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CITY OF
ELK GROVE

**CITY OF ELK GROVE
SOUTHEAST POLICY AREA (SEPA) AND
LAGUNA RIDGE SPECIFIC PLAN PHASE 3 (LRSP P3)
DRAINAGE IMPACT FEE NEXUS STUDY**

April 18, 2019

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EXECUTIVE SUMMARY

The Southeast Policy Area (“SEPA”) is an employment-oriented development located in the southern portion of the City of Elk Grove (the “City”) that lies west of Highway 99, south of Poppy Ridge Road, east of Big Horn Boulevard and Bruceville Road, and north of Kammerer Road. SEPA is envisioned to provide a wide range of land uses that will provide a balanced mix of retail, office, light industrial, mixed use, and residential developments. Development in the SEPA is projected to include 545 acres zoned for residential land uses, including 476 acres for single family homes and 69 acres zoned for multi-family units. The SEPA will also include approximately 34 acres zoned for commercial and mixed use non-residential development, 311 acres of office development, and approximately 111 acres of light industrial/flex development.

The Laguna Ridge Specific Plan Phase 3 (“LRSP P3”) area is contiguous to the SEPA and shares its eastern and southern boundaries with the SEPA. Exhibit 1 on page 2 of this report illustrates their relative location. The LRSP P3 area includes approximately 333 acres zoned for residential land uses, including 314 acres for single family home development and 19 acres for multi-family development.

The SEPA and LRSP P3 areas (collectively, the “Fee Area”) are located in Drainage Shed C, which encompasses approximately 7,900 acres in south Sacramento County. The Fee Area is currently included in the Sacramento County Water Agency’s (SCWA) Zone 11A drainage fee program. However, with the creation of the City’s SEPA and LRSP P3 drainage fee program (the “Drainage Fee Program”), the need to be included in the County’s Zone 11A fee program is no longer necessary. Therefore, the City is currently pursuing proceedings to detach from SCWA’s Zone 11A program. This detachment process will take legislative action by SCWA and, as of the date of this Nexus Study, is currently underway.

DRAINAGE FACILITIES

The Drainage Fee Program provides funding for the project-specific storm drainage facilities needed to serve development in the Fee Area. A detailed review was conducted by City staff and the City’s drainage consultant, West Yost Associates, to identify the project-specific storm drainage facilities needed to serve the Fee Area. The result of this effort serves as the basis for the Drainage Fee Program. The total cost associated with drainage facilities and public land included in the Drainage Fee Program is estimated to be \$39.3 million and includes the following:

SEPA – Zone 1 Fee Area

- Channel Infrastructure \$5.9 million
- City Infrastructure Development Costs \$2.7 million
- Basin Infrastructure \$14.9 million
- Land Acquisition \$8.4 million

LRSP P3 – Zone 2 Fee Area

- Basin Infrastructure \$6.4 million
- Land Acquisition \$1.1 million

Detailed cost estimates for these facilities are shown in Appendix A of this report.

DRAINAGE FEES AND FEE ZONES

The Drainage Fee Program includes two separate fee zones, as identified in Exhibit 3 on page 19 of this report. Zone 1 includes all land within the SEPA and Zone 2 includes the LRSP P3 area. Within Zone 1, the basin areas are further separated into fees zones that are unique based on the drainage infrastructure that serves each basin area. While the SEPA has eight basin areas or sub-sheds, the City has elected to merge the Sub-sheds S1A, S1B, S2, and S3 into one fee zone, termed the North Sub-shed. The City has elected to do this since this approach limits the need for extremely large trunk pipes and additional channel construction that would have limited the development in Sub-sheds S1B and S3. As a result, the City believes it is equitable to allocate the basin infrastructure costs among these four sub-sheds. The remaining Sub-sheds S4, S5, S6, S7, and S8 will fund their own basin infrastructure and therefore will be separate fee zones within Zone 1.

Drainage facilities and improvements for LRSP P3 include a detention basin, trunk pipe system, an outfall channel that connects to the Shed C Channel in the SEPA, landscaping, and land acquisition. These facilities and improvements will serve the LRSP P3 area exclusively and therefore the allocation of these costs will be solely to the LRSP P3 area through Zone 2 drainage fees.

DRAINAGE FEE – SEPA (ZONE 1)

The Storm Drainage Fee for the SEPA is comprised of the following fee components:

- Channel Fee
- Basin Fee
- City Infrastructure Development Fee
- Administration Fee

The **Channel Fee** is based on the allocation of channel facilities and land acquisition costs to land uses in the SEPA. The costs are allocated uniformly to all developable land uses in the SEPA Zone 1 area and therefore the Channel Fee does not vary from one sub-shed to another.

The **Basin Fee** is based on the allocation of basin facilities and land acquisition costs to land uses within the North Sub-shed and each of the other individual basin sub-sheds in Zone 1. This fee varies from sub-shed to sub-shed in Zone 1 based on the individual drainage facilities needed in each sub-shed.

The **City Infrastructure Development Fee** will reimburse the City for upfront costs it paid for drainage infrastructure design and permitting, downstream improvements, and drainage channel and basin right-of-way. This fee component is included in the Drainage Fee for Zone 1 only.

The City will charge an **Administration Fee** that equals 4.0% of the total costs. Calculations performed by City staff for other City fee programs show that expenditures for program administration equal and often exceed 4.0% of the fee program's expenditures. Costs included in the administration of the program include, but are not limited to, preparation of the nexus study; preparation of updates to the nexus study; preparation of annual reports for the fee; and administration costs for maintaining the fee fund. The City should monitor its costs in the following years and adjust the rate, as necessary. This fee is levied on development in the SEPA and LRSP P3.

DRAINAGE FEE – LRSP P3 (ZONE 2)

The Storm Drainage Fee for the LRSP P3 is comprised of the following fee components:

- LRSP P3 Drainage Fee
- Administration Fee

FEE SUMMARY

The detailed information presented in this report has been used to determine the Drainage Fees for new development in the Fee Area. The Drainage Fees for each sub-shed in the SEPA are identified in Table ES-1 below. Table ES-1 shows the SEPA Drainage Fee broken down by its fee components; namely, channel facilities, City infrastructure development costs, basin facilities, and the City's administration fee.

The Drainage Fees for LRSP P3 are identified in Table ES-2 and are broken down by fee components - drainage facilities and the City's administration fee.

Table ES-1 - SEPA - ZONE 1
DRAINAGE FEE SUMMARY

	Channel Fee	City Infrastructure Develop. Fee	Basin Fee	Admin Fee (4.0%)	Total Drainage Fee¹
	<i>A</i>	<i>B</i>	<i>C</i>	<i>D = (A+B+C) x 4%</i>	<i>E = A+B+C+D</i>
North Sub-Shed					
Drainage Fees per Acre					
Land Use					
Single Family	\$6,939	\$1,962	\$18,033	\$1,077	\$28,011
Multi-Family, Commercial, Office, and Light Industrial	\$11,593	\$3,278	\$30,126	\$1,800	\$46,797
Basin S4					
Drainage Fees per Acre					
Land Use					
Single Family	\$0	\$0	\$0	\$0	\$0
Multi-Family, Commercial, Office, and Light Industrial	\$11,593	\$3,278	\$14,378	\$1,170	\$30,419
Basin S5					
Drainage Fees per Acre					
Land Use					
Single Family	\$0	\$0	\$0	\$0	\$0
Multi-Family, Commercial, Office, and Light Industrial	\$11,593	\$3,278	\$19,817	\$1,388	\$36,076
Basin S6					
Drainage Fees per Acre					
Land Use					
Single Family	\$6,939	\$1,962	\$16,723	\$1,025	\$26,649
Multi-Family, Commercial, Office, and Light Industrial	\$11,593	\$3,278	\$27,938	\$1,712	\$44,521
Basin S7²					
Drainage Fees per Acre					
Land Use					
Single Family	\$6,939	\$1,962	\$0	\$356	\$9,257
Multi-Family, Commercial, Office, and Light Industrial	\$11,593	\$3,278	\$0	\$595	\$15,466
Basin S8					
Drainage Fees per Acre					
Land Use					
Single Family	\$0	\$0	\$0	\$0	\$0
Multi-Family, Commercial, Office, and Light Industrial	\$11,593	\$3,278	\$23,470	\$1,534	\$39,875

1. Land uses that have a \$0 fee indicate that no acreage of that particular land use type is in the Sub-shed.
2. Basin S7 is not assessed a Basin Fee component in recognition that it is delivering all shed area improvements and will not be reimbursed for said improvements from any areas beyond the Basin S7 area.

Table ES-2 - LRSP P3 - ZONE 2
DRAINAGE FEE SUMMARY

	LRSP Drainage Fee	Admin Fee (4.0%)	Total Drainage Fee
	<i>A</i>	<i>B = A x 4%</i>	<i>C = A + B</i>
<u>Land Use</u>	<u>Drainage Fees per Acre</u>		
Single Family	\$21,401	\$856	\$22,257
Multi-Family, Commercial, Office, and Light Industrial	\$40,127	\$1,605	\$41,732

ANNUAL INFLATION UPDATE

The Drainage Fee may be adjusted in future years to reflect revised facility costs, receipt of funding from alternative sources, or changes in development land use plans within the SEPA. In addition to such adjustments, in January of each calendar year, the Drainage Fee rates shall be inflated automatically based on the prior 12-month period. The inflation adjustment should be applied only to the City’s fee components, including the Channel Fee, Basin Fee, the City Infrastructure Development Fee, and the LRSP Drainage Fee. Section VII of this report discusses the annual inflation methodology in greater detail.

I. INTRODUCTION

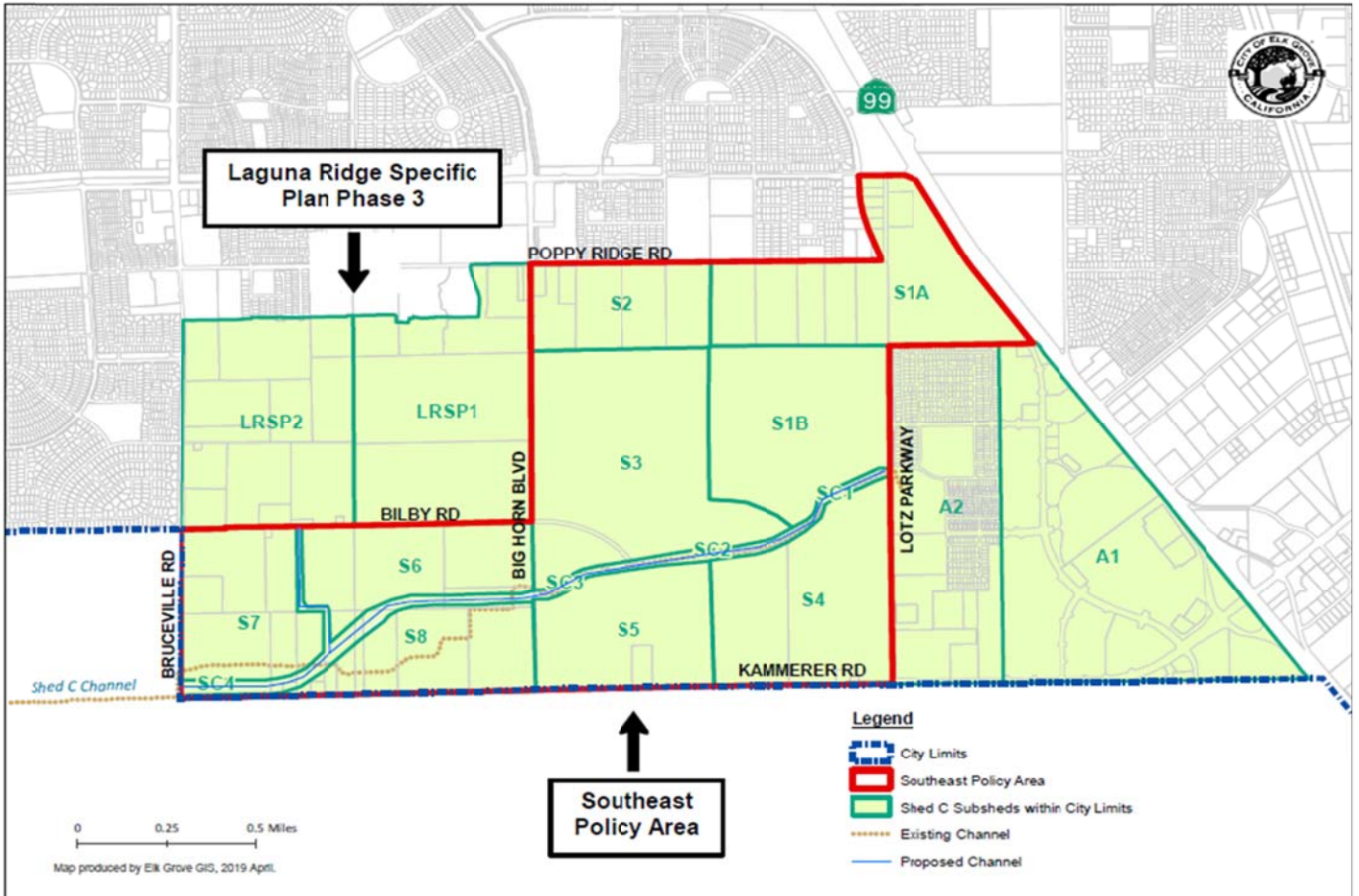
The Southeast Policy Area is an employment-oriented development located in the southern portion of the City of Elk Grove that lies west of Highway 99, south of Poppy Ridge Road, east of Big Horn Boulevard and Bruceville Road, and north of Kammerer Road. SEPA is envisioned to provide a wide range of land uses that will include a balanced mix of retail, office, light industrial, mixed use, and residential developments. Development in the SEPA is projected to include 545 acres zoned for residential land uses, including 476 acres of single family homes and 69 acres zoned for multi-family units. The SEPA will also include approximately 34 acres zoned for commercial and mixed use non-residential development, 311 acres of office development, and approximately 111 acres of light industrial/flex development.

