement from Krumenacher Ranch to pay for their fair share of the land acquisition cost for the detention basin.

[2] Acreage from the Drainage System Modeling Report for Natomas Panhandle (December 4, 2019), prepared by MacKay & Somps.

[3] See Table 3-3.



Transmission line improvement costs are based on assumed construction concurrent with road improvements; the cost estimate therefore excludes pavement removal and replacement and utility conflict resolution.

As shown on **Table 3-5**, water improvement costs for the Project total approximately \$2.9 million, an increase of 9.4 percent over the 2018 estimated costs. The Finance Plan is based on the assumption that the full cost of the improvements may be eligible for credits and/or reimbursements from the City's water development impact fee program. Therefore, no additional funding source is needed for the water improvements.

## Public Facility Improvements, Costs, and Phasing

### Open Space and Trails

The Finance Plan includes the costs of Ninos Parkway landscaping, construction of the Powerline Trail facility, and Panhandle's contribution to the Sotnip Trail, which are discussed in more detail below.

#### *Ninos Parkway*

Ninos Parkway is a 20.1-acre open space parkway located in the WAPA corridor that traverses the length of the Project. Ninos Parkway is envisioned as an integrated system of open spaces, recreational facilities, community gardens, and parks connected by a Class 1 bicycle and pedestrian trail—the Powerline Trail (also known as the WAPA Corridor Trail).

Landscaping costs for Ninos Parkway include the 20-foot landscape area adjacent to the Powerline Trail and open space in the WAPA corridor, as well as approximately 8 acres of neighborhood park space located in the WAPA corridor. The park space in Ninos Parkway is not included in the Quimby calculation and is not eligible for PIF funding because of WAPA easement constraints. As shown on **Table 3-6**, Ninos Parkway costs total approximately \$4.6 million, an increase of 7.3 percent over the 2018 estimated costs. This total estimated cost will be funded privately with each property owner constructing their own portion of the Ninos Parkway. Note that this estimate excludes the cost of the Powerline Trail, which will be constructed within the Ninos Parkway. The cost of the Powerline Trail is discussed in the next section.

#### *Trails*

The Project includes two separate Class 1 bike trails: the Powerline Trail and the Sotnip Trail. The Powerline Trail is a new 12-foot paved trail with 2-foot decomposed granite shoulders and 10-foot landscape corridors that will extend

**Table 3-5**  
**Panhandle Finance Plan**  
**Estimated Potable Water Costs - Rounded**

Water
-------

Item	2021 Cost Estimate			2018 Cost Estimate		
	Cost	Credits [2]	Net Cost	Cost	Credits [2]	Net Cost
<b>Water Costs</b>						
<b>Transmission Main [1]</b>						
18" Water Transmission Main	\$140,000	(\$140,000)	\$0	\$128,000	(\$128,000)	\$0
24" Water Transmission Main	\$1,832,100	(\$1,832,100)	\$0	\$1,674,000	(\$1,674,000)	\$0
<b>Subtotal Water Transmission Main (Rounded)</b>	<b>\$1,972,000</b>	<b>(\$1,972,000)</b>	<b>\$0</b>	<b>\$1,802,000</b>	<b>(\$1,802,000)</b>	<b>\$0</b>
15% Contingency	\$296,000	(\$296,000)	\$0	\$270,000	(\$270,000)	\$0
<b>Subtotal with Contingency</b>	<b>\$2,268,000</b>	<b>(\$2,268,000)</b>	<b>\$0</b>	<b>\$2,072,000</b>	<b>(\$2,072,000)</b>	<b>\$0</b>
30% Engineering and Management	\$680,000	(\$680,000)	\$0	\$622,000	(\$622,000)	\$0
<b>Total Water Transmission Main (Rounded)</b>	<b>\$2,948,000</b>	<b>(\$2,948,000)</b>	<b>\$0</b>	<b>\$2,694,000</b>	<b>(\$2,694,000)</b>	<b>\$0</b>
<b>Total Water Costs (Rounded)</b>	<b>\$2,948,000</b>	<b>(\$2,948,000)</b>	<b>\$0</b>	<b>\$2,694,000</b>	<b>(\$2,694,000)</b>	<b>\$0</b>
<b>Percentage Change</b>	<b>9.4%</b>					

Source: MacKay & Soms (November 29, 2017); Harris (January 2022)

[1] Transmission main construction costs assume construction concurrent with road improvements. Excludes pavement removal and replacement and utility conflict resolution.

[2] Water credits will be applied against the City of Sacramento 1" water meter fee paid at building permit up to the credit amount shown.

**Table 3-6**  
**Panhandle Finance Plan**  
**Estimated Ninos Parkway/Trails Costs - Rounded**

**Ninos Parkway/  
Trails**

Item	Estimated Cost		
	2021 Cost	2018 Cost	Pct. Change
<b>Ninos Parkway [1]</b>			
20' Landscape Area Adjacent to 12' Trail	\$1,713,800	\$1,602,700	6.9%
Open Space in WAPA Corridor	\$160,200	\$134,400	19.2%
Park Space in WAPA Corridor - Landscape/Turf	\$743,700	\$695,500	6.9%
Park Space in WAPA Corridor - Minimal Landscape/Natural	\$1,994,300	\$1,864,900	6.9%
<b>Total Ninos Parkway</b>	<b>\$4,612,000</b>	<b>\$4,297,500</b>	<b>7.3%</b>
<b>Trails</b>			
Powerline (WAPA Corridor) Class I Bike Trail [1] [2]	<b>\$667,000</b>	<b>\$525,100</b>	<b>27.0%</b>
<b>Sotnip Trail [3]</b>			
Panhandle Contribution (1/3 of total)	\$381,000	\$300,000	27.0%
Other Properties' Contribution	\$762,000	\$600,000	27.0%
<b>Subtotal Sotnip Trail</b>	<b>\$1,143,000</b>	<b>\$900,000</b>	<b>27.0%</b>
<b>Subtotal Trails</b>	<b>\$1,810,000</b>	<b>\$1,425,100</b>	<b>27.0%</b>
<b>Total Ninos Parkway/Trails</b>	<b>\$6,422,000</b>	<b>\$5,722,600</b>	<b>12.2%</b>

*trails*

Source: MacKay & Soms (November 29, 2017); Harris (January 2022); City of Sacramento

[1] Includes contingency and engineering.

[2] 12' Powerline Trail with decomposed granite shoulders within the WAPA Corridor.

[3] Assumes a 1,200-foot-long trail between Sorento Road and Kenmar Road. The total cost of the Sotnip Trail was \$900,000 in 2018 dollars. The 2021 amount reflects a percentage increase in cost equal to the Powerline trail cost percentage increase. Panhandle's contribution is one-third of the total with the remaining two-thirds funded by other benefitting properties.

the entire north-south length of the Project in Ninos Parkway. As shown on **Table 3-6**, the estimated cost of the Powerline trail is approximately \$667,000. Construction of the Powerline Trail will be funded by Panhandle Impact Fees.

The Finance Plan also includes the Project's share of construction costs for the new Sotnip Trail facility, a 1,200-foot-long 12-foot Class 1 trail that will be constructed between Sorento Road and Kenmar Road and is needed to provide bicycle and pedestrian connectivity to the City's existing trail network. The estimated cost of the Sotnip Trail is \$1.1 million. Panhandle's contribution is \$381,000, with the remaining \$762,000 to be funded by other benefitting properties or other funding sources. The Project's share of the Sotnip Trail will be funded through Panhandle Impact Fees.

The total cost of both trails combined is estimated at \$1.8 million, an increase of 27 percent over the 2018 estimated costs.

#### TDIF Credits

The City's TDIF Program imposes citywide impact fees for transportation improvements that provide citywide benefit, including improvements accommodating alternative transportation modes, such as the bicycle and pedestrian network. If a finance plan includes transportation improvements that provide citywide benefit and are included in the TDIF capital list, the City Council may reduce the TDIF rate for developers within the finance plan area to account for the finance plan contribution toward these facilities. Because the Powerline Trail and Sotnip Trail are part of the City's bicycle and pedestrian networks and included in the TDIF capital list, construction of and financial participation in funding these facilities are creditable against the alternative modes portion of the TDIF program. Through construction of the Powerline Trail and Sotnip Trail, Panhandle development will likely fulfill its obligations to fund improvements accommodating alternative transportation modes. As a result, Panhandle development is eligible for a credit against the Citywide TDIF, in the full amount of the alternative modes component of the fee. The City Council may, by resolution, amend the TDIF Program and establish a reduced TDIF rate for the Panhandle Project. The Panhandle TDIF rates effective July 1, 2022, are detailed in **Appendix C**.

#### **Other Public Facilities**

The cost of public facilities other than Ninos Parkway and the trails are estimated based on the revenue that would be generated from different existing and proposed fee programs if the fees were applied to the projected Panhandle development at buildout. Note that the proposed Panhandle DA Fees will be used to fund Panhandle's share of improvements specified in the NNFP. The fee programs used to estimate the cost for each public facility category are summarized below:

**City Park Impact Fee Program:**

- Neighborhood and Community Parks
- Citywide Parks and Facilities

**Proposed Panhandle DA Fees:**

- Regional Park Land Acquisition
- Transit
- Fire Facilities
- Community Center
- Library

**Twin Rivers and Robles Elementary School District Fees:**

- Schools

**Table 3-7** shows the calculation of the estimated costs for each public facility category.

***Neighborhood and Community and Parks***

Park Land

The Project is required to provide a total of 15.7 acres of community and neighborhood parks, based on the City's amended Quimby ordinance obligations (Sacramento City Code Chapter 17.512), as shown on **Table 3-8**. The Project is meeting this demand by providing two park facilities, for a total of approximately 15.6 acres. The total park acres provided will be refined as individual final maps are processed.

Park Facilities

The Project is also required to provide the facilities for the 15.7 acres of community and neighborhood parks. Preliminary cost estimates for development of the park facilities are based on the City Park Impact Fee Program revenue generated by the Project, assuming the current neighborhood and community park fee rates (effective July 1, 2021). The total cost for all park facilities is estimated at \$6.5 million (see **Table 3-7**). These costs will be funded through the City Park Impact fee program.

***Regional Park Land Acquisition, Transit, Fire, Community Center, and Library***

The Project will be required to contribute to the construction of transit, fire, community center, and library facilities, as well as the acquisition of regional park land. The cost contribution will be for improvements planned or already constructed in the NNFP area that will also benefit Panhandle residents. The cost estimates are based on the development impact fee amounts specified in the NNFP area because Panhandle DAs require payment toward transit, fire, community center, and library improvements, and regional park land acquisition based on the rate the NNFP area developers pay for such improvements.

**Table 3-7**  
**Panhandle Finance Plan**  
**Estimated Other Public Facilities Costs (2021\$)**

Item	Total	Residential		
		Estates (E)	Traditional (T)	Village (V)
Units	1,662	340	869	453
<b>Public Facilities Cost per Unit</b>				
Neighborhood and Community Parks [1]		\$3,912	\$3,912	\$3,912
Regional Park Land Acquisition [2]		\$2,388	\$2,388	\$2,388
Transit [2]		\$587	\$587	\$587
Fire Facilities [2]		\$596	\$596	\$596
Community Center [2]		\$368	\$368	\$368
Library [2]		\$936	\$936	\$936
Schools [3]		\$10,200	\$9,180	\$8,160
<b>Total Public Facilities Cost [4]</b>				
Neighborhood and Community Parks	\$6,501,744	\$1,330,080	\$3,399,528	\$1,772,136
Regional Park Land Acquisition	\$3,968,856	\$811,920	\$2,075,172	\$1,081,764
Transit	\$975,594	\$199,580	\$510,103	\$265,911
Fire Facilities	\$990,552	\$202,640	\$517,924	\$269,988
Community Center	\$611,616	\$125,120	\$319,792	\$166,704
Library	\$1,555,632	\$318,240	\$813,384	\$424,008
Schools	\$15,141,900	\$3,468,000	\$7,977,420	\$3,696,480
<b>Total Public Facilities Cost</b>	<b>\$29,745,894</b>	<b>\$6,455,580</b>	<b>\$15,613,323</b>	<b>\$7,676,991</b>

*pf costs*

Source: City of Sacramento; EPS.

- [1] Current fee rates for the City Parks Development Impact Fee Program (Neighborhood and Community Park component).
- [2] Based on North Natomas fees. See Table 3-9.
- [3] Twin Rivers and Roblas Elementary School District impact fees.
- [4] Revenue generated from fees.

**Table 3-8**  
**Panhandle Finance Plan**  
**Quimby Park Requirement**

Land Use	Quimby Factor [1]	Units	Acres [2]
<b>Acres Required</b>			
Estates (E)	0.0095	340	3.21
Traditional (T)	0.0095	869	8.21
Village (V)	0.0095	453	4.28
<b>Total Acres Required</b>		<b>1,662</b>	<b>15.71</b>
<b>Net Acres Provided (Excluding Ninos Parkway) [3]</b>			<b>15.59</b>
<b>Difference</b>			<b>(0.12)</b>

*quimby*

Source: MacKay & Soms; City of Sacramento.

[1] Quimby factor (acres per unit) for low density residential from the Panhandle Annexation and Planned Unit Development Project Environmental Impact Report prepared by Ascent Environmental, Inc. (June 2017).

[2] May differ from land use plan or MacKay & Soms because of rounding.

[3] Net acres were provided by MacKay & Soms and do not match the quimby park acres in Table 1-1 because of rounding.

For transit, fire, and library improvements and regional park land acquisition, the Panhandle estimated costs are based on the revenue that would be generated by Panhandle development assuming the NNFP impact fee rates for Fiscal Year 2017-18 (FY 17-18 North Natomas Fees), escalated to 2021 dollars. The Fiscal Year 2017-18 rates were used as a starting point because the NNFP was updated in February 2018.

For community center improvements, the Panhandle estimated costs are based on the revenue that would be generated by Panhandle development assuming the NNFP community center development fees for Fiscal Year 2021-22 (FY 21-22). Note that the NNFP community center fees have decreased in recent years, so the Panhandle community center fees are set equal to the NNFP FY 21-22 community center fees to be consistent with current NNFP fees.

The estimated regional park land acquisition, transit, fire, library, and community center fees and costs are shown in **Table 3-7**.

**Table 3-9** provides the backup for the escalation of the NNFP 2017 fees to 2021 dollars. For each public facility type except community center, it includes the FY 17-18 NNFP fees, the escalated fees in 2021 dollars, the escalation factor used to establish the fees in 2021 dollars, and the index used to calculate the escalation factor. The community center portion of the DA Fees is set equal to the FY 21-22 NNFP community center fee.

As discussed further in **Chapter 8**, depending on the public facility, the required index used to adjust the fees annually is either the Engineering News Record Construction Cost Index for San Francisco (CCI) or the Consumer Price Index for all Urban Consumers for San Francisco-Oakland-Hayward (CPI) as summarized below:

- Regional Park Land Acquisition: CPI
- Transit: CCI
- Fire Facilities: CCI
- Community Center: CCI
- Library: CCI

The calculation of the escalation factors using the different indices is detailed in **Table A-5** of **Appendix A**.



**Table 3-9**  
**Panhandle Finance Plan**  
**Panhandle Special Financing District Program Fee per Unit**  
**Panhandle DA Fees per Unit**

Item	North Natomas Fees per Unit						Panhandle DA Fees per Unit [3]			Percentage Change	Fee Escalation Basis
	FY 2017-2018			FY 2017-2018			FY 2021-2022				
	Including Admin. [1]			Excluding Admin. [2]			Excluding Admin.				
	Estates	Traditional	Village	Estates	Traditiona	Village	Estates	Traditional	Village		
Regional Park Land Acquisition	\$2,183	\$2,183	\$2,183	\$2,119	\$2,119	\$2,119	\$2,388	\$2,388	\$2,388	12.68%	CPI. See Table A-5.
Transit	\$535	\$535	\$535	\$519	\$519	\$519	\$587	\$587	\$587	13.16%	ENR CCI. See Table A-5.
Fire Facilities	\$543	\$543	\$543	\$527	\$527	\$527	\$596	\$596	\$596	13.16%	ENR CCI. See Table A-5.
Community Center							\$368	\$368	\$368	[4]	ENR CCI. See Table A-5.
Library	\$852	\$852	\$852	\$827	\$827	\$827	\$936	\$936	\$936	13.16%	ENR CCI. See Table A-5.
Total (including Administration)	\$4,113	\$4,113	\$4,113				\$4,875	\$4,875	\$4,875		

Source: City of Sacramento; EPS.

pff

[1] Fees from February 2018 Nexus Study (2017\$) for low density units (lots greater than 5,000 square feet); fees effective from July 1, 2017 through June 30, 2018.

[2] Estimated as FY 2017-18 fee/1.03 to exclude the 3% administrative component.

[3] For all improvements except community center, Panhandle DA Fees = North Natomas FY 17-18 fees excluding administration, escalated to 2021\$.

[4] Community center fee per unit equals NNFP FY 21-22 community center fee of \$379 per unit /1.03 to exclude the 3% administration component.

#### Regional Park Land Acquisition

The Project will contribute to the development of regional park facilities located in the NNFP area. The Panhandle contribution was intended to help fund the land acquisition costs for the North Natomas regional park, including payment of the Natomas Basin Habitat Conservation Plan fees associated with the regional park. Because the land for the regional park already has been acquired, however, the Panhandle fee revenue is anticipated to be used to pay for development of the regional park. It is estimated that the Panhandle will contribute \$4 million (in 2021 dollars) to the regional park development cost.

#### Transit, Fire, Community Center, and Library Facilities

The Project will contribute to the funding of transit, fire, community center, and library facilities constructed or planned to serve the NNCP area. The Project's cost responsibility (in 2021 dollars) for each facility type is shown below:

- Transit: \$1.0 million
- Fire Facilities: \$1.0 million
- Community Centers: \$0.6 million
- Library Facilities: \$1.6 million

#### ***Schools***

The Project is located in the Twin Rivers Unified School District (TRUSD) and Robla School District (RSD), and students in the Project are anticipated to ultimately attend the proposed elementary school and middle school/high school that will be constructed in the Project. Payment of the existing California Level 1 statutory school impact fees fulfills the Project's obligation for school facility construction. The estimated schools cost totals \$15.1 million, based on the assumption that the cost is equal to fee revenue generated by the Project.

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## 4. Infrastructure Financing Strategy and Funding Sources

This chapter outlines the Project's financing strategy and describes how a combination of funding sources will be used to fund the backbone infrastructure and other public facilities required to serve the Project.

### **Financing Strategy and Funding Sources Overview**

The backbone infrastructure and public facilities required to serve development in the Project will be funded using a combination of public and private funding sources. Specific requirements for developer construction of backbone infrastructure and public facilities are defined in tentative map conditions and Development Agreement (DA) requirements.

Initially, developers will construct and privately finance the construction costs for most of the backbone infrastructure (roads, sewer, water, drainage) needed at the outset of development. Developers also may be required to construct parks, open space, and trail facilities. For improvements that the developer constructs and pays the upfront costs to construct, the developers may receive credits or reimbursements from the appropriate existing or new fee programs (including the proposed Panhandle Fee Program discussed in this chapter) depending on credit/reimbursement eligibility and policy requirements of the appropriate agency. In addition, the financing strategy includes formation of one or more land-secured bond financing districts (e.g., Mello-Roos CFD or Assessment District), which may fund a portion of the total backbone infrastructure and public facilities needed at the outset of development.

For most of the remaining public facilities, the Project's developers will pay applicable existing and new development impact fees. The Panhandle DA Fees will fund Panhandle public facility obligations for regional park land acquisition and transit, fire, community center, and library improvements.

## Detailed Sources of Funding

The following sections detail the currently available sources identified to fund Project Facilities:

- Existing City and Other Agency Fee Programs.
- Panhandle Fee Program.
- Other Funding Sources.

**Table 1-3** (in **Chapter 1**) shows the proposed funding source for each public facility at buildout. Under this funding strategy, approximately \$25.4 million will be funded through existing development impact fees, approximately \$38.9 million will be funded by the proposed Panhandle Fee Program, and approximately \$5.5 million will be funded from other funding sources.

### Existing City and Other Agency Fee Programs

Specific building projects will be subject to all applicable City and other agency development impact fees in place at the time of acceptance of the building permit application. Revenues generated by certain specific fee programs will be available to directly fund backbone infrastructure and public facilities identified in this Finance Plan. Fee program revenues generated by the following fee programs may be available to partially or fully fund Facilities required for Project development and therefore are included in the Finance Plan and estimated in **Table C-1** in **Appendix C**:

- Citywide Park Impact Fee.
- Citywide Water System Development Fee.
- SASD Development Impact Fee.
- TRUSD and RSD School Mitigation Fee.

The sections below offer additional detail regarding fee programs that may provide partial or full funding for backbone infrastructure and public facilities.

#### ***Citywide Park Impact Fee***

In February 2017, the City adopted an update to the citywide Park Impact Fee (PIF). All new residential and nonresidential development in the City is subject to the PIF, which funds park improvements in the Community Plan Area in which a project is located. In addition, the updated PIF includes a new fee component that funds citywide park facilities (e.g., regional parks, community centers, aquatic centers, etc.). This Finance Plan is based on the assumption that Panhandle development will fulfill all Quimby park improvement obligations through payment of the PIF.

### ***Citywide Water System Development Fee***

The City charges a citywide fee on all new connections to the water system to fund water treatment and transmission facilities to provide water to customers in the City. Water development fees are estimated to fully fund the \$2.9 million in backbone water infrastructure costs, which may take the form of impact fee credits or reimbursements for developer-constructed infrastructure.

### ***SASD Impact Fee***

SASD levies a development impact fee to fund sewer capacity, infrastructure, and associated costs. Approximately \$850,000 of backbone sewer infrastructure is anticipated to be funded by SASD impact fees, which may take the form of impact fee credits and reimbursements for developer-constructed infrastructure.

### ***School District Impact Fees***

State law allows school districts to impose fees on new residential and nonresidential development. Level I fees are capped by law, and that cap amount is split between elementary and high school districts. If school districts meet certain criteria, they may impose Level II fees on residential development. Level II fees are not capped but follow a strict formula set forth in the law. The Project pays the current Level 1 fees for TRUSD and RSD, which will satisfy Panhandle's funding obligation for school facilities.

### ***Other Existing Development Impact Fee Programs and Charges***

The Project will be subject to other City, County, and Other Agency development impact fee programs that are not anticipated to fund Project-related backbone infrastructure and public facilities. These fees are identified in **Table C-1** in **Appendix C**.

### ***Panhandle Fee Program***

Detailed further in **Chapter 5**, the proposed Panhandle Fee Program will help fund those backbone infrastructure and public facilities costs that are not funded by existing fee programs or other funding sources identified in the section to follow. Facilities included in the Panhandle Fee Program include those facilities with plan-wide benefits (i.e., serve multiple individual subdivisions), the costs of which should be distributed among Panhandle land uses and ownership interests.

The Panhandle Fee Program will be a City-implemented, plan area-specific development fee program applicable only to new Panhandle development that will include two fee components: the Panhandle Impact Fee Component and the Panhandle DA Fee Component. Infrastructure to be funded by the Panhandle Impact Fee Component are roadway, sewer, drainage, and trails. Public facilities to be funded by the Panhandle DA Fee Component are regional park land acquisition and transit, fire, community center, and library facilities.

### Integration with the NNFP

One of the central purposes of the Panhandle DA Fee Component is to maintain equity and fairness between the Project development and development in the rest of the NNCP area through equitable financial participation for public improvements benefitting both the NNFP area and the Project area. Because the Project public facility obligations will be financed via a mechanism separate from the NNFP funding mechanisms, certain policies that apply in the NNFP also should apply to Panhandle. The DA Fees for regional park land acquisition and transit, fire, and library improvements will be set equal to FY 17-18 NNFP fee rates, escalated to 2021 dollars. The community center DA Fees will be set equal to the FY 21-22 NNFP fee rates.

### **Other Funding Sources**

Other funding sources anticipated to fund a portion of required backbone infrastructure and public facilities include reimbursements from adjacent developments and private developer funding.

### ***Other Development Projects***

The Project will participate in funding of facilities whose benefit is shared by other neighboring development projects. Specifically, certain off-site roadway contributions ultimately will benefit the Krumenacher property to the north of Panhandle, and it is anticipated that the Krumenacher developer will pay for its fair share of those costs when the Krumenacher property develops. **Table 1-3 in Chapter 1** shows the off-site future reimbursements anticipated for Krumenacher construction or funding of infrastructure benefitting future development on this site.

Furthermore, the Sotnip Trail benefits other development projects. Panhandle's cost contribution is \$381,000 with the remaining \$762,000 being funded by other benefitting development projects.

### Drainage Improvements

As discussed at length in **Chapter 3**, it is unclear at this time if Krumenacher will develop, and if it does develop, it is unclear how its drainage system will be configured. As shown on **Table 3-4 in Chapter 3**, to the extent development of the Krumenacher property proceeds and uses the Panhandle detention basin, the Krumenacher property should reimburse the Panhandle Fee Program for its share of the Impact Fee attributed to the storm drainage improvements. The City may consider future updates to the Panhandle Fee Program should Krumenacher tie into the Panhandle drainage system.

### ***Private Developer Funding***

Certain facilities will be the responsibility of individual project developers to fund. Specifically, Ninos Parkway landscaping will be funded by a combination of private developer cash, equity, or private debt financing. The developers also will have sole responsibility for funding and constructing in-tract infrastructure and most frontage improvements.

## **Land-Secured Financing**

This Finance Plan includes the potential use of land-secured financing for a portion of Backbone Infrastructure and Public Facilities costs. Although this Finance Plan identifies sources of funding for all the included backbone infrastructure and public facilities, major facility oversizing and substantial up-front capital outlays may be required for certain projects. Land-secured financing, in the form of either a Mello-Roos CFD or an Assessment District, may be used to provide debt financing for some of these oversized Facilities:

- **Mello-Roos CFD.** The Mello-Roos Community Facilities Act of 1982 enables public agencies to form CFDs and levy a special tax on property owners in those CFDs. These special taxes may be used to pay debt service on CFD bonds or to finance public improvements directly on a pay-as-you-go (PAYGO) basis.
- **Assessment Districts.** California statutes give local governments the authority to levy several special assessments for specific public improvements such as streets, storm drains, sewers, streetlights, curbs, gutters, and sidewalks. The agency creates a special Assessment District that defines both the area to benefit from the improvements and the properties that will pay for the improvements.

