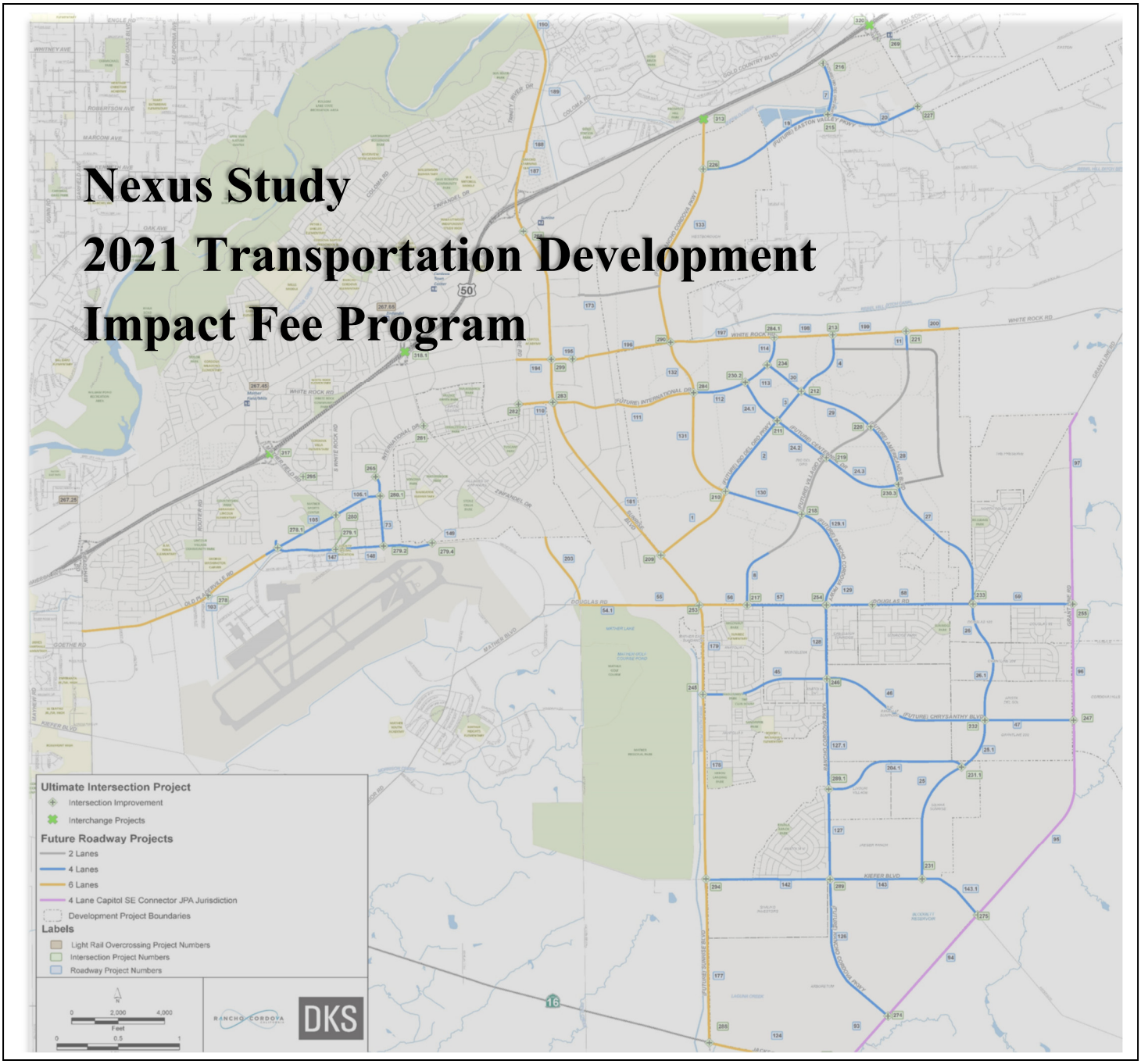

Nexus Study
2021 Transportation Development Impact Fee Program

Prepared for:

CITY OF RANCHO CORDOVA

Prepared by:

DKS Associates in cooperation with
Wood Rodgers and Urban Economics

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Executive Summary

The City of Rancho Cordova's Capital Improvement Program (CIP) includes improvements to the City's major roadway, transit, bicycle, and pedestrian facilities that are needed to accommodate projected future travel demand. The City has various methods for financing the transportation improvements in the CIP. One of the key methods is the Transportation Development Impact Fee (TDIF) Program. The intent of the fee program is to provide an equitable means of ensuring that future development contributes their fair share of transportation improvements so that the City's quality of life can be maintained.