As part of the adoption of the City's General Plan, the City Council declared the SEPA a special land use policy area in 2003. The policies of this designation required the preparation of the Southeast Policy Area Community Plan ("Community Plan") and the Southeast Policy Area Special Planning Area Report ("SPA Report"). The Community Plan illustrates the location and planned uses for properties within the SEPA and established general guiding principles and action items for developing infrastructure, including storm drainage facilities, in the SEPA. The SPA Report, on the other hand, specifies features, amenities, and design requirements for the storm drainage facilities needed in the SEPA.

The Laguna Ridge Specific Plan Phase 3 area is contiguous to the SEPA and shares its eastern and southern boundaries with the SEPA. Exhibit 1 on the following page illustrates the relative locations of the two areas. LRSP P3 lies west of Big Horn Boulevard, south of Poppy Ridge Road, east of Bruceville Road, and north of Bilby Road. The LRSP P3 is projected to include approximately 333 acres zoned for residential land uses, including 314 acres of single family homes and 19 acres for multi-family development.

Both the SEPA and LRSP P3 (the "Fee Area") are located in Drainage Shed C, which encompasses approximately 7,900 acres in south Sacramento County. The Fee Area is currently included in the Sacramento County Water Agency's (SCWA) Zone 11A drainage fee program. However, with the creation of the City's SEPA and LRSP P3 drainage fee program (the "Drainage Fee Program"), the need to be included in the County's Zone 11A fee program is no longer necessary. Therefore, the City is currently pursuing proceedings to detach from SCWA's Zone 11A program. This detachment process will take legislative action by the City and SCWA and is currently underway.

Exhibit 1 - SEPA and LRSP Phase 3



PURPOSE OF STUDY

Prior to development occurring in the Fee Area, storm drainage facilities will need to be constructed to serve future development there. Facilities that serve development in the Fee Area will be funded with drainage impact fees (“Drainage Fees”) based on this Southeast Policy Area and Laguna Ridge Specific Plan Phase 3 Drainage Impact Fee Nexus Study (“Nexus Study”). The Drainage Fees in this Nexus Study apply to all future development within the Fee Area.

The Southeast Policy Area Drainage Study, prepared by West Yost Associates, identified the location and quantity of drainage facilities required to serve development in the SEPA. The City has refined the drainage facilities required in the SEPA, identified facilities for LRSP P3, and estimated the drainage costs for each of the two areas.

The City of Elk Grove retained Goodwin Consulting Group to assist it in creating the Drainage Fee Program. The Drainage Fee Program will be established by the Elk Grove City Council through the adoption of this Nexus Study. This Nexus Study demonstrates that the Drainage Fee Program is compliant with the requirements set forth in the Mitigation Fee Act and ensures that a nexus exists between the impact from future development in the Fee Area and (i) the use of the fee, (ii) the need for drainage facilities, and (iii) the amount of the fee assigned to future development.

IMPACT FEE NEXUS REQUIREMENTS (AB 1600)

Assembly Bill (AB) 1600, which created the Mitigation Fee Act, was enacted by the State of California in 1987, created Section 66000 et seq. of the Government Code (the “Fee Law”). The Fee Law requires that all public agencies satisfy the following requirements when establishing, increasing, or imposing a fee as a condition of approval for a development project:

1. Identify the purpose of the fee
2. Identify the use to which the fee will be put
3. Determine how there is a reasonable relationship between:
 - A. The fee’s use and the type of development project on which the fee is imposed
 - B. The need for the public facility and the type of development project on which the fee is imposed.
 - C. 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.

The purpose of this Nexus Study is to demonstrate that the Drainage Fees calculated herein comply with the Fee Law. The assumptions and cost allocation methodology that are used to establish the nexus between the proposed Drainage Fees and the development on which it will be levied are summarized in the subsequent sections of this report.

ORGANIZATION OF REPORT

The remainder of this report has been organized into the following sections:

Section II	Provides a general explanation of the methodology used to calculate the Drainage Fees
Section III	Discusses the Fee Area land uses and categories to be used in the application of the Drainage Fees
Section IV	Discusses the drainage facilities, their land requirements, and costs for the SEPA and LRSP P3
Sections V	Presents the nexus findings pursuant to the Fee Mitigation Act
Sections VI	Discusses the calculation of the Drainage Fee and presents a summary of the fees for the SEPA and LRSP P3
Section VII	Addresses future fee adjustments, credit/reimbursement policies, and exemptions for the Drainage Fee Program, as well as other administration issues relevant to the Drainage Fee Program

II. FEE CALCULATION METHODOLOGY

When impact fees are calculated, an analysis must be presented in enough detail to demonstrate that a logical and thorough consideration was applied in the process of determining how the fee relates to the impacts created by new development. Various findings pursuant to the Fee Law must be made to ensure that there is a reasonable relationship between the amount of the fee and the impact from development on drainage facilities. The following section of the report outlines the methodology used in this Nexus Study to calculate the Drainage Fees.

FEE METHODOLOGY

The method used to calculate the Drainage Fees ensures that each land use category funds its equitable share of storm drainage facilities based on the benefit that the development type will receive from the drainage facilities. The following is a summary of the steps used to calculate the Drainage Fees in this Nexus Study:

- 1) Determine the total development, by land use category, expected within the SEPA and LRSP P3. Within the SEPA, determine the total development within each sub-shed.
- 2) Determine the drainage facilities needed to serve development in the SEPA and LRSP P3. Within the SEPA, determine the basin facilities for each sub-shed. Because the drainage facilities required for each sub-shed area are unique and specific to each sub-shed area, the facilities and costs of these facilities will be separated for each area into separate fee zones.
- 3) Estimate the total cost of drainage facilities, or portion of the cost of facilities identified in Step 2 that will serve development in the SEPA and LRSP P3. The total cost of the drainage facilities will be separated into those that will serve the SEPA (Zone 1) and those serving LRSP total (Zone 2). Within Zone 1, determine the total cost of basin facilities that will serve each identified sub-shed. The total cost of basin facilities for each sub-shed will be separated to calculate sub-shed fees within Zone 1.
- 4) Assign a percent impervious factor for each land use category. The percent impervious factor for a land use is a measure of the amount of storm water that will run off and drain into the City's drainage system.
- 5) Calculate the total impervious acres that will be generated from future development for all land use categories by multiplying the gross acreage of each land use type by its

percent impervious factor and sum the impervious acres. This is done for Zones 1 and 2.

- 6) Divide the total impervious acres for each land use category by the total impervious acres for all land uses in each zone to determine the allocation percentages for each land use category.
- 7) Multiply each land use category's allocation percentage by the total facility cost to determine the cost attributable to each land use category.
- 8) Divide the facilities and land costs allocated to each land use category by the total acres for each land use type to determine the Drainage Fee for each residential and non-residential land use category.
- 9) Apply an administration charge to the total Drainage Fees to fund the City's cost of administering the Drainage Fee Program.

By applying this fee methodology, the amount of the Drainage Fee calculated for each land use category is based on the estimated amount of water runoff created, which is a measure of the impact on the storm drainage facilities. Thus a nexus, or reasonable relationship, is established between the amount of the Drainage Fee and the cost of drainage facilities attributable to each type of development.

PERCENT IMPERVIOUS

Drainage facilities and land costs are allocated proportionately to developable residential and non-residential land uses based on their percent impervious factor. The percent impervious is a measure of a land use's capacity to absorb storm water runoff. For example, an acre containing single family units has more open and pervious areas for storm water to be absorbed than an acre containing commercial development. Therefore, an acre of single family development has a lower impervious percent than a commercially developed acre. The percent impervious factor for each land use type was developed in coordination with City staff and West Yost Associates and based on the Southeast Policy Area Drainage Study. These factors are shown in Table A-8 of Appendix A in this report and are used in the calculation of the Drainage Fees.

FEE ZONES

The Drainage Fee Program includes two separate fee zones, as identified in Exhibit 3 on page 19 of this report. Because the drainage facilities required for each area are unique and specific to each development area, City staff and West Yost concluded that separate fee zones and drainage

fees should be established. Zone 1 includes all development in the SEPA and Zone 2 includes all development in the LRSP P3 area. Within Zone 1, basins are further separated into fees zones with the drainage basin facilities and land costs for the eight sub-sheds allocated to the land uses within them. While the SEPA has eight sub-sheds, City staff has elected to merge the costs and land uses for sub-sheds S1A, S1B, S2, and S3 into one zone, identified as the North Sub-shed. This was done because the City's initial plan for the S1 sub-shed called for one basin along Shed C at the far east end of the channel. This design required large pipes through the Souza Dairy development in order to convey the drainage flows from the far north end of the sub-shed to the basin, which could have caused utility conflicts and limits on development design and capacity. As a result, this sub-shed was divided and outfalls from the S1A basin are to be conveyed through a pipe in Lotz Parkway, outside of the Souza Dairy development. This allows for more flexibility in the design and construction of Souza Dairy, creating a direct benefit from the increased cost associated with this design.

Additionally, the northern portion of sub-shed S3 drains north into the S2 area in the pre-development configuration. Through early planning work it was decided to move the shed break north to follow existing property limits, creating independent utility between properties for development of drainage infrastructure. This design flexibility creates a direct benefit to the southern properties.

III. LAND USE CATEGORIES

The Mitigation Fee Act requires that a reasonable relationship exist between the need for public facilities and the type of development on which an impact fee is imposed. The need for public facilities is related to the level of service demanded, which will vary by a land use's capacity to absorb storm runoff. Therefore, land use categories have been defined in order to distinguish between relative impacts on facilities. The Drainage Fee has been calculated on a per-acre basis for all land use categories. The following land use categories are identified for purposes of the Drainage Fee Program:

Single Family: All single family residential development categories, including estate residential, low density residential, and medium density residential. This use is typically found in the Estate Residential, Low Density Residential, and Medium Density Residential land use designations identified in the SEPA Special Planning Area (SEPA SPA).

Multi-family, Commercial, Office, and Light Industrial/Flex: Includes all other non-public/quasi-public uses (e.g., parks, schools, drainage facilities) including but not limited to the uses set forth below. Specifically includes properties identified in the SEPA SPA as High Density Residential, Residential Mixed Use, Commercial, Village Center Mixed Use, Office, and Light Industrial. These categories have been combined because, as provided in Table A-8, all have the same percent impervious area and therefore have the same impact.

- All multi-family residential development categories, including high density residential and mixed use residential.
- Buildings in which retail and service businesses are the primary uses, including, but not limited to, retail stores, clothing stores, book stores, video rental stores, drug stores, professional services (i.e., barber shops, dry cleaners), hospitals, movie theaters, appliance and electronics stores, home supply stores, tire stores, auto parts stores, auto service centers, oil change service centers and other retail-based businesses providing auto-related products and services, restaurants, supermarkets, gas stations, day/child care facilities, private schools, motels/hotels, large residential care facilities, and health clubs.