A CFD is the most likely form of land-secured financing to be used to mitigate up-front costs of construction or acquisition of backbone infrastructure and public facilities in the Project, and it is anticipated that Project developers may request that the City form a CFD on all or a portion of the Project.

The proceeds from a CFD bond sale can be used for direct funding of improvements, to acquire facilities constructed by the developer, to reimburse developers for advance-funding improvements, or to pay certain development fees. The annual special tax can be used toward bond debt service or to build or reimburse for infrastructure as needed. The proceeds of the Mello-Roos special tax can be used for direct funding of facilities or to service bond debt.



**Tables 4-1** and **4-2** show a preliminary estimate of the Mello-Roos CFD bonding capacity of the Project, based on assumptions regarding tax rates, reserve fund requirements, and interest rates. Based on current assumptions, which are estimates for purposes of example in this document, the Project is estimated to have capacity to bond for approximately \$57.2 million, of which \$48.4 million could be available to fund Project infrastructure costs. Actual tax rates and related bond capacity will be established at the time of formation of the CFD. **Table 4-3** shows an overall estimated value to lien ratio of 17:1 at buildout.

## Phasing and the Financing Strategy

Phasing of public facility construction is an important component of the overall financing strategy. The ability to sequence public facilities will depend on the type of facility and the pace of new development. When possible, construction of public facilities will be sequenced over time as needed to serve new development. The sequencing of public facility costs will help ensure that adequate monies are available from the various financing sources to fund the public facility improvements.

Completion of backbone infrastructure and other public facilities will be phased to serve logical increments of development, based on the demand for such facilities as the Project builds out. The timing and amount of development in each increment will depend on many factors, such as market demand. In the normal course of the development approval process, the City will condition the Project's tentative maps with backbone infrastructure and other public facility requirements.

The Finance Plan is designed to be flexible enough to accommodate faster or slower growth of Project development in response to the market for housing and nonresidential development.

The developers of the Project will be responsible for advance funding and constructing all of the backbone infrastructure and public facilities needed to serve the Project, unless the City and Project proponents agree otherwise to City construction of specific improvements. Subject to the City's fee credit and reimbursement policies, some or all of this private funding will be reimbursed to the landowners/developers over time as the City is able to issue public debt through the CFD, issue credits due for landowner/developer proportionate share of fees, and collect fees from other developers that will provide reimbursements. The timeframe for reimbursement is unknown and could be a considerable period of time depending on market conditions and the actual absorption of the development projects. There is no guarantee the initial developers will be fully reimbursed for the costs to oversize facilities for later development projects.

**Table 4-1**  
**Panhandle Finance Plan**  
**Estimated Bond Sizing (2021\$)**

Item	Assumption	Estimated Bond Sizing
<b>Maximum Special Taxes Available for Debt Service</b>		
<b>Estimated Annual Maximum Special Taxes [1]</b>		<b>\$3,599,800</b>
Less Estimated Administration Costs	4.00%	(\$144,000)
Less Delinquency Coverage	10.00%	(\$360,000)
Adjustment for Rounding		\$4,200
<b>Estimated Gross Debt Service (Rounded)</b>		<b>\$3,100,000</b>
<b>Total Bond Size</b>		
<b>Total Bond Size without Tax Escalation</b>		<b>\$47,655,000</b>
Adjustment for Rounding		\$45,000
<b>Total Bond Size (Rounded)</b>		<b>\$47,700,000</b>
Increase for Annual Escalation [2]	20%	\$9,540,000
<b>Total Bond Size (Rounded)</b>		<b>\$57,240,000</b>
<b>Estimated Bond Proceeds</b>		
<b>Total Bond Size (Rounded)</b>		<b>\$57,240,000</b>
Less Capitalized Interest	12 months	(\$2,862,000)
Less Bond Reserve Fund	1-yr. debt service	(\$3,100,000)
Less Issuance Cost	5.00%	(\$2,862,000)
<b>Estimated Bond Proceeds</b>		<b>\$48,416,000</b>
<b>Assumptions [3]</b>		
Interest Rate	5.00%	
Term	30 years	
Annual Escalation	2%	

*est bond*

Source: City of Sacramento; EPS.

[1] See Table 4-2.

[2] Assumes special taxes are escalated 2.0% annually for 30 years, which increases total bond size by approximately 20%.

[3] Estimated bond sizing based on conservative assumptions. The interest rate will be determined at the time of the bond sale. This analysis is based on an assumed bond term of 30 years.

**Table 4-2**  
**Panhandle Finance Plan**  
**Estimated Bond Proceeds (2021\$)**

Item	Units	Prelim. Max. Special Tax Rate	Maximum Special Tax		Bond Size [1]		Bond Proceeds	
			Amount	% of Total	Amount	Per Unit/Acre	Amount	Per Unit
<i>Formula</i>	<i>A</i>	<i>B</i>	<i>C = A * B</i>	<i>D = C / Total Max Tax</i>	<i>E = D x total bond</i>	<i>F = E / A</i>	<i>G = D x bond proceeds</i>	<i>H = G / A</i>
<b>Residential Land Uses</b>		<i>per unit</i>				<i>per unit</i>		<i>per unit</i>
Estates (E)	340	\$2,300	\$782,000	21.72%	\$12,434,491	\$36,572	\$10,517,615	\$30,934
Traditional (T)	869	\$2,200	\$1,911,800	53.11%	\$30,399,309	\$34,982	\$25,713,014	\$29,589
Village (V)	453	\$2,000	\$906,000	25.17%	\$14,406,200	\$31,802	\$12,185,370	\$26,899
<b>Subtotal Residential Land Uses</b>	<b>1,662</b>		<b>\$3,599,800</b>	<b>100.00%</b>	<b>\$57,240,000</b>		<b>\$48,416,000</b>	
<b>Total [2]</b>			<b>\$3,599,800</b>	<b>100.00%</b>	<b>\$57,240,000</b>		<b>\$48,416,000</b>	

*proceeds*

Source: City of Sacramento; EPS.

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

[2] See Table 4-1 for total bond size and total bond proceeds.

**Table 4-3**  
**Panhandle Finance Plan**  
**Project Buildout Value-to-Lien Ratio (2021\$)**

Item	Estates (E)	Traditional (T)	Village (V)	Total
<b>Estimated Project Buildout Value</b>				
Dwelling Units	340	869	453	1,662
Finished Unit Sales Price	\$625,000	\$600,000	\$550,000	
<b>Total Project Buildout Value</b>	<b>\$212,500,000</b>	<b>\$521,400,000</b>	<b>\$249,150,000</b>	<b>\$983,050,000</b>
<b>Estimated Bond Size</b>				<b>\$57,240,000</b>
<b>Estimated Buildout Value-to-Lien Ratio</b>				<b>17:1</b>

vt/

Source: City of Sacramento; EPS.

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## 5. Panhandle Fee Program

This Finance Plan proposes adoption of a new plan area development impact fee program, the Panhandle Fee Program, that will fund the backbone infrastructure and public facilities needed to serve the Project. The proposed Panhandle Fee Program is designed to fund construction of backbone infrastructure and public facilities necessary to accommodate new residents generated by Panhandle development after taking into consideration a variety of other funding sources for the improvements. The costs to be funded through the Panhandle Fee Program were detailed in **Chapter 3**. The Panhandle Fee Program will include two different types of fees and thus is divided into two components, the Panhandle DA Fee Component and the Panhandle Impact Fee Component. Collectively, the fees for these two Panhandle Fee Program components are referred to as Panhandle Fees. **Table 5-1** summarizes the fees included in both fee programs, including three percent administration components for each fee program, as well as the estimated revenue generated at buildout. The Panhandle Fee Program components are detailed in the remainder of this chapter.

### Panhandle Developer Agreement (DA) Fee Component

The Panhandle DA Fee Component will contain fees (DA Fees) to help fund the following NNFP public facilities, to which Panhandle is required to contribute because such facilities will serve the Panhandle area as well as the NNFP area, as prescribed in the DAs between the Panhandle developers and the City.

- Regional Park Land Acquisition
- Transit
- Fire Facilities
- Community Center
- Library

To maintain equity and fairness between the Project development and development in the rest of the NNCP area, the fees for these public facilities are established at the same rates as the NNFP fees for the same improvements. For each public facility type except community centers, the fees are set equal to the FY 17-18 NNFP fees, escalated to 2021 dollars using a prescribed index. The community center DA Fee is set equal to the FY 21-22 NNFP community center fee.

The required fee estimation and escalation process was detailed in **Chapter 3**. The proposed Panhandle DA Fees, including a 3 percent fee program administration component, are summarized in **Table 5-1**.

**Table 5-1**  
**Panhandle Finance Plan**  
**Panhandle Fee Program Fees (FY 2022-23)**

Item	Source/ Assumption	Total Fee Revenue	Residential		
			Estates (E)	Traditional (T)	Village (V)
<b>Units</b>		<b>1,662</b>	<b>340</b>	<b>869</b>	<b>453</b>
<b>Panhandle DA Fee Component</b>			<i>per unit</i>	<i>per unit</i>	<i>per unit</i>
Regional Park Land Acquisition	Table 3-9	\$3,968,856	\$2,388	\$2,388	\$2,388
Transit	Table 3-9	\$975,594	\$587	\$587	\$587
Fire Facilities	Table 3-9	\$990,552	\$596	\$596	\$596
Community Center	Table 3-9	\$611,616	\$368	\$368	\$368
Library	Table 3-9	\$1,555,632	\$936	\$936	\$936
<b>Subtotal</b>		<b>\$8,102,250</b>	<b>\$4,875</b>	<b>\$4,875</b>	<b>\$4,875</b>
Fee Program Administration	3%	\$243,068	\$146	\$146	\$146
<b>Total</b>		<b>\$8,345,318</b>	<b>\$5,021</b>	<b>\$5,021</b>	<b>\$5,021</b>
<b>Panhandle Impact Fee Component</b>					
Roadways	Table A-1	\$14,519,000	\$8,736	\$8,736	\$8,736
Sanitary Sewer	Table A-2	\$314,000	\$234	\$178	\$175
Storm Drainage (Including Land Acquisition)	Table A-3	\$14,948,865	\$11,131	\$8,497	\$8,346
Trails	Table A-4	\$1,048,000	\$631	\$631	\$631
<b>Subtotal</b>		<b>\$30,829,865</b>	<b>\$20,731</b>	<b>\$18,042</b>	<b>\$17,888</b>
Fee Program Administration	3%	\$924,896	\$622	\$541	\$537
<b>Total</b>		<b>\$31,754,761</b>	<b>\$21,353</b>	<b>\$18,583</b>	<b>\$18,424</b>
<b>Total Panhandle Fee Program</b>		<b>\$40,100,078</b>	<b>\$26,374</b>	<b>\$23,604</b>	<b>\$23,445</b>

sfd

Source: MacKay & Soms (November 29, 2017); Harris (January 2022); City of Sacramento; EPS

## Panhandle Impact Fee Component

The Panhandle Impact Fee Component will include fees (Impact Fees) that must be established in accordance with the procedural requirements of the Mitigation Fee Act, as codified in California Government Section 66000 et seq. The facilities fees included in the Panhandle Impact Fee Component are listed below:

- Roadways
- Sanitary Sewer
- Storm Drainage (infrastructure and land acquisition)
- Trails (Sotnip Trail and Powerline Corridor Class I Bike Trail)

### Cost Allocation

To ensure developed land uses will fund their pro-rata share of backbone infrastructure and public facilities, the cost of each of the above improvement types is allocated across all land uses, based on the relative need for the improvements generated by each land use as measured by equivalent dwelling unit (EDU) factors and/or other measure of benefit such as developable acres.

The purpose of allocating certain improvement costs among the various land uses is to provide an equitable method of funding required infrastructure. The key to apportioning the cost of improvements to different land uses is the assumption that the demands placed on backbone infrastructure improvements are related to land use types and that such demands can be stated in relative terms for all particular land uses. By relating demand for facilities to land use types, a reasonable nexus, or relationship, can be established to apportion each land use's "fair share" costs.

An EDU factor is a common use factor that enables the allocation of improvement costs between developable residential and nonresidential land uses. An EDU is defined as the amount of facility use for each land use relative to a single-family unit.

**Table 5-2** summarizes the EDU factors and the basis of the EDU factors for all improvement types to be included in the proposed Panhandle Impact Fee Component. These EDU factors represent the relative demand for each facility type generated by each land use. For example, the EDU factors used to allocate roadway improvement costs are based on the average daily vehicle miles traveled associated with each residential category. The Project will contain only residential land uses, so the EDU factors will be applied to residential land uses for the Project.



**Table 5-2**  
**Panhandle Finance Plan**  
**Panhandle Impact Fee Component Cost Allocation Factors**

Item	Reference	EDU Factor Basis	EDUs per Unit/Acre			EDU Factor per Unit		
			Estates (E)	Traditional (T)	Village (V)	Estates (E)	Traditional (T)	Village (V)
<b>Units pe Acre</b>			4.5	5.9	7.5			
<b>Backbone Infrastructure</b>								
Roadways	Table A-1	VMT Factor per unit [1]	0.99	0.99	0.99	1.00	1.00	1.00
Sanitary Sewer	Table A-2	ESDs per acre [2]	6.00	6.00	7.50	1.00	0.76	0.75
Storm Drainage Construction and Land Acq.	Table A-3	impervious surface per acre	0.40	0.40	0.50	1.00	0.76	0.75
Trails	Table A-4	persons per household	2.98	2.98	2.98	1.00	1.00	1.00

edu

Source: City of Sacramento; EPS.

[1] VMT: Vehicle Miles Traveled.

[2] ESD: Equivalent Single Family Dwellings.

### **Cost Allocation Methodology**

The methodology of allocating the Panhandle Impact Fee Component costs needed to serve new development to the different developable land uses is summarized below and detailed in **Appendix A**. *Note that there is no commercial development planned in the Project, so the steps below describe the cost allocation methodology for residential development:*

1. Determine the total cost of new backbone infrastructure and public facilities required to serve the new residents in the Project area.
2. Determine the net cost of backbone infrastructure and public facilities to be funded by the Panhandle Impact Fee Component after accounting for other financing sources, such as citywide sources, State and federal sources, existing development impact fees, and funding from other plan areas.
3. Determine the amount of development in the Project that will be served by the new backbone infrastructure and public facilities.
4. For each backbone infrastructure and public facility category needed to accommodate new Panhandle development:
  - a. Determine the appropriate EDU factors by which to allocate the cost of the infrastructure needed to serve new development to the different land uses.
  - b. For each land use, multiply the EDU factor by the number of dwelling units to determine the total number of EDUs.
  - c. Allocate the total costs to each land use based on the land use's percentage of total EDUs.
  - d. Divide the total cost allocated to each land use by the number of dwelling units determine the cost per dwelling unit.
5. Add an administration component to fund the administration, oversight, implementation, and updates of the Panhandle Impact Fee Component. The administration fee equals 3 percent of the sum of the Impact Fees for each benefiting land use.

**Table 5-1**, presented earlier in this chapter, summarizes the cost allocations, administration component, and resultant fees, on a per-unit basis, for all Impact Fees.

## **Assembly Bill 602 Requirements**

The newly enacted California Assembly Bill 602 (AB 602 - adopted on September 28, 2021) contains new requirements for development impact fee programs, most of which are effective as of January 1, 2022. Several of the requirements apply to nexus studies. Per Government Code 66016.5(a)(6), large jurisdictions (i.e., jurisdictions located in a county with a population over 250,000 as of January 1, 2019) must adopt a capital improvement plan (CIP) as part of the nexus study. Per Government Code 66016.5(a)(2), where applicable, all nexus studies must identify the existing level of service for each public facility, the proposed new level of service, and explain why the new level of service is appropriate.

## **Nexus Study Findings**

### ***Capital Improvement Plan***

**Appendix B** of this report details the proposed capital improvements included in the Panhandle Impact Fee Component. The improvements included in the Panhandle Impact Fee Component and detailed in **Appendix B** are summarized below:

- Roadways
- Sanitary Sewer
- Storm Drainage (infrastructure and land acquisition)
- Trails

**Appendix B** details the improvement requirements and cost estimates for each of the above improvement types. Collectively, these requirements and cost estimates constitute the Panhandle Impact Fee Component CIP.

### ***Level of Service***

This section discusses the existing and proposed level of service for each improvement type included in the Panhandle Impact Fee Component and explains why the new level of service is appropriate.

#### Roadways

There are existing roadways in and adjacent to the Project. At the time that these roads were constructed, they were designed to provide the level of service required by the Sacramento County General Plan to accommodate projected traffic volumes without Panhandle development. The roadways were designed to meet Sacramento County General Plan standards (rather than City General Plan Standards) because the Project area used to be in the unincorporated area of Sacramento County.

Enhancements to the roadway system are needed to accommodate the projected increased traffic volumes that will occur as a result of Panhandle development. The Panhandle roadway improvements have been identified and designed to meet

the level of service standards outlined in the City General Plan and the requirements detailed in the Panhandle Environmental Impact Report (EIR).

#### Sanitary Sewer

With zero to limited occupied units or nonresidential structures in the Panhandle area, the area is not connected to any municipal wastewater system. Any existing uses would be operating on septic systems. Consequently, there is no existing municipal level of service. The required sanitary sewer improvements needed to serve projected Panhandle development at an acceptable level of service to meet the City General Plan standards and the Panhandle EIR conditions are identified in the Sewer Master Plan. The sanitary sewer system has been designed to provide the required sewer collection and treatment services to Panhandle development.

#### Storm Drainage

With zero to limited occupied units or nonresidential structures in the Panhandle area, the area is not connected to an area storm drainage system. Consequently, there is no existing level of service. The required storm drainage improvements needed to serve projected Panhandle development at an acceptable level of service to meet the City General Plan standards and the Panhandle EIR conditions are identified in the Storm Drainage Master Plan. The storm drainage system has been designed to provide the required flood protection to Panhandle development.

#### Trails

There is currently no trail system in the Panhandle Project and consequently no existing level of service. The overall transportation planning took into account the required trail network to meet the level of service standards outlined in the City General Plan and the requirements detailed in the Panhandle EIR. The planned trail network provides trail amenities within Panhandle as well as connectivity with regional trails outside of the project.

#### ***Specific Findings for Each Improvement***

This Finance Plan establishes the Panhandle Impact Fee Component of the Panhandle Fee Program in accordance with the procedural guidelines established in the Mitigation Fee Act, which is codified in California Government Section 66000 et seq. This Finance Plan establishes the Mitigation Fee Act legally required findings. Specifically, for each fee included in the Impact Fee Component, the following findings are made:

1. Identify the purpose of the fee.
2. Identify how the fee is to be used.
3. Determine how a reasonable relationship exists between the fee's use and the type of development project on which the fee is imposed.

4. Determine how a reasonable relationship exists between the need for the public facility and the type of development project on which the fee is imposed.
5. Demonstrate a reasonable relationship between the amount of the fee and the cost of the public facility or portion of the public facility attributable to the development on which the fee is imposed.

This Finance Plan makes separate findings concerning the nexus between each Impact Fee and the new Panhandle development on which the fee will be imposed.

### **Roadways**

#### **Purpose of Fee**

New development in the Project will result in an increase in population, and, therefore, in the demand for transportation improvements. The purpose of the Panhandle roadway fee is to provide funding to maintain adequate levels of service on public roads through the construction and expansion of new on-site and off-site roadway facilities.

#### **Use of Fee**

The Panhandle roadway fees will be used to construct and expand roadway infrastructure to accommodate future traffic volumes projected as a result of new Panhandle development. Roadway improvements to be funded by Panhandle fees include roadway segments, entry monumentation, traffic signals, traffic circles, and off-site improvements needed for the expansion of Elkhorn Boulevard.

#### **Reasonable Relationship Between Use of Fee and Type of Development**

The Panhandle roadway fees will be used to construct roadway improvements needed to adequately serve an increased population as the result of new Panhandle development. A reasonable relationship exists between the use of the roadway fees and the residential development on which the fees are imposed because the fees will be used to construct the roadway system to serve the new residents generated by the new development.

#### **Reasonable Relationship Between Need for Facility and Type of Development**

New residential development in the Project will generate new residents that will result in new vehicular trips and the need for additional roadway capacity to maintain adequate levels of service. A reasonable relationship exists between the need for transportation improvements and the type of new residential development projects because the capacity of the roadway system must be expanded to accommodate the new development that will place an increased demand on the roadway system.

Reasonable Relationship between Amount of Fee and Cost of Facility or Portion of Facility Attributed to Development on which Fee is Imposed

The total cost of roadway improvements funded by the Panhandle roadway fee is allocated among the projected new residential land uses in Panhandle at buildout based on the relative demand each land use is anticipated to place upon the improvements. Cost allocation factors based on vehicle miles travelled are used to measure the relative demand generated by each land use and to allocate the roadway costs across all benefitting land uses in the Project. A reasonable relationship exists between the amount of the Panhandle roadway fees and the costs of the facilities attributable to the new residential development on which the fees are imposed because the fees are derived using appropriate cost allocation factors as measures of the proportional demand generated by each development type.

***Sanitary Sewer***

Purpose of Fee

New development in the Project will result in the need for new sanitary sewer infrastructure to serve the new service population. The purpose of the Panhandle sanitary sewer fee is to provide funding to construct sanitary sewer improvements needed to adequately serve the new service population.

Use of Fee

The Panhandle sanitary sewer fees will be used to construct sanitary sewer facilities needed to accommodate increased demand projected as a result of new residential development. Construction of trunk sewer improvements will be funded through Panhandle Impact Fees.

Reasonable Relationship Between Use of Fee and Type of Development

The Panhandle sanitary sewer fees will be used to construct the trunk sanitary sewer infrastructure needed to adequately serve the new service population as the result of new development. A reasonable relationship exists between the use of the sanitary sewer fees and the residential development on which the fees are imposed because the fees will be used to construct the sewer system infrastructure needed to serve the new residents generated by the new development.

Reasonable Relationship Between Need for Facility and Type of Development

New residential development in the Project will generate new residents that will result in the need for new sanitary sewer system capacity to provide adequate service to the Project's service population. A reasonable relationship exists between the need for sewer system improvements and the type of new residential development projects because the new sewer system improvements must be constructed to accommodate the new residential development types that will place an increased demand on the sewer system.

Reasonable Relationship between Amount of Fee and Cost of Facility or Portion of Facility Attributed to Development on which Fee is Imposed

The total cost of improvements funded by the Panhandle sanitary sewer fee is allocated among the projected new residential land uses in the Project at buildout based on the relative demand each land use is anticipated to place upon the improvements. Cost allocation factors based on sewer system demand, as measured in equivalent sewer dwellings (ESDs) per acre, are used to measure the relative demand generated by each land use and to allocate the sewer costs across all benefitting land uses in the Project. A reasonable relationship exists between the amount of the Panhandle sewer fees and the costs of the facilities attributable to the new residential development on which the fees are imposed because the fees are derived using appropriate cost allocation factors as measures of the proportional demand generated by each development type.

***Storm Drainage***

Purpose of Fee

New development in the Project will result in increased storm water runoff generated by the addition of impervious surface area created by the new development. New storm drainage infrastructure will be needed to provide protection against flooding to the new Panhandle service population associated with the new development. The purpose of the Panhandle storm drainage fee is to provide funding for storm drainage improvements needed to serve the new Panhandle service population.

Use of Fee

The Panhandle storm drainage fees will be used to acquire detention basin land and to construct storm drainage infrastructure needed to accommodate increased demand for flood protection as a result of new development. Storm drainage system improvements funded through the Impact Fees include backbone storm drain lines, expansion of an existing detention basin owned by Twin Rivers Joint Unified School District, and associated outfall structures and pumps.

Reasonable Relationship Between Use of Fee and Type of Development

The Panhandle storm drainage fees will be used to acquire detention basin land and construct storm drainage infrastructure needed to adequately serve an increased service population as the result of new residential development. A reasonable relationship exists between the use of the storm drainage fees and the residential development on which the fees are imposed because the fees will be used to construct storm drainage system infrastructure needed to provide flood protection to the new residents generated by the new development.

Reasonable Relationship Between Need for Facility and Type of Development

New residential development in the Project will generate new residents that will result in the need for additional storm drainage infrastructure to provide adequate flood protection to the Project's service population. A reasonable relationship

exists between the need for storm drainage improvements and the type of new residential development projects because the storm drainage infrastructure must be constructed to accommodate the new development types that will place an increased demand on the storm drainage system.

Reasonable Relationship between Amount of Fee and Cost of Facility or Portion of Facility Attributed to Development on which Fee is Imposed

The total cost of improvements funded by the Panhandle storm drainage fee is allocated among the projected new residential land uses in the Project at buildout based on the relative demand each land use is anticipated to place upon the improvements. Cost allocation factors based on the need for drainage improvements, as measured by impervious surface area generated by each land use type, are used to measure the relative demand generated by each land use and to allocate the storm drainage costs across all benefitting land uses in the Project. A reasonable relationship exists between the amount of the Panhandle storm drainage fees and the costs of the facilities attributable to the new residential development on which the fees are imposed because the fees are derived using appropriate cost allocation factors as measures of the proportional demand generated by each development type.

***Trails***

Purpose of Fee

New development in the Project will result in new residents and in the need for a bicycle and pedestrian trail system that creates recreational activities and connectivity between different destinations. The purpose of the Project trails fee is to provide funding to construct a trails system that serves the residents of the Project and connects to the Citywide trails network.

Use of Fee

The Panhandle trails fee will be used to fund the construction of a trails system to serve the residents of the Panhandle development. The planned trails to be funded by the trails fee include the planned new Powerline Class 1 Bike Trail within the WAPA Corridor that will extend through the north-south length of the Project and construction of a portion of the Sotnip Trail within the Project area that will connect to the City's existing trail network. The Sotnip Trail is a planned 1,200-foot-long 12-foot Class 1 trail between Sorento Road and Kenmar Road directly to the east of the Project.

Reasonable Relationship Between Use of Fee and Type of Development

The Panhandle trails fees will be used to construct bicycle and pedestrian trails needed to serve the projected new residents of the Project. A reasonable relationship exists between the use of the trails fees and the residential development on which the fees are imposed because the fees will be used to construct the trails system to serve the new residents generated by the new development.



Reasonable Relationship Between Need for Facility and Type of Development

New residential development in the Project will generate new residents, resulting in the need for a bicycle and pedestrian trails system to provide connectivity within the Project and to the City trails system, as well as a desired level of service to the residents. A reasonable relationship exists between the need for the trails system and the type of new residential development projects because the trails system must be created to accommodate the new development types that will benefit from the trails. The EIR states that the Project residents will significantly increase pedestrian activity and the demand for new pedestrian facilities but that construction of the proposed Project trails (which would interconnect with pedestrian facilities) would reduce the Project's impact to a less than significant level. The City's General Plan also includes a level of service standard of 0.5 miles of trails and parkways per 1,000 residents, resulting in the need for trails to be constructed in the Project to serve the projected residents.