Pursuant to the California Mitigation Fee Act (MFA[1]), the City must periodically review the factors used in estimating fee rates. Based on the following factors, a comprehensive fee update was considered warranted:

- Changes in the City's projected growth rate and long-term residential and non-residential development estimates;
- The City completed a major update to its' travel demand model – the operative analysis tool for forecasting changes in the City's long-range transportation needs and its CIP;
- Need to update construction costs for infrastructure improvements;
- The need to refine project definitions and update assumptions on potential funding from sources other than the TDIF Program; and,
- Need to reflect legislative amendments to the Mitigation Fee Act requirements.

The transportation needs and fee allocation for this update of the TDIF Program are based a 2007 "Base Year" (the same year as the current TDIF Program adopted in 2013) and a future development scenario that reflects full buildout of all residential uses within the City. The City has the potential for almost 40,000 additional dwelling units over Base Year" (2007) levels. Using the Sacramento Area Council of Government's (SACOG) projected average annual growth rate in housing units for the City of Rancho Cordova through 2040, the estimated year when the City would reach full buildout of its residential uses is projected to be 2055. The "planning horizon" for the CIP and TDIF Program was therefore extended to 2055. For non-residential uses, SACOG's projected average annual growth rates for retail, office and industrial uses were used to estimate the 2055 development levels for those types of uses.

An updated analysis of roadway improvement needs was conducted using traffic forecasts from the City's updated travel demand model and the new 2055 development estimates. As with the analysis conducted in 2013, the roadway and intersection improvements included in the TDIF Program were identified to meet the City's level of service policy under 2055 travel demand levels after "thru trips" (those with neither trip end within the City) were subtracted from the traffic demand. This updated effort resulted in some changes in roadway improvements identified in the 2013 CIP. The descriptions of the improvement projects in the TDIF Program adopted in 2013 were reviewed and refined as necessary.

The estimated improvement costs are based on conceptual definitions and preliminary engineering of the improvement projects and then planning-level cost estimates. The "unit prices" for items used in those cost estimates were updated to current unit costs (2021). Generally, unit prices have increased by approximately 2% per year between 2013 and 2021, for an overall unit price increase of 16-20% for most items. However,

[1] Mitigation Fee Act (MFA), California Government Code, Sections 66000-66025.

several items including, but not limited to, drainage pipe and traffic signals have in particular, increased significantly more since 2013.

A 4% program contingency has been applied to the total CIP costs and the costs allocated to the TDIF Program. The program contingency is intended to cover project scope changes, alternative nexus-based projects, unforeseen and unbudgeted construction expenses, and other project related expenses.

The transportation elements and costs that are included in the updated CIP are shown in Table 1.

Table 1
Summary of Costs in CIP

CIP Elements	Cost
Roadways, Intersections, Interchanges and Light Rail Grade Separations	$1,027,571,669
Phasing of Roadway Improvements	$29,948,000
Traffic Signal System and ITS	$28,922,000
Transit	$138,225,000
Bikeways	$78,089,000
TDIF Program Contingency	$36,347,735
Total CIP	**$1,339,103,404**

Source: Wood Rodgers, City of Rancho Cordova, DKS Associates, 2021

Table 2 shows that of the total $1.34 billion in transportation improvements that are included in the CIP, approximately $945 million of the total cost was allocated to new development in TDIF Program. The City shares responsibility for roadways along its border with Sacramento County. Approximately $162 million for improvements to those shared roadways would be funded by Sacramento County. The percent share of roadway and intersection improvements for shared facilities is consistent with those in the Sacramento County Transportation Development Fee (SCTDF) Program.

Other Funding

The City will need to secure $209 million in "other funding" for: 1) the City's share of existing deficiencies; 2) "existing development's share" of transit and bikeway improvements; and, 3) some reduction in the developer funded portion of several major improvements. These include: Light Rail grade separations; Bikeway grade separations; and the Zinfandel Drive Complex. The City has secured approximately $49.2 million of funding for projects in the TDIF program, including Measure A funding and other grants. The TDIF assumes that about $24.5 million in future Measure A funding will be available, but only for the City's portion of improvements to Grant Line Road. An assumed 30% of the cost of improvements along Grant Line Road is assumed to come from Measure A funding (as the Capital Southeast Connector Project) and the remainder would be split with Sacramento County. The sources for the remaining $135.4 million in "other funding" have not been identified[2]. The City will seek grants to fund the City's share of transit and bikeway improvements.

[2] Since 2007, the City has collected $56.2 million in TDIF fees and has prepared $25.6 million fee credit agreements. These fees are reflected in the $945 million of the total cost allocated to new development in TDIF Program.