- Includes, but is not limited to, buildings in which the primary uses are professional, insurance, real estate, banking, administrative or in-office medical or dental activities.
- Includes, but is not limited to, warehouses, mini-storage facilities, manufacturing, heavy and light industrial uses, processing, fabricating, assembly, refining, repairing, packaging, or treatment of goods, material, or produce, sheet metal and welding shops, wholesale lumber yards, contractor yards, auto wrecking yards, or similar.

The City shall make the final determination as to which land use category a particular development will be assigned. The Finance Director is authorized to determine the land use category that corresponds most directly to the land use. Alternatively, the Finance Director can determine that no land use category adequately corresponds to the development in question and may work in conjunction with the City Engineer to determine the applicable ad hoc fee.

LAND USES

SEPA – Zone 1

The SEPA encompasses approximately 1,208 gross acres, of which approximately 545 acres are planned for residential development and 456 acres are planned for non-residential development that includes commercial, office, and industrial/flex development. The remaining 206 acres in the SEPA are slated for public uses, which include parks, open space, trails, drainage facilities, and schools. Exhibit 2 on page 11 identifies the land uses in the SEPA development.

LRSP P3 – Zone 2

The LRSP P3 encompasses approximately 373 gross acres, of which approximately 333 are planned for residential development. The remaining 40 acres in the LRSP P3 are slated for public uses, which includes parks, open space, a school, and drainage facilities.

Table 3-1 on the following page summarizes the estimated total residential, non-residential, and public land acres anticipated within the Fee Area. Note that the acreage of major roads in the developments is included in the acreage of the land uses adjoining the roadway.

TABLE 3-1
LAND USE SUMMARY

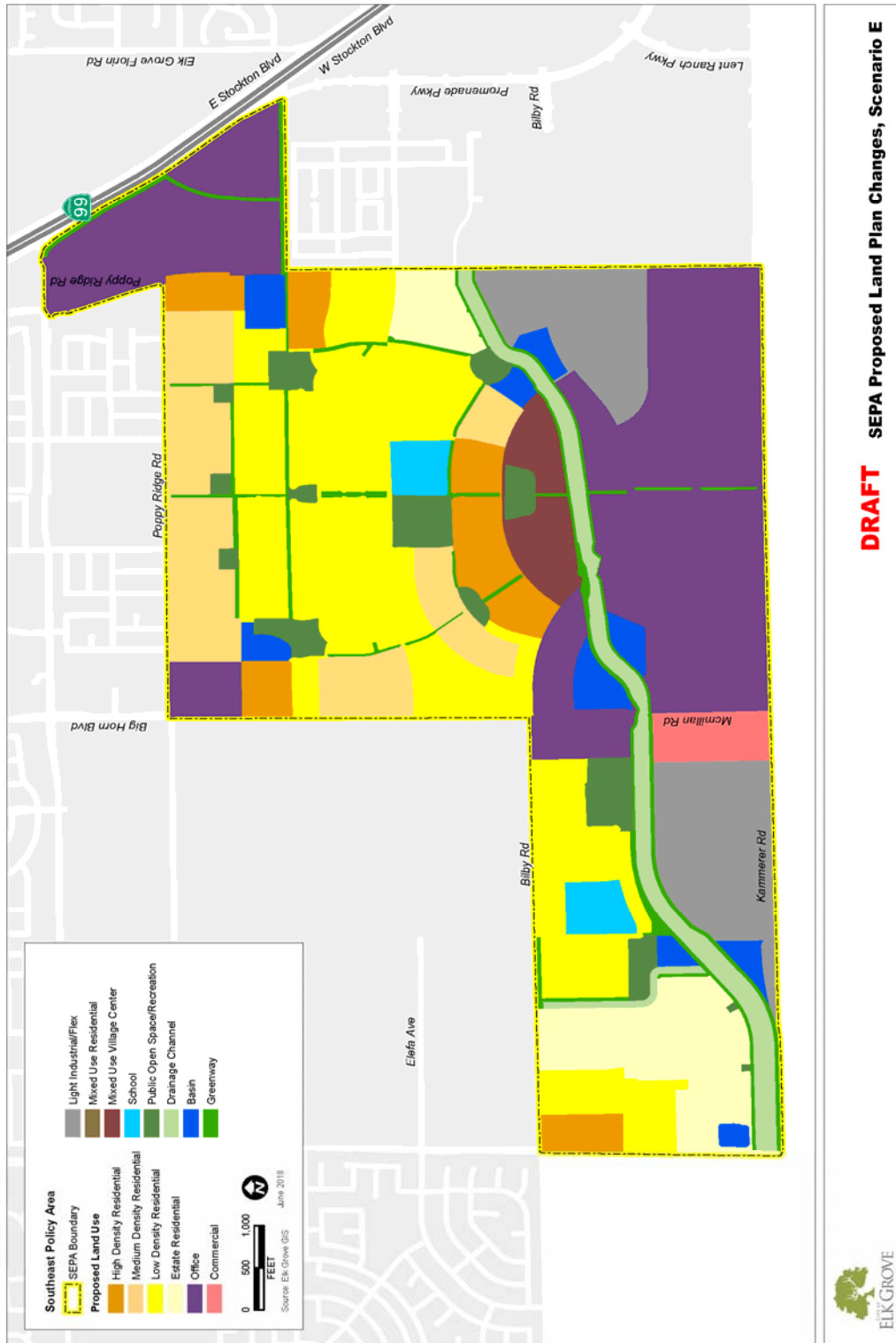
<u>Residential</u>	<u>SEPA</u>	<u>LRSP Phase III</u>
Single Family ¹	476.5	314.0
Multi-Family ²	68.8	19.1
Subtotal	545.3	333.0
<u>Non-Residential</u>		
Commercial ³	34.4	0.0
Office	311.1	0.0
Industrial/Flex	110.7	0.0
Subtotal	456.2	0.0
Total Acres	1,001.5	333.0
<u>Community and Public Land Uses</u>		
School	19.5	10.1
Parks/Open Space	50.4	22.6
Drainage Basins	38.9	3.7
Channel	51.7	0.0
Greenway	45.8	3.5
Total Acres	206.3	39.9
Total Acres	1,207.8	372.9

¹ Includes acreage associated with estate, low density, and medium density residential land uses.

² Includes acreage associated with high density and mixed use residential land uses.

³ Includes anticipated non-residential acreage within the mixed use area.

Exhibit 2 – SEPA Land Use Map



DRAFT SEPA Proposed Land Plan Changes, Scenario E



IV. DRAINAGE FACILITIES AND LAND COSTS

The Drainage Fee Program facilities and cost estimates were developed by City staff and its consultant West Yost Associates. Summary tables detailing the facilities and their associated costs are included in Appendix B of this report. These tables estimate the total cost of drainage facilities and associated land acquisition to be approximately \$39.3 million. The total SEPA (Zone 1) facilities and land costs total to approximately \$31.8 million while the total cost of LRSP P3 (Zone 2) facilities and land is estimated to be \$7.5 million. Detailed cost estimates for all storm drainage facilities, City infrastructure development costs, and land dedication costs are shown in Appendices A and B of this report. A map identifying the location of the drainage facilities is shown on Exhibit 3 page 19 of this report.

The Drainage Fee Program costs can generally be categorized into the following components: (i) channel facilities, (ii) basin facilities, and (iii) City infrastructure development costs. In addition to drainage facility and land acquisition costs, the Drainage Fee Program includes costs for contingency, engineering, administration, environmental permitting, and fee program development.

SEPA DRAINAGE FACILITIES

SHED C CHANNEL FACILITIES

The Drainage Fee Program includes funding for various Shed C Channel improvements; including channel excavation, pipe system, access ramps, maintenance paths, fencing, and erosion control. Table 4-1 on the following page identifies the channel improvements and land costs that will be required to serve future development in the SEPA. As shown in this table, the Drainage Fee Program includes approximately \$5.9 million in channel improvements. The drainage improvement plan includes three reaches along the channel. The reaches to be constructed/ improved in the SEPA include:

- East Reach – From Lotz Parkway to the outfall from Detention Basin S1A
- Middle Reach – From the outfall from Detention Basin S1A to the confluence with the channel from the LRSP P3 area
- West Reach – From the confluence with the LRSP P3 channel to Bruceville Road

TABLE 4-1
SHED C CHANNEL IMPROVEMENTS

Drainage Facility	Unit	Unit Cost	West Reach Channel		Middle Reach Channel		East Reach Channel	
			Quantity	Cost	Quantity	Cost	Quantity	Cost
10' Access/Maintenance Rd. (3" AC)	SF	\$2.22	31,722	\$70,423	31,682	\$70,334	71,263	\$158,204
10' Access/Maintenance Rd. (6" AB)	SF	\$1.58	44,411	\$70,169	44,355	\$70,081	99,768	\$157,633
Geotextile Under Maintenance Road	SY	\$1.50	4,935	\$7,402	4,928	\$7,393	11,085	\$16,628
4" Conduits (Water)	EA	\$350	13	\$4,550	15	\$5,250	29	\$10,150
6" Conduits (Electric)	EA	\$400	13	\$5,200	15	\$6,000	29	\$11,600
Fencing and Gates - 3' High Post & Cable	LF	\$24	4,291	\$102,984	5,836	\$140,064	10,605	\$254,520
Fencing and Gates - Pipe Gate	EA	\$3,812	1	\$3,812	1	\$3,812	5	\$19,060
Excavation	CY	\$4.36	67,800	\$295,608	84,200	\$367,112	158,000	\$688,880
Landscaping (vegetation + hydro seeding)	SF	\$2.07	127,969	\$264,896	177,413	\$367,245	334,268	\$691,935
Landscape Irrigation	SF	\$1.45	81,529	\$118,217	105,050	\$152,322	201,495	\$292,168
Misc. Concrete - Ramp (Assumed 6")	CY	\$1,307	93	\$121,551	84	\$109,788	323	\$422,161
<i>Subtotal (Rounded)</i>				\$1,064,800		\$1,299,400		\$2,722,900
Engineering & Staking	LS	15%		\$159,720		\$194,910		\$408,435
TOTAL				\$1,224,520		\$1,493,310		\$3,131,335

Construction of drainage facilities will necessitate acquiring land for the drainage facilities. The City estimates the total land required for all of the channel facilities is approximately 51.7 acres. The Drainage Fee Programs assumes different values for land inside the floodplain, outside the floodplain, and the easement along the channel. A land dedication cost of \$100,000 per acre is used for land within the floodplain and \$150,000 per acre for land outside of the floodplain. The fee program assumes a zero value for the estimated 11.2 acres of land associated with the 80 foot easement along the length of the channel because the easement is an interest the City already possesses. As shown in Table 4-2 on the following page, the Drainage Fee Program includes approximately \$3.5 million for land costs associated with the channel. Another \$0.9 million for 6.45 acres of channel land acquired by the City, as well as the cost of the downstream temporary easement, are included in the City's Infrastructure Development costs, as presented in Table 4-4 on the following pages.

TABLE 4-2
SHED C CHANNEL LAND COSTS

<u>Land Costs</u>	<u>Acreage</u>	<u>Cost Estimates</u>
Inside Floodplain	33.93	\$3,543,000
Outside Floodplain	6.45	\$866,921
80 Foot Easement Inside Floodplain ¹	11.24	\$0
Downstream Temporary Easement	--	\$20,000
Less: City Direct Costs ²	(6.45)	(\$886,921)
Total (Rounded)	45.17	\$3,543,000

¹ Assumes that the estimated value of 11.24 acres of land associated with the 80 foot easement along the length of the channel is \$0.

² City Direct Costs for 6.45 acres of acquired land and the downstream temporary easement included in the City's Infrastructure Development Costs.

BASIN FACILITIES

The drainage facilities plan for SEPA includes eight detention basins to provide runoff storage for the SEPA. The basins will also provide storm water quality treatment to the stored runoff. While the area north of Shed C and east of Big Horn Boulevard is designed to drain into four detention basins, each with their own sub-shed area (S1A, S1B, S2, and S3), the City has elected, based on its analysis, to collect funding for this area as though it were one sub-shed, identified as the North Sub-shed. This has been done for the following reasons:

- The City's initial plan for the S1 sub-shed called for one basin along Shed C at the far east end of the channel. This design required large pipes through the Souza Dairy development in order to convey the drainage flows from the far north end of the sub-shed to the basin, which could have caused utility conflicts and limits on development design and capacity. As a result, this sub-shed was divided and outfalls from S1A basin are to be conveyed through a pipe in Lotz Parkway, outside of the Souza Dairy development. This allows for more flexibility in the design and construction of Souza Dairy, creating a direct benefit from the increased cost associated with this design.
- The northern portion of sub-shed S3 drains north into the S2 area in the pre-development configuration. Through early planning work it was decided to move the shed break north to follow existing property limits, creating independent utility between properties for development of drainage infrastructure.