Reasonable Relationship between Amount of Fee and Cost of Facility or Portion of Facility Attributed to Development on which Fee is Imposed

The total cost of improvements funded by the Panhandle trails fee is allocated among the projected new residential land uses in the Project at buildout based on the relative benefit from the trails system generated by each land use. Cost allocation factors based on the residents who will use the trails system, as measured by persons per household, are used to measure the relative demand generated by each land use and to allocate trails costs across all benefitting residential land uses in the Project. A reasonable relationship exists between the amount of the Panhandle trails fees and the costs of the improvements attributable to the new residential development on which the fees are imposed because the fees are derived using appropriate cost allocation factors as measures of the proportional demand generated by each residential development type.

## 6. Feasibility of the Finance Plan

This chapter reviews issues associated to the overall financial feasibility of the Finance Plan. The financial feasibility is addressed by reviewing a total infrastructure burden analysis, as well as bond issuance guidelines, to ensure the Finance Plan will meet the required financial tests.

### Description of Static Feasibility Analyses

This analysis includes the following static methods for evaluating the financial feasibility of the proposed Project:

- Total Backbone Infrastructure and Public Facilities Cost Burden.
- Total Taxes and Assessments as a Percentage of Sales Price.

Each of these methods is based on a static financial feasibility evaluation. To be considered financially feasible, the Project should meet each of the static feasibility tests.

It is important to note that these feasibility metrics, described in detail below, should be considered initial diagnostics, offering a general indicator of whether or not a project is likely to meet financial feasibility criteria or whether measures should be taken to improve viability, either through a reduction in cost burdens, identification of other funding sources, or other approaches. None of the indicators, by themselves, should be considered absolute determinations regarding Project feasibility.

### Total Backbone Infrastructure and Public Facilities Cost Burden

It is common for developers of major development projects to advance-fund and carry infrastructure costs for some timeframe. The impact of the land developer's cost burden depends on several factors, including the timeframe for the reimbursements and the extent to which full reimbursement is received, either through public funding programs or through adjustments in land sales prices.

The purpose of the total backbone infrastructure and public facilities cost burden feasibility test is to assess the financial feasibility of the Project, given all current and proposed fees and the additional burden of Project-specific infrastructure

costs. As such, this feasibility test assesses the total fee burden on residential dwelling units associated with the proposed backbone infrastructure and public facilities.

The total backbone infrastructure and public facilities cost burden feasibility test provides a performance indicator of a project's feasibility. For each residential land use the total cost burden per dwelling unit is expressed as a percent of the finished sales price. Project feasibility is evaluated based on the following general guidelines or benchmarks:

- Burdens below 15 percent generally are considered financially feasible.
- Burdens between 15 and 20 percent may be feasible depending on the specific circumstances of the project.
- Burdens above 20 percent suggest a project may not be financially feasible unless other components of the project pro forma are particularly advantageous to the developer, thus allowing the project to bear unusually high backbone infrastructure and public facilities costs.<sup>2</sup>

These static feasibility benchmarks are based on EPS's experience conducting financial feasibility analyses for numerous projects throughout the Sacramento Region and Central Valley over the last 3 decades. This feasibility diagnostic is merely a tool that can be used—along with other tools—as a general measure of financial feasibility. This measure should not automatically be interpreted to mean that if one land use type exceeds the threshold, the project definitely is infeasible. In certain circumstances, there are ways in which a development project can mitigate against a high cost burden. In addition, the backbone infrastructure and public facilities costs will be fine-tuned and possibly reduced as engineering studies are completed closer to actual construction.

As shown in **Table 6-1**, the total cost of backbone infrastructure and public facilities accounts for between approximately 13.8 percent and 14.5 percent of the estimated sales price of residential units in the Project. Cost burdens of this magnitude indicate that the Project is likely financially feasible. Other factors such as the magnitude of advance funding requirements, reimbursement timeframes, and development absorption would also factor into Project feasibility.

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<sup>2</sup> Such other components may include extraordinarily low land basis (e.g., land has been in the family for a long time, land acquired during severe real estate market downturn, etc.), development phasing (e.g., fast early absorption ahead of a major infrastructure cost such as a new water treatment plant), or low or no environmental mitigation requirements (e.g., through avoidance or on-site preservation).

**Table 6-1**  
**Panhandle Finance Plan**  
**Estimated Infrastructure Cost Burden (2021\$)**

Item	Residential			Notes
	Estates (E)	Traditional (T)	Village (V)	
<b>Assumptions</b>				
Net Acres	75.7	147.7	60.5	
Number of Units	340	869	453	
Unit Size/Bldg. Sq. Ft.	2,500	2,250	2,000	
Garage Square Feet	500	500	450	
Units per Acre	4.5	5.9	7.5	
Valuation per Bldg. Sq. Ft.- Living Area (VB)	\$148.33	\$148.33	\$148.33	
Valuation per Bldg. Sq. Ft. - Garage (U)	\$59.88	\$59.88	\$59.88	
Building Valuation - Living Area and Garage	\$400,765	\$363,683	\$323,606	
<b>2002 Building plus Equipment Valuations</b>				
Valuation per Bldg. Sq. Ft.- Living Area	\$92.40	\$92.40	\$92.40	
Valuation per Bldg. Sq. Ft. - Garage	\$24.30	\$24.30	\$24.30	
Air Conditioning - Living Area	\$3.50	\$3.50	\$3.50	
Sprinklers - Living Area and Garage	\$2.60	\$2.60	\$2.60	
<b>Building and Equipment Valuation</b>	<b>\$259,700</b>	<b>\$220,050</b>	<b>\$195,735</b>	Used for calculation of Construction Excise Tax
<b>Current as of</b>				
	Jan-22	Jan-22	Jan-22	
<b>Processing Fees</b>				
	<u>per unit</u>	<u>per unit</u>	<u>per unit</u>	
Administrative Processing Fee	\$164	\$164	\$164	\$164 per hour, assumes 1 hour review
Building Permit	\$3,119	\$2,868	\$2,596	\$1,078 + \$0.006787 for each dollar over \$100,000 of bldg. valuation
Technology Surcharge	\$250	\$229	\$208	8% of Building Permit
Plan Review Fee	\$655	\$602	\$545	42% of Building Permit Fee; 50% of amount for Master Plan projects.
Technology Surcharge	\$52	\$48	\$44	8% of Plan Review Fee
Planning Review Fee	\$98	\$90	\$82	15% of Plan Review Fee
Planning Inspection Fee	\$336	\$336	\$336	Flat rate; charged when Planning Division performs inspections.
Seismic/Strong Motion	\$52	\$47	\$42	\$0.00013 per \$1 of bldg. valuation
General Plan Recovery Fee	\$1,042	\$946	\$841	\$2.60 per \$1,000 of bldg. valuation
Green Building/CBSC Fee	\$17	\$15	\$13	\$1 per \$25,000 of bldg. valuation or fraction, thereof
Construction Excise Tax	\$2,078	\$1,760	\$1,566	0.008 * valuation of 2002 bldg. + equipment valuation
Fire Inspection Fee	\$279	\$256	\$228	\$0.093 x gross square feet
Fire Review Fee	\$131	\$131	\$131	\$131 per hour, assumes 1 hour review
<b>Subtotal Processing Fees</b>	<b>\$8,273</b>	<b>\$7,493</b>	<b>\$6,795</b>	
<b>City Development Impact Fees</b>				
Adjusted Transportation Development Impact Fee (TDIF)	\$2,188	\$2,188	\$2,188	Net of alternative modes credits
Water Development Fee	\$3,323	\$3,323	\$3,323	Assumes 1" domestic meter
Water Easement Tap Installation Fee	\$1,822	\$1,822	\$1,822	Assumes 1" domestic meter
Water Meter Installation	\$672	\$672	\$672	Assumes 1" domestic meter
Residential Construction Water Use Fee	\$201	\$201	\$201	Flat rate per residential lot

**Table 6-1**  
**Panhandle Finance Plan**  
**Estimated Infrastructure Cost Burden (2021\$)**

Item	Residential			Notes
	Estates (E)	Traditional (T)	Village (V)	
Sewer Development Fee	\$151	\$151	\$151	Flat rate per residential lot
City Business Operations Tax	\$160	\$145	\$129	\$0.0004 per \$1 of bldg. valuation; Max. \$5,000/year/contractor
Erosion and Sediment Control (ESC)	\$70	\$70	\$70	Flat rate per residential lot
Neighborhood and Community Parks	\$3,912	\$3,912	\$3,912	\$3,912 per unit for units 2,000 sq. ft. or larger
Citywide Parks/Facilities	\$1,991	\$1,991	\$1,991	\$1,991 per unit for units 2,000 sq. ft. or larger
Natomas Basin Habitat Conservation Plan Fee	\$5,573	\$4,255	\$3,343	\$25,032 per acre; assumes land dedication in-lieu (\$16,250/acre), so excludes land acquisition portion of total fee (\$43,968 per acre).
Mixed Income Housing Ordinance/Housing Trust Fund	\$7,575	\$6,818	\$6,060	\$3.03 per unit sq. ft.
Residential Construction Tax	\$385	\$385	\$385	Flat rate for dwelling units with 3 or more bedrooms
<b>Subtotal City Development Impact Fees</b>	<b>\$28,024</b>	<b>\$25,933</b>	<b>\$24,248</b>	
<b>Other Agency Fees</b>				
Twin Rivers and Robla Elementary School District Fees	\$10,200	\$9,180	\$8,160	4.08 per living area sq. ft.
Sacramento Area Flood Control Agency Dev. Impact Fee	\$5,250	\$4,725	\$4,200	\$2.10 per habitable area sq. ft.(effective 1/4/2020).
Sacramento Countywide Transportation Mitigation Fee	\$1,378	\$1,378	\$1,378	\$1,351 mitigation fee + 2% admin fee
Air Quality Mitigation Fee [1]	\$276	\$276	\$276	Estimated \$240.38 per unit, plus 15% admin fee (\$36.06)
Sacramento Area Sewer District (Expansion)	\$4,561	\$3,482	\$2,736	\$20,484 per net acre for Expansion Area
Regional SAN (New)	\$6,479	\$6,479	\$6,479	\$6,479 per ESD for New Growth Area
<b>Subtotal Other Agency Fees</b>	<b>\$28,144</b>	<b>\$25,520</b>	<b>\$23,229</b>	
<b>Subtotal Fees</b>	<b>\$64,441</b>	<b>\$58,946</b>	<b>\$54,272</b>	
<b>Panhandle Fee [2]</b>	<b>\$25,606</b>	<b>\$22,917</b>	<b>\$22,763</b>	
<b>Panhandle Administration Fee (3%)</b>	<b>\$768</b>	<b>\$688</b>	<b>\$683</b>	
<b>Total Fees</b>	<b>\$90,815</b>	<b>\$82,550</b>	<b>\$77,717</b>	
<b>Sales Price per Unit/Building Value per Sq. Ft. [3]</b>	<b>\$625,000</b>	<b>\$600,000</b>	<b>\$550,000</b>	
<b>Infrastructure Burden Costs as a % of Sales Price [4]</b>	<b>14.5%</b>	<b>13.8%</b>	<b>14.1%</b>	

burden

Source: City of Sacramento; various public agencies; EPS.

[1] From the FEIR and escalated by percentage change in SF CPI from April 2018 through April 2021 (9.17%) See Table A-5.

Fee in the FEIR was \$220.18 per unit plus 15% administration.

[2] Combination of Panhandle Impact Fee and Panhandle DA Fee. See Table 5-1 for detailed Panhandle fee information.

[3] Residential values based on Gregory Group research for North Natomas homes for sale in Quarter 3 of 2021.

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

The infrastructure cost burden could change for several reasons, including a re-allocation of costs among land uses and cost reductions resulting from fine-tuning the estimates as engineering studies are completed and the Project becomes closer to implementation. The cost burden estimates will be further refined as the Project is implemented.

## **Total Taxes and Assessments as a Percentage of Sales Price**

The Total Taxes and Assessments as a Percentage of Sales Price feasibility test often is referred to as a “two-percent test.” This test provides another measure of the financial feasibility of a project that is used by land developers, builders, and municipal governments to evaluate development projects. The Total Taxes and Assessments as a Percentage of Sales Price test provides a general rule for the feasibility of proposed annual special taxes and assessments. In general, if the sum of property taxes, other ad valorem taxes, and all annual special taxes and assessments is less than 2 percent of the average finished home sales price, then the burden of annual taxes and assessments is considered financially feasible. In the Sacramento Region, jurisdictions and developers typically target total taxes and assessments at levels no greater than approximately 1.6 percent to 1.8 percent of the finished home sales price.

**Table 6-2** shows the estimated taxes and assessments as a percentage of home sales prices for three different proposed Project land uses. The total annual amount includes the following taxes and assessments:

- Property taxes.
- Other general ad valorem taxes (e.g., school/other General Obligation bonds).
- Services taxes and assessments.
- Infrastructure CFD taxes (proposed in this Finance Plan).

Development in Panhandle is subject to participation in several special districts for services and ongoing maintenance with proposed and established rates as specified in **Table 6-2**. When combined with the potential implementation of infrastructure special taxes that range from \$2,000 to \$2,300 per unit, the Panhandle total special taxes and assessments would be at the higher end of the feasibility range, ranging from 1.68 percent to 1.79 percent. While the Project special tax and assessment burden generally remains within feasible ranges after the addition of the Project Infrastructure CFD, capacity for additional CFD special taxes is limited.

**Table 6-2**  
**Panhandle Finance Plan**  
**Test of 2% Sales Price - Residential Market-Rate Units (2021\$)**

Item	Assumption	Residential				
		Estates (E)	Traditional (T)		Village (V)	
		TRA 003-446	TRA 003-445	TRA 003-446	TRA 003-445	TRA 003-446
<b>Assumptions</b>						
Net Acres		75.7	44.7	103.0	16.4	44.1
Dwelling Units		340	263	606	123	330
Dwelling Units per Net Acre		4.5	5.9	5.9	7.5	7.5
Square Feet per Dwelling Unit		2,500	2,250	2,250	2,000	2,000
<b>Finished Unit Sales Price (2018\$)</b>		<b>\$425,000</b>	<b>\$400,000</b>	<b>\$400,000</b>	<b>\$375,000</b>	<b>\$375,000</b>
<b>Finished Unit Sales Price (2021\$) [1]</b>		<b>\$625,000</b>	<b>\$600,000</b>	<b>\$600,000</b>	<b>\$550,000</b>	<b>\$550,000</b>
<b>Property Taxes</b>						
General Property Tax [2]	1.0000%	\$6,180	\$5,930	\$5,930	\$5,430	\$5,430
Grant JT High GOB	0.0236%	\$148	\$142	\$142	\$130	\$130
Los Rios College GOB	0.0249%	\$156	\$149	\$149	\$137	\$137
Twin Rivers Unified GOB	0.0558%	\$349	\$335	\$335	\$307	\$307
Robla Elementary GOB	0.1532%	\$958	\$0	\$919	\$0	\$843
Twin Rivers Elementary GOB 12	0.0426%	\$0	\$256	\$0	\$234	\$0
<b>Total Ad Valorem Taxes Range</b>		<b>\$7,789</b>	<b>\$6,811</b>	<b>\$7,475</b>	<b>\$6,238</b>	<b>\$6,846</b>
<b>Estimated Special Annual Taxes/Assessments</b>						
SAFCA Consolidated Capital Assessment District #2	\$100.00 per 1,000 bldg. sq. ft. (avg.)	\$250	\$225	\$225	\$200	\$200
SAFCA AD No.1 - O&M Assessment	\$55.00 per acre	\$12	\$9	\$9	\$7	\$7
SAFCA Natomas Basin Local Assessment District	\$36.00 per 1,000 bldg. sq. ft. (avg.)	\$90	\$81	\$81	\$72	\$72
City of Sacramento Core Library Services Tax	\$14.40 per unit	\$14	\$14	\$14	\$14	\$14
City of Sacramento Additional Library Services Tax	\$37.02 per unit	\$37	\$37	\$37	\$37	\$37
City of Sacramento AD L & L	\$90.42 per unit	\$90	\$90	\$90	\$90	\$90
North Natomas TMA CFD 99-01 [3]	\$121.00 per unit	\$121	\$121	\$121	\$121	\$121
Reclamation District No. 1000	\$25.00 per unit	\$25	\$25	\$25	\$25	\$25
<b>Total Estimated Special Annual Taxes/Assessments</b>		<b>\$640</b>	<b>\$603</b>	<b>\$603</b>	<b>\$567</b>	<b>\$567</b>
<b>Estimated Panhandle Services CFD [4]</b>	8.465%	<b>\$468</b>	<b>\$460</b>	<b>\$460</b>	<b>\$455</b>	<b>\$455</b>
<b>Estimated Panhandle Infrastructure CFD</b>		<b>\$2,300</b>	<b>\$2,200</b>	<b>\$2,200</b>	<b>\$2,000</b>	<b>\$2,000</b>
<b>Total Annual Taxes and Assessments</b>		<b>\$11,197</b>	<b>\$10,075</b>	<b>\$10,738</b>	<b>\$9,260</b>	<b>\$9,868</b>
<b>Taxes &amp; Assessments as % of Sales Price [5]</b>		<b>1.79%</b>	<b>1.68%</b>	<b>1.79%</b>	<b>1.68%</b>	<b>1.79%</b>

two percent

Source: Sacramento County; City of Sacramento; Gregory Group; EPS.

[1] Residential values based on Gregory Group research for North Natomas homes for sale in Quarter 3 of 2021.

[2] Includes homeowners' property tax exemption of \$7,000.

[3] As shown on Table 7-1, North Natomas TMA provided estimated annual cost to serve Panhandle, including Krumenacher Ranch. The annual cost per unit is estimated by distributing this cost over Panhandle PUD units because it is uncertain if Krumenacher Ranch will proceed.

[4] Based on an estimated services CFD for streetscapes, parks and open space, and utilities. See **Appendix D** for more detailed information. Rates established in 2018 Finance Plan adjusted by pct. change in annual average CPI for San Francisco-Oakland-Hayward from 2018 through 2021. See Table A-5.

[5] Although the State guideline is 2%, this analysis uses a target range of 1.7%-1.8% for evaluating feasibility, to allow for additional taxes and assessments as needed (e.g. future school district GO bond).

## 7. Financing Sources for Services and Ongoing Operation and Maintenance

This chapter includes additional information regarding funding sources for annual services and ongoing operation and maintenance costs. "Services" refer to general government or other services, such as law enforcement protection, that will be provided by public agencies. Operation and maintenance costs refer to the costs to operate and maintain backbone infrastructure and public facilities.

Once backbone infrastructure and public facilities are completed, they will be dedicated to or acquired by public agencies. These public agencies will be responsible for operating and maintaining the facilities. The Finance Plan provides estimates of the operations and maintenance costs.

Development in the Project will be required to participate in a series of special financing districts to fund public services and the operation and maintenance of the public improvements. Participation in these districts will be determined by the City or the special districts no later than at the filing of final maps. The City or existing assessment districts will have funding responsibility for most items. However, if a funding shortfall is deemed to exist, a Mello-Roos CFD, Community Services District, Lighting and Landscaping District, or some other funding mechanism will be established.

The Applicant, the City, and the North Natomas TMA are in discussions regarding support for TMA programs. The Finance Plan includes a placeholder cost per dwelling unit based on the estimated amount to provide services to the Project divided by the total number of dwelling units in the Project. **Table 7-1** details the total annual estimated TMA services cost and TMA services cost per dwelling unit. The total annual cost estimate was provided in 2018 and is escalated to 2021 dollars on **Table 7-1**. Panhandle may annex into the North Natomas TMA CFD 99-01 or form a separate CFD for TMA services.

The Project may form a services CFD for the operations and maintenance of streetscapes, parks and open space, and utilities. **Appendix D** includes the detailed cost estimates and allocation methodology for the potential Panhandle services CFD. If the Project forms a Homeowners' Association (HOA), some of the operations and maintenance costs currently assumed in the CFD may be included in a HOA fee instead.



**Table 7-1**  
**Panhandle Finance Plan**  
**North Natomas TMA Proposed Programs and Services**

Item	Percentage	Amount
<b>North Natomas TMA Cost (2018\$)</b>		
Commuter Shuttle Service		\$118,978
Bike and Walk to School Program		\$34,200
Bike Program		\$6,688
<b>Subtotal North Natomas TMA Cost</b>		<b>\$159,866</b>
TMA Business Program, Advocacy, Communications, Marketing & Overhead	10%	\$15,987
City Administration (5%)	5%	\$7,993
<b>Total North Natomas TMA Cost</b>		<b>\$183,846</b>
<b>Total Panhandle Units</b>		<b>1,662</b>
North Natomas TMA Cost per Unit (2018\$) [1]		\$111
<b>North Natomas TMA Cost per Unit (escalated to 2021\$) [2]</b>	<b>9.17%</b>	<b>\$121</b>

tma

Source: North Natomas Transportation Management Association (TMA); City of Sacramento.

[1] North Natomas TMA provided estimated annual cost to serve Panhandle, including Krumenacher Ranch. The annual cost per unit is estimated by distributing this cost over Panhandle PUD units because it is uncertain if Krumenacher Ranch will proceed.

[2] Percentage escalation equals pct. change in CPI from April 2018 through April 2021. See Table A-5.

## 8. Implementation

Implementation of the Finance Plan ensures that new development will construct facilities to meet the service-level specification set out in the Project and will pay its fair share of the cost of backbone infrastructure and public facilities required to serve the Project area. The City will implement the Finance Plan, which may include the following actions:

- Update relevant existing fee programs to include Project land uses and facilities when appropriate.
- Implement the Panhandle Fee Program.
- Establish reimbursement policies and parameters. Reimbursements will be controlled by reimbursement agreements between the City and the developers. The time frame for reimbursements will be limited through the terms of the reimbursement agreement.
- Form a CFD to help finance the construction of infrastructure and public facilities and administer subsequent bond sales and tax collection.
- Form a services CFD to fund maintenance of streetscapes, parks and open space, and utilities.
- Annex into an existing TMA or create a new TMA for the Project.
- Account for fee payments, fee credits, or reimbursements.
- Update the Panhandle Fee Program annually for inflation.
- Periodically, update and adjust the Panhandle Fee Program as new infrastructure cost, land use, and revenue information becomes available.
- Coordinate closely with all appropriate City departments and other service providers to implement the Finance Plan.
- Work with property owners and the development community during the Project's buildout to resolve specific infrastructure construction responsibility and financing issues that may arise as part of the individual land development application process.

## Panhandle Fee Program

### Fee Amount

As documented in previous chapters, the Panhandle Fee Program estimates provided in this Finance Plan are based on the best facility improvement cost estimates, administrative cost estimates, and land use information available at this time. If costs change significantly, if the type or amount of new development changes, if other assumptions significantly change, or if other funding becomes available (as a result of legislative action on State and local government finance, for example), the Panhandle Fee Program should be updated accordingly.

After the fees presented in this report are established, the City will conduct annual and other periodic reviews of facility improvement costs and other assumptions used as the basis of this Finance Plan. Based on these reviews, the City may make necessary adjustments to the fee program through subsequent fee program updates. The cost and fee adjustment process is discussed below under "Fee Program Updates."

The cost estimates presented in this Finance Plan are in 2021 dollars because the estimates were prepared in 2021. The City may adjust the costs and fees annually as outlined in this chapter.

The Panhandle Fee Program will consist of two components, the Panhandle Impact Fee Component and the Panhandle DA Fee Component. The Panhandle Impact Fee Component will be implemented in accordance with Government Code Section 66000 (for applicable fees) and City Code Chapter 18.56. The Panhandle DA Fee Component will be implemented in accordance with the DA requirements. Any City ordinances and resolutions required for implementation of the Panhandle Fee Program will be an integral and controlling part of the policies and procedures authorized for the Panhandle Fee Program. If there are any inconsistencies or contradictions between the implementing ordinance and resolution(s) and the Finance Plan, the ordinance/resolution(s) shall prevail. **Table 5-1 in Chapter 5** shows the fee rates identified in this Finance Plan for the residential land uses.

### Administration Fee

Administration fees will be collected to fund the administration, oversight, implementation, and updates of the Panhandle Fee Program, including administration of any credit and reimbursement agreements. The administration fee will include adequate funding to cover all City costs. The Panhandle Impact Fee Component and the Panhandle DA Fee Component will each contain an administration fee.

While the administration fee is required to cover actual costs of administering the program on an annual basis, this fee component also must provide adequate funding to cover periodic updates to the program that are above and beyond

annual fee program administration. For each Panhandle Fee Program component, it is recommended the administration fee for each land use be established as 3 percent of the sum of the other fees.

### **Reimbursements and Fee Credits**

The City and individual developers may agree to have developers build or advance-fund certain facilities identified in the Panhandle Fee Program. The facilities advance-funded or built may be part of the fee program or funded by non-fee revenues. In the case of such an agreement, developers should receive a reimbursement or fee credit based on the terms of the agreement. Infrastructure projects that are the financial responsibility of the developer (i.e., designated as private capital) are not subject to reimbursement or fee credits.

For instance, if a developer constructs and funds the extension of a roadway contained in the Panhandle Fee Program, then the developer would be eligible for a reimbursement or fee credit up to the amount of funding that was to be included in the fee program. In such an instance, the City and the developer would come to agreement before construction of the improvement to determine the amount, timing, and manner of repayment of the advance funding: fee credit or reimbursement. The City will establish a set of procedures to manage reimbursement/credit agreements. The procedures could include forms of any agreement and accounting procedures to manage the reimbursement/credit program.

### **Fee Program Updates**

The fees presented in this report are based on the best available cost estimates and land use information at this time. If costs or land uses change significantly in either direction, or if other funding becomes available, the fees will be updated accordingly. Most updates to the development impact fees and costs will occur automatically and annually in accordance with the procedure below. As also provided below, systematic updates will occur periodically to assess the need for more, or fewer, facilities, and the appropriateness of the nexus relationships as both need and land uses evolve.

Annual adjustments to costs and funding sources will be made using either a cost benchmarking methodology (Benchmark Change) or application of an inflation index or a combination thereof, as described in the specific procedures outlined below.