Table 2
Allocation of Costs of TDIF Program Improvements

Transportation Element	Cost Allocation			
	TDIF Program	Sacramento County[2]	Other Sources	Total
Roadways, Intersections, Interchanges, and Light Rail Grade Separations[1]	$773,974,732	$164,378,257	$119,166,679	$1,057,519,669
Traffic Signals and ITS	$23,822,747	$0	$5,099,253	$28,922,000
Transit	$77,406,000	$0	$60,819,000	$138,225,000
Bikeways	$33,489,904	$0	$44,599,096	$78,089,000
Subtotal	**$908,693,383**	$164,378,257	**$229,684,029**	**$1,302,755,669**
Program Contingency (4%)	$36,347,735	$0	$0	$36,347,735
Total	**$945,041,118**	$164,378,257	**$215,684,029**	**$1,339,103,404**

[1] Includes cost of phasing roadway segments
[2] County's share of improvements to roadways and intersections that are along City/County boundary

Source: DKS Associates, 2021

Estimated Fees

Fees are differentiated by the type of development and relative demands on the transportation system. In the allocation of costs, each development type is assigned a "dwelling unit equivalent" or "DUE" rate. DUE's measure how the trip-making characteristics of a land use type compares to a single-family residential unit. The estimated growth in development between the Base Year (2007) and 2055 represents 52,951 DUEs. Table 3 summarizes the estimated "cost per DUE" for the TDIF. The "cost per DUE" is the development fee for a single-family unit and fees for other land uses are calculated using DUE ratios.

Table 3
Estimated Cost per DUE – TDIF Program Update

Elements of TDIF Program	CIP Cost Allocated to New Development in TDIF Program
TDIF Program's Portion of CIP Improvements	$908,693,383
TDIF Program Contingency (4%)	$36,347,735
Total	**$945,041,118**
Fees Collected by City prior to January 2007	$33,143,248
Total Remaining Costs Funded by TDIF	**$911,897,870**
Total Growth in DUEs	52,951
Cost per DUE	**$17,221**
Administrative Cost (3.75%) per DUE	$646
Total Fee per DUE	**$17,867**

Source: DKS Associates, 2021

1.0 Introduction

1.1 Purpose of Transportation Development Impact Fee Program

The City of Rancho Cordova's Capital Improvement Program (CIP) includes improvements to the City's major roadway, transit, bicycle, and pedestrian facilities that are needed to accommodate projected future travel demand. The City has various methods for financing the transportation improvements in the CIP. One of the key methods is the Transportation Development Impact Fee (TDIF) Program.

The TDIF Program collects funds from new development in the City to finance the portion of the transportation improvements that result from the travel demand generated by new development in the City. Fees are differentiated by the type of development in relationship to their relative impacts on the transportation system. The intent of the fee program is to provide an equitable means of ensuring that future development contributes their fair share of transportation improvements so that the City's General Plan Circulation policies and quality of life can be maintained.

1.2 Purpose 2021 Update

When the City incorporated in July 2003, the City inherited fee programs established by Sacramento County. In 2005, the City established the costs of the roadways in the City's General Plan and prepared a Nexus Study that resulted in implementation of the City's first transportation impact fee program. In 2012 the City performed an update to the TDIF Program. A Nexus Study with updated fee rates was prepared and approved by the City Council in January 2013. During the remainder of 2013, the City worked with representatives of the building industry to explore various changes in the methodologies used to determine the fee rates. Those efforts resulted in a decision to update construction costs to 2013 levels to compensate for the Great Recession and to refine the definition of some improvement projects. That effort resulted in a reduction to the fee rates, which were approved by the City Council in December 2013. The current TDIF Program is based on the December 2013 Nexus Study.

The City periodically determines if a TDIF Program update is warranted. In 2020, the City determined that a comprehensive update should be performed based on the following factors:

- Changes in the City's projected growth rate and long-term residential and non-residential development estimates;
- The City completed a major update to its' travel demand model – the operative analysis tool for forecasting changes in the City's long-range transportation needs and its CIP;
- Need to update construction costs for infrastructure improvements;
- The need to refine project definitions and update assumptions on potential funding; and,
- Need to reflect legislative amendments to the Mitigation Fee Act requirements. This includes a Smart Growth Discount for residential developments that meet smart-growth criteria (Government Code 66005.1). A 15% fee discount based on reduced vehicle trip generation studies is offered to any residential development that meets the criteria.

The purpose of this Nexus Study report is to update the nexus (or reasonable relationship) between new development that occurs in the City and the need for additional transportation improvements and facilities to accommodate this new development. This report documents the methodology and assumptions used to update the 2013 Nexus Study for the TDIF Program.