Table 4-3 on the following page, identifies the planned basin facilities and estimated quantities and costs for each improvement. As shown in Table 4-3, basin facilities for the SEPA are estimated to total \$14.9 million.

**TABLE 4-3
SEPA BASIN FACILITIES**

Drainage Facility	Unit	Unit Cost	North Sub-shed		Detention Basin 4		Detention Basin 5		Detention Basin 6		Detention Basin 7		Detention Basin 8	
			Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost
36-inch Pipe	LF	\$176	0	\$0	0	\$0	0	\$0	307	\$53,994	299	\$52,624	0	\$0
42-inch Pipe	LF	\$206	0	\$0	498	\$102,632	353	\$72,819	469	\$96,577	462	\$95,172	494	\$101,846
48-inch Pipe	LF	\$235	5,764	\$1,354,540	437	\$102,592	410	\$96,291	930	\$218,453	906	\$212,910	258	\$60,623
54-inch Pipe	LF	\$294	5,134	\$1,509,396	1,610	\$473,235	1,071	\$314,908	0	\$0	0	\$0	892	\$262,266
60-inch Pipe	LF	\$349	656	\$228,944	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
66-inch Pipe	LF	\$352	2,513	\$884,576	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
72-inch Pipe	LF	\$384	2,002	\$768,768	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
48-inch Manhole	EA	\$5,446	0	\$0	3	\$18,149	2	\$12,877	2	\$11,176	4	\$21,784	2	\$10,724
60-inch Manhole	EA	\$8,169	0	\$0	5	\$40,835	4	\$28,973	3	\$25,145	3	\$24,507	3	\$24,130
72-inch Manhole	EA	\$11,436	37	\$423,132	10	\$114,333	7	\$81,121	6	\$70,402	6	\$68,616	6	\$67,560
84-inch Manhole	EA	\$15,248	20	\$304,960	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
96-inch Manhole	EA	\$19,605	15	\$294,075	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
120-inch Manhole	EA	\$30,000	1	\$30,000	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0
10' Access/Maintenance Rd. (3" AC)	SF	\$2.22	46,074	\$102,283	15,159	\$33,652	12,021	\$26,688	13,346	\$29,627	10,498	\$23,305	13,603	\$30,198
10' Access/Maintenance Rd. (6" AB)	SF	\$1.58	64,503	\$101,915	21,222	\$33,531	16,830	\$26,591	18,684	\$29,521	14,697	\$23,221	19,044	\$30,090
Geotextile Under Maintenance Road	SY	\$1.50	7,167	\$10,751	2,358	\$3,537	1,870	\$2,805	2,076	\$3,114	1,633	\$2,450	2,116	\$3,174
Fencing and Gates - 3' High Post & Cable	LF	\$24	6,612	\$158,688	1,351	\$32,424	1,112	\$26,688	1,958	\$46,992	1,050	\$25,200	2,137	\$51,288
Fencing and Gates - Pipe Gate	EA	\$3,812	8	\$30,496	3	\$11,436	3	\$11,436	3	\$11,436	3	\$11,436	3	\$11,436
Misc. Metal	LB	\$6.53	2,000	\$13,060	500	\$3,265	500	\$3,265	500	\$3,265	500	\$3,265	500	\$3,265
Excavation	CY	\$4.36	159,112	\$693,728	65,070	\$283,705	45,290	\$197,464	22,540	\$98,274	13,150	\$57,334	29,080	\$126,789
Erosion Control Rip Rap	Ton	\$98	200	\$19,600	50	\$4,900	50	\$4,900	50	\$4,900	50	\$4,900	50	\$4,900
Landscaping (vegetation + hydro seeding)	SF	\$2.07	139,705	\$289,189	53,474	\$110,691	46,423	\$96,096	44,356	\$91,817	24,461	\$50,634	49,596	\$102,664
Landscape Irrigation	SF	\$1.45	159,293	\$230,975	29,945	\$43,420	25,997	\$37,696	24,839	\$36,017	13,698	\$19,862	27,774	\$40,272
Misc. Concrete - Outlet	CY	\$1,307	68	\$88,876	17	\$22,219	17	\$22,219	17	\$22,219	17	\$22,219	17	\$22,219
Misc. Concrete - Weir Structure	CY	\$1,307	80	\$104,560	20	\$26,140	20	\$26,140	20	\$26,140	20	\$26,140	20	\$26,140
Misc. Concrete - Ramp (Assumed 6")	CY	\$1,307	40	\$52,280	10	\$13,070	10	\$13,070	10	\$13,070	10	\$13,070	10	\$13,070
<i>Subtotal (Rounded)</i>				\$7,694,700		\$1,473,800		\$1,102,200		\$892,100		\$758,600		\$992,700
Engineering & Staking	LS	15%		\$1,154,205		\$221,070		\$165,300		\$133,815		\$113,790		\$148,905
TOTAL				\$8,848,905		\$1,694,870		\$1,267,300		\$1,025,915		\$872,390		\$1,141,605

CITY INFRASTRUCTURE DEVELOPMENT COSTS

The City Infrastructure Development Fee component will fund the reimbursement of drainage facilities costs that the City has paid. These include design and permitting for drainage infrastructure, downstream reach improvements, and drainage right-of way. Table 4-4 shows the total cost of these items is approximately \$2.7 million.

**TABLE 4-4
CITY INFRASTRUCTURE DEVELOPMENT COSTS**

Item	Cost Estimates
Design	
West Yost, 35% Design	\$254,000
Hunting Environmental	\$93,000
UNICO Engineering	\$37,000
Matt Boyer & Associates	\$121,600
Blackburn Consulting (Property Demo)	\$8,300
WRECO	\$18,150
Dokken Environmental	\$68,700
Dokken Structures	\$4,500
Willdan	\$180,800
Interwest	\$50,000
Subtotal	\$836,050
Permitting	
1602 East Reach	\$41,200
1602 Middle Reach	\$5,150
1602 West Reach	\$46,300
404 Permit	\$130,000
1602 Downstream	\$5,150
Mitigation	\$475,000
Subtotal	\$702,800
Right-of-Way Acquisition	
Channel	\$866,921
Downstream Temporary Easement	\$20,000
Basins	\$0
Subtotal	\$886,921
Downstream	
Improvements	\$150,000
Contingency	\$37,500
Engineering, Staking, Inspection	\$37,500
Permitting	\$5,200
Subtotal	\$230,200
Total City Infrastructure Development Costs	\$2,656,000

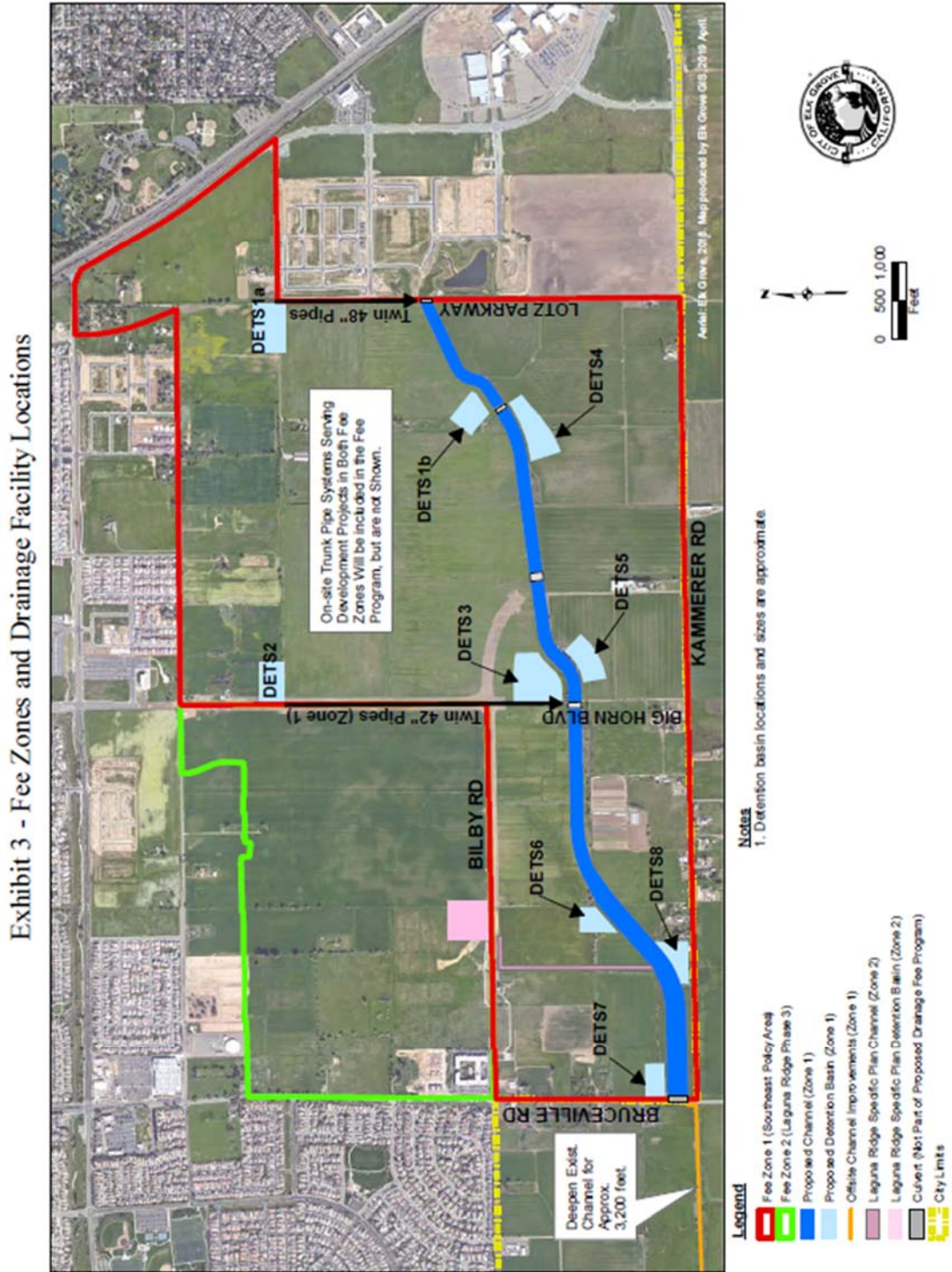
LRSP P3 DRAINAGE FACILITIES

Drainage facilities for the LRSP P3 include a detention basin, truck pipe system, land acquisition, and an off-site channel that will convey runoff from the LRSP P3 detention basin through SEPA to the Shed C Channel. Land acquisition for all drainage facilities for LRSP P3 totals approximately 8.08 acres. Table 4-5 below identifies the planned facilities, costs, and the estimated quantity for each facility. The total cost of these facilities is approximately \$7.5 million.