### **Procedure for Adjusting the Panhandle Impact Fees and Revising the Inventory of Remaining Infrastructure to be Financed by that Fee**

The City will set the amount of the Panhandle Impact Fees by using the estimated cost of the facilities to be financed, determined in accordance with the following

definitions and procedures. The estimated costs will be allocated among the residential land uses in accordance with the cost allocation methodology detailed in **Chapter 5**.

**1. Definitions.**

- a. "Aggregate Costs" means the cost to construct remaining Panhandle Impact Fee (PHIF) Eligible Facilities.
- b. "CalTrans Index" means the Quarterly California Highway Construction Cost Index (Price Index for Selected Highway Construction Items) published by the California Department of Transportation, Division of Engineering Services—Office Engineer.
- c. "ENR Index" means the Engineering News Record Construction Cost Index for San Francisco.
- d. "Finance Plan" means the Panhandle Finance Plan, as amended.
- e. "Funding Requirement" means the amount of the PHIF that must be generated from remaining development so that the City will have adequate funding (A) to construct the PHIF Facilities remaining to be completed and (B) to administer the PHIF program. It is calculated as follows: *first*, calculate the aggregate cost to complete the remaining PHIF Facilities and to pay the administrative component of the PHIF as required by the Finance Plan; *second*, from the result add the amount of outstanding PHIF credits; and *third*, subtract the PHIF revenues then available to complete the remaining PHIF facilities.

**Funding Requirement = (current Aggregate Costs and Administration) + (credits owed) – (revenue on hand)**

- f. "PHIF" means the Panhandle Impact Fee established by Sacramento City Code for the Panhandle Finance Plan.
- g. "PHIF Credits" means the outstanding fee credits or reimbursements owed for developer constructed or advance-funded PHIF Eligible Facilities.
- h. "PHIF Eligible Facility" means a public improvement or segment of a public improvement that is identified in the 2018 Finance Plan as being funded by the PHIF.

- i. "PHIF Funding Obligation" means the maximum funding obligation of the PHIF for a given year.
- j. "PHIF Share" means the portion of a PHIF Eligible Facility's cost that is funded, in whole or part, by the PHIF.

## 2. Annual PHIF Adjustment for PHIF Eligible Facilities.

- a. Each July 1, the City will adjust the PHIF in accordance with the difference between (1) the Funding Requirement for the current year; and (2) the funding that would be available, if the then-existing PHIF were applied to remaining development.
- b. Examples of Annual PHIF Adjustment for PHIF Eligible Facilities:

As of April 1, 2022	Hypothetical: Percentage Cost Changes		
	4.00%	-6.00%	6.00%
<b>Costs Comparison (as of April 1, 2022)</b>			
Aggregate Costs and Administration (2021\$)	\$50,000,000	\$50,000,000	\$50,000,000
Aggregate Costs and Administration (2022\$) [1]	\$52,000,000	\$47,000,000	\$53,000,000
Escalation Factor	4.00%	-6.00%	6.00%
<b>Credits Owed (as of April 1, 2022)</b>			
Credits Owed (2021\$)	\$3,000,000	\$3,000,000	\$3,000,000
Credits Owed (2022\$) [2]	\$3,120,000	\$3,000,000	\$3,180,000
<b>Funding Requirement Calculation</b>			
Aggregate Costs and Administration (2022\$)	\$52,000,000	\$47,000,000	\$53,000,000
Plus: Credits Owed (2022\$) [2]	\$3,120,000	\$3,000,000	\$3,180,000
Less: Cash on Hand, April 1, 2022	(\$1,000,000)	(\$1,000,000)	(\$1,000,000)
<b>2022 Funding Requirement</b>	<b>\$54,120,000</b>	<b>\$49,000,000</b>	<b>\$55,180,000</b>
<b>Revenue from Remaining Development (as of April 1, 2022)</b>			
Fee Revenue Based on 2021 Fees and Remaining Development [3]	<b>\$50,000,000</b>	<b>\$50,000,000</b>	<b>\$50,000,000</b>
<b>Hypothetical Fee Change (Effective July 1, 2022)</b>			
2022 Funding Requirement	\$54,120,000	\$49,000,000	\$55,180,000
Revenue from Remaining Development	\$50,000,000	\$50,000,000	\$50,000,000
<b>Fee Change (\$)</b>	<b>\$4,120,000</b>	<b>(\$1,000,000)</b>	<b>\$5,180,000</b>
<b>Fee Change (%)</b>	<b>8.24%</b>	<b>-2.00%</b>	<b>10.36%</b>

[1] Based on the adjustment procedures described in Sections 3 and 4 below.

[2] Credits owed are escalated annually based on the year over year change to the aggregate cost but are never decreased.

[3] Reflects future fee revenue from all development (applying unadjusted fee rates to all remaining development), including development that is eligible for future fee credits.

**3. Adjustments to Aggregate Costs: Remaining Roadways, Sewer, Drainage, and Trails Facilities<sup>3</sup>.**

- a. Adjustment by Index.
  1. Except as specified in Subsection 3(b) and Sections 4 and 5 below, for all PHIF Eligible Facilities, the cost adjustment to remaining PHIF Eligible Facilities is the greater of the following (but in no event less than zero percent in net aggregate):
    - A. The ENR Index; or
    - B. The CalTrans Index 3-year moving average.
  2. Index measurement.
    - A. ENR Index: Year-over-year change as of each March.
    - B. CalTrans Index: 12-quarter average through quarter 1 of the current year over 12-quarter average through quarter 1 of the prior year.
  3. Precision. All calculations will be carried out to three decimal places.
- b. Adjustment by Benchmarking.
  1. Before April 1 of each calendar year, a third-party professional engineering consultant who is under contract to the City will estimate the cost to construct all PHIF Eligible Facilities subject to this subsection 3(b). The cost estimate will anticipate cost changes to July 1 of the calendar year in which the estimate is made. The cost estimate plus an additional contingency (not to exceed an amount equal to 15% of the cost estimate) is the "Draft Benchmark Estimate" of Aggregate Costs for the year.
  2. Panhandle landowners shall have the right, assignable only with the written consent of the City at the City's sole discretion, to hire an independent third-party engineer to validate the cost estimates reflected in the "Draft Benchmark Estimate". The City and Landowner agree to work in good faith to resolve differences, if any, in the engineer's estimates. The agreed upon cost estimate shall be the "Benchmark Estimate."
  3. If the percentage change between the Aggregate Costs for the then-current year and the Aggregate Costs for the same set of PHIF Eligible

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<sup>3</sup> Storm drainage land acquisition costs are excluded from the cost adjustment procedures detailed in this section. Storm drainage land acquisition costs are updated annually based on an annual appraisal of the value of North Tatomas public land and are not included as part of the benchmark cost estimates.

Facilities for the immediately preceding year differ by an amount equal to, or more than, plus or minus 5% in aggregate from the percentage change determined by index in accordance with Subsection 3(a) above, then the City will use the then-current year's Benchmark Estimate of Aggregate Costs to determine the Funding Requirement.

*Note that for the purposes of estimating the roadway, sewer, drainage and trails facilities costs in this Finance Plan, the Benchmark Estimate of Aggregate Costs was used. Since the proposed Panhandle Fee Program and Panhandle Impact Fees have not yet been adopted, a comparison was not made this year. Rather, the engineer's cost estimates were used to establish costs. The comparison methodology will first be performed in 2023 following adoption of the Panhandle Impact Fees.*

c. Comprehensive Review and Nexus Study.

Per California Government Code section 66016.5(a)(8) created by California Assembly Bill 602, nexus studies must be updated every eight years. The City may perform a comprehensive review and nexus study for the PHIF every three years unless the City determines that prevailing market conditions do not justify doing so (e.g., if development is lacking or the remaining development is limited).

d. Sample cost adjustments for roadways, sewer, drainage, and trail facilities:

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**Sample #1**

Benchmarking *increase* of 4%  
ENR Index *increase* of 2%  
CalTrans Index *increase* of 3.1%

**Change in Aggregate Costs: *increase* of 3.1%**

**Sample #3**

Benchmarking *decrease* of 3%  
ENR Index *decrease* of 0.5%  
CalTrans Index *decrease* of 1%

**Change in Aggregate Costs: 0%**

**Sample #5**

Benchmarking *increase* of 6%  
ENR Index *increase* of 1%  
CalTrans Index *decrease* of 1%

**Change in Aggregate Costs: *increase* of 6%**

---

**Sample #2**

Benchmarking *increase* of 4.5%  
ENR Index *increase* of 1%  
CalTrans Index *decrease* of 1%

**Change in Aggregate Costs: *increase* of 1%**

**Sample #4**

Benchmarking *decrease* of 5%  
ENR *increase* of 0.5%  
Cal Trans Index *decrease* of 1%

**Change in Aggregate Costs: *decrease* of 5%**



#### **4. Adjustment to Outstanding PHIF Credits.**

Effective July 1 of each year, outstanding PHIF credits are adjusted annually based on the same adjustment factor applied to the PHIF Aggregate Costs, with the exception that the outstanding PHIF credits will not be decreased.

#### **5. PHIF Funding Obligation; Change in List of Facilities Funded with PHIF.**

- a. The Finance Plan shows not just the estimated cost of each PHIF Eligible Facility but also the PHIF Share for the PHIF Eligible Facility. Each year, after adjusting costs in accordance with sections 1 through 4 above, the City shall determine the aggregate PHIF share for all PHIF Eligible Facilities, and that aggregate amount will be the PHIF Funding Obligation for that year.
- b. Each year, the City may revise the PHIF Share for each PHIF Eligible Facility and shall give Landowner 30-days' prior written notice of any revision that will result in a Removed PHIF Facility (defined below), as follows:
  1. If a PHIF Eligible Facility is removed from the Panhandle Finance Plan because it will no longer be funded by the PHIF (a "Removed PHIF Facility"), then the City may allocate the Removed PHIF Facility's PHIF Share (determined in accordance with subsection 3(b)(1) above) to another PHIF Eligible Facility on the list. Public improvements not identified in the Panhandle Finance Plan may not be funded with the PHIF.
  2. The City may not require, as a condition for approving the Landowner's request for land-use entitlements on all or part of the Property, that the Landowner or any other signatory to a Panhandle DA construct all or part of a Removed PHIF Facility. This limitation does not apply if the Landowner requests and receives a change in the then-existing zoning on all or part of the Property and the City determines that the change creates a need for construction of a Removed PHIF Facility.
  3. If the City has previously required the Landowner to build a PHIF Eligible Facility as a condition of approval for a land-use entitlement granted to the Landowner, then the City may not subsequently remove the PHIF Eligible Facility from the list of remaining PHIF Eligible Facilities and thereby deny the Landowner the opportunity to obtain reimbursement from the PHIF program.

## **6. Scope of PHIF Eligible Facilities.**

The scope of each PHIF Eligible Facility is as described in the Finance Plan, as amended, and may not be revised except as required to comply with federal or state law. With respect to public roadways and streets, the scope is to be based on the City's street-design standards for lands within the Panhandle area.

## **7. Adequate Funding for PHIF Eligible Facilities.**

The City may not cite, as a reason for increasing the amount of the PHIF Funding Obligation, the loss of potential funding from sources identified in the Panhandle Finance Plan as Non-PHIF Funding Sources, such as PDAF, federal funding, state funding, regional funding, grants, gifts, contributions, fees, reimbursements, the City's general fund, the City's Major Street Construction Tax, or private funds.

## **Procedure for Adjusting the Panhandle DA Fees**

The City will set the amount of the Panhandle DA Fees by adjusting the prior year's Panhandle DA Fees in accordance with the NNFP fee amounts and the following definitions and procedures:

### **1. Definitions.**

- a. "CPI Index" means the San Francisco-Oakland-Hayward Consumer Price Index (CPI) for all urban consumers.
- b. "ENR Index" means the Engineering News Record Construction Cost Index for San Francisco.
- c. "Finance Plan" means the Panhandle Finance Plan, as amended.
- d. "PDAF" means the Panhandle DA Fee established by the Panhandle DAs.
- e. "PDAF Eligible Facility" means a public improvement or segment of a public improvement that is identified in the North Natomas Development Impact Fee Nexus Study and Financing Plan Update – 2018 (or any amendments thereof) as being funded by the PDAF.

### **2. Adjustments to PDAF: Transit, Fire, Community Center, and Library.**

The transit, fire, and library DA Fees in this Finance Plan are calculated assuming the applicable FY 17-18 NNFP development impact fees paid under the NNFP, escalated to 2021 dollars. The community center DA Fee in this Finance Plan is set equal to the FY 21-22 NNFP community center fee.

For each of these public facilities, the City will adjust the PDAF annually by the percentage change in the ENR Index from March to March, effective each July 1, in accordance with the North Natomas Nexus Study.

**3. Adjustment to the PDAF Regional Park Land Acquisition Fee.**

The regional park land acquisition fees in this Finance Plan are calculated assuming the applicable FY 2017-18 NNFP development impact fees escalated to 2021 dollars. The City will adjust the regional park land acquisition PDAF annually by the percentage change in the CPI Index from April to April, effective each July 1, in accordance with the NNFP.



## APPENDICES:

- Appendix A: Cost Allocations and Cost Adjustments
- Appendix B: Capital Improvement Cost Estimates
- Appendix C: Estimated Fee Revenue
- Appendix D: Potential Panhandle Services CFD Detailed Cost Estimates and Allocation Methodology





## APPENDIX A:

### Cost Allocations and Cost Adjustments

Table A-1	Cost Allocation: Roadway Improvements .....	A-1
Table A-2	Cost Allocation: Sanitary Sewer.....	A-2
Table A-3	Cost Allocation: Drainage Improvements and Land Acquisition.....	A-3
Table A-4	Cost Allocation: Trails .....	A-4
Table A-5	Annual Escalation Factors .....	A-5



**Table A-1**  
**Panhandle Finance Plan**  
**Cost Allocation: Roadway Improvements**

<b>Cost Allocation:</b> <b>Roadway</b>
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Land Use	Units	Trip Demand Factor per Unit [1]	Total EDUs	Percentage of Total Trips	Distribution Total Cost	Cost per Unit
<b>Residential Land Uses</b>						
Estates (E)	340	0.99	337	20.5%	\$2,970,193	\$8,736
Traditional (T)	869	0.99	860	52.3%	\$7,591,463	\$8,736
Village (V)	453	0.99	448	27.3%	\$3,957,345	\$8,736
<b>Subtotal Residential Land Uses</b>	<b>1,662</b>		<b>1,645</b>	<b>100.0%</b>	<b>\$14,519,000</b>	
<b>Total</b>			<b>1,645</b>	<b>100.0%</b>	<b>\$14,519,000</b>	

*trans alloc*

Source: DKS Associates; City of Sacramento Transportation Development Impact Fee (TDIF) Nexus Study; EPS.

[1] Trip demand factor from City of Sacramento TDIF Nexus Study based on PM peak trip vehicle miles traveled per dwelling unit.



**Table A-2**  
**Panhandle Finance Plan**  
**Cost Allocation: Sanitary Sewer**

**Cost Allocation:**  
**Sanitary Sewer**

Land Use	Units	Net Acres	ESDs per Acre [1]	EDU Factor per Unit	Total EDUs	Percentage of Total EDUs	Distribution of Total Costs	Cost per Unit
<b>Residential Land Uses</b>								
Estates (E)	340	75.7	6.00	1.34	454	25.3%	\$79,491	\$234
Traditional (T)	869	147.7	6.00	1.02	886	49.4%	\$155,097	\$178
Village (V)	453	60.5	7.50	1.00	454	25.3%	\$79,412	\$175
<b>Subtotal Residential Land Uses</b>	<b>1,662</b>	<b>283.9</b>			<b>1,794</b>	<b>100.0%</b>	<b>\$314,000</b>	
<b>Total</b>		<b>283.9</b>			<b>1,794</b>	<b>100.0%</b>	<b>\$314,000</b>	

Source: MacKay & Somps; EPS.

*sewer alloc*

[1] Equivalent Single Family Dwellings (ESDs) per acre equal to factors in Table 1 of the 2020 Sanitary Sewer Study Level Two for Natomas Panhandle.

**Table A-3**  
**Panhandle Finance Plan**  
**Cost Allocation: Drainage Improvements and Land Acquisition**

**Cost Allocation:**  
**Storm Drainage**

Land Use	Units	Net Acres	Impervious Surface per Acre [1]	Total EDUs	Percentage of Total EDUs	Distribution of Total Costs	Cost per Unit
<b>Residential Land Uses</b>							
Estates (E)	340	75.7	0.40	30	25.3%	\$3,784,396	\$11,131
Traditional (T)	869	147.7	0.40	59	49.4%	\$7,383,822	\$8,497
Village (V)	453	60.5	0.50	30	25.3%	\$3,780,647	\$8,346
<b>Subtotal Residential Land Uses</b>	<b>1,662</b>	<b>283.9</b>		<b>120</b>	<b>100.0%</b>	<b>\$14,948,865</b>	
<b>Total [2]</b>		<b>283.9</b>		<b>120</b>	<b>100.0%</b>	<b>\$14,948,865</b>	

*sd alloc*

Source: City of Sacramento; EPS.

[1] From Table 5-3 of the Sacramento City/County Hydrology Standards-Volume 2:

4-6 units per acre 0.40

6-8 units per acre 0.50

[2] See Table 3-3 for total cost.

**Table A-4**  
**Panhandle Finance Plan**  
**Cost Allocation: Trails**

**Cost Allocation:**  
**Trails**

Land Use	Units [2]	Persons Served	Percentage of Total Persons Served	Distribution of Total Costs	Cost per Unit
<b>Persons per Household [1]</b>		<b>2.98</b>			
<b>Residential Land Uses</b>					
Estates (E)	340	1,013	20.5%	\$214,392	<i>per unit</i> \$631
Traditional (T)	869	2,590	52.3%	\$547,961	\$631
Village (V)	453	1,350	27.3%	\$285,646	\$631
<b>Total [2] [3]</b>	<b>1,662</b>	<b>4,953</b>	<b>100.0%</b>	<b>\$1,048,000</b>	

*trails alloc*

Source: City of Sacramento; EPS.

[1] Average household size for the City of Sacramento according to the 2010 US Census.

[2] Total cost equals the estimated Panhandle cost contribution for the Sotnip Trail and the cost of the Powerline (WAPA Corridor) trails as shown below and detailed in Table 3-6:

Sotnip Trail Contribution:	\$381,000
Powerline (WAPA Corridor) Trail:	\$667,000
<b>Total:</b>	<b>\$1,048,000</b>

[3] According to the Project conditions of approval, the Panhandle's contribution for the Sotnip Trail will be paid on a per-unit basis by the first 50 percent of permits. This Finance Plan allocates the total cost on a planwide basis to equalize costs across all benefitting Panhandle land uses.

**Table A-5**  
**Panhandle Finance Plan**  
**Annual Escalation Factors**

Year	ENR Construction Cost Index San Francisco			CPI For All Urban Consumers San Francisco-Oakland-Hayward			CPI For All Urban Consumers San Francisco-Oakland-Hayward			Caltrans Index 3-Year Average Through First Quarter		
	March Index	Annual % Change	% Increase to FY 21-22	April Index	Annual % Change	% Increase to FY 21-22	Annual Average	Annual % Change	% Increase to FY 21-22	March Index 3-Yr. Avg.	Annual % Change	% Increase to FY 21-22
2017	11,609.44		<b>13.159%</b> [1]	274.589		<b>12.684%</b> [1]	274.924			80.2192		
2018	12,014.72	3.491%	<b>9.342%</b> [2]	283.422	3.217%	<b>9.173%</b> [3]	285.550	3.865%	<b>8.465%</b> [4]	85.4033	6.463%	<b>19.180%</b> [2]
2019	12,048.19	0.279%	9.038%	294.801	4.015%	4.959%	295.004	3.311%	4.989%	93.9825	10.045%	8.300%
2020	12,810.67	6.329%	2.549%	298.074	1.110%	3.806%	300.084	1.722%	3.211%	100.2317	6.649%	1.548%
2021	13,137.16	2.549%	0.000%	309.419	3.806%	0.000%	309.721	3.211%	0.000%	101.7833	1.548%	0.000%

esc

Source: Engineering News-Record; U.S. Bureau of Labor Statistics; Caltrans; EPS.

[1] Percentage change in ENR CCI (March index) or CPI (April index) from 2017 to 2021 used to escalate North Natomas 2017-18 public facilities fees to establish Panhandle 2021-22 public facilities fees. See Table 3-9.

[2] Percentage change in ENR CCI (March index) or Caltrans Index (3-year average of quarterly indices ending in 1st quarter) from 2018 to 2021 used to escalate some infrastructure costs and for comparison to benchmark costs.

[3] Percentage change in April CPI from 2018 to 2021 used to escalate TMA costs.

[4] Percentage change in annual average CPI from 2018 to 2021 used to escalate estimated Panhandle Services CFD special tax.

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## APPENDIX B:

### Capital Improvement Cost Estimates



# **FINANCE PLAN COST ESTIMATE**

**Panhandle**  
within the  
City of Sacramento, California

FOR  
**City of Sacramento**

Prepared by MacKay & Soms (November 29, 2017)  
Updated by Harris & Associates January 6, 2022)



**A-E****Summary of Total Costs**

SECTION	PROJECT NAME	TOTAL COST	2018 to 2021 % Change
A	Roadway Segments, Signals, and Traffic Circles [1]	\$ 14,655,000	17.043%
B	Sanitary Sewer	\$ 1,164,000	12.573%
C	Storm Drain	\$ 14,495,000	13.954%
D	Potable Water	\$ 2,948,000	9.428%
E	Trails	\$ 5,279,000	9.455%
	<b>Total</b>	<b>\$ 38,541,000</b>	

[1] Includes supplemental roadway costs from Section G.

TOTAL

**A-1**  
**Roadway Index**  
**Summary of Total Costs**

SHEET	PROJECT NAME	TOTAL 2021 COST	2018 to 2021 % Change
A-1.1	Del Paso Median and Travel Lane (South Side)	\$ 1,558,900	16.518%
G-1.1	Del Paso Frontage Improvements (North Side)	\$ 1,267,000	16.882%
G-1.2	Sorento Road Horse Fence (West Side)	\$ 201,000	9.239%
G-1.3	Sorento Road Frontage Improvements (West Side)	\$ 733,000	16.349%
A-1.2	Street "C"/Faletto Avenue	\$ 1,313,200	20.102%
A-1.3	Street "C"	\$ 1,260,600	20.103%
A-1.4	Club Center Drive	\$ 1,371,800	19.308%
A-1.5	Club Center Drive	\$ 823,300	19.319%
A-1.6	Street "F"	\$ 347,800	16.986%
A-1.7	Club Center Drive/Street "G"	\$ 1,293,000	19.236%
<b>Roadway Segments Total</b>		<b>\$ 10,170,000</b>	

SHEET	PROJECT NAME	TOTAL 2021 COST	2018 to 2021 % Change
G-1.4	National Drive at Del Paso Road	\$ 88,550	18.462%
G-1.4	Club Center Drive at Del Paso Road	\$ 88,550	18.462%
<b>Entry Monumentation Total</b>		<b>\$ 177,000</b>	

SHEET	PROJECT NAME	TOTAL 2021 COST	2018 to 2021 % Change
A-2.1	Del Paso Road/National Drive	\$ 547,700	9.365%
A-2.2	Del Paso Road/Club Center Drive	\$ 755,200	9.338%
A-2.3	Del Paso Road/Sorento Road	\$ 755,200	9.338%
<b>Signalization Total</b>		<b>\$ 2,058,000</b>	

SHEET	PROJECT NAME	TOTAL 2021 COST	2018 to 2021 % Change
A-3.1	Traffic Circle - Club Center/Street "C"	\$ 563,800	19.046%
A-3.2	Traffic Circle - Club Center/Street "G"	\$ 563,800	19.046%
A-3.3	Traffic Circle - National Drive	\$ 563,800	19.046%
<b>Traffic Circles Total</b>		<b>\$ 1,691,000</b>	

Sheet	Off-Site Roadway Cost (Elkhorn Blvd)	TOTAL 2021 COST	2018 to 2021 % Change
G-1.5	Segment - State Route 99 to East Commerce	\$ 25,000	19.444%
G-1.5	Segment - East Commerce Way to Natomas Blvd.	\$ 251,000	19.444%
G-1.5	Segment - Natomas Blvd. to City Limit East	\$ 130,000	19.444%
G-1.5	Segment - City Limit East to Panhandle Limit East	\$ 80,000	19.444%
G-1.5	Contingency	\$ 73,000	19.444%
		<b>\$ 559,000</b>	<b>19.444%</b>

<b>Total</b>		<b>\$ 14,655,000</b>	<b>17.043%</b>
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\* Totals rounded

**ROADWAY INDEX**  
**ROADWAY SEGMENTS**

SEGMENT	DESCRIPTION	SECTION		QUANTITY	UNIT	UNIT PRICE	COST (Rounded)	2018 to 2021 % Change
1	Del Paso Road	A-1.1	PARTIAL	2610	L.F.	\$ 597	\$ 1,558,900	16.518%
2	National Drive	A-1.2	HALF	690	L.F.	\$ 842	\$ 580,800	20.099%
3	National Drive	A-1.3	FULL	760	L.F.	\$ 1,659	\$ 1,260,600	20.103%
4	Club Center Drive	A-1.4	FULL	290	L.F.	\$ 2,110	\$ 612,000	19.298%
5	Club Center Drive	A-1.5	HALF	780	L.F.	\$ 1,055	\$ 823,300	19.319%
6	Club Center Drive	A-1.4	FULL	360	L.F.	\$ 2,110	\$ 759,800	19.315%
7	Street 'F'	A-1.6	FULL	240	L.F.	\$ 1,449	\$ 347,800	16.986%
8	Club Center Drive	A-1.7	HALF	250	L.F.	\$ 924	\$ 230,900	19.267%
9	Faletto Avenue	A-1.2	HALF	870	L.F.	\$ 842	\$ 732,400	20.105%
10	Street 'G'	A-1.7	HALF	1150	L.F.	\$ 924	\$ 1,062,100	19.230%
SUBTOTAL							\$ 7,968,600	

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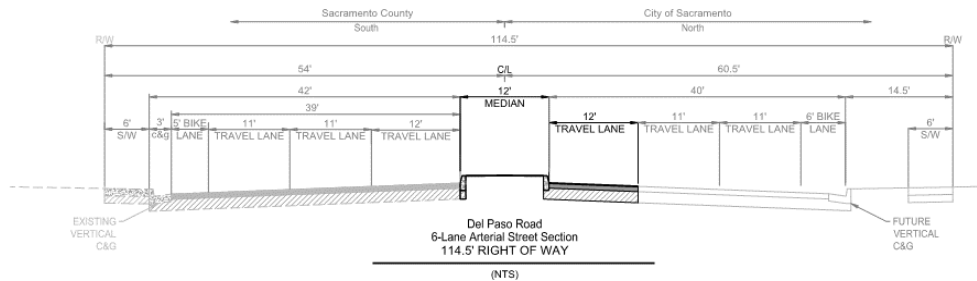
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**TOTAL ROADWAY SEGMENTS ESTIMATED COST \$ 7,969,000**

Note: Engineering and Contingency with section costs  
Totals rounded

1  
A-1.1  
Panhandle Finance Plan - Roadway  
PARTIAL HALF STREET SECTIONS  
Roadway Cross Section index  
Preliminary Per Foot Cost Estimate

Typical Cross Section:



ITEM DESCRIPTION		UNIT	PRICE	QUANTITY	COST
<b>1 Earthwork</b>					
	ROADWAY EXCAVATION	CY	\$ 21.50	2.07	\$ 44.51
	EROSION CONTROL	LF	\$ 13.10	0.5	\$ 6.55
	<b>TOTAL FOR ITEM 1 EARTHWORK</b>				<b>\$ 51.06</b>
<b>2 DRAINAGE</b>					
	DRAINAGE	LF	\$ 35.75	0	\$ -
	<b>TOTAL FOR ITEM 2 DRAINAGE</b>				<b>\$ -</b>
<b>3 PAVEMENT</b>					
*	ASPHALT CONCRETE (6" AC)	SF	\$ 4.60	12	\$ 55.20
*	AGGREGATE BASE W/ LIME TREATMENT (16" AB)	SF	\$ 4.80	13	\$ 62.40
	SIDEWALK (6" PCC/6"AB)	SF	\$ 7.64	0	\$ -
	CURB & GUTTER	LF	\$ 31.00	0	\$ -
	TYPE 14A MEDIAN CURB	LF	\$ 23.60	2	\$ 47.20
	<b>TOTAL OR ITEM 3 PAVEMENT</b>				<b>\$ 164.80</b>
<b>4 MISCELLANEOUS</b>					
**	STREET LIGHTS / ELECTROLIERS (NON-DECORATIVE)	LF	\$ 50.00	0	\$ -
	JOINT TRENCH	LF	\$ 179.00	0	\$ -
	MEDIAN LANDSCAPING	SF	\$ 6.60	11	\$ 72.60
	LANDSCAPING BUFFER	SF	\$ 8.75	0	\$ -
	LANDSCAPE CORRIDOR/PUE	SF	\$ 5.50	0	\$ -
	<b>TOTAL FOR ITEM 4 MISCELLANEOUS</b>				<b>\$ 72.60</b>
<b>5 MINOR ITEMS</b>					
	MINOR ITEMS	%	30.0%		\$ 86.54
	<b>TOTAL FOR ITEM 5 MINOR ITEMS</b>				<b>\$ 86.54</b>

ITEM DESCRIPTION		UNIT	PRICE	QUANTITY	COST
<b>6 CONTINGENCY</b>					
	<b>SUBTOTAL CONSTRUCTION COST</b>				\$ 374.99
	CONTINGENCY	%	15.0%		\$ 56.25
	<b>TOTAL CONSTRUCTION COST</b>				<b>\$ 431.24</b>
<b>7 ENGINEERING &amp; MANAGEMENT</b>					
	ENGINEERING STUDIES	%	3.0%	\$ 431.24	\$ 12.94
	ENVIROMENTAL DOCUMENT	%	1.5%	\$ 431.24	\$ 6.47
	DESIGN ENGINEERING	%	12.0%	\$ 431.24	\$ 51.75
	DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 431.24	\$ 6.47
	CONSTRUCTION STAKING	%	2.5%	\$ 431.24	\$ 10.78
	CONSTRUCTION MANAGEMENT	%	13.0%	\$ 431.24	\$ 56.06
	<b>TOTAL FOR ITEM 7 ENGINEERING &amp; MANAGEMENT</b>				<b>\$ 144.47</b>
	(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
<b>8 UTILITIES</b>					
	UTILITIES RELOCATION	%	2.0%	\$ 431.24	\$ 8.62
	<b>TOTAL FOR ITEM 8 UTILITIES</b>				<b>\$ 8.62</b>
<b>9 ENVIROMENTAL MITIGATION</b>					
	ENVIROMENTAL MITIGATION	%	3.0%	\$ 431.24	\$ 12.94
	<b>TOTAL FOR ITEM 9 ENVIROMENTAL MITIGATION</b>				<b>\$ 12.94</b>

\* Varies based on street section

2

## A-1.2

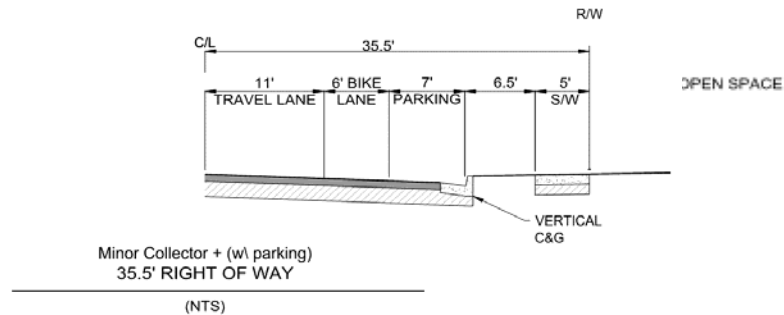
## Panhandle Finance Plan - Roadway

## HALF STREET SECTION

## Roadway Cross Section index

## Preliminary Per Foot Cost Estimate

Typical Cross Section:



ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
<b>1 Earthwork</b>				
ROADWAY EXCAVATION	CY	\$ 21.50	1.56	\$ 33.54
EROSION CONTROL	LF	\$ 13.10	0.5	\$ 6.55
<b>TOTAL FOR ITEM 1 EARTHWORK</b>				<b>\$ 40.09</b>
<b>2 DRAINAGE</b>				
DRAINAGE	LF	\$ 35.75	0.5	\$ 17.88
<b>TOTAL FOR ITEM 2 DRAINAGE</b>				<b>\$ 17.88</b>
<b>3 PAVEMENT</b>				
* ASPHALT CONCRETE (4" AC)	SF	\$ 3.10	21.5	\$ 66.65
* AGGREGATE BASE W/ LIME TREATMENT (8" AB)	SF	\$ 2.40	24.5	\$ 58.80
SIDEWALK (6" PCC/6"AB)	SF	\$ 7.64	5	\$ 38.21
CURB & GUTTER	LF	\$ 31.00	1	\$ 31.00
TYPE 14A MEDIAN CURB	LF	\$ 23.60	0	\$ -
<b>TOTAL OR ITEM 3 PAVEMENT</b>				<b>\$ 194.66</b>
<b>4 MISCELLANEOUS</b>				
** STREET LIGHTS / ELECTROLIERS (NON-DECORATIVE)	LF	\$ 35.80	0.5	\$ 17.90
JOINT TRENCH	LF	\$ 179.00	0.5	\$ 89.50
MEDIAN LANDSCAPING	SF	\$ 6.60	0	\$ -
LANDSCAPING BUFFER	SF	\$ 8.75	6	\$ 52.48
LANDSCAPE CORRIDOR/PUE	SF	\$ 5.50	0	\$ -
<b>TOTAL FOR ITEM 4 MISCELLANEOUS</b>				<b>\$ 159.88</b>
<b>5 MINOR ITEMS</b>				
MINOR ITEMS	%	30.0%		\$ 123.75
<b>TOTAL FOR ITEM 5 MINOR ITEMS</b>				<b>\$ 123.75</b>

ITEM DESCRIPTION		UNIT	PRICE	QUANTITY	COST
<b>6 CONTINGENCY</b>					
	<b>SUBTOTAL CONSTRUCTION COST</b>			\$	536.26
	CONTINGENCY	%	15.0%		\$ 80.44
	<b>TOTAL CONSTRUCTION COST</b>			\$	<b>616.70</b>
<b>7 ENGINEERING &amp; MANAGEMENT</b>					
	ENGINEERING STUDIES	%	3.0%	\$ 616.70	\$ 18.50
	ENVIROMENTAL DOCUMENT	%	1.5%	\$ 616.70	\$ 9.25
	DESIGN ENGINEERING	%	12.0%	\$ 616.70	\$ 74.00
	DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 616.70	\$ 9.25
	CONSTRUCTION STAKING	%	2.5%	\$ 616.70	\$ 15.42
	CONSTRUCTION MANAGEMENT	%	13.0%	\$ 616.70	\$ 80.17
	<b>TOTAL FOR ITEM 7 ENGINEERING &amp; MANAGEMENT</b>				\$ <b>206.60</b>
	(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
<b>8 UTILITIES</b>					
	UTILITIES RELOCATION	%	0.0%	\$ 616.70	\$ -
	<b>TOTAL FOR ITEM 8 UTILITIES</b>				\$ -
<b>9 ENVIROMENTAL MITIGATION</b>					
	ENVIROMENTAL MITIGATION	%	3.0%	\$ 616.70	\$ 18.50
	<b>TOTAL FOR ITEM 9 ENVIROMENTAL MITIGATION</b>				\$ <b>18.50</b>

\* Varies based on street section

3

## A-1.3

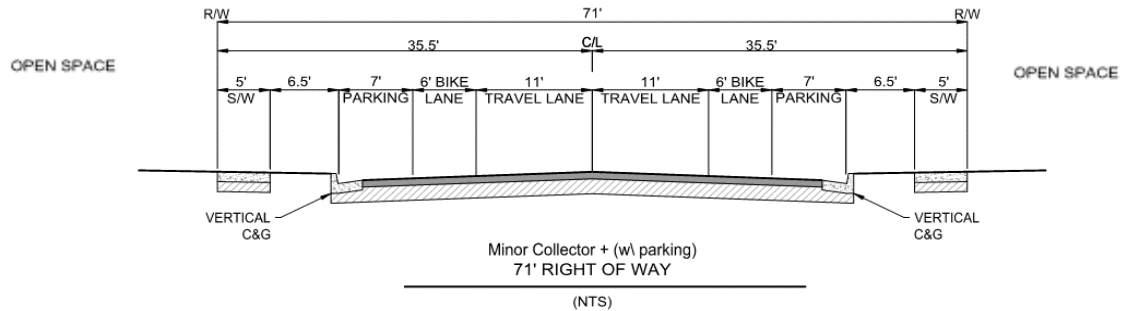
## Panhandle Finance Plan - Roadway

## FULL STREET SECTION

## Roadway Cross Section index

## Preliminary Per Foot Cost Estimate

Typical Cross Section:



ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
<b>1 Earthwork</b>				
ROADWAY EXCAVATION	CY	\$ 21.50	3.11	\$ 66.87
EROSION CONTROL	LF	\$ 13.10	1	\$ 13.10
<b>TOTAL FOR ITEM 1 EARTHWORK</b>				<b>\$ 79.97</b>
<b>2 DRAINAGE</b>				
DRAINAGE	LF	\$ 35.75	1	\$ 35.75
<b>TOTAL FOR ITEM 2 DRAINAGE</b>				<b>\$ 35.75</b>
<b>3 PAVEMENT</b>				
* ASPHALT CONCRETE (4" AC)	SF	\$ 3.10	43	\$ 133.30
* AGGREGATE BASE W/ LIME TREATMENT (8" AB)	SF	\$ 2.40	44	\$ 105.60
SIDEWALK (6" PCC/6"AB)	SF	\$ 7.64	10	\$ 76.42
CURB & GUTTER	LF	\$ 31.00	2	\$ 62.00
TYPE 14A MEDIAN CURB	LF	\$ 23.60	0	\$ -
<b>TOTAL OR ITEM 3 PAVEMENT</b>				<b>\$ 377.32</b>
<b>4 MISCELLANEOUS</b>				
** STREET LIGHTS / ELECTROLIERS (NON-DECORATIVE)	LF	\$ 35.80	1	\$ 35.80
JOINT TRENCH	LF	\$ 179.00	1	\$ 179.00
MEDIAN LANDSCAPING	SF	\$ 6.60	0	\$ -
LANDSCAPING BUFFER	SF	\$ 8.75	12	\$ 104.97
LANDSCAPE CORRIDOR/PUE	SF	\$ 5.50	0	\$ -
<b>TOTAL FOR ITEM 4 MISCELLANEOUS</b>				<b>\$ 319.77</b>
<b>5 MINOR ITEMS</b>				
MINOR ITEMS	%	30.0%		\$ 243.84
<b>TOTAL FOR ITEM 5 MINOR ITEMS</b>				<b>\$ 243.84</b>



ITEM DESCRIPTION		UNIT	PRICE	QUANTITY	COST
<b>6 CONTINGENCY</b>					
	<b>SUBTOTAL CONSTRUCTION COST</b>			\$	1,056.65
	CONTINGENCY	%	15.0%		\$ 158.50
	<b>TOTAL CONSTRUCTION COST</b>			\$	<b>1,215.15</b>
<b>7 ENGINEERING &amp; MANAGEMENT</b>					
	ENGINEERING STUDIES	%	3.0%	\$ 1,215.15	\$ 36.45
	ENVIROMENTAL DOCUMENT	%	1.5%	\$ 1,215.15	\$ 18.23
	DESIGN ENGINEERING	%	12.0%	\$ 1,215.15	\$ 145.82
	DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 1,215.15	\$ 18.23
	CONSTRUCTION STAKING	%	2.5%	\$ 1,215.15	\$ 30.38
	CONSTRUCTION MANAGEMENT	%	13.0%	\$ 1,215.15	\$ 157.97
	<b>TOTAL FOR ITEM 7 ENGINEERING &amp; MANAGEMENT</b>				\$ <b>407.07</b>
	(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
<b>8 UTILITIES</b>					
	UTILITIES RELOCATION	%	0.0%	\$ 1,215.15	\$ -
	<b>TOTAL FOR ITEM 8 UTILITIES</b>				\$ -
<b>9 ENVIROMENTAL MITIGATION</b>					
	ENVIROMENTAL MITIGATION	%	3.0%	\$ 1,215.15	\$ 36.45
	<b>TOTAL FOR ITEM 9 ENVIROMENTAL MITIGATION</b>				\$ <b>36.45</b>

\* Varies based on street section

4

## A-1.4

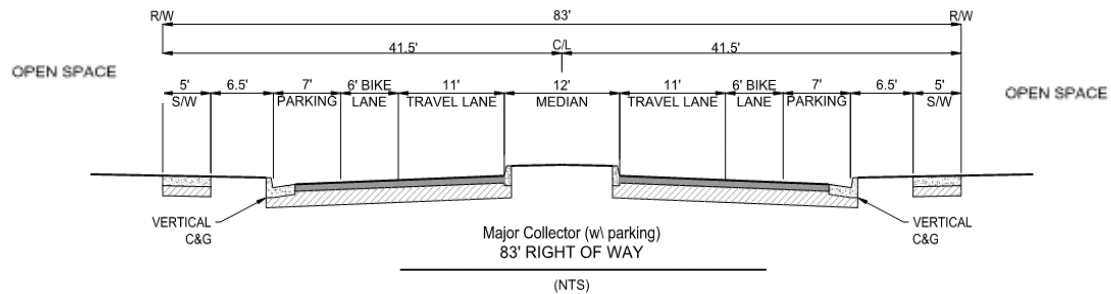
## Panhandle Finance Plan - Roadway

## FULL STREET SECTIONS

## Roadway Cross Section index

## Preliminary Per Foot Cost Estimate

Typical Cross Section:



ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
<b>1 Earthwork</b>				
ROADWAY EXCAVATION	CY	\$ 21.50	4.17	\$ 89.66
EROSION CONTROL	LF	\$ 13.10	1	\$ 13.10
<b>TOTAL FOR ITEM 1 EARTHWORK</b>				<b>\$ 102.76</b>
<b>2 DRAINAGE</b>				
DRAINAGE	LF	\$ 35.75	1	\$ 35.75
<b>TOTAL FOR ITEM 2 DRAINAGE</b>				<b>\$ 35.75</b>
<b>3 PAVEMENT</b>				
* ASPHALT CONCRETE (5" AC)	SF	\$ 3.90	43	\$ 167.70
* AGGREGATE BASE W/ LIME TREATMENT (10" AB)	SF	\$ 3.00	50	\$ 150.00
SIDEWALK (6" PCC/6"AB)	SF	\$ 7.64	10	\$ 76.42
CURB & GUTTER	LF	\$ 31.00	2	\$ 62.00
TYPE 14A MEDIAN CURB	LF	\$ 23.60	2	\$ 47.20
<b>TOTAL OR ITEM 3 PAVEMENT</b>				<b>\$ 503.32</b>
<b>4 MISCELLANEOUS</b>				
** STREET LIGHTS / ELECTROLIERS (NON-DECORATIVE)	LF	\$ 35.80	1	\$ 35.80
JOINT TRENCH	LF	\$ 179.00	1	\$ 179.00
MEDIAN LANDSCAPING	SF	\$ 6.60	11	\$ 72.60
LANDSCAPING BUFFER	SF	\$ 8.75	12	\$ 104.97
LANDSCAPE CORRIDOR/PUE	SF	\$ 5.50	0	\$ -
<b>TOTAL FOR ITEM 4 MISCELLANEOUS</b>				<b>\$ 392.37</b>
<b>5 MINOR ITEMS</b>				
MINOR ITEMS	%	30.0%		\$ 310.26
<b>TOTAL FOR ITEM 5 MINOR ITEMS</b>				<b>\$ 310.26</b>



5

## A-1.5

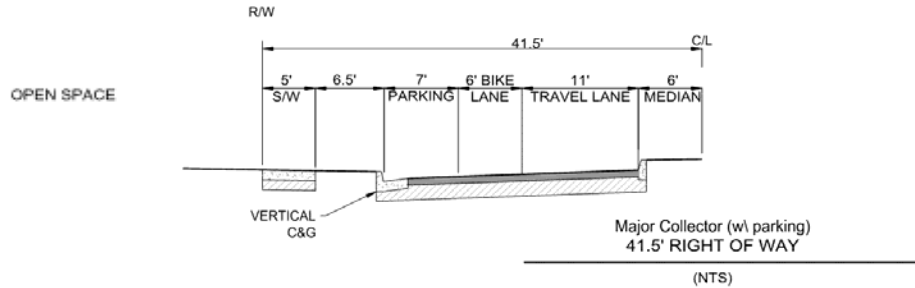
## Panhandle Finance Plan - Roadway

## HALF STREET SECTIONS

## Roadway Cross Section index

## Preliminary Per Foot Cost Estimate

Typical Cross Section:



ITEM DESCRIPTION		UNIT	PRICE	QUANTITY	COST
<b>1</b>	<b>Earthwork</b>				
	ROADWAY EXCAVATION	CY	\$ 21.50	2.09	\$ 44.94
	EROSION CONTROL	LF	\$ 13.10	0.5	\$ 6.55
	<b>TOTAL FOR ITEM 1 EARTHWORK</b>				<b>\$ 51.49</b>
<b>2</b>	<b>DRAINAGE</b>				
	DRAINAGE	LF	\$ 35.75	0.5	\$ 17.88
	<b>TOTAL FOR ITEM 2 DRAINAGE</b>				<b>\$ 17.88</b>
<b>3</b>	<b>PAVEMENT</b>				
*	ASPHALT CONCRETE (5" AC)	SF	\$ 3.90	21.5	\$ 83.85
*	AGGREGATE BASE W/ LIME TREATMENT (10" AB)	SF	\$ 3.00	25	\$ 75.00
	SIDEWALK (6" PCC/6"AB)	SF	\$ 7.64	5	\$ 38.21
	CURB & GUTTER	LF	\$ 31.00	1	\$ 31.00
	TYPE 14A MEDIAN CURB	LF	\$ 23.60	1	\$ 23.60
	<b>TOTAL OR ITEM 3 PAVEMENT</b>				<b>\$ 251.66</b>
<b>4</b>	<b>MISCELLANEOUS</b>				
**	STREET LIGHTS / ELECTROLIERS (NON-DECORATIVE)	LF	\$ 35.80	0.5	\$ 17.90
	JOINT TRENCH	LF	\$ 179.00	0.5	\$ 89.50
	MEDIAN LANDSCAPING	SF	\$ 6.60	5.5	\$ 36.30
	LANDSCAPING BUFFER	SF	\$ 8.75	6	\$ 52.48
	LANDSCAPE CORRIDOR/PUE	SF	\$ 5.50	0	\$ -
	<b>TOTAL FOR ITEM 4 MISCELLANEOUS</b>				<b>\$ 196.18</b>
<b>5</b>	<b>MINOR ITEMS</b>				
	MINOR ITEMS	%	30.0%		\$ 155.16
	<b>TOTAL FOR ITEM 5 MINOR ITEMS</b>				<b>\$ 155.16</b>

ITEM DESCRIPTION		UNIT	PRICE	QUANTITY	COST
<b>6 CONTINGENCY</b>					
	<b>SUBTOTAL CONSTRUCTION COST</b>			\$	672.37
	CONTINGENCY	%	15.0%		\$ 100.86
	<b>TOTAL CONSTRUCTION COST</b>			\$	773.22
<b>7 ENGINEERING &amp; MANAGEMENT</b>					
	ENGINEERING STUDIES	%	3.0%	\$ 773.22	\$ 23.20
	ENVIROMENTAL DOCUMENT	%	1.5%	\$ 773.22	\$ 11.60
	DESIGN ENGINEERING	%	12.0%	\$ 773.22	\$ 92.79
	DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 773.22	\$ 11.60
	CONSTRUCTION STAKING	%	2.5%	\$ 773.22	\$ 19.33
	CONSTRUCTION MANAGEMENT	%	13.0%	\$ 773.22	\$ 100.52
	<b>TOTAL FOR ITEM 7 ENGINEERING &amp; MANAGEMENT</b>				\$ 259.03
	(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
<b>8 UTILITIES</b>					
	UTILITIES RELOCATION	%	0.0%	\$ 773.22	\$ -
	<b>TOTAL FOR ITEM 8 UTILITIES</b>				\$ -
<b>9 ENVIROMENTAL MITIGATION</b>					
	ENVIROMENTAL MITIGATION	%	3.0%	\$ 773.22	\$ 23.20
	<b>TOTAL FOR ITEM 9 ENVIROMENTAL MITIGATION</b>				\$ 23.20

\* Varies based on street section

## A-1.6

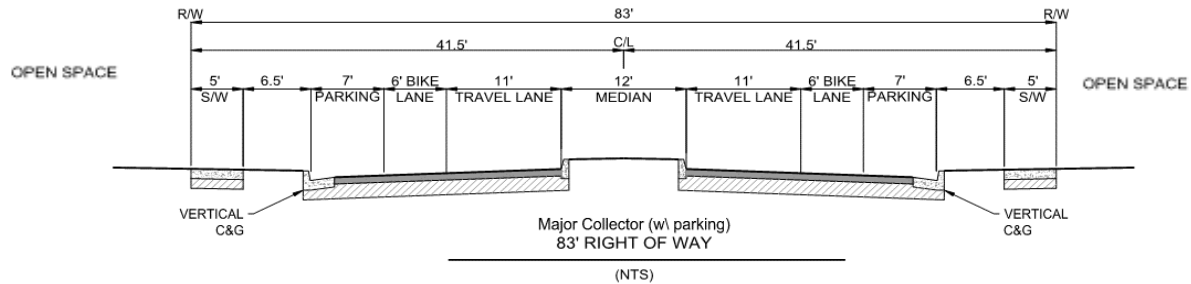
## Panhandle Finance Plan - Roadway

## FULL STREET SECTIONS

## Roadway Cross Section index

## Preliminary Per Foot Cost Estimate

Typical Cross Section:

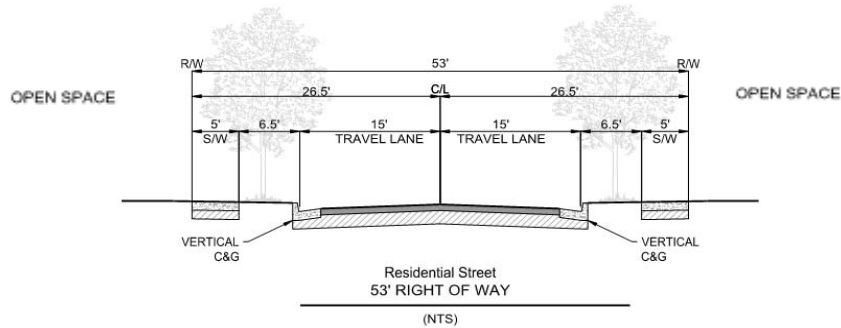


ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
<b>1 Earthwork</b>				
ROADWAY EXCAVATION	CY	\$ 21.50	4.17	\$ 89.66
EROSION CONTROL	LF	\$ 13.10	1	\$ 13.10
<b>TOTAL FOR ITEM 1 EARTHWORK</b>				<b>\$ 102.76</b>
<b>2 DRAINAGE</b>				
DRAINAGE	LF	\$ 35.75	1	\$ 35.75
<b>TOTAL FOR ITEM 2 DRAINAGE</b>				<b>\$ 35.75</b>
<b>3 PAVEMENT</b>				
* ASPHALT CONCRETE (5" AC)	SF	\$ 3.90	43	\$ 167.70
* AGGREGATE BASE W/ LIME TREATMENT (10" AB)	SF	\$ 3.00	50	\$ 150.00
SIDEWALK (6" PCC/6"AB)	SF	\$ 7.64	10	\$ 76.42
CURB & GUTTER	LF	\$ 31.00	2	\$ 62.00
TYPE 14A MEDIAN CURB	LF	\$ 23.60	2	\$ 47.20
<b>TOTAL OR ITEM 3 PAVEMENT</b>				<b>\$ 503.32</b>
<b>4 MISCELLANEOUS</b>				
** STREET LIGHTS / ELECTROLIERS (NON-DECORATIVE)	LF	\$ 35.80	1	\$ 35.80
JOINT TRENCH	LF	\$ 179.00	1	\$ 179.00
MEDIAN LANDSCAPING	SF	\$ 6.60	11	\$ 72.60
LANDSCAPING BUFFER	SF	\$ 8.75	12	\$ 104.97
LANDSCAPE CORRIDOR/PUE	SF	\$ 5.50	0	\$ -
<b>TOTAL FOR ITEM 4 MISCELLANEOUS</b>				<b>\$ 392.37</b>
<b>5 MINOR ITEMS</b>				
MINOR ITEMS	%	30.0%		\$ 310.26
<b>TOTAL FOR ITEM 5 MINOR ITEMS</b>				<b>\$ 310.26</b>