TABLE 4-5
LRSP P3 DRAINAGE FACILITIES

Drainage Facility	Total Drainage Facility Quantity		Unit Cost	Estimated Cost
36-inch Pipe	385	LF	\$176	\$67,760
42-inch Pipe	145	LF	\$206	\$29,870
48-inch Pipe	2,040	LF	\$235	\$479,400
54-inch Pipe	1,570	LF	\$294	\$461,580
60-inch Pipe	1,410	LF	\$349	\$492,090
66-inch Pipe	805	LF	\$352	\$283,360
72-inch Pipe	3,425	LF	\$384	\$1,315,200
60-inch Manhole	4	EA	\$8,169	\$32,676
72-inch Manhole	15	EA	\$11,436	\$171,540
84-inch Manhole	14	EA	\$15,248	\$213,472
96-inch Manhole	5	EA	\$19,605	\$98,025
Junction Box	9	EA	\$27,000	\$243,000
Detention Basin Outfall Structure (60")	1	EA	\$25,000	\$25,000
Detention Basin Outfall Structure (72")	1	EA	\$45,000	\$45,000
Fencing and Gates - 3' High Post & Cable	7,400	LF	\$24	\$177,600
Fencing and Gates - Pipe Gate	4	EA	\$3,812	\$15,248
Misc. Metal	3,700	LB	\$6.53	\$24,161
Excavation	122,000	CY	\$4.36	\$531,920
Erosion Control Rip Rap	160	Ton	\$98	\$15,680
Access/Maintenance Rd. (2" asph conc)	58,000	SF	\$2.22	\$128,760
Access/Maintenance Rd. (6" aggr base)	58,000	SF	\$1.58	\$91,640
Geotextile Fabric	19,500	SF	\$0.30	\$5,850
Landscaping (incl. hydro seeding)	133,000	SF	\$2.07	\$275,310
Landscaping Irrigation	133,000	SF	\$1.45	\$192,850
Culvert (10'x1'x25')	3	EA	\$30,000	\$90,000
Misc. Concrete - Ramp & Weir	30	CY	\$762	\$22,860
<i>Subtotal (Rounded)</i>				<u>\$5,530,000</u>
<i>Engineering and Staking (15%)</i>				<u>\$829,500</u>
<i>Total Without Land Costs (Rounded)</i>				<u>\$6,359,500</u>
Land for Outfall Channel	4.4	AC		\$569,295
Land for Detention Basins	3.7	AC	\$150,000	\$555,000
Total With Land Costs (Rounded)				<u>\$7,484,000</u>

Exhibit 3 – Fee Zones and Drainage Facility Locations



V. NEXUS FINDINGS

Development of the Fee Area will require construction of storm drainage facilities. The Drainage Fee Program will fund construction of channel improvements, detention basins, land acquisition for these facilities, and the City's infrastructure development costs. The Drainage Fees, as calculated in this Nexus Study meet the Fee Law nexus requirements, as outlined below.

Purpose of Fee

The purpose of the Drainage Fee is to fund construction of storm drainage improvements necessary to serve future residential and non-residential development in the Fee Area.

Use of Fee

Drainage Fee revenue will be used to fund the construction of drainage facilities and the acquisition of land for these facilities. The drainage facilities and their costs are identified in detail in Appendix A.

Reasonable Relationship Between the Fee's Use and the Type of Development

Development of new residential and non-residential land uses in the Fee Area will require storm drainage facilities. Drainage Fees from residential and non-residential land use developments will fund the construction and land costs associated with the drainage facilities required to serve all future development in the Fee Area. Drainage Fee revenues from the SEPA and LRSP P3 will be used to fund each area's specific drainage facilities only. Within the SEPA, the fee revenues from the basin fee component will be used to fund that sub-shed's specific basin facilities only. The City will create separate Drainage Fee fund accounts so that the fee revenues from each fee zone are spent only on the drainage facilities serving each zone.

Reasonable Relationship Between the Need for the Facility and the Type of Development

The loss of vacant and open space resulting from residential and non-residential land development will reduce the capacity of the land in the Fee Area to absorb storm water runoff. Residential and nonresidential developments each impact the need for drainage facilities since both types of developments increase the amount of impervious land uses that, in turn, creates more storm water flow. Because the additional runoff will exceed the capacity of existing facilities, additional drainage facilities will be needed to capture the additional runoff created by

residential and nonresidential development within the Fee Area. Without these drainage facilities, the new development areas would flood during storms and create a public safety issue.

Reasonable Relationship Between the Amount of the Fee and the Cost of the Facility

The Drainage Fees in this Nexus Study are calculated to offset the attributable portion of the cost of land and the storm drainage facilities necessary to serve new development in the Fee Area. The relationship between the amount of the fee and the portion of the facility and cost attributable to the development type is based on the percent impervious factor for each land use category, as shown in Table A-8 in Appendix A. The percent impervious factor establishes a reasonable relationship between the development type and its impact on storm drainage facilities and therefore, provides a nexus between the amount of the Drainage Fee and the cost of the facility attributable to the type of development or land use. The higher the percent impervious factor for a land use, the greater the storm water runoff that the land use will create and the higher the impact it will have on drainage facilities. As a result, the greater the impact created by a land use, as measured by the percent impervious factor, the higher the Drainage Fee will be for the land use.

VI. DRAINAGE FEE CALCULATION

Storm drainage facilities and land funded through the Drainage Fee Program are designed to serve all development in the Fee Area. The total cost of facilities for each fee zone is allocated to future residential and non-residential development in the Fee Area based on the percent impervious factors shown in Table A-8 of Appendix A. The Drainage Fee for each land use category is based on the cost allocation calculations shown in Tables A-9 through Table A-17 in Appendix A.

It should be noted that the acres shown in these cost allocation tables include acreage of adjoining major roadways up to their centerline, and therefore, when the Drainage Fees are calculated by the City's building department, the gross acreage, which includes roadway acreage, should be used to calculate the total Drainage Fee for a development map.

DRAINAGE FEES - SEPA

The detailed information presented in this report has been used to determine the Drainage Fee for new development in the Fee Area. The Drainage Fee rates for the land use categories in the SEPA are identified in Table 5-1 on the following pages. Table 5-1 shows the Drainage Fee broken down by its fee components; namely, channel facilities, City infrastructure development costs, basin facilities, and the City's 4.0% administration fee. The administration fee component will reimburse the City for costs associated with administering the Drainage Fee Program.

DRAINAGE FEES – LRSP P3

The Drainage Fee rates for LRSP P3 are identified in Table 5-2. Table 5-2 shows the Drainage Fee and its separate fee components - drainage facilities, and the City's 4.0% administration fee.

**Table 5-1- SEPA - ZONE 1
DRAINAGE FEE SUMMARY**

	Channel Fee	City Infrastructure Develop. Fee	Basin Fee	Admin Fee (4.0%)	Total Drainage Fee¹
	<i>A</i>	<i>B</i>	<i>C</i>	<i>D = (A+B+C) x 4%</i>	<i>E = A+B+C+D</i>
North Sub-Shed					
Drainage Fees per Acre					
Land Use					
Single Family	\$6,939	\$1,962	\$18,033	\$1,077	\$28,011
Multi-Family, Commercial, Office, and Light Industrial	\$11,593	\$3,278	\$30,126	\$1,800	\$46,797
Basin S4					
Drainage Fees per Acre					
Land Use					
Single Family	\$0	\$0	\$0	\$0	\$0
Multi-Family, Commercial, Office, and Light Industrial	\$11,593	\$3,278	\$14,378	\$1,170	\$30,419
Basin S5					
Drainage Fees per Acre					
Land Use					
Single Family	\$0	\$0	\$0	\$0	\$0
Multi-Family, Commercial, Office, and Light Industrial	\$11,593	\$3,278	\$19,817	\$1,388	\$36,076
Basin S6					
Drainage Fees per Acre					
Land Use					
Single Family	\$6,939	\$1,962	\$16,723	\$1,025	\$26,649
Multi-Family, Commercial, Office, and Light Industrial	\$11,593	\$3,278	\$27,938	\$1,712	\$44,521
Basin S7²					
Drainage Fees per Acre					
Land Use					
Single Family	\$6,939	\$1,962	\$0	\$356	\$9,257
Multi-Family, Commercial, Office, and Light Industrial	\$11,593	\$3,278	\$0	\$595	\$15,466
Basin S8					
Drainage Fees per Acre					
Land Use					
Single Family	\$0	\$0	\$0	\$0	\$0
Multi-Family, Commercial, Office, and Light Industrial	\$11,593	\$3,278	\$23,470	\$1,534	\$39,875

1. Land uses that have a \$0 fee indicate that no acreage of that particular land use type is in the Sub-shed.
2. Basin S7 is not assessed a Basin Fee component in recognition that it is delivering all shed area improvements and will not be reimbursed for said improvements from any areas beyond the Basin S7 area.

**Table 5-2 - LRSP P3 - ZONE 2
DRAINAGE FEE SUMMARY**

	LRSP Drainage Fee <i>A</i>	Admin Fee (4.0%) <i>B = A x 4%</i>	Total Drainage Fee <i>C = A + B</i>
<u>Land Use</u>	<i>Drainage Fees per Acre</i>		
Single Family	\$21,401	\$856	\$22,257
Multi-Family, Commercial, Office, and Light Industrial	\$40,127	\$1,605	\$41,732

VII. ADMINISTRATION OF THE DRAINAGE FEE PROGRAM

The City will administer the Drainage Fee Program. This will include, but not limited to, the following ongoing duties:

- Annually updating the Drainage Fee rates for inflation based on the ENR index
- Update the Nexus Study as necessary
- Collect and allocate Drainage Fee revenues to the separate fee accounts
- Enter into reimbursement agreements for land dedications or drainage improvements that may reimburse using either or both credit or cash
- Manage and track existing Drainage Fee credits and reimbursements
- Conduct the annual and five year reporting requirements pursuant to the Mitigation Fee Act

PAYMENT AND CALCULATION OF THE DRAINAGE FEE

The Drainage Fee shall be collected at improvement plan approval. The City's building department shall calculate the total Drainage Fee for each development based on its gross acres, which would include major roadway acreage up to the centerline of the road adjoining the property.

ELK GROVE STORM DRAINAGE UTILITY FEE

The SEPA and LRSP P3 Drainage Fees will not impact the City's existing Storm Drain Utility Fee.

ANNUAL INFLATION UPDATE

In January of each calendar year, the Channel Fee, Basin Fees, and the LRSP P3 Fee components of the Drainage Fee, as well as the drainage facilities costs, and land costs in the Fee Program should be inflated automatically based on the average change in the San Francisco Construction Cost Index (CCI) and the change in the 20-city CCI as reported in the *Engineering News Record* (ENR) for the 12-month period ending October of the previous year or equivalent, as determined by the Finance Director, if these numbers are not available. For example, the adjustment for January 2020 will be determined by calculating the change from October 2018 to October 2019

in the 20-city and San Francisco CCIs. These two inflation rates will be averaged, and the resulting value will be the inflation adjustment factor that will be applied to the aforementioned Drainage Fee components, drainage facilities and land costs in January 2020.

The City Infrastructure Development Fee component of the Drainage Fee will be inflated annually based on an inflation rate that is equal to the LAIF rate plus 2.0% for the prior 12-month period ending October of the prior year, or other equivalent inflator as determined by the Finance Director.

The City will incorporate these adjustments into the total Drainage Fees when they are implemented by the SCWA.

NEXUS STUDY UPDATES

The Drainage Fee Nexus Study will be subject to periodic update based on changes in developable land, land uses, and facilities. The City will periodically review the costs, fees, and account balances to determine if an update to the Drainage Fee is warranted. During the periodic reviews, the City may analyze the following items that would impact the Drainage Fee Program:

- Significant changes to the required drainage facilities in the Drainage Fee Program
- Significant changes in zoning or density
- Changes in the cost to administer the Drainage Fee

DRAINAGE FEE ACCOUNTS

The City will establish separate fee accounts for Zones 1 and 2 and for the individual fee components of the Drainage Fee. This will include separate fee fund accounts for the channel component, for each of the basin components, the City infrastructure development costs component, and the Administration fee. The City will also determine whether it will allow interfund borrowing between the separate fee accounts to allow funding of priority projects. Interfund borrowing will require payment of interest to the fund from which the money is borrowed.

ADMINISTRATION FEE COMPONENT OF THE DRAINAGE FEE

The Drainage Fee includes an administration fee that equals 4.0% of the total costs. Calculations performed by City staff for other City fee programs show that expenditures for program administration equal and often exceed 4.0% of the fee program's expenditures. Costs included in the administration of the program include, but are not limited to, preparation of the nexus study; preparation of updates to the nexus study; preparation of annual reports for the fee; and administration costs for maintaining the fee fund. The City should monitor its costs in the following years and adjust the rate, as necessary.

FEE CREDITS AND REIMBURSEMENTS

Fee credits and reimbursements will be available as part of the Drainage Fee Program for construction of drainage facilities or land dedications through the execution of an agreement with the City. The City will determine which drainage facilities and land dedications will be eligible for developers to construct or dedicate. Facilities must meet City standards for acquisition projects in order to be eligible for credits and/or cash reimbursement. All future construction contracts, construction work, and requests for credit/reimbursement associated with storm drainage facilities must be performed in conformance with the most current "Reimbursement Policies and Procedures for Privately Constructed Public Facilities", which is available from the City Engineer. Developers will be responsible for complying with all applicable laws, codes, and regulations relating to contracting and construction of public projects that are not currently under contract with the City.