ITEM DESCRIPTION		UNIT	PRICE	QUANTITY	COST
<b>6</b>	<b>CONTINGENCY</b>				
	<b>SUBTOTAL CONSTRUCTION COST</b>			\$	1,344.46
	CONTINGENCY	%	15.0%		\$ 201.67
	<b>TOTAL CONSTRUCTION COST</b>			\$	<b>1,546.13</b>
<b>7</b>	<b>ENGINEERING &amp; MANAGEMENT</b>				
	ENGINEERING STUDIES	%	3.0%	\$ 1,546.13	\$ 46.38
	ENVIROMENTAL DOCUMENT	%	1.5%	\$ 1,546.13	\$ 23.19
	DESIGN ENGINEERING	%	12.0%	\$ 1,546.13	\$ 185.54
	DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 1,546.13	\$ 23.19
	CONSTRUCTION STAKING	%	2.5%	\$ 1,546.13	\$ 38.65
	CONSTRUCTION MANAGEMENT	%	13.0%	\$ 1,546.13	\$ 201.00
	<b>TOTAL FOR ITEM 7 ENGINEERING &amp; MANAGEMENT</b>				\$ <b>517.95</b>
	(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
<b>8</b>	<b>UTILITIES</b>				
	UTILITIES RELOCATION	%	0.0%	\$ 1,546.13	\$ -
	<b>TOTAL FOR ITEM 8 UTILITIES</b>				\$ -
<b>9</b>	<b>ENVIROMENTAL MITIGATION</b>				
	ENVIROMENTAL MITIGATION	%	3.0%	\$ 1,546.13	\$ 46.38
	<b>TOTAL FOR ITEM 9 ENVIROMENTAL MITIGATION</b>				\$ <b>46.38</b>

\* Varies based on street section

Typical Cross Section:



ITEM DESCRIPTION		UNIT	PRICE	QUANTITY	COST
<b>1</b>	<b>Earthwork</b>				
	ROADWAY EXCAVATION	CY	\$ 21.50	1.52	\$ 32.68
	EROSION CONTROL	LF	\$ 13.10	1	\$ 13.10
	<b>TOTAL FOR ITEM 1 EARTHWORK</b>				<b>\$ 45.78</b>
<b>2</b>	<b>DRAINAGE</b>				
	DRAINAGE	LF	\$ 35.75	1	\$ 35.75
	<b>TOTAL FOR ITEM 2 DRAINAGE</b>				<b>\$ 35.75</b>
<b>3</b>	<b>PAVEMENT</b>				
*	ASPHALT CONCRETE (4" AC)	SF	\$ 3.10	25	\$ 77.50
*	AGGREGATE BASE W/ LIME TREATMENT (6" AB)	SF	\$ 3.00	31	\$ 93.00
	SIDEWALK (6" PCC/6"AB)	SF	\$ 7.64	10	\$ 76.42
	CURB & GUTTER	LF	\$ 31.00	2	\$ 62.00
	TYPE 14A MEDIAN CURB	LF	\$ 23.60	0	\$ -
	<b>TOTAL OR ITEM 3 PAVEMENT</b>				<b>\$ 308.92</b>
<b>4</b>	<b>MISCELLANEOUS</b>				
**	STREET LIGHTS / ELECTROLIERS (NON-DECORATIVE)	LF	\$ 35.80	1	\$ 35.80
	JOINT TRENCH	LF	\$ 179.00	1	\$ 179.00
	MEDIAN LANDSCAPING	SF	\$ 6.60	0	\$ -
	LANDSCAPING BUFFER	SF	\$ 8.75	12	\$ 104.97
	LANDSCAPE CORRIDOR/PUE	SF	\$ 5.50	0	\$ -
	<b>TOTAL FOR ITEM 4 MISCELLANEOUS</b>				<b>\$ 319.77</b>
<b>5</b>	<b>MINOR ITEMS</b>				
	MINOR ITEMS	%	30.0%		\$ 213.07
	<b>TOTAL FOR ITEM 5 MINOR ITEMS</b>				<b>\$ 213.07</b>



ITEM DESCRIPTION		UNIT	PRICE	QUANTITY	COST
<b>6 CONTINGENCY</b>					
	<b>SUBTOTAL CONSTRUCTION COST</b>			\$	923.29
	CONTINGENCY	%	15.0%		\$ 138.49
	<b>TOTAL CONSTRUCTION COST</b>			\$	<b>1,061.78</b>
<b>7 ENGINEERING &amp; MANAGEMENT</b>					
	ENGINEERING STUDIES	%	3.0%	\$ 1,061.78	\$ 31.85
	ENVIROMENTAL DOCUMENT	%	1.5%	\$ 1,061.78	\$ 15.93
	DESIGN ENGINEERING	%	12.0%	\$ 1,061.78	\$ 127.41
	DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 1,061.78	\$ 15.93
	CONSTRUCTION STAKING	%	2.5%	\$ 1,061.78	\$ 26.54
	CONSTRUCTION MANAGEMENT	%	13.0%	\$ 1,061.78	\$ 138.03
	<b>TOTAL FOR ITEM 7 ENGINEERING &amp; MANAGEMENT</b>				\$ <b>355.70</b>
	(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
<b>8 UTILITIES</b>					
	UTILITIES RELOCATION	%	0.0%	\$ 1,061.78	\$ -
	<b>TOTAL FOR ITEM 8 UTILITIES</b>				\$ -
<b>9 ENVIROMENTAL MITIGATION</b>					
	ENVIROMENTAL MITIGATION	%	3.0%	\$ 1,061.78	\$ 31.85
	<b>TOTAL FOR ITEM 9 ENVIROMENTAL MITIGATION</b>				\$ <b>31.85</b>

\* Varies based on street section

## A-1.8

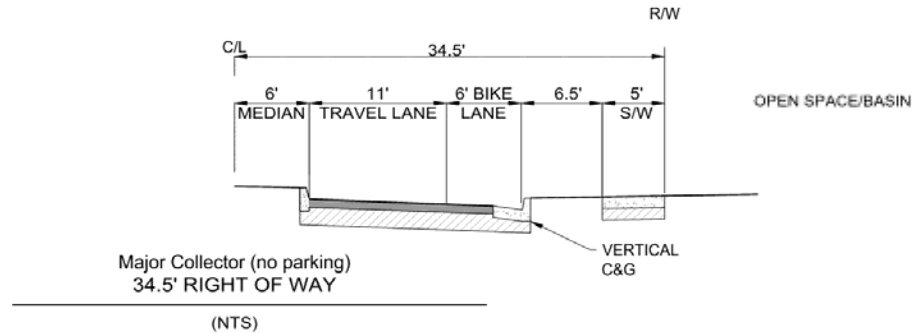
## Panhandle Finance Plan - Roadway

## HALF STREET SECTIONS

## Roadway Cross Section index

## Preliminary Per Foot Cost Estimate

Typical Cross Section:



ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
<b>1 Earthwork</b>				
ROADWAY EXCAVATION	CY	\$ 21.50	1.33	\$ 28.60
EROSION CONTROL	LF	\$ 13.10	0.5	\$ 6.55
<b>TOTAL FOR ITEM 1 EARTHWORK</b>				<b>\$ 35.15</b>
<b>2 DRAINAGE</b>				
DRAINAGE	LF	\$ 35.75	0.5	\$ 17.88
<b>TOTAL FOR ITEM 2 DRAINAGE</b>				<b>\$ 17.88</b>
<b>3 PAVEMENT</b>				
* ASPHALT CONCRETE (5" AC)	SF	\$ 3.90	14.5	\$ 56.55
* AGGREGATE BASE W/ LIME TREATMENT (10" AB)	SF	\$ 3.00	18	\$ 54.00
SIDEWALK (6" PCC/6"AB)	SF	\$ 7.64	5	\$ 38.21
CURB & GUTTER	LF	\$ 31.00	1	\$ 31.00
TYPE 14A MEDIAN CURB	LF	\$ 23.60	1	\$ 23.60
<b>TOTAL OR ITEM 3 PAVEMENT</b>				<b>\$ 203.36</b>
<b>4 MISCELLANEOUS</b>				
** STREET LIGHTS / ELECTROLIERS (NON-DECORATIVE)	LF	\$ 35.80	0.5	\$ 17.90
JOINT TRENCH	LF	\$ 179.00	0.5	\$ 89.50
MEDIAN LANDSCAPING	SF	\$ 6.60	5.5	\$ 36.30
LANDSCAPING BUFFER	SF	\$ 8.75	6	\$ 52.48
LANDSCAPE CORRIDOR/PUE	SF	\$ 5.50	0	\$ -
<b>TOTAL FOR ITEM 4 MISCELLANEOUS</b>				<b>\$ 196.18</b>
<b>5 MINOR ITEMS</b>				
MINOR ITEMS	%	30.0%		\$ 135.77
<b>TOTAL FOR ITEM 5 MINOR ITEMS</b>				<b>\$ 135.77</b>



## A-1.9

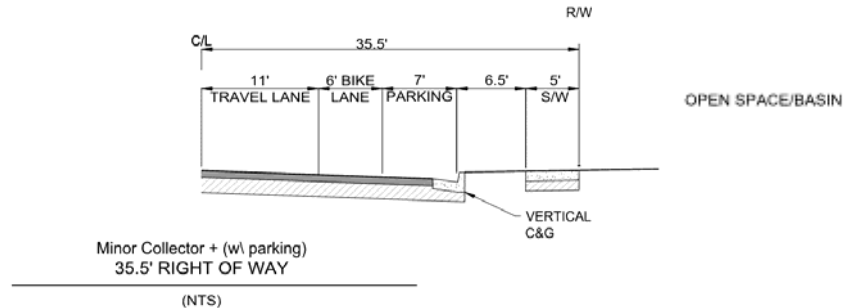
## Panhandle Finance Plan - Roadway

## HALF STREET SECTION

## Roadway Cross Section index

## Preliminary Per Foot Cost Estimate

Typical Cross Section:



ITEM DESCRIPTION		UNIT	PRICE	QUANTITY	COST
<b>1</b>	<b>Earthwork</b>				
	ROADWAY EXCAVATION	CY	\$ 21.50	1.56	\$ 33.54
	EROSION CONTROL	LF	\$ 13.10	0.5	\$ 6.55
	<b>TOTAL FOR ITEM 1 EARTHWORK</b>				<b>\$ 40.09</b>
<b>2</b>	<b>DRAINAGE</b>				
	DRAINAGE	LF	\$ 35.75	0.5	\$ 17.88
	<b>TOTAL FOR ITEM 2 DRAINAGE</b>				<b>\$ 17.88</b>
<b>3</b>	<b>PAVEMENT</b>				
*	ASPHALT CONCRETE (4" AC)	SF	\$ 3.10	21.5	\$ 66.65
*	AGGREGATE BASE W/ LIME TREATMENT (8" AB)	SF	\$ 2.40	24.5	\$ 58.80
	SIDEWALK (6" PCC/6"AB)	SF	\$ 7.64	5	\$ 38.21
	CURB & GUTTER	LF	\$ 31.00	1	\$ 31.00
	TYPE 14A MEDIAN CURB	LF	\$ 23.60	0	\$ -
	<b>TOTAL OR ITEM 3 PAVEMENT</b>				<b>\$ 194.66</b>
<b>4</b>	<b>MISCELLANEOUS</b>				
**	STREET LIGHTS / ELECTROLIERS (NON-DECORATIVE)	LF	\$ 35.80	0.5	\$ 17.90
	JOINT TRENCH	LF	\$ 179.00	0.5	\$ 89.50
	MEDIAN LANDSCAPING	SF	\$ 6.60	0	\$ -
	LANDSCAPING BUFFER	SF	\$ 8.75	6	\$ 52.48
	LANDSCAPE CORRIDOR/PUE	SF	\$ 5.50	0	\$ -
	<b>TOTAL FOR ITEM 4 MISCELLANEOUS</b>				<b>\$ 159.88</b>
<b>5</b>	<b>MINOR ITEMS</b>				
	MINOR ITEMS	%	30.0%		\$ 123.75
	<b>TOTAL FOR ITEM 5 MINOR ITEMS</b>				<b>\$ 123.75</b>

ITEM DESCRIPTION		UNIT	PRICE	QUANTITY	COST
<b>6 CONTINGENCY</b>					
	<b>SUBTOTAL CONSTRUCTION COST</b>			\$	536.26
	CONTINGENCY	%	15.0%		\$ 80.44
	<b>TOTAL CONSTRUCTION COST</b>			\$	<b>616.70</b>
<b>7 ENGINEERING &amp; MANAGEMENT</b>					
	ENGINEERING STUDIES	%	3.0%	\$ 616.70	\$ 18.50
	ENVIROMENTAL DOCUMENT	%	1.5%	\$ 616.70	\$ 9.25
	DESIGN ENGINEERING	%	12.0%	\$ 616.70	\$ 74.00
	DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 616.70	\$ 9.25
	CONSTRUCTION STAKING	%	2.5%	\$ 616.70	\$ 15.42
	CONSTRUCTION MANAGEMENT	%	13.0%	\$ 616.70	\$ 80.17
	<b>TOTAL FOR ITEM 7 ENGINEERING &amp; MANAGEMENT</b>				\$ <b>206.60</b>
	(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
<b>8 UTILITIES</b>					
	UTILITIES RELOCATION	%	0.0%	\$ 616.70	\$ -
	<b>TOTAL FOR ITEM 8 UTILITIES</b>				\$ -
<b>9 ENVIROMENTAL MITIGATION</b>					
	ENVIROMENTAL MITIGATION	%	3.0%	\$ 616.70	\$ 18.50
	<b>TOTAL FOR ITEM 9 ENVIROMENTAL MITIGATION</b>				\$ <b>18.50</b>

\* Varies based on street section

10

## A-1.10

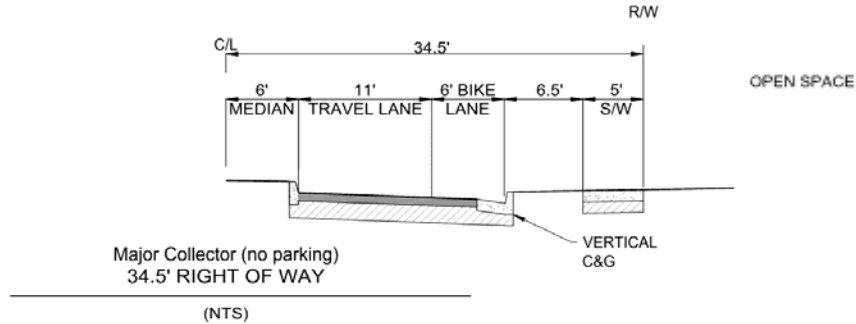
## Panhandle Finance Plan - Roadway

## HALF STREET SECTIONS

## Roadway Cross Section index

## Preliminary Per Foot Cost Estimate

Typical Cross Section:



ITEM DESCRIPTION		UNIT	PRICE	QUANTITY	COST
<b>1</b>	<b>Earthwork</b>				
	ROADWAY EXCAVATION	CY	\$ 21.50	1.33	\$ 28.60
	EROSION CONTROL	LF	\$ 13.10	0.5	\$ 6.55
	<b>TOTAL FOR ITEM 1 EARTHWORK</b>				<b>\$ 35.15</b>
<b>2</b>	<b>DRAINAGE</b>				
	DRAINAGE	LF	\$ 35.75	0.5	\$ 17.88
	<b>TOTAL FOR ITEM 2 DRAINAGE</b>				<b>\$ 17.88</b>
<b>3</b>	<b>PAVEMENT</b>				
	* ASPHALT CONCRETE (5" AC)	SF	\$ 3.90	14.5	\$ 56.55
	* AGGREGATE BASE W/ LIME TREATMENT (10" AB)	SF	\$ 3.00	18	\$ 54.00
	SIDEWALK (6" PCC/6"AB)	SF	\$ 7.64	5	\$ 38.21
	CURB & GUTTER	LF	\$ 31.00	1	\$ 31.00
	TYPE 14A MEDIAN CURB	LF	\$ 23.60	1	\$ 23.60
	<b>TOTAL OR ITEM 3 PAVEMENT</b>				<b>\$ 203.36</b>
<b>4</b>	<b>MISCELLANEOUS</b>				
	** STREET LIGHTS / ELECTROLIERS (NON-DECORATIVE)	LF	\$ 35.80	0.5	\$ 17.90
	JOINT TRENCH	LF	\$ 179.00	0.5	\$ 89.50
	MEDIAN LANDSCAPING	SF	\$ 6.60	5.5	\$ 36.30
	LANDSCAPING BUFFER	SF	\$ 8.75	6	\$ 52.48
	LANDSCAPE CORRIDOR/PUE	SF	\$ 5.50	0	\$ -
	<b>TOTAL FOR ITEM 4 MISCELLANEOUS</b>				<b>\$ 196.18</b>
<b>5</b>	<b>MINOR ITEMS</b>				
	MINOR ITEMS	%	30.0%		\$ 135.77
	<b>TOTAL FOR ITEM 5 MINOR ITEMS</b>				<b>\$ 135.77</b>



**A-2**  
**Traffic Signals**  
**Summary of Total Costs**

SHEET	PROJECT NAME	TOTAL COST (rounded)	2018 to 2021 % Change
A-2.1	Del Paso Road/National Drive	\$ 547,700	9.365%
A-2.2	Del Paso Road/Club Center Drive	\$ 755,200	9.338%
A-2.3	Del Paso Road/Sorento Road	\$ 755,200	9.338%
	<b>Traffic Signals Total</b>	<b>\$ 2,058,000</b>	

**NOTES:**

1. The amount is only the cost for the signalization. Roadway widening and improvements will happen with Del Paso Road, National Drive, Club Center Drive Improvements

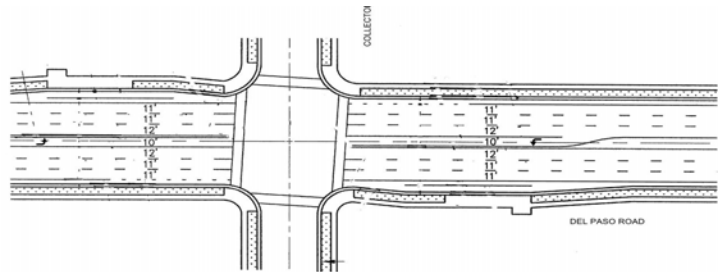


A-2.1

Panhandle Finance Plan - Roadway

Roadway Cross Section index

Preliminary Cost Estimate



ITEM DESCRIPTION		UNIT	PRICE	QUANTITY	COST
1 SIGNALIZATION					
	6 x 6 x 2 x 2				
	Signal	LS	\$ 273,400.00	1	\$ 273,400.00
	F&I Poles (sizes vary)		included	included	included
	F&I - Pedestrian Heads,		included	included	included
	F&I - Pedestrian Push button w/ audible signal		included	included	included
	F&I - Signal Heads		included	included	included
	F&I - Detector Loops (vehicle and bike)		included	included	included
	F&I - New Pull Boxes		included	included	included
	F&I Conduit		included	included	included
	F&I Wiring		included	included	included
	F&I - 'Street Lights 165 Watt		included	included	included
	Service Point		included	included	included
	F&I - Mast-Arm-Mounted Illuminated Street Name Signs		included	included	included
	F&I - Emergency Vehicle Pre-Emptions System		included	included	included
	Concrete Flatwork Controller Pad		included	included	included
	Start-up, Test		included	included	included
	Intersection signal exists as interim condition. Some modifications and additions would be required to complete fully functioning ultimate condition intersection. Amount for upgrade included in above pricing.				
	TOTAL FOR ITEM 1 SIGNALIZATION				\$ 273,400.00
2 MINOR ITEMS					
	MINOR ITEMS	%	30.0%		\$ 82,020.00
	TOTAL FOR ITEM 2 MINOR ITEMS				\$ 82,020.00

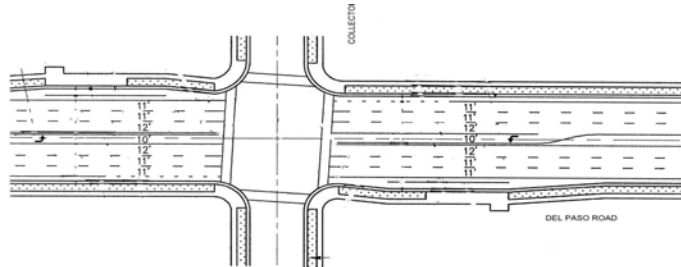
ITEM DESCRIPTION		UNIT	PRICE	QUANTITY	COST
<b>3 CONTINGENCY</b>					
	<b>SUBTOTAL CONSTRUCTION COST</b>				\$ 355,420.00
	CONTINGENCY	%	15.0%		\$ 53,313.00
	<b>TOTAL CONSTRUCTION COST</b>			<b>\$</b>	<b>408,733.00</b>
<b>4 ENGINEERING &amp; MANAGEMENT</b>					
	ENGINEERING STUDIES	%	3.0%	\$ 408,733.00	\$ 12,261.99
	ENVIROMENTAL DOCUMENT	%	0.0%	\$ 408,733.00	\$ -
	DESIGN ENGINEERING	%	12.0%	\$ 408,733.00	\$ 49,047.96
	DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 408,733.00	\$ 6,131.00
	CONSTRUCTION STAKING	%	2.5%	\$ 408,733.00	\$ 10,218.33
	CONSTRUCTION MANAGEMENT	%	13.0%	\$ 408,733.00	\$ 53,135.29
	<b>TOTAL FOR ITEM 4 ENGINEERING &amp; MANAGEMENT</b>				<b>\$ 130,794.56</b>
	(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
<b>5 UTILITIES</b>					
	UTILITIES RELOCATION	%	2%	\$ 408,733.00	\$ 8,174.66
	<b>TOTAL FOR ITEM 5 UTILITIES</b>				<b>\$ 8,174.66</b>
<b>6 ENVIROMENTAL MITIGATION</b>					
	ENVIROMENTAL MITIGATION	%	0.0%	\$ 408,733.00	\$ -
	<b>TOTAL FOR ITEM 6 ENVIROMENTAL MITIGATION</b>				<b>\$ -</b>

## A-2.2

### Panhandle Finance Plan - Roadway

#### Roadway Cross Section index

#### Preliminary Cost Estimate



ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
<b>1 SIGNALIZATION</b>				
<b>6 x 6 x 2</b>				
Signal	LS	\$ 382,700.00	1	\$ 382,700.00
F&I Poles (sizes vary)		included	included	included
F&I - Pedestrian Heads,		included	included	included
F&I - Pedestrian Push button w/ audible signal		included	included	included
F&I - Signal Heads		included	included	included
F&I - Detector Loops (vehicle and bike)		included	included	included
F&I - New Pull Boxes		included	included	included
F&I Conduit		included	included	included
F&I Wiring		included	included	included
F&I - 'Street Lights 165 Watt		included	included	included
Service Point		included	included	included
F&I - Mast-Arm-Mounted Illuminated Street Name Signs		included	included	included
F&I - Emergency Vehicle Pre-Emptions System		included	included	included
Concrete Flatwork Controller Pad		included	included	included
Start-up, Test		included	included	included
<b>TOTAL FOR ITEM 1 SIGNALIZATION</b>				<b>\$ 382,700.00</b>
<b>2 MINOR ITEMS</b>				
MINOR ITEMS	%	30.0%		\$ 114,810.00
<b>TOTAL FOR ITEM 2 MINOR ITEMS</b>				<b>\$ 114,810.00</b>

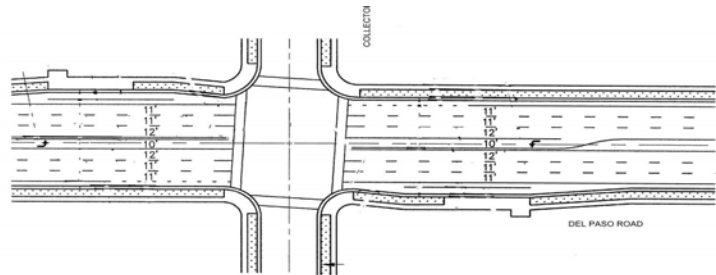
ITEM DESCRIPTION		UNIT	PRICE	QUANTITY	COST
<b>3 CONTINGENCY</b>					
	<b>SUBTOTAL CONSTRUCTION COST</b>				\$ 497,510.00
	CONTINGENCY	%	15.0%		\$ 74,626.50
	<b>TOTAL CONSTRUCTION COST</b>			<b>\$</b>	<b>572,136.50</b>
<b>4 ENGINEERING &amp; MANAGEMENT</b>					
	ENGINEERING STUDIES	%	3.0%	\$ 572,136.50	\$ 17,164.10
	ENVIROMENTAL DOCUMENT	%	0.0%	\$ 572,136.50	\$ -
	DESIGN ENGINEERING	%	12.0%	\$ 572,136.50	\$ 68,656.38
	DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 572,136.50	\$ 8,582.05
	CONSTRUCTION STAKING	%	2.5%	\$ 572,136.50	\$ 14,303.41
	CONSTRUCTION MANAGEMENT	%	13.0%	\$ 572,136.50	\$ 74,377.75
	<b>TOTAL FOR ITEM 4 ENGINEERING &amp; MANAGEMENT</b>				<b>\$ 183,083.68</b>
	(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
<b>5 UTILITIES</b>					
	UTILITIES RELOCATION	%	0%	\$ 572,136.50	\$ -
	<b>TOTAL FOR ITEM 5 UTILITIES</b>				<b>\$ -</b>
<b>6 ENVIROMENTAL MITIGATION</b>					
	ENVIROMENTAL MITIGATION	%	0.0%	\$ 572,136.50	\$ -
	<b>TOTAL FOR ITEM 6 ENVIROMENTAL MITIGATION</b>				<b>\$ -</b>

### A-2.3

#### Panhandle Finance Plan - Roadway

#### Roadway Cross Section index

#### Preliminary Cost Estimate



ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
<b>1 SIGNALIZATION</b>				
<b>6 x 6 x 2</b>				
Signal	LS	\$ 382,700.00	1	\$ 382,700.00
F&I Poles (sizes vary)		included	included	included
F&I - Pedestrian Heads,		included	included	included
F&I - Pedestrian Push button w/ audible signal		included	included	included
F&I - Signal Heads		included	included	included
F&I - Detector Loops (vehicle and bike)		included	included	included
F&I - New Pull Boxes		included	included	included
F&I Conduit		included	included	included
F&I Wiring		included	included	included
F&I - 'Street Lights 165 Watt		included	included	included
Service Point		included	included	included
F&I - Mast-Arm-Mounted Illuminated Street Name Signs		included	included	included
F&I - Emergency Vehicle Pre-Emptions System		included	included	included
Concrete Flatwork Controller Pad		included	included	included
Start-up, Test		included	included	included
<b>TOTAL FOR ITEM 1 SIGNALIZATION</b>				<b>\$ 382,700.00</b>
<b>2 MINOR ITEMS</b>				
MINOR ITEMS	%	30.0%		\$ 114,810.00
<b>TOTAL FOR ITEM 2 MINOR ITEMS</b>				<b>\$ 114,810.00</b>