Fee credits and/or cash reimbursement will be given only to projects included in the Drainage Fee Program that are fully completed and have been accepted by the City. The City will reimburse the developer for acquisition or installation of facilities under the applicable fee based upon the lesser of either of the following:

1. The actual construction cost of the eligible facilities, as determined at the sole discretion of the City through its review of the construction contract, plus allowance for soft costs (e.g., engineering, mobilization, staking) associated with the actual construction costs, as determined by the City; or
2. Where the actual costs exceed the value of the improvements as provided in the program (as listed in the schedule of quantities and values, plus annual cost inflation

adjustments, as applicable), the value of those improvements as provided in the program.

In no instance will the City provide credit or reimbursement in excess of the lesser of the value in the program or the actual construction costs. Costs are subject to binder review (including certified payroll) by the City. For example, if the value of the improvements under the schedule is \$2.0 million and the contract value is \$1.7 million, the City will only reimburse or provide credit to a maximum of \$1.7 million. Likewise, if the value of the improvements under the schedule is \$2.0 million and the contract value is \$2.3 million, the City will only reimburse or provide credit to a maximum of \$2.0 million.

Fee credits will be provided up to the total fee obligation for the developer and cash reimbursement will be provided for any remaining amount. Project costs incurred in excess of the cost shown in the Nexus Study plus inflation adjustments will not be credited or reimbursed.

The City will determine the method of applying the fee credits. Additionally, the City will allow credits to be applied only for in-kind items. For example, credits for basin construction can only be applied against the basin fee component of the Drainage Fee. Likewise for a land credit, which would only be applied against the land dedication costs of the Drainage Fee. The remaining amount of the Drainage Fee would be payable to the City in cash.

For reimbursements, the Finance Director will determine the priority of repayment. Reimbursement will only be paid after the City has accepted the developer-funded facility or land dedication. All reimbursements will be an obligation of the individual funds within the Drainage Fee Program and not the City General Fund or any other unrelated specialty funds.

FEE CREDITS AND REIMBURSEMENTS – SUB-SHEDS S6 AND S8

The City has purchased land for basins in the S6 and S8 sub-sheds. Because the City would like to expedite reimbursement for these land acquisition costs, it will require development that constructs basin facilities in these two sub-sheds to pay 20% of the basin fee component and receive fee credits for 80% of the basin fee. The uncredited facilities would go into a reimbursement agreement. Once the City is fully reimbursed for its land acquisition costs, any remaining basin fee revenue will be used to reimburse the developer that constructed the basin facilities for the fees paid to the City.

DRAINAGE FEE EXEMPTIONS

All determinations regarding the exemptions provided in this section shall be made by the City Finance Director or his/her designee. The following public agencies and land shall be exempted from payment of the Drainage Fee:

- Public facilities (e.g., schools, parks, drainage facilities) are exempt from the Drainage Fee. The City will determine if other non-City public agencies and their facilities will be subject to payment of the Drainage Fee.

ANNUAL AND FIVE-YEAR REPORTING REQUIREMENTS

The Mitigation Fee Act requires the City to report every year and every fifth year certain financial information regarding the fees. The City must make available within 180 days after the last day of each fiscal year the following information from the prior fiscal year:

- 1) A brief description of the type of fee in the account or fund
- 2) The amount of the fee
- 3) The beginning and ending balance in the account or fund
- 4) The amount of the fee collected and the interest earned
- 5) An identification of each public improvement for which fees were expended and the amount of expenditures
- 6) An identification of an approximate date by which time construction on the improvement will commence if it is determined that sufficient funds exist to complete the project
- 7) A description of each interfund transfer or loan made from the account and when it will be repaid
- 8) Identification of any refunds made once it is determined that sufficient monies have been collected to fund all fee-related projects

The City must make this information available for public review and must also present it at the next regularly scheduled public meeting not less than 15 days after this information is made available to the public.

For the fifth fiscal year following the first deposit into the fee account, and every five years thereafter, the City must make the following findings with respect to any remaining funds in the fee account, regardless of whether those funds are committed or uncommitted:

- 1) Identify the purpose to which the fee is to be put
- 2) Demonstrate a reasonable relationship between the fee and the purpose for which it is charged
- 3) Identify all sources and amounts of funding anticipated to complete financing any incomplete improvements
- 4) Designate the approximate dates on which funding in item (3) above is expected to be deposited into the fee account

As with the annual disclosure, the five-year report must be made public within 180 days after the end of the City's fiscal year and must be reviewed at the next regularly scheduled public meeting. The City must make these findings, otherwise, the law requires that the City refund the money on a prorated basis to the then current record owners of the development project.

APPENDIX A

SOUTHEAST POLICY AREA AND LAGUNA RIDGE SPECIFIC PLAN PHASE 3 DRAINAGE FEE CALCULATION TABLES

Table A-1
Land Use Summary

<u>Residential</u>	<u>SEPA</u>	<u>LRSP Phase III</u>
Single Family ¹	476.5	314.0
Multi-Family ²	68.8	19.1
Subtotal	545.3	333.0
<u>Non-Residential</u>		
Commercial ³	34.4	0.0
Office	311.1	0.0
Industrial/Flex	110.7	0.0
Subtotal	456.2	0.0
Total Acres	1,001.5	333.0
<u>Community and Public Land Uses</u>		
School	19.5	10.1
Parks/Open Space	50.4	22.6
Drainage Basins	38.9	3.7
Channel	51.7	0.0
Greenway	45.8	3.5
Total	206.3	39.9
 Total Acres	 1,207.8	 372.9

¹ Includes acreage associated with estate, low density, and medium density residential land uses.

² Includes acreage associated with high density and mixed use residential land uses.

³ Includes anticipated non-residential acreage within the mixed use area.

Source: City of Elk Grove

Table A-2
SEPA - Land Uses By Basin and Channel

	North							
	Sub-shed	S4	S5	S6	S7	S8	SC1-4	Total
<u>Residential</u>								
Estate Residential	28.6	0.0	0.0	0.0	63.0	0.0	0.0	91.6
Low Density Residential	201.5	0.0	0.0	51.8	23.4	0.0	0.0	276.6
Medium Density Residential	108.3	0.0	0.0	0.0	0.0	0.0	0.0	108.3
High Density Residential	59.4	0.0	0.0	0.0	9.4	0.0	0.0	68.8
Subtotal	397.7	0.0	0.0	51.8	95.8	0.0	0.0	545.3
<u>Non-Residential</u>								
Commercial	0.0	0.0	0.0	0.0	0.0	17.6	0.0	17.6
Mixed Use Village Center	16.8	0.0	0.0	0.0	0.0	0.0	0.0	16.8
Office	105.0	95.6	97.2	13.3	0.0	0.0	0.0	311.1
Light Industrial/Flex Space	0.0	49.5	0.0	0.0	0.0	61.2	0.0	110.7
Subtotal	121.7	145.1	97.2	13.3	0.0	78.8	0.0	456.2
Total Developable Lands	519.5	145.1	97.2	65.1	95.8	78.8	0.0	1,001.5
<u>Non Developable Lands</u>								
Park/Open Space	35.6	0.0	0.0	14.3	0.4	0.0	0.0	50.4
Greenway	25.3	4.4	2.5	5.8	2.6	5.1	0.1	45.8
School	9.5	0.0	0.0	10.0	0.0	0.0	0.0	19.5
Basin	21.4	3.9	4.5	2.8	2.2	4.1	0.0	38.9
Drainage Channel	0.0	0.0	0.0	0.0	0.0	0.0	51.7	51.7
Total	91.8	8.4	7.0	32.9	5.3	9.2	51.8	206.3
Total Acres	611.2	153.4	104.3	98.0	101.0	88.0	51.8	1,207.8

Source: City of Elk Grove

Table A-3
Storm Drainage Facilities Costs Summary

	SEPA								LRSP P3	Total Cost
	Channel Costs	City Infrastructure Develop. Costs	North Sub-shed Costs ¹	Basin S4 Costs	Basin S5 Costs	Basin S6 Costs	Basin S7 Costs	Basin S8 Costs	Drainage Costs	
Channel Costs	\$5,850,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,850,000
City Development Costs	\$0	\$2,656,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,656,000
Basin Costs	\$0	\$0	\$8,849,000	\$1,695,000	\$1,267,000	\$1,026,000	\$872,000	\$1,142,000	\$6,360,000	\$21,211,000
Land Costs	\$3,543,000	\$0	\$2,708,900	\$391,200	\$660,050	\$211,886	\$223,500	\$708,232	\$1,124,295	\$9,571,000
Total Costs	\$9,393,000	\$2,656,000	\$11,557,900	\$2,086,200	\$1,927,050	\$1,237,886	\$1,095,500	\$1,850,232	\$7,484,295	\$39,288,000

¹ The North Sub-shed includes Basins 1A, 1B, 2, and 3.

Source: City of Elk Grove; West Yost Associates; Goodwin Consulting Group, Inc.

Table A-4
Drainage Facilities Cost Summary - Channel Costs

Drainage Improvements	Cost Estimates
<hr/>	
<u>SEPA Improvements</u>	
Channel Facilities	
Upstream Facilities	
West Reach Channel	\$1,224,520
Middle Reach Channel	\$1,494,310
East Reach Channel	\$3,131,335
Subtotal (Rounded)	\$5,850,000
Land Costs	<u>Acreage</u>
Channel Land to be Dedicated	33.93
Channel Land Acquired By the City	6.45
80 Foot Easement Inside Floodplain ¹	11.24
Downstream Temporary Easement	--
Less: City Direct Costs ²	(6.45)
Subtotal (Rounded)	45.17
<hr/>	
Total Channel Costs	\$9,393,000

¹ Assumes that the estimated value of 11.24 acres of land associated with the 80 foot easement along the length of the channel is \$0.

² City Direct Costs for 6.45 acres of acquired land and the downstream temporary easement are included in the City's Infrastructure Development Cost.

Source: City of Elk Grove; West Yost Associates

Table A-5
Summary of Basin Facilities and Land Costs

	North Sub-shed	S4	S5	S6	S7	S8	Total
<u>Facilities Costs</u>							
Basin Cost	\$8,849,000	\$1,695,000	\$1,267,000	\$1,026,000	\$872,000	\$1,142,000	\$14,851,000
<u>Land Dedication Costs</u>							
Inside Floodplain	9.99	3.91	0.38	0.00	2.24	0.17	16.68
Cost per Acre Inside	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	
Subtotal - Inside	\$998,900	\$391,200	\$38,300	\$0	\$223,500	\$16,500	\$1,668,400
Outside Floodplain	11.40	0.00	4.15	0.00	0.00	0.14	15.68
Cost per Acre Outside	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	
Subtotal - Outside	\$1,710,000	\$0	\$621,750	\$0	\$0	\$20,850	\$2,352,600
Subtotal - Land Dedication	\$2,708,900	\$391,200	\$660,050	\$0	\$223,500	\$37,350	\$4,021,000
<u>Land Acquisition Costs ¹</u>							
Acres Acquired by City	0.00	0.00	0.00	2.80	0.00	3.70	6.50
Cost per Acre	\$0	\$0	\$0	\$75,674	\$0	\$181,319	
Subtotal - Land Acquired	\$0	\$0	\$0	\$ 211,886	\$0	\$ 670,882	\$882,768
Total	\$11,557,900	\$2,086,200	\$1,927,050	\$1,237,886	\$1,095,500	\$1,850,232	\$19,754,768

¹ Includes 6.5 acres of land acquired by the City for \$882,768

Source: City of Elk Grove

Table A-6
City Infrastructure Development Costs

Item	Cost Estimates
Design	
West Yost, 35% Design	\$254,000
Hunting Environmental	\$93,000
UNICO Engineering	\$37,000
Matt Boyer & Associates	\$121,600
Blackburn Consulting (Property Demo)	\$8,300
WRECO	\$18,150
Dokken Environmental	\$68,700
Dokken Structures	\$4,500
Willdan	\$180,800
Interwest	\$50,000
Subtotal	\$836,050
Permitting	
1602 East Reach	\$41,200
1602 Middle Reach	\$5,150
1602 West Reach	\$46,300
404 Permit	\$130,000
1602 Downstream	\$5,150
Mitigation	\$475,000
Subtotal	\$702,800
Right-of-Way Acquisition	
Channel	\$866,921
Downstream Temporary Easement	\$20,000
Basins	\$0
Subtotal	\$886,921
Downstream	
Improvements	\$150,000
Contingency	\$37,500
Engineering, Staking, Inspection	\$37,500
Permitting	\$5,200
Subtotal	\$230,200
Total City Infrastructure Development Costs	\$2,656,000

Source: City of Elk Grove

Table A-7
Drainage Facilities Cost Summary - LRSP Costs

Drainage Improvements	Acres	Cost Estimates
<hr/>		
<u>LRSP Improvements</u>		
Southern Shed Trunk Drainage Facilities		\$6,359,500
Land Costs		
LRSP Outfall Channel	4.38	\$569,295
LRSP Detention Basin	3.70	\$555,000
Total LRSP	8.08	\$7,484,000

Source: City of Elk Grove; West Yost Associates

Table A-8
Percent Impervious Percentages

Land Use		SEPA	LRSP Phase 3
<hr/>			
<u>Residential</u>	Percent		
Single Family	<u>Impervious</u>	<u>Acres</u>	<u>Acres</u>
Estate Residential	30%	91.6	0.0
Low Density Residential	40%	276.6	314.0
Medium Density Residential	70%	108.3	0.0
Total Acres		<hr/>	<hr/>
		476.5	314.0
Single Family Weighted Average - Percent Impervious		45%	40%
Multi-Family - Percent Impervious		75%	75%
<u>Non-Residential</u>		Percent <u>Impervious</u>	Percent <u>Impervious</u>
Commercial		75%	75%
Office		75%	75%
Industrial/Flex		75%	75%

Source: City of Elk Grove; West Yost Associates; Goodwin Consulting Group, Inc.