ITEM DESCRIPTION		UNIT	PRICE	QUANTITY	COST
<b>3 CONTINGENCY</b>					
	<b>SUBTOTAL CONSTRUCTION COST</b>				\$ 497,510.00
	CONTINGENCY	%	15.0%		\$ 74,626.50
	<b>TOTAL CONSTRUCTION COST</b>				\$ 572,136.50
<b>4 ENGINEERING &amp; MANAGEMENT</b>					
	ENGINEERING STUDIES	%	3.0%	\$ 572,136.50	\$ 17,164.10
	ENVIROMENTAL DOCUMENT	%	0.0%	\$ 572,136.50	\$ -
	DESIGN ENGINEERING	%	12.0%	\$ 572,136.50	\$ 68,656.38
	DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 572,136.50	\$ 8,582.05
	CONSTRUCTION STAKING	%	2.5%	\$ 572,136.50	\$ 14,303.41
	CONSTRUCTION MANAGEMENT	%	13.0%	\$ 572,136.50	\$ 74,377.75
	<b>TOTAL FOR ITEM 4 ENGINEERING &amp; MANAGEMENT</b>				\$ 183,083.68
	(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
<b>5 UTILITIES</b>					
	UTILITIES RELOCATION	%	0%	\$ 572,136.50	\$ -
	<b>TOTAL FOR ITEM 5 UTILITIES</b>				\$ -
<b>6 ENVIROMENTAL MITIGATION</b>					
	ENVIROMENTAL MITIGATION	%	0.0%	\$ 572,136.50	\$ -
	<b>TOTAL FOR ITEM 6 ENVIROMENTAL MITIGATION</b>				\$ -

**A-3**  
**Traffic Circles**  
**Summary of Total Costs**

SHEET	PROJECT NAME	TOTAL COST (rounded)	2018 to 2021 % Change
A-3.1	Traffic Circle - Club Center/Street "C"	\$ 563,800	19.046%
A-3.2	Traffic Circle - Club Center/Street "G"	\$ 563,800	19.046%
A-3.3	Traffic Circle - National Drive	\$ 563,800	19.046%
	<b>Traffic Circles Total</b>	<b>\$ 1,691,000</b>	

**NOTES:**

1. Rush River Road in Sacramento was used as example to develop components and quantities

**A-3.1**

**Panhandle Finance Plan - Roadway**

**Traffic Circle**

**Club Center Drive/Street "C"**

Project Description:



ITEM DESCRIPTION		UNIT	PRICE	QUANTITY	COST
<b>1</b>	<b>Earthwork</b>				
	ROADWAY EXCAVATION	CY	\$ 21.50	770	\$ 16,555.00
	EROSION CONTROL	LF	\$ 6.60	325	\$ 2,145.00
	<b>TOTAL FOR ITEM 1 EARTHWORK</b>				<b>\$ 18,700.00</b>
<b>2</b>	<b>DRAINAGE</b>				
	DRAINAGE	LF	\$ 35.75	325	\$ 11,618.75
	<b>TOTAL FOR ITEM 2 DRAINAGE</b>				<b>\$ 11,618.75</b>
<b>3</b>	<b>PAVEMENT</b>				
	* ASPHALT CONCRETE (5" AC)	SF	\$ 3.90	7300	\$ 28,470.00
	* AGGREGATE BASE W/ LIME TREATMENT (10" AB)	SF	\$ 3.00	9200	\$ 27,600.00
	8' WIDE CONCRETE APRON	SF	\$ 12.64	1900	\$ 24,018.68
	SIDEWALK (6" PCC/6"AB)	SF	\$ 7.64	1600	\$ 12,227.67
	PEDESTRIAN RAMPS	EA	\$ 2,145.00	8	\$ 17,160.00
	CURB & GUTTER	LF	\$ 31.00	320	\$ 9,920.00
	TYPE 14A MEDIAN CURB	LF	\$ 23.60	830	\$ 19,588.00
	<b>TOTAL OR ITEM 3 PAVEMENT</b>				<b>\$ 138,984.36</b>



ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
<b>4 MISCELLANEOUS</b>				
** STREET LIGHTS / ELECTROLIERS	LF	\$ 35.80	325	\$ 11,635.00
JOINT TRENCH	LF	\$ 179.00	245	\$ 43,855.00
MEDIAN LANDSCAPING	SF	\$ 6.60	6550	\$ 43,230.00
LANDSCAPING BUFFER	SF	\$ 5.50	1500	\$ 8,250.00
LANDSCAPE CORRIDOR/PUE	SF	\$ 5.50	0	\$ -
6' PRIVACY WALL W/ PILASTERS	LF	\$ 188.00	0	\$ -
<b>TOTAL FOR ITEM 4 MISCELLANEOUS</b>				<b>\$ 106,970.00</b>
<b>5 MINOR ITEMS</b>				
MINOR ITEMS	%	30.0%		\$ 82,881.93
<b>TOTAL FOR ITEM 5 MINOR ITEMS</b>				<b>\$ 82,881.93</b>
<b>6 CONTINGENCY</b>				
<b>SUBTOTAL CONSTRUCTION COST</b>				<b>\$ 359,155.04</b>
CONTINGENCY	%	15.0%		\$ 53,873.26
<b>TOTAL CONSTRUCTION COST</b>				<b>\$ 413,028.29</b>
<b>7 ENGINEERING &amp; MANAGEMENT</b>				
ENGINEERING STUDIES	%	3.0%	\$ 413,028.29	\$ 12,390.85
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 413,028.29	\$ 6,195.42
DESIGN ENGINEERING	%	12.0%	\$ 413,028.29	\$ 49,563.40
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 413,028.29	\$ 6,195.42
CONSTRUCTION STAKING	%	2.5%	\$ 413,028.29	\$ 10,325.71
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 413,028.29	\$ 53,693.68
<b>TOTAL FOR ITEM 7 ENGINEERING &amp; MANAGEMENT</b>				<b>\$ 138,364.48</b>
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
<b>8 UTILITIES</b>				
UTILITIES RELOCATION	%	0.0%	\$ 413,028.29	\$ -
<b>TOTAL FOR ITEM 8 UTILITIES</b>				<b>\$ -</b>
<b>9 ENVIROMENTAL MITIGATION</b>				
ENVIROMENTAL MITIGATION	%	3.0%	\$ 413,028.29	\$ 12,390.85
<b>TOTAL FOR ITEM 9 ENVIROMENTAL MITIGATION</b>				<b>\$ 12,390.85</b>

**GRAND TOTAL \$ 563,784**

\* Varies based on street section

\*\* Varies based on street section. Type A light is assumed.

### A-3.2

#### Panhandle Finance Plan - Roadway

#### Traffic Circle

#### Club Center Drive/Street "G"

Project Description:



ITEM DESCRIPTION		UNIT	PRICE	QUANTITY	COST
<b>1</b>	<b>Earthwork</b>				
	ROADWAY EXCAVATION	CY	\$ 21.50	770	\$ 16,555.00
	EROSION CONTROL	LF	\$ 6.60	325	\$ 2,145.00
	<b>TOTAL FOR ITEM 1 EARTHWORK</b>				<b>\$ 18,700.00</b>
<b>2</b>	<b>DRAINAGE</b>				
	DRAINAGE	LF	\$ 35.75	325	\$ 11,618.75
	<b>TOTAL FOR ITEM 2 DRAINAGE</b>				<b>\$ 11,618.75</b>
<b>3</b>	<b>PAVEMENT</b>				
	* ASPHALT CONCRETE (5" AC)	SF	\$ 3.90	7300	\$ 28,470.00
	* AGGREGATE BASE W/ LIME TREATMENT (10" AB)	SF	\$ 3.00	9200	\$ 27,600.00
	8' WIDE CONCRETE APRON	SF	\$ 12.64	1900	\$ 24,018.68
	SIDEWALK (6" PCC/6"AB)	SF	\$ 7.64	1600	\$ 12,227.67
	PEDESTRIAN RAMPS	EA	\$ 2,145.00	8	\$ 17,160.00
	CURB & GUTTER	LF	\$ 31.00	320	\$ 9,920.00
	TYPE 14A MEDIAN CURB	LF	\$ 23.60	830	\$ 19,588.00
	<b>TOTAL OR ITEM 3 PAVEMENT</b>				<b>\$ 138,984.36</b>

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
<b>4 MISCELLANEOUS</b>				
** STREET LIGHTS / ELECTROLIERS	LF	\$ 35.80	325	\$ 11,635.00
JOINT TRENCH	LF	\$ 179.00	245	\$ 43,855.00
MEDIAN LANDSCAPING	SF	\$ 6.60	6550	\$ 43,230.00
LANDSCAPING BUFFER	SF	\$ 5.50	1500	\$ 8,250.00
LANDSCAPE CORRIDOR/PUE	SF	\$ 5.50	0	\$ -
6' PRIVACY WALL W/ PILASTERS	LF	\$ 188.00	0	\$ -
<b>TOTAL FOR ITEM 4 MISCELLANEOUS</b>				<b>\$ 106,970.00</b>
<b>5 MINOR ITEMS</b>				
MINOR ITEMS	%	30.0%		\$ 82,881.93
<b>TOTAL FOR ITEM 5 MINOR ITEMS</b>				<b>\$ 82,881.93</b>
<b>6 CONTINGENCY</b>				
<b>SUBTOTAL CONSTRUCTION COST</b>				<b>\$ 359,155.04</b>
CONTINGENCY	%	15.0%		\$ 53,873.26
<b>TOTAL CONSTRUCTION COST</b>				<b>\$ 413,028.29</b>
<b>7 ENGINEERING &amp; MANAGEMENT</b>				
ENGINEERING STUDIES	%	3.0%	\$ 413,028.29	\$ 12,390.85
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 413,028.29	\$ 6,195.42
DESIGN ENGINEERING	%	12.0%	\$ 413,028.29	\$ 49,563.40
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 413,028.29	\$ 6,195.42
CONSTRUCTION STAKING	%	2.5%	\$ 413,028.29	\$ 10,325.71
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 413,028.29	\$ 53,693.68
<b>TOTAL FOR ITEM 7 ENGINEERING &amp; MANAGEMENT</b>				<b>\$ 138,364.48</b>
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
<b>8 UTILITIES</b>				
UTILITIES RELOCATION	%	0.0%	\$ 413,028.29	\$ -
<b>TOTAL FOR ITEM 8 UTILITIES</b>				<b>\$ -</b>
<b>9 ENVIROMENTAL MITIGATION</b>				
ENVIROMENTAL MITIGATION	%	3.0%	\$ 413,028.29	\$ 12,390.85
<b>TOTAL FOR ITEM 9 ENVIROMENTAL MITIGATION</b>				<b>\$ 12,390.85</b>

**GRAND TOTAL \$ 563,784**

\* Varies based on street section

\*\* Varies based on street section. Type A light is assumed.

### A-3.3

#### Panhandle Finance Plan - Roadway

#### Traffic Circle

#### National Drive

Project Description:



ITEM DESCRIPTION		UNIT	PRICE	QUANTITY	COST
<b>1</b>	<b>Earthwork</b>				
	ROADWAY EXCAVATION	CY	\$ 21.50	770	\$ 16,555.00
	EROSION CONTROL	LF	\$ 6.60	325	\$ 2,145.00
	<b>TOTAL FOR ITEM 1 EARTHWORK</b>				<b>\$ 18,700.00</b>
<b>2</b>	<b>DRAINAGE</b>				
	DRAINAGE	LF	\$ 35.75	325	\$ 11,618.75
	<b>TOTAL FOR ITEM 2 DRAINAGE</b>				<b>\$ 11,618.75</b>
<b>3</b>	<b>PAVEMENT</b>				
	* ASPHALT CONCRETE (5" AC)	SF	\$ 3.90	7300	\$ 28,470.00
	* AGGREGATE BASE W/ LIME TREATMENT (10" AB)	SF	\$ 3.00	9200	\$ 27,600.00
	8' WIDE CONCRETE APRON	SF	\$ 12.64	1900	\$ 24,018.68
	SIDEWALK (6" PCC/6"AB)	SF	\$ 7.64	1600	\$ 12,227.67
	PEDESTRIAN RAMPS	EA	\$ 2,145.00	8	\$ 17,160.00
	CURB & GUTTER	LF	\$ 31.00	320	\$ 9,920.00
	TYPE 14A MEDIAN CURB	LF	\$ 23.60	830	\$ 19,588.00
	<b>TOTAL OR ITEM 3 PAVEMENT</b>				<b>\$ 138,984.36</b>

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
<b>4 MISCELLANEOUS</b>				
** STREET LIGHTS / ELECTROLIERS	LF	\$ 35.80	325	\$ 11,635.00
JOINT TRENCH	LF	\$ 179.00	245	\$ 43,855.00
MEDIAN LANDSCAPING	SF	\$ 6.60	6550	\$ 43,230.00
LANDSCAPING BUFFER	SF	\$ 5.50	1500	\$ 8,250.00
LANDSCAPE CORRIDOR/PUE	SF	\$ 5.50	0	\$ -
6' PRIVACY WALL W/ PILASTERS	LF	\$ 188.00	0	\$ -
<b>TOTAL FOR ITEM 4 MISCELLANEOUS</b>				<b>\$ 106,970.00</b>
<b>5 MINOR ITEMS</b>				
MINOR ITEMS	%	30.0%		\$ 82,881.93
<b>TOTAL FOR ITEM 5 MINOR ITEMS</b>				<b>\$ 82,881.93</b>
<b>6 CONTINGENCY</b>				
<b>SUBTOTAL CONSTRUCTION COST</b>				\$ 359,155.04
CONTINGENCY	%	15.0%		\$ 53,873.26
<b>TOTAL CONSTRUCTION COST</b>				<b>\$ 413,028.29</b>
<b>7 ENGINEERING &amp; MANAGEMENT</b>				
ENGINEERING STUDIES	%	3.0%	\$ 413,028.29	\$ 12,390.85
ENVIROMENTAL DOCUMENT	%	1.5%	\$ 413,028.29	\$ 6,195.42
DESIGN ENGINEERING	%	12.0%	\$ 413,028.29	\$ 49,563.40
DESIGN SERVICES DURING CONSTRUCTION	%	1.5%	\$ 413,028.29	\$ 6,195.42
CONSTRUCTION STAKING	%	2.5%	\$ 413,028.29	\$ 10,325.71
CONSTRUCTION MANAGEMENT	%	13.0%	\$ 413,028.29	\$ 53,693.68
<b>TOTAL FOR ITEM 7 ENGINEERING &amp; MANAGEMENT</b>				<b>\$ 138,364.48</b>
(THE ABOVE EXCLUDES LAND AND RIGHT OF WAY & MAJOR STRUCTURES WORK)				
<b>8 UTILITIES</b>				
UTILITIES RELOCATION	%	0.0%	\$ 413,028.29	\$ -
<b>TOTAL FOR ITEM 8 UTILITIES</b>				<b>\$ -</b>
<b>9 ENVIROMENTAL MITIGATION</b>				
ENVIROMENTAL MITIGATION	%	3.0%	\$ 413,028.29	\$ 12,390.85
<b>TOTAL FOR ITEM 9 ENVIROMENTAL MITIGATION</b>				<b>\$ 12,390.85</b>

**GRAND TOTAL \$ 563,784**

\* Varies based on street section

\*\* Varies based on street section. Type A light is assumed.

**B-1**  
**Sanitary Sewer Index**  
**Summary of Total Costs**

SHEET	PROJECT NAME	TOTAL COST	2018 to 2021 % Change
B-1.1	Trunk Sanitary Sewer	\$ 1,164,000	12.573%
	<b>Sanitary Sewer Total</b>	<b>\$ 1,164,000</b>	

Panhandle Finance Plan  
**SANITARY SEWER INDEX**

**TRUNK SANITARY SEWER**

ITEM	DESCRIPTION	DEPTH (Feet)	QUANTITY	UNIT	UNIT PRICE	COST (Rounded)
1	15" trunk sewer line	14	1,280	L.F.	\$ 138	\$ 176,400
2	18" trunk sewer line	14	2,120	L.F.	\$ 145	\$ 308,400
3	21" trunk sewer line	15' - 17'	720	L.F.	\$ 190	\$ 136,500
4	48" trunk sewer manhole	14' - 17'	13	EA.	\$ 9,482	\$ 123,300
5	60" trunk sewer manhole	14' - 17'	3	EA.	\$ 11,242	\$ 33,700
<b>SUBTOTAL</b>						\$ 778,000
<b>15% CONTINGENCY</b>						\$ 117,000
<b>30% ENGINEERING &amp; MANAGEMENT</b>						\$ 269,000
<b>TOTAL TRUNK SEWER ESTIMATED COST</b>						<b>\$ 1,164,000</b>

**FUNDING SOURCES:**

1. Eligible for SASD reimbursements/credit.  
Preliminary figure equal to \$500K +/-

**NOTES:**

1. Trunk sewer assumes construction concurrent with road improvements: excludes pavement removal and replacement, roadway and erosion control related items.

**C-1**  
**Storm Drain Index**  
**Summary of Total Costs**

<b>SHEET</b>	<b>PROJECT NAME</b>	<b>TOTAL COST</b>	<b>2018 to 2021 % Change</b>
C-1.1	Storm Drain System	\$ 9,654,000	13.603%
C-1.2	Detention Basin Expansion	\$ 4,841,000	14.661%
	<b>Onsite Public Frontage Total</b>	<b>\$ 14,495,000</b>	



**Storm Drain System**

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	COST (Rounded)
1	24" Storm Drain	2,040	LF	\$ 72.40	\$ 147,700
2	27" Storm Drain	970	LF	\$ 77.35	\$ 75,000
3	30" Storm Drain	470	LF	\$ 80.41	\$ 37,800
4	42" Storm Drain	790	LF	\$ 105.81	\$ 83,600
5	48" Storm Drain	2,170	LF	\$ 111.38	\$ 241,700
6	60" Storm Drain	1,150	LF	\$ 222.76	\$ 256,200
7	66" Storm Drain	690	LF	\$ 316.08	\$ 218,100
8	72" Storm Drain	4,910	LF	\$ 345.02	\$ 1,694,000
9	78" Storm Drain	8,800	LF	\$ 413.31	\$ 3,637,100
10	78" Storm Drain Outfall	2	EA	\$ 32,800.00	\$ 65,600
<b>SUBTOTAL</b>					\$ 6,457,000
<b>15% CONTINGENCY</b>					\$ 969,000
<b>30% ENGINEERING &amp; MANAGEMENT</b>					\$ 2,228,000
<b>TOTAL</b>					\$ 9,654,000

- Notes:**
1. Storm drain assumes construction concurrent with road improvements, and excludes pavement removal and replacement.
  2. Storm drain system includes the components listed above because each segment of pipe is required for a complete functioning system.
  3. Storm Drain System is not reimbursable by City of Sacramento

**Detention Basin Expansion**

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	COST (Rounded)
1	Detention Pond - Excavation	88,900	c.y.	\$5.50	\$ 489,000
2	Detention Pond - Finish Grading	444,170	s.f.	\$0.11	\$ 48,600
3	Pump Station Outlet Structure	1	l.s.	\$16,400.00	\$ 16,400
4	Pump Station Inlet Structure	1	l.s.	\$21,900.00	\$ 21,900
5	Pump Station	1	l.s.	\$546,700.00	\$ 546,700
6	Weir Erosion Protection - Rip Rap 1' deep	425	tons	\$49.00	\$ 20,800
7	Detention Pond - Maint. Path (6" ab @ 12')	39,600	s.f.	\$1.69	\$ 67,000
8	Metal access gate	1	e.a.	\$5,194.96	\$ 5,200
9	12 Concrete access ramp	2,760	s.f.	\$8.75	\$ 24,100
10	6" Concrete Spillway	3,600	s.f.	\$8.70	\$ 31,300
11	Geotextiles	444,170	s.f.	\$0.22	\$ 97,100
12	Rip Rap/Cobble Rock Protection at Outfall Str. (2)	41	tons	\$48.24	\$ 2,000
13	Hydroseed	328,000	s.f.	\$0.11	\$ 36,100
14	Detention Pond - Fencing: Post & Cable	3,300	l.f.	\$11.00	\$ 36,300
15	Detention Pond - Fencing: tubular steel (housing)	850	l.f.	\$37.00	\$ 31,500
16	Detention Pond - Landscaping (25% coverage & trees)	116,850	s.f.	\$5.50	\$ 642,700
<b>SUBTOTAL</b>					\$ 2,117,000
<b>15% CONTINGENCY</b>					\$ 318,000
<b>30% ENGINEERING &amp; MANAGEMENT</b>					\$ 731,000
<b>CONSTRUCTION TOTAL</b>					\$ 3,166,000
Real-Estate Acquisition		6.7	acres	\$ 250,000.00	<b>\$1,675,000</b>
<b>Total Cost</b>					<b>\$ 4,841,000</b>

**Notes:**

1. School has already acquired the land and excavated their portion of the basin (6.9 acres). Dirtwork and above quantities



**D-1**  
**Potable Water Index**  
**Summary of Total Costs**

SHEET	PROJECT NAME	TOTAL COST	2018 to 2021 % Change
D-1.1	Transmission Main	\$ 2,948,000	9.428%
	<b>Potable Water Total</b>	<b>\$ 2,948,000</b>	

**TRANSMISSION MAIN**

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT	PRICE	COST (Rounded)
1	18" Water transmission main	950	I.f.	\$	147	\$ 140,000
2	24" Water transmission main	9,300	I.f.	\$	197	\$ 1,832,100
<b>SUBTOTAL</b>						\$ 1,972,000
<b>15% CONTINGENCY</b>						\$ 296,000
<b>30% ENGINEERING &amp; MANAGEMENT</b>						\$ 680,000
<b>TOTAL TRANSMISSION MAIN ESTIMATED COST</b>						<b>\$ 2,948,000</b>

**REIMBURSEMENT SOURCES:**

1. Reimbursement available, applied as water meter credits.

**NOTES**

1. Transmission main costs include fittings and valves at 500' spacing.
2. T-Main construction costs assume construction concurrent with road improvements: excludes pavement removal and replacement, utility conflict resolution.