Table A-9
Channel Facilities and Land Costs
Cost Allocation

Land Use	Acres	Percent Impervious	Impervious Acres	Percent Allocation	Total Costs	Cost per Acre
Cost	\$9,393,000					
<i><u>Residential</u></i>						
Single Family	476.5	45% ¹	213.9	35.20%	\$3,306,370	\$6,939
Multi-Family	68.8	75%	51.6	8.49%	\$797,685	\$11,593
Subtotal	545.3		265.5	43.69%	\$4,104,055	
<i><u>Non-Residential</u></i>						
Commercial	34.4	75%	25.8	4.25%	\$398,955	\$11,593
Office	311.1	75%	233.4	38.40%	\$3,607,000	\$11,593
Industrial/Flex	110.7	75%	83.0	13.66%	\$1,282,990	\$11,593
Subtotal	456.2		342.2	56.31%	\$5,288,945	
Total	1,001.5		607.7	100.00%	\$9,393,000	

¹ Weighted average assuming 91.6 acres of estate residential at 30% imperviousness, 276.6 acres of low density residential at 40% imperviousness, and 108.3 acres of medium density residential at 70% imperviousness.

Source: Goodwin Consulting Group, Inc.

Table A-10
North Sub-shed Facilities and Land Costs
Cost Allocation

Land Use	Acres	Percent Impervious	Impervious Acres	Percent Allocation	Total Costs	Cost per Acre
Cost	\$11,557,900					
<i><u>Residential</u></i>						
Single Family	338.3	45% ¹	151.9	52.79%	\$6,100,938	\$18,033
Multi-Family	59.4	75%	44.5	15.48%	\$1,789,248	\$30,126
Subtotal	397.7		196.4	68.27%	\$7,890,187	
<i><u>Non-Residential</u></i>						
Commercial	16.8	75%	12.6	4.38%	\$505,675	\$30,126
Office	105.0	75%	78.7	27.36%	\$3,162,039	\$30,126
Industrial/Flex	0.0	75%	0.0	0.00%	\$0	n/a
Subtotal	121.7		91.3	31.73%	\$3,667,713	
Total	519.5		287.7	100.00%	\$11,557,900	

¹ Weighted average assuming 91.6 acres of estate residential at 30% imperviousness, 276.6 acres of low density residential at 40% imperviousness, and 108.3 acres of medium density residential at 70% imperviousness.

Source: City of Elk Grove; West Yost Associates; Goodwin Consulting Group, Inc.

Table A-11
Basin S4 Facilities and Land Costs
Cost Allocation

Land Use	Acres	Percent Impervious	Impervious Acres	Percent Allocation	Total Costs	Cost per Acre
Cost	\$2,086,200					
<i><u>Residential</u></i>						
Single Family	0.0	45% ¹	0.0	0.00%	\$0	\$0
Multi-Family	0.0	75%	0.0	0.00%	\$0	\$0
Subtotal	0.0		0.0	0.00%	\$0	
<i><u>Non-Residential</u></i>						
Commercial	0.0	75%	0.0	0.00%	\$0	\$0
Office	95.6	75%	71.7	65.91%	\$1,375,000	\$14,378
Industrial/Flex	49.5	75%	37.1	34.09%	\$711,200	\$14,378
Subtotal	145.1		108.8	100.00%	\$2,086,200	
Total	145.1		108.8	100.00%	\$2,086,200	

¹ Weighted average assuming 91.6 acres of estate residential at 30% imperviousness, 276.6 acres of low density residential at 40% imperviousness, and 108.3 acres of medium density residential at 70% imperviousness.

Source: City of Elk Grove; West Yost Associates; Goodwin Consulting Group, Inc.

Table A-12
Basin S5 Facilities and Land Costs
Cost Allocation

Land Use	Acres	Percent Impervious	Impervious Acres	Percent Allocation	Total Costs	Cost per Acre
Cost	\$1,927,050					
<i><u>Residential</u></i>						
Single Family	0.0	45% ¹	0.0	0.00%	\$0	\$0
Multi-Family	0.0	75%	0.0	0.00%	\$0	\$0
Subtotal	0.0		0.0	0.00%	\$0	
<i><u>Non-Residential</u></i>						
Commercial	0.0	75%	0.0	0.00%	\$0	\$0
Office	97.2	75%	72.9	100.00%	\$1,927,050	\$19,817
Industrial/Flex	0.0	75%	0.0	0.00%	\$0	\$0
Subtotal	97.2		72.9	100.00%	\$1,927,050	
Total	97.2		72.9	100.00%	\$1,927,050	

¹ Weighted average assuming 91.6 acres of estate residential at 30% imperviousness, 276.6 acres of low density residential at 40% imperviousness, and 108.3 acres of medium density residential at 70% imperviousness.

Source: City of Elk Grove; West Yost Associates; Goodwin Consulting Group, Inc.

Table A-13
Basin S6 Facilities and Land Costs
Cost Allocation

Land Use	Acres	Percent Impervious	Impervious Acres	Percent Allocation	Total Costs	Cost per Acre
Cost	\$1,237,886					
<u>Residential</u>						
Single Family	51.8	45% ¹	23.3	69.98%	\$866,213	\$16,723
Multi-Family	0.0	75%	0.0	0.00%	\$0	\$0
Subtotal	51.8		23.3	69.98%	\$866,213	
<u>Non-Residential</u>						
Commercial	0.0	75%	0.0	0.00%	\$0	\$0
Office	13.3	75%	10.0	30.02%	\$371,673	\$27,938
Industrial/Flex	0.0	75%	0.0	0.00%	\$0	\$0
Subtotal	13.3		10.0	30.02%	\$371,673	
Total	65.1		33.2	100.00%	\$1,237,886	

¹ Weighted average assuming 91.6 acres of estate residential at 30% imperviousness, 276.6 acres of low density residential at 40% imperviousness, and 108.3 acres of medium density residential at 70% imperviousness.

Source: City of Elk Grove; West Yost Associates; Goodwin Consulting Group, Inc.

Table A-14
Basin S7 Facilities and Land Costs
Cost Allocation

Land Use	Acres	Percent Impervious	Impervious Acres	Percent Allocation	Total Costs	Cost per Acre
Cost	\$1,095,500					
<i><u>Residential</u></i>						
Single Family	86.3	45% ¹	38.8	84.59%	\$926,683	\$10,732
Multi-Family	9.4	75%	7.1	15.41%	\$168,817	\$17,929
Subtotal	95.8		45.8	100.00%	\$1,095,500	
<i><u>Non-Residential</u></i>						
Commercial	0.0	75%	0.0	0.00%	\$0	\$0
Office	0.0	75%	0.0	0.00%	\$0	\$0
Industrial/Flex	0.0	75%	0.0	0.00%	\$0	\$0
Subtotal	0.0		0.0	0.00%	\$0	
Total	95.8		45.8	100.00%	\$1,095,500	

¹ Weighted average assuming 91.6 acres of estate residential at 30% imperviousness, 276.6 acres of low density residential at 40% imperviousness, and 108.3 acres of medium density residential at 70% imperviousness.

Source: City of Elk Grove; West Yost Associates; Goodwin Consulting Group, Inc.

Table A-15
Basin S8 Facilities and Land Costs
Cost Allocation

Land Use	Acres	Percent Impervious	Impervious Acres	Percent Allocation	Total Costs	Cost per Acre
Cost	\$1,850,232					
<i><u>Residential</u></i>						
Single Family	0.0	45% ¹	0.0	0.00%	\$0	\$0
Multi-Family	0.0	75%	0.0	0.00%	\$0	\$0
Subtotal	0.0		0.0	0.00%	\$0	
<i><u>Non-Residential</u></i>						
Commercial	17.6	75%	13.2	22.36%	\$413,736	\$23,470
Office	0.0	75%	0.0	0.00%	\$0	\$0
Industrial/Flex	61.2	75%	45.9	77.64%	\$1,436,495	\$23,470
Subtotal	78.8		59.1	100.00%	\$1,850,232	
Total	78.8		59.1	100.00%	\$1,850,232	

¹ Weighted average assuming 91.6 acres of estate residential at 30% imperviousness, 276.6 acres of low density residential at 40% imperviousness, and 108.3 acres of medium density residential at 70% imperviousness.

Source: City of Elk Grove; West Yost Associates; Goodwin Consulting Group, Inc.

Table A-16
City Infrastructure Development Costs
Cost Allocation

Land Use	Acres	Percent Impervious	Impervious Acres	Percent Allocation	Total Costs	Cost per Acre
Cost	\$2,656,000					
<i><u>Residential</u></i>						
Single Family	476.5	45% ¹	213.9	35.20%	\$934,922	\$1,962
Multi-Family	68.8	75%	51.6	8.49%	\$225,556	\$3,278
Subtotal	545.3		265.5	43.69%	\$1,160,478	
<i><u>Non-Residential</u></i>						
Commercial	34.4	75%	25.8	4.25%	\$112,810	\$3,278
Office	311.1	75%	233.4	38.40%	\$1,019,929	\$3,278
Industrial/Flex	110.7	75%	83.0	13.66%	\$362,783	\$3,278
Subtotal	456.2		342.2	56.31%	\$1,495,522	
Total	1,001.5		607.7	100.00%	\$2,656,000	

¹ Weighted average assuming 91.6 acres of estate residential at 30% imperviousness, 276.6 acres of low density residential at 40% imperviousness, and 108.3 acres of medium density residential at 70% imperviousness.

Source: City of Elk Grove; West Yost Associates; Goodwin Consulting Group, Inc.

Table A-17
LRSP Drainage Facilities and Land Costs
Cost Allocation

Land Use	Acres	Percent Impervious	Impervious Acres	Percent Allocation	Total Costs	Cost per Acre
Cost	\$7,484,000					
<i><u>Residential</u></i>						
Single Family	314.0	40% ¹	125.6	89.79%	\$6,719,573	\$21,401
Multi-Family	19.1	75%	14.3	10.21%	\$764,427	\$40,127
Subtotal	333.0		139.9	100.00%	\$7,484,000	
<i><u>Non-Residential</u></i>						
Commercial	0.0	75%	0.0	0.00%	\$0	\$0
Office	0.0	75%	0.0	0.00%	\$0	\$0
Industrial/Flex	0.0	75%	0.0	0.00%	\$0	\$0
Subtotal	0.0		0.0	0.00%	\$0	
Total	333.0		139.9	100.00%	\$7,484,000	

¹ Weighted average assuming 0.0 acres of estate residential at 30% imperviousness, 314.0 acres of low density residential at 40% imperviousness, and acres of medium density residential at 70% imperviousness.

Source: City of Elk Grove; West Yost Associates; Goodwin Consulting Group, Inc.

APPENDIX B

DETAILED DRAINAGE COST ESTIMATES

Table B-1
SEPA - Zone 1
Detailed Channel Development Costs

Channel Costs		
Segment	Units	Cost
<i>Upstream</i>		
Improvements		
West	LS	\$ 1,064,800
Middle	LS	\$ 1,299,400
East	LS	\$ 2,722,900
<i>Subtotal</i>	LS	\$ 5,087,100
Contingency	0%	\$ -
Mobilization	0%	\$ -
Engineering and Staking	15%	\$ 763,065
<i>Subtotal</i>		\$ 5,850,165
Rounded Total		\$ 5,850,000

Basin Development Costs

Basin and Trunk Costs										
Component	Units	Basin S1A	Basin S1B	Basin S2	Basin S3	Basin S4	Basin S5	Basin S6	Basin S7	Basin S8
Improvements	LS	\$ 1,605,300	\$ 1,274,700	\$ 2,038,200	\$ 2,776,500	\$ 1,473,800	\$ 1,102,000	\$ 892,100	\$ 758,600	\$ 992,700
Contingency	0%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Mobilization	0%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Engineering and Staking	15%	\$ 240,795	\$ 191,205	\$ 305,730	\$ 416,475	\$ 221,070	\$ 165,300	\$ 133,815	\$ 113,790	\$ 148,905
Permitting	0%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total		\$ 1,846,095	\$ 1,465,905	\$ 2,343,930	\$ 3,192,975	\$ 1,694,870	\$ 1,267,300	\$ 1,025,915	\$ 872,390	\$ 1,141,605
Rounded Totals:		\$ 1,846,000	\$ 1,466,000	\$ 2,344,000	\$ 3,193,000	\$ 1,695,000	\$ 1,267,000	\$ 1,026,000	\$ 872,000	\$ 1,142,000
North Supersubshed Total:		\$			8,849,000					

Source: City of Elk Grove

Table B-2
SEPA Zone 1
Channel and Basin Land Cost Detail

Channel Reach	Channel Reachs					
	Design Area		Less 80-foot Easement	Total		
	Within 100 yr	Outside 100-year		Within 100 yr	Outside 100-year	Total
C1-3	18.58	1.84	11.2	7.3	1.84	9.18
C-4	26.18	5.02	0.0	26.2	5.02	31.20
Subtotal	44.76	6.86	11.2	33.5	6.9	40.38
LESS Acquired Acres				2.6	3.86	6.45
Total Acres For Dedication				30.9	3.00	33.93
Total Dedication Reimbursement				\$3,092,849	\$450,000	\$ 3,542,849
Plus Acquisition Costs						\$ 866,921
Plus Downstream TCE						\$ 20,000
Total Budget						\$ 4,429,770
LESS City Direct Costs						\$ 886,921
TOTAL						\$ 3,542,849
ROUNDED						\$ 3,543,000

APN	Subshed/ Basin	Basins									
		Design Area		Grand Total	By Acquisition		By Dedication		Acquisition Cost	Dedication Cost	Total Cost
		Within 100 yr	Outside 100-year		Within 100 yr	Outside 100-year	Within 100 yr	Outside 100-year			
132-0290-021	1A		6.6	6.6						\$990,000	\$ 990,000.00
132-0320-006	1B	2.5	0.5	3.0			2.5	0.5	\$ -	\$323,900	\$ 323,900.00
132-0290-014	2		4.3	4.3				4.3	\$ -	\$645,000	\$ 645,000.00
132-0320-006	3	7.5		7.5				7.5	\$ -	\$750,000	\$ 750,000.00
132-0320-010	4	3.9		3.9				3.9	\$ -	\$391,200	\$ 391,200.00
132-0320-009	5	0.4	4.1	4.5				0.4	\$ -	\$660,050	\$ 660,050.00
132-0300-015	6	2.8		2.8	2.8				\$ 211,885.90	\$0	\$ 211,885.90
132-0300-008	7	2.2		2.2				2.2	\$ -	\$223,500	\$ 223,500.00
132-0300-012	8		-	-					\$ -	\$0	\$ -
132-0300-013	8	0.2	0.1	0.3				0.2	\$ -	\$37,350	\$ 37,350.00
132-0300-014	8	-	0.4	0.4			0.4		\$ 191,576.32	\$0	\$ 191,576.32
132-0300-015	8	2.0		2.0	2.0				\$ 154,374.01	\$0	\$ 154,374.01
132-0300-016	8	1.2		1.2	1.2				\$ 324,931.43	\$0	\$ 324,931.43
TOTALS		22.8	16.1	38.9					\$ 882,767.65	\$4,021,000	\$ 4,903,767.65

Total Basin Land Cost			
Basin	Acquisition Cost	Dedication Cost	Total Cost
1A	\$ -	\$ 990,000	\$ 990,000
1B	\$ -	\$ 323,900	\$ 323,900
2	\$ -	\$ 645,000	\$ 645,000
3	\$ -	\$ 750,000	\$ 750,000
4	\$ -	\$ 391,200	\$ 391,200
5	\$ -	\$ 660,050	\$ 660,050
6	\$ 211,886	\$ -	\$ 211,886
7	\$ -	\$ 223,500	\$ 223,500
8	\$ 670,882	\$ 37,350	\$ 708,232
TOTAL	\$ 882,768	\$ 4,021,000	\$ 4,903,768
LESS City Acquired			\$ 882,768
NET TOTAL (rounded)			\$ 4,021,000

Source: City of Elk Grove

Table B-3
SEPA Fee Program
Channel and Basin Development Costs - Details

Estimated Costs for SEPA Trunk Drainage Facilities																														
Drainage Facility	Unit	Unit Cost in Dollars	West Reach Channel		Middle Reach Channel		East Reach Channel		Detention Basin 1A		Detention Basin 1B		Detention Basin 2		Detention Basin 3		Detention Basin 4		Detention Basin 5		Detention Basin 6		Detention Basin 7		Detention Basin 8		Total Drainage Facility Quantity	Estimated Cost in Dollars		
			Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost				
36-inch Pipe	LF	176	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	307	53,994	299	52,624	0	0	606	106,618	
42-inch Pipe	LF	206	0	0	0	0	0	0	0	0	0	0	0	0	0	0	498	102,632	353	72,819	469	96,577	462	95,172	494	101,846	2,277	469,047		
48-inch Pipe	LF	235	0	0	0	0	0	0	2,170	509,950	1,424	334,640	0	0	2,170	509,950	437	102,592	410	96,291	930	218,453	906	212,910	258	60,623	8,704	2,045,409		
54-inch Pipe	LF	294	0	0	0	0	0	0	615	180,810	0	0	4,519	1,328,586	0	0	1,610	473,235	1,071	314,908	0	0	0	0	892	262,266	8,707	2,559,805		
60-inch Pipe	LF	349	0	0	0	0	0	0	656	228,944	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	656	228,944		
66-inch Pipe	LF	352	0	0	0	0	0	0	0	0	665	234,080	0	0	1,848	650,496	0	0	0	0	0	0	0	0	0	0	2,513	884,576		
72-inch Pipe	LF	384	0	0	0	0	0	0	0	0	319	122,496	0	0	1,683	646,272	0	0	0	0	0	0	0	0	0	0	2,002	768,768		
48-inch Manhole	EA	5,446	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	18,149	2	12,877	2	11,176	4	21,784	2	10,724	14	74,710		
60-inch Manhole	EA	8,169	0	0	0	0	0	0	0	0	0	0	0	0	0	5	40,835	4	28,973	3	25,145	3	24,507	3	24,130	18	143,591			
72-inch Manhole	EA	11,436	0	0	0	0	0	0	7	80,052	11	125,796	4	45,744	15	171,540	10	114,333	7	81,121	6	70,402	6	68,616	6	67,560	72	825,165		
84-inch Manhole	EA	15,248	0	0	0	0	0	0	3	45,744	4	60,992	6	91,488	7	106,736	0	0	0	0	0	0	0	0	0	0	20	304,960		
96-inch Manhole	EA	19,605	0	0	0	0	0	0	0	0	1	19,605	9	176,445	5	98,025	0	0	0	0	0	0	0	0	0	0	15	294,075		
120-inch Manhole	EA	30,000	0	0	0	0	0	0	0	0	0	0	1	30,000	0	0	0	0	0	0	0	0	0	0	0	0	1	30,000		
10' Access/Maintenance Rd. (3" AC)	SF	2.22	31,722	70,423	31,682	70,334	71,263	158,204	14,561	32,325	10,659	23,662	8,981	19,937	11,874	26,359	15,159	33,652	12,021	26,688	13,346	29,627	10,498	23,305	13,603	30,198	245,367	544,715		
10' Access/Maintenance Rd. (6" AB)	SF	1.58	44,411	70,169	44,355	70,081	99,768	157,633	20,385	32,208	14,922	23,577	12,573	19,865	16,623	26,264	21,222	33,531	16,830	26,591	18,684	29,521	14,697	23,221	19,044	30,090	343,514	542,752		
Geotextile Under Maintenance Road	SY	1.50	4,935	7,402	4,928	7,393	11,085	16,628	2,265	3,398	1,658	2,487	1,397	2,096	1,847	2,771	2,358	3,537	1,870	2,805	2,076	3,114	1,633	2,450	2,116	3,174	38,168	57,252		
4" Conduits (Water)	EA	350	13	4,550	15	5,250	29	10,150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	57	19,950		
6" Conduits (Electric)	EA	400	13	5,200	15	6,000	29	11,600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	57	22,800		
Fencing and Gates - 3' High Post & Cable	LF	24	4,291	102,984	5,836	140,064	10,605	254,520	2,484	59,616	1,066	25,584	1,399	33,576	1,663	39,912	1,351	32,424	1,112	26,688	1,958	46,992	1,050	25,200	2,137	51,288	34,952	838,848		
Fencing and Gates - Pipe Gate	EA	3,812	1	3,812	1	3,812	5	19,060	1	3,812	3	11,436	1	3,812	3	11,436	3	11,436	3	11,436	3	11,436	3	11,436	3	11,436	3	11,436	30	114,360
Misc. Metal	LB	6.53	0	0	0	0	0	0	500	3,265	500	3,265	500	3,265	500	3,265	500	3,265	500	3,265	500	3,265	500	3,265	500	3,265	4,500	29,385		
Excavation	CY	4.36	67,800	295,608	84,200	367,112	158,000	688,880	41,422	180,600	29,241	127,491	25,913	112,981	62,536	272,657	65,070	283,705	45,290	197,464	22,540	98,274	13,150	57,334	29,080	126,789	644,242	2,808,895		
Erosion Control Rip Rap	Ton	98	0	0	0	0	0	0	50	4,900	50	4,900	50	4,900	50	4,900	50	4,900	50	4,900	50	4,900	50	4,900	50	4,900	450	44,100		
Landscaping (vegetation + hydroseeding)	SF	2.07	127,969	264,896	177,413	367,245	334,268	691,935	46,284	95,808	27,093	56,083	27,093	56,083	39,235	81,216	53,474	110,691	46,423	96,096	44,356	91,817	24,461	50,634	49,596	102,664	997,665	2,065,167		
Landscape Irrigation	SF	1.45	81,529	118,217	105,050	152,322	201,495	292,168	56,853	82,437	25,658	37,204	33,125	48,031	43,657	63,303	29,945	43,420	25,997	37,696	24,839	36,017	13,698	19,862	27,774	40,272	669,620	970,949		
Misc. Concrete - Outlet	CY	1,307	0	0	0	0	0	0	17	22,219	17	22,219	17	22,219	17	22,219	17	22,219	17	22,219	17	22,219	17	22,219	17	22,219	153	199,971		
Misc. Concrete - Weir Structure	CY	1,307	0	0	0	0	0	0	20	26,140	20	26,140	20	26,140	20	26,140	20	26,140	20	26,140	20	26,140	20	26,140	20	26,140	180	235,260		
Misc. Concrete - Ramp (Assumed 6")	CY	1,307	93	121,551	84	109,788	323	422,161	10	13,070	10	13,070	10	13,070	10	13,070	10	13,070	10	13,070	10	13,070	10	13,070	10	13,070	590	771,130		
<i>Rounded Subtotal</i>				1,064,800		1,299,400		2,722,900		1,605,300		1,274,700		2,038,200		2,776,500		1,473,800		1,102,000		892,100		758,600		992,700		18,001,200		
Contingency	LS	0%		0		0		0		0		0		0		0		0		0		0		0		0		0		
Mobilization	LS	0%		0		0		0		0		0		0		0		0		0		0		0		0		0		
Engineering & Staking	LS	15%		159,720		194,910		408,435		240,795		191,205		305,730		416,475		221,070		165,300		133,815		113,790		148,905		2,700,180		
TOTAL				\$1,224,520		\$1,494,310		\$3,131,335		\$1,846,095		\$1,465,905		\$2,343,930		\$3,192,975		\$1,694,870		\$1,267,300		\$1,025,915		\$872,390		\$1,141,605		\$20,701,380		