Panhandle Finance Plan  
**WAPA CORRIDOR TRAIL INDEX**

**POWERLINE CORRIDOR CLASS I BIKE TRAIL**

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	COST (Rounded)
1	12' Trail with DG shoulders	7,800	l.f.	\$ 86	\$ 667,000
2	20' Landscape Area	231,600	s.f.	\$ 7.40	\$ 1,713,800
3	Open Space In WAPA Corridor	19.1	a.c.	\$ 8,388	\$ 160,200
4	Park Space in WAPA Corridor - Landscape/turf	100,500	s.f.	\$ 7.40	\$ 743,700
5	Park Space in WAPA Corridor - Minimal Landscape/Natural	269,500	s.f.	\$ 7.40	\$ 1,994,300
<b>SUBTOTAL</b>					\$ 5,279,000

**TOTAL WAPA CORRIDOR WITH TRAIL ESTIMATED COST \$ 5,279,000**

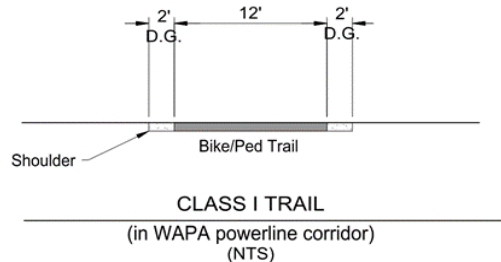
**NOTES**

Landscape items and unit prices above include contingency and engineering. Base price is \$5/sf

**TRAIL**  
**Panhandle Finance Plan - Trails**

**7,800 LF**  
**Trails Cross Section Index**  
**Preliminary Per Foot Cost Estimate**

Typical Cross Section:



ITEM DESCRIPTION		UNIT	PRICE	QUANTITY	COST
<b>1 EARTHWORK</b>					
	CLEAR AND GRUB	SF	\$ 0.11	16	\$ 1.75
	TRAIL ROUGH GRADING	CY	\$ 5.96	0.15	\$ 0.89
	<b>TOTAL FOR ITEM 1 EARTHWORK</b>				<b>\$ 2.65</b>
<b>2 PAVEMENT</b>					
	ASPHALT CONCRETE (3" AC)	SF	\$ 2.30	12	\$ 27.60
	AGGREGATE BASE (6" AB)	SF	\$ 1.80	12	\$ 21.60
	DECOMPOSED GRANITE	SF	\$ 2.80	4	\$ 11.20
	<b>TOTAL FOR ITEM 2 PAVEMENT</b>				<b>\$ 60.40</b>
<b>3 MISCELLANEOUS</b>					
	SIGNAGE/STRIPING	LF	\$ 0.24	1	\$ 0.24
	NATIVE LANDSCAPING/IRRIGATION	SF	\$ 5.50	0	\$ -
	<b>TOTAL FOR ITEM 3 MISCELLANEOUS</b>				<b>\$ 0.24</b>
<b>4 CONTINGENCY</b>					
	<b>SUBTOTAL CONSTRUCTION COST</b>				<b>\$ 63.29</b>
	CONTINGENCY	%	15.0%		\$ 9.49
	<b>TOTAL CONSTRUCTION COST</b>				<b>\$ 72.78</b>
<b>5 ENGINEERING &amp; MANAGEMENT</b>					
	DESIGN ENGINEERING	%	5.0%	\$ 72.78	\$ 3.64
	PLAN CHECK/INSPECTION	%	5.0%	\$ 72.78	\$ 3.64
	CONSTRUCTION STAKING	%	2.5%	\$ 72.78	\$ 1.82
	CONSTRUCTION MANAGEMENT	%	5.0%	\$ 72.78	\$ 3.64
	MISC	%	2.5%	\$ 72.78	\$ 1.82
	<b>TOTAL FOR ITEM 5 ENGINEERING &amp; MANAGEMENT</b>				<b>\$ 12.74</b>

**GRAND TOTAL \$ 86**

**OPEN SPACE at CORRIDOR**  
**Panhandle Finance Plan - Trails**

**19.1 AC**  
**Preliminary Per Acre Cost Estimate**

ITEM DESCRIPTION	UNIT	PRICE	QUANTITY	COST
<b>1 EARTHWORK</b>				
CLEAR AND GRUB	AC	\$ 4,767.00	1	\$ 4,767.00
ROUGH GRADING	CY	\$ 3.58	403	\$ 1,440.88
<b>TOTAL FOR ITEM 1 EARTHWORK</b>				<b>\$ 6,207.88</b>
<b>2 PAVEMENT</b>				
ASPHALT CONCRETE (3" AC)	SF	\$ 2.30	0	\$ -
AGGREGATE BASE (6" AB)	SF	\$ 1.80	0	\$ -
DECOMPOSED GRANITE	SF	\$ 2.80	0	\$ -
<b>TOTAL FOR ITEM 2 PAVEMENT</b>				<b>\$ -</b>
<b>3 MISCELLANEOUS</b>				
SIGNAGE/STRIPING	LF	\$ 0.24	0	\$ -
NATIVE LANDSCAPING/IRRIGATION	SF	\$ 5.50	0	\$ -
<b>TOTAL FOR ITEM 3 MISCELLANEOUS</b>				<b>\$ -</b>
<b>4 CONTINGENCY</b>				
<b>SUBTOTAL CONSTRUCTION COST</b>				<b>\$ 6,207.88</b>
CONTINGENCY	%	15.0%		\$ 931.18
<b>TOTAL CONSTRUCTION COST</b>				<b>\$ 7,139.07</b>
<b>5 ENGINEERING &amp; MANAGEMENT</b>				
DESIGN ENGINEERING	%	5.0%	\$ 7,139.07	\$ 356.95
PLAN CHECK/INSPECTION	%	5.0%	\$ 7,139.07	\$ 356.95
CONSTRUCTION STAKING	%	2.5%	\$ 7,139.07	\$ 178.48
CONSTRUCTION MANAGEMENT	%	5.0%	\$ 7,139.07	\$ 356.95
MISC	%	2.5%	\$ 7,139.07	\$ 178.48
<b>TOTAL FOR ITEM 5 ENGINEERING &amp; MANAGEMENT</b>				<b>\$ 1,249.34</b>

**GRAND TOTAL \$ 8,388**

**G-1**  
**Supplemental Finance Report**  
**Summary of Additional Road Costs**

SHEET	PROJECT NAME	TOTAL COST	2018 to 2021 % Change
G-1.1	Del Paso Frontage Improvements (Northside)	\$ 1,267,000	16.846%
G-1.2	Sorento Road Horse Fence (West Side)	\$ 201,000	9.239%
G-1.3	Sorento Road Frontage Improvements (West Side)	\$ 733,000	16.312%
G-1.4	Entry Monumentation	\$ 177,000	18.395%
G-1.5	Elkhorn Boulevard (Off-Site)	\$ 559,000	19.444%
	<b>Sanitary Sewer Total</b>	<b>\$ 2,937,000</b>	



**G-1.1****Del Paso Frontage Improvements (Northside)**

Roadway Segment	TOTAL QUANTITY	UNIT	UNIT COST		TOTAL COST
Landscape (18' wide)	23,500	s.f.	\$	8.75	\$ 206,000
Soundwall	2,700	l.f.	\$	208.56	\$ 563,000
Pilasters	20	e.a.	\$	1,749.50	\$ 35,000
12' Wide PCC Trail	31,300	s.f.	\$	9.53	\$ 298,000
<b>SUBTOTAL</b>			\$		1,102,000
<b>15% CONTINGENCY</b>			\$		165,000
			\$		1,267,000

**G-1.2**  
**Sorento Road Horse Fence (West Side)**

Fence/Soundwall	TOTAL QUANTITY	UNIT	UNIT COST		TOTAL COST
Horse Fence	3,200	l.f.	\$	55	\$ 175,000
<b>SUBTOTAL</b>				\$	175,000
<b>15% CONTINGENCY</b>				\$	26,000
				\$	201,000

**G-1.3**  
**Sorento Road Frontage Improvements (West Side)**

Roadway Segment	TOTAL QUANTITY	UNIT	UNIT COST		TOTAL COST
Landscape	20,500	s.f.	\$	8.75	\$ 179,000
12' Wide PCC Trail	48,000	l.f.	\$	9.53	\$ 458,000
<b>SUBTOTAL</b>					\$ 637,000
<b>15% CONTINGENCY</b>					\$ 96,000
					\$ 733,000

**G-1.4**  
**Entry Monumentation**

Entry Monumentation	TOTAL QUANTITY	UNIT	UNIT COST	TOTAL COST
National Drive at Del Paso Road	1	e.a.	\$ 77,467	\$ 77,000
Club Center Drive at Del Paso Road	1	e.a.	\$ 77,467	\$ 77,000
<b>SUBTOTAL</b>				\$ 154,000
<b>15% CONTINGENCY</b>				\$ 23,000
				\$ 177,000

**G-1.5**  
**Elkhorn Boulevard**

Roadway Segment	TOTAL QUANTITY	UNIT	UNIT COST	TOTAL COST
Segment - State Route 99 to East Commerce	1	l.s.	\$ 24,872	\$ 25,000
Segment - East Commerce Way to Natomas Blvd.	1	l.s.	\$ 250,796	\$ 251,000
Segment - Natomas Blvd. tp City Limit East	1	l.s.	\$ 129,543	\$ 130,000
Segment - City Limit East to Panhandle Limit East	1	l.s.	\$ 79,799	\$ 80,000
<b>SUBTOTAL</b>				\$ 486,000
<b>15% CONTINGENCY</b>				\$ 73,000
				\$ 559,000



**APPENDIX C:**  
**Estimated Fee Revenue**

Table C-1	Estimated Fee Revenue at Buildout .....	C-1
Table C-2	Panhandle Fee Program Fees .....	C-2
Table C-3	Panhandle TDIF Rates .....	C-3



**Table C-1**  
**Panhandle Finance Plan**  
**Estimated Fee Revenue at Buildout (2021\$)**

Item	Total Revenue	Residential		
		Estates	Traditional	Village
<b>Number of Units</b>		340	869	453
<b>Fee Revenue [1]</b>				
<b>Processing Fees</b>				
Administrative Processing Fee	\$272,568	\$55,760	\$142,516	\$74,292
Building Permit	\$4,728,328	\$1,060,559	\$2,491,956	\$1,175,813
Technology Surcharge	\$378,266	\$84,845	\$199,356	\$94,065
Plan Review Fee	\$992,949	\$222,717	\$523,311	\$246,921
Technology Surcharge	\$79,436	\$17,817	\$41,865	\$19,754
Planning Review Fee	\$148,942	\$33,408	\$78,497	\$37,038
Planning Inspection Fee	\$558,432	\$114,240	\$291,984	\$152,208
Seismic/Strong Motion	\$77,856	\$17,714	\$41,085	\$19,057
General Plan Recovery Fee	\$1,557,124	\$354,276	\$821,704	\$381,143
Green Building/CBSC Fee	\$24,704	\$5,780	\$13,035	\$5,889
Construction Excise Tax	\$2,945,515	\$706,384	\$1,529,788	\$709,344
Fire Inspection Fee	\$420,323	\$94,860	\$222,247	\$103,216
Fire Review Fee	\$217,722	\$44,540	\$113,839	\$59,343
<b>Subtotal Processing Fees</b>	<b>\$12,402,166</b>	<b>\$2,812,901</b>	<b>\$6,511,182</b>	<b>\$3,078,083</b>
<b>City Development Impact Fees</b>				
Adjusted Transportation Development Impact Fee (TDIF)	\$3,636,456	\$743,920	\$1,901,372	\$991,164
Water Development Fee	\$5,522,976	\$1,129,851	\$2,887,765	\$1,505,360
Water Easement Tap Installation Fee	\$3,028,164	\$619,480	\$1,583,318	\$825,366
Water Meter Installation	\$1,116,864	\$228,480	\$583,968	\$304,416
Residential Construction Water Use Fee	\$334,062	\$68,340	\$174,669	\$91,053
Sewer Development Fee	\$251,560	\$51,462	\$131,532	\$68,566
City Business Operations Tax	\$239,557	\$54,504	\$126,416	\$58,637
Erosion and Sediment Control (ESC)	\$116,340	\$23,800	\$60,830	\$31,710
Neighborhood and Community Parks	\$6,501,744	\$1,330,080	\$3,399,528	\$1,772,136
Citywide Parks/Facilities	\$3,309,042	\$676,940	\$1,730,179	\$901,923
Natomas Basin Habitat Conservation Plan Fee	\$7,106,585	\$1,894,922	\$3,697,226	\$1,514,436
Mixed Income Housing Ordinance/Housing Trust Fund	\$11,245,088	\$2,575,500	\$5,924,408	\$2,745,180
Residential Construction Tax	\$639,870	\$130,900	\$334,565	\$174,405
<b>Subtotal City Development Impact Fees</b>	<b>\$43,048,308</b>	<b>\$9,528,179</b>	<b>\$22,535,776</b>	<b>\$10,984,352</b>
<b>Other Agency Fees</b>				
Twin Rivers and Robla Elementary School District Fees	\$15,141,900	\$3,468,000	\$7,977,420	\$3,696,480
Sacramento Area Flood Control Agency Dev. Impact Fee	\$7,793,625	\$1,785,000	\$4,106,025	\$1,902,600
Sacramento Countywide Transportation Mitigation Fee	\$2,290,269	\$468,527	\$1,197,499	\$624,243
Air Quality Mitigation Fee	\$459,433	\$93,987	\$240,221	\$125,224
Sacramento Area Sewer District (Expansion)	\$5,815,408	\$1,550,639	\$3,025,487	\$1,239,282
Regional SAN (New)	\$10,768,098	\$2,202,860	\$5,630,251	\$2,934,987
<b>Subtotal Other Agency Fees</b>	<b>\$42,268,733</b>	<b>\$9,569,013</b>	<b>\$22,176,903</b>	<b>\$10,522,817</b>
<b>Panhandle Fee Program Revenue</b>				
Roadways	\$14,519,000	\$2,970,193	\$7,591,463	\$3,957,345
Sanitary Sewer	\$314,000	\$79,491	\$155,097	\$79,412
Storm Drainage	\$14,948,865	\$3,784,396	\$7,383,822	\$3,780,647
Trails	\$1,048,000	\$214,392	\$547,961	\$285,646
Regional Park Land Acquisition	\$3,968,856	\$811,920	\$2,075,172	\$1,081,764
Transit	\$975,594	\$199,580	\$510,103	\$265,911
Fire Facilities	\$990,552	\$202,640	\$517,924	\$269,988
Community Center	\$611,616	\$125,120	\$319,792	\$166,704
Library	\$1,555,632	\$318,240	\$813,384	\$424,008
<b>Subtotal Panhandle Fee Program Revenue</b>	<b>\$38,932,115</b>	<b>\$8,705,972</b>	<b>\$19,914,718</b>	<b>\$10,311,425</b>
<b>Panhandle Fee Program Admin Fee Revenue</b>	<b>\$1,167,963</b>	<b>\$261,179</b>	<b>\$597,442</b>	<b>\$309,343</b>
<b>Total Fee Revenue</b>	<b>\$137,819,284</b>	<b>\$30,877,244</b>	<b>\$71,736,021</b>	<b>\$35,206,019</b>

fee rev

Source: City of Sacramento; various public agencies; EPS.

[1] See Table 6-1 for fees per unit.



**Table C-2**  
**Panhandle Finance Plan**  
**Panhandle Fee Program Fees (FY 2022-23)**

Item	Source/ Assumption	Total Fee Revenue	Residential		
			Estates (E)	Traditional (T)	Village (V)
<b>Units</b>		<b>1,662</b>	<b>340</b>	<b>869</b>	<b>453</b>
<b>Panhandle DA Fee Component</b>			<i>per unit</i>	<i>per unit</i>	<i>per unit</i>
Regional Park Land Acquisition	Table 3-9	\$3,968,856	\$2,388	\$2,388	\$2,388
Transit	Table 3-9	\$975,594	\$587	\$587	\$587
Fire Facilities	Table 3-9	\$990,552	\$596	\$596	\$596
Community Center	Table 3-9	\$611,616	\$368	\$368	\$368
Library	Table 3-9	\$1,555,632	\$936	\$936	\$936
<b>Subtotal</b>		<b>\$8,102,250</b>	<b>\$4,875</b>	<b>\$4,875</b>	<b>\$4,875</b>
Fee Program Administration	3%	\$243,068	\$146	\$146	\$146
<b>Total</b>		<b>\$8,345,318</b>	<b>\$5,021</b>	<b>\$5,021</b>	<b>\$5,021</b>
<b>Panhandle Impact Fee Component</b>					
Roadways	Table A-1	\$14,519,000	\$8,736	\$8,736	\$8,736
Sanitary Sewer	Table A-2	\$314,000	\$234	\$178	\$175
Storm Drainage (Including Land Acquisition)	Table A-3	\$14,948,865	\$11,131	\$8,497	\$8,346
Trails	Table A-4	\$1,048,000	\$631	\$631	\$631
<b>Subtotal</b>		<b>\$30,829,865</b>	<b>\$20,731</b>	<b>\$18,042</b>	<b>\$17,888</b>
Fee Program Administration	3%	\$924,896	\$622	\$541	\$537
<b>Total</b>		<b>\$31,754,761</b>	<b>\$21,353</b>	<b>\$18,583</b>	<b>\$18,424</b>
<b>Total Panhandle Fee Program</b>		<b>\$40,100,078</b>	<b>\$26,374</b>	<b>\$23,604</b>	<b>\$23,445</b>

sfd

Source: MacKay & Soms (November 29, 2017); Harris (January 2022); City of Sacramento; EPS

**Table C-3**  
**Panhandle Finance Plan**  
**Panhandle TDIF Rates**

**Panhandle TDIF Rates**  
**Include Credits**  
**for Alternative Modes**

Land Use		Baseline	Panhandle
<b>Effective Date</b>		<b>07/01/22</b>	
<b>Residential Land Use Categories</b>		----- per unit -----	
Single-Family		\$2,740	\$2,188
Multifamily		\$1,574	\$1,257
<b>Nonresidential Land Use Categories</b>		-----	
Retail	First 5000 SF	\$0.41	\$0.33
	5001 SF and above	\$4.11	\$3.28
Office	First 5000 SF	\$0.41	\$0.32
	5001 SF and above	\$4.06	\$3.24
Major Medical Facilities	First 5000 SF	\$0.39	\$0.31
	5001 SF and above	\$3.91	\$3.12
Schools	First 5000 SF	\$0.15	\$0.12
	5001 SF and above	\$1.53	\$1.22
Church/Assembly	First 5000 SF	\$0.09	\$0.07
	5001 SF and above	\$0.87	\$0.70
Industrial	First 5000 SF	\$0.28	\$0.22
	5001 SF and above	\$2.78	\$0.22
Warehouse	First 5000 SF	\$0.13	\$0.11
	5001 SF and above	\$1.32	\$1.06
		----- per pump -----	
Gas Station		\$ 4,117	\$ 3,289
		----- per room -----	
Hotel/Motel		\$ 1,130	\$ 903

ptdif

Source: City of Sacramento

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## APPENDIX D:

### Potential Panhandle Services CFD Detailed Cost Estimates and Allocation Methodology

Table D-1	City Cost Allocation Table—Summary of Total Maintenance Costs and Maximum Special Tax Rate .....	D-1
Table D-2	Maintenance Items, Responsibilities, and Costs.....	D-2
Table D-3	Maintenance Benefit Units .....	D-3
Table D-4	CFD Maintenance Cost Allocation Table— Streetscapes .....	D-4
Table D-5	CFD Maintenance Cost Allocation Table— Parks and Open Space .....	D-5
Table D-6	CFD Maintenance Cost Allocation Table— Utilities .....	D-6



**Table D-1**  
**Panhandle Finance Plan**  
**City Cost Allocation Table - Summary of Total Maintenance Costs and Maximum Special Tax Rate**  
**DRAFT**

	Capital Facility:	Streetscapes	Parks and Open Space	Utilities	Subtotal Cost Allocation	Annual Admin.	Landscape Contingency & Repair/Replacement	Total Cost Allocation	Total City Maint. Costs	Maximum Special Tax
	Benefit Unit:	Daily Trip Rate	Residents Served	Developable Acres		3.00%	Daily Trip Rate			
City Maintenance Costs (2018\$):		\$218,069	\$414,000	\$35,803	\$667,872	\$20,036	\$17,336		\$705,243	\$37,372
<b>Estimated Maximum Special Taxes (2018\$)</b>										
<u>Residential</u>	Units	Cost per Unit								<u>per Unit</u>
Estates (E)	340	\$131	\$249	\$28	\$408	\$12	\$10	\$431	\$146,563	\$431
Traditional (T)	869	\$131	\$249	\$21	\$402	\$12	\$10	\$424	\$368,650	\$424
Village (V)	453	\$131	\$249	\$17	\$397	\$12	\$10	\$419	\$190,031	\$419
	1,662								\$705,243	
										10/25/2017
<b>Estimated Maximum Special Taxes Adjusted to 2021\$</b>										8.465%
<i>Adjusted by percentage change in annual average CPI for San Francisco-Oakland-Hayward from 2018 through 2021.</i>										
<u>Residential</u>										<u>per Unit</u>
Estates (E)	340	\$142	\$270	\$30	\$443	\$13	\$11	\$468	\$158,969	\$468
Traditional (T)	869	\$142	\$270	\$23	\$436	\$13	\$11	\$460	\$399,856	\$460
Village (V)	453	\$142	\$270	\$18	\$431	\$13	\$11	\$455	\$206,117	\$455
									\$764,942	2021\$

Source: City of Sacramento; EPS.

**Table D-2**  
**Panhandle Finance Plan**  
**Maintenance Items, Responsibilities, and Costs (2018\$)**  
**DRAFT**

Item	Quantity	Unit Price	Unit	Maintenance Responsibility	Included in CFD?	Maintenance Cost Estimat CFD	Cost Estimat Non-CFD
Streetscapes							
Sorento Road Landscape (A-1.1a)	20,500	\$0.65	Sq. Ft.	HOA	Yes	\$13,325	\$13,325
Sorento Road Landscape (A-1.1a) - Utilities	1	\$1,610	Each	HOA	Yes	\$1,610	\$1,610
ROW Landscape (back of curb to back of walk - A-1.2)	54,300	\$0.65	Sq. Ft.	City	Yes	\$35,295	\$0
Del Paso Road Landscape (A-1.3)	23,500	\$0.65	Sq. Ft.	HOA	Yes	\$15,275	\$15,275
Del Paso Road Landscape (A-1.3) - Utilities	1	\$1,890	Each	HOA	Yes	\$1,890	\$1,890
Ninos Parkway Landscape	78,500	\$0.65	Sq. Ft.	HOA	Yes	\$51,025	\$51,025
Ninos Parkway Landscape - Utilities	1	\$3,969	Each	HOA	Yes	\$3,969	\$3,969
5' Wide Sidewalk (B-1.1)	35,200	\$0.25	Sq. Ft.	City	Yes	\$8,800	\$0
Sorento Road Horse Fence (A-1.1)	3,200	\$0.94	LF	HOA	Yes	\$3,000	\$3,000
Sorento Road Masonry Wall	5,568	\$1.11	LF	HOA	Yes	\$6,187	\$6,187
Del Paso Road Soundwall (C-1.1)	2,700	\$1.11	LF	HOA	Yes	\$3,000	\$3,000
Del Paso Road Pilasters (C-1.1)	20	\$250	Each	HOA	Yes	\$5,000	\$5,000
Sorento Road Trail (12' Wide PCC)	48,000	\$0.37	Sq. Ft.	HOA	Yes	\$17,760	\$17,760
Del Paso Road Trail (12' Wide PCC)	31,300	\$0.37	Sq. Ft.	HOA	Yes	\$11,581	\$11,581
Ninos Parkway Bike Trail (12' Wide AC Paving) (A-1.4)	94,200	\$0.25	Sq. Ft.	HOA	Yes	\$23,550	\$23,550
Ninos Parkway Shoulders (2-2' DG Wide) (A-1.4)	31,400	\$0.18	Sq. Ft.	HOA	Yes	\$5,652	\$5,652
Entry Feature / Landscape Monumentation (TBD) - National (F-1)	500	\$0.65	Sq. Ft.	HOA	Yes	\$325	\$325
Entry Features / Landscape Monumentation (TBD) - Del Paso (F-1)	500	\$0.65	Sq. Ft.	HOA	Yes	\$325	\$325
Del Paso Road Median (12' Wide) <sup>1</sup>	31,272	\$0.87	Sq. Ft.	City	No	\$0	\$0
Major Collector Medians (12' Wide) <sup>1</sup>	118,800	\$0.87	Sq. Ft.	City	No	\$0	\$0
A Streets Contract Admin & Inspection	1	\$10,500	Each	City	Yes	\$10,500	\$0
Subtotals						\$218,069	\$163,474
<sup>1</sup> 100% of these street medians qualify for funding through the Citywide Landscaping & Lighting Assessment District.							
Parks and Open Space							
Open Space 4 / Ninos Parkway	12.30	\$2,500	Per Acre	HOA	Yes	\$30,750	\$30,750
Open Space 3 / Ninos Parkway	4.10	\$2,500	Per Acre	HOA	Yes	\$10,250	\$10,250
Park 4 / Ninos Parkway	6.50	\$15,000	Per Acre	HOA	Yes	\$97,500	\$97,500
Park 3 / Ninos Parkway	1.50	\$15,000	Per Acre	HOA	Yes	\$22,500	\$22,500
Park 2 / Quimby	10.50	\$15,000	Per Acre	City	Yes	\$157,500	\$0
Park 1 / Quimby	5.00	\$15,000	Per Acre	City	Yes	\$75,000	\$0
Open Space 2 / Ninos Parkway	3.10	\$2,500	Per Acre	HOA	Yes	\$7,750	\$7,750
Open Space 1 / Ninos Parkway	5.10	\$2,500	Per Acre	HOA	Yes	\$12,750	\$12,750
Subtotals						\$414,000	\$181,500
Utilities							
E-1.1 Detention Basin (area between 10-year and 100-year flood plains)	1.62	\$15,000	Per Acre	City	Yes	\$24,277	\$0
Landscaping along street frontages (behind sidewalk)	14,825	\$0.65	SF	City	Yes	\$9,636	\$0
Landscaping along street frontages - Utilities	1	\$1,890	Each	City	Yes	\$1,890	\$0
Subtotals						\$35,803	\$0
Subtotal Contingent Special Tax						\$667,872	\$344,974
Contingency and Administration Costs							
Landscaping Contingency & Repair/Replacement (15% of lsc. costs)	15%	\$115,570				\$17,336	
Administration (3% of Maintenance Costs)	3%	\$667,872				\$20,036	
Subtotal Contingency and Admin Costs						\$37,372	
Total Project Contingent Special Tax Summary							
Subtotal Annual Maintenance						\$667,872	
Subtotal Contingency and Admin Costs						\$37,372	
Total Contingent Special Tax						\$705,243	

**Table D-3**  
**Panhandle Finance Plan**  
**Maintenance Benefit Units**

	Maintenance Item:	Landscape Maintenance	Parks and Open Space	Utilities (Detention Basin)
Land Use	Benefit Unit:	Daily Trip Rate	Persons Served	Developable Acres
<u>Residential</u>			<u>Residents</u>	
Estates (E)		8.20 per unit	2.98 per unit	1.00 per acre
Traditional (T)		8.20 per unit	2.98 per unit	1.00 per acre
Village (V)		8.20 per unit	2.98 per unit	1.00 per acre

<sup>1</sup> Assumes a resident-to-employee ratio of 1.0 : 0.5 (i.e., 1.0 employees equals 0.5 residents).

Source: City of Sacramento.

10/25/2017



**Table D-4**  
**Panhandle Finance Plan**  
**CFD Maintenance Cost Allocation Table - Streetscapes (2018\$)**  
**DRAFT**

Land Use	Cost	Units	Net Acres	Daily Trip Rate per Unit	Total Trips	Pct. Allocation	Cost Allocation	Cost per Unit		
								Total	Streets	Contingency & Repair/Replacement
Streets CFD Cost	\$218,069								92.6%	7.4%
Landscaping Cotingency & Repair/Replacement	\$17,336									
<b>Total CFD Cost</b>	<b>\$235,404</b>									
<i>Residential</i>										
Estates (E)		340	75.7	8.20	2,788	20.46%	\$48,157	\$142	\$131	\$10
Traditional (T)		869	147.7	8.20	7,126	52.29%	\$123,084	\$142	\$131	\$10
Village (V)		453	60.5	8.20	3,715	27.26%	\$64,163	\$142	\$131	\$10
Total		1,662	283.9		13,628	100.00%	\$235,404			

Source: City of Sacramento.

10/25/2017

**Table D-5**  
**Panhandle Finance Plan**  
**CFD Maintenance Cost Allocation Table - Parks and Open Space (2018\$)**  
**DRAFT**

Land Use	Units	Net Acres	Persons per Household	Total Persons Served	Percentage Allocation	Cost Allocation	Cost per Unit/Sq. Ft.
<b>Total CFD Cost</b>		<b>\$414,000</b>					
<u>Residential</u>							<u>per unit</u>
Estates (E)	340	75.7	2.98	1,013	20.46%	\$84,693	\$249
Traditional (T)	869	147.7	2.98	2,590	52.29%	\$216,466	\$249
Village (V)	453	60.5	2.98	1,350	27.26%	\$112,841	\$249
Total	1,662	283.9		4,953	100.00%	\$414,000	

Source: City of Sacramento.

10/25/2017

**Table D-6**  
**Panhandle Finance Plan**  
**CFD Maintenance Cost Allocation Table - Utilities (2018\$)**  
**DRAFT**

Land Use	Units/ Sq. Ft.	Net Acres	Percentage Allocation	Cost Allocations	Cost per Unit/Sq. Ft.						
<table border="1"> <tr> <td><b>Total CFD Cost</b></td><td><b>\$35,803</b></td><td colspan="4"></td></tr> </table>						<b>Total CFD Cost</b>	<b>\$35,803</b>				
<b>Total CFD Cost</b>	<b>\$35,803</b>										
<i>Residential</i>	<i>units</i>				<i>per unit</i>						
Estates (E)	340	75.7	26.66%	\$9,547	\$28						
Traditional (T)	869	147.7	52.03%	\$18,627	\$21						
Village (V)	453	60.5	21.31%	\$7,630	\$17						
Total	1,662	283.9	100.00%	\$35,803							

Source: City of Sacramento.

10/25/2017