2.0 Development Forecasts

The transportation needs and fee allocation for this update of the TDIF Program are based a 2007 "Base Year" (the same year as the current TDIF Program adopted in 2013) and a future development scenario that reflects full buildout of all residential uses within the City. These analysis years are described as follows:

- The City of Rancho Cordova has prepared updated estimates of development "capacities" for its adopted and planned specific plan areas, as well as likely residential capacities for its vacant or underutilized infill sites. Based on that analysis, the City has the potential for almost 40,000 additional dwelling units over "base year" (2007) levels.
- SACOG prepares forecasts of future development throughout the six-county SACOG region every four years. Their latest forecasts prepared in 2020 define growth between 2016 and 2040. Using SACOG's projected average annual growth rate in total housing units for the City of Rancho Cordova, the estimated year when the City would reach full buildout of its residential uses is 2055.
- For non-residential uses, SACOG's projected average annual growth rates for retail, office and industrial uses were used to estimate the total 2055 development levels for those types of uses. Based on SACOG's non-residential growth rate, the City will reach full buildout of its non-residential uses after 2055.

Appendix A details the assumptions and methodology used to prepare the City's development forecasts. Estimates of housing and jobs for the 2007 Base Year, 2055 and the growth over that 48-year period are provided in Table 4. As shown, housing units and employment in the City are expected to grow by 163 percent and 88 percent, respectfully. For non-residential uses, fees are based on the square footage of a building while the travel demand model uses jobs to determine the trips generated by non-residential uses. Therefore, both the estimated number of jobs and building square footage by type is shown in Table 4.

Table 4
Summary of Development Forecasts

Land use	Units	2007	2055	Growth 2007 to 2055
Residential				
Single-Family	Dwelling Unit	18,141	47,177	29,036
Multi-Family		6,308	17,230	10,922
Total		**24,449**	**64,407**	**39,958**
Non-Residential				
Retail	Jobs	7,603	19,695	12,092
Office		34,703	56,128	21,425
Industrial		7,541	17,799	10,258
Total		**49,847**	**93,622**	**43,775**
Retail	Square Feet	3,801,000	9,847,000	6,046,000
Office		9,479,000	15,906,000	6,427,000
Industrial		6,636,000	12,791,000	6,155,000
Total		**19,916,000**	**38,544,000**	**18,628,000**

Sources: DKS Associates, SACOG and City of Rancho Cordova

3.0 Transportation Improvements

The Circulation Element of the General Plan identifies the long-range transportation system that is needed to accommodate travel demand at full build out of the City. The CIP and TDIF Program are consistent with the General Plan Circulation Element. The City has been evaluating the timing of the transportation improvements in the General Plan. That effort has resulted in the following:

- **Core Backbone Improvements –** The City has identified the following core backbone infrastructure improvements as necessary to support the next 10,000 residential EDUs in the new development area east of Sunrise Blvd. The estimated costs of these improvements are approximately $180 million. A dedicated revenue stream in the form of a set aside from the development impact fee is intended to partially fund the core improvements.
    - Zinfandel Complex Improvements;
    - Sunrise Boulevard Widening from Kiefer Boulevard. to Jackson Highway including intersection improvements at Jackson Highway;
    - White Rock Road Widening from Sunrise Boulevard. to Rancho Cordova Parkway including intersection improvements;
    - Rancho Cordova Parkway Interchange and Rancho Cordova Parkway Extension to White Rock Road; and,
    - Douglas Road Widening from Sunrise Blvd. to Zinfandel Drive including bridge widening over the Folsom South Canal and completion of intersection improvements at Sunrise Boulevard.
- **CIP –** This report summarizes the transportation analyses that have defined the transportation improvements that are needed to accommodate projected growth by 2055, including and updated 2055 roadway needs analysis and the findings from the City's Master Plan efforts on the transit and bikeways elements of the transportation system.
- **Post-2055 Improvements –** This report does not evaluate transportation needs and cost at full buildout of all land uses in the City (i.e., non-residential uses will not reach development capacity by 2055) and therefore improvements that would be needed after 2055 are not reflected. Future updates to the City's TDIF Program will address this remaining increment of development growth including an updated deficiency assessment.

This section describes the transportation analysis that determined the improvement projects that would be included in the CIP as well as those that would be funded in the TDIF Program.

3.1 Existing LOS Deficiencies

Roadway Segments Deficiencies

An analysis of traffic demand in the 2007 Base Year (documented in the TDIF Program adopted in 2013) showed that nearly five miles of roadways in the City of Rancho Cordova operated at LOS E or F conditions.

The locations and volume-to-capacity ratio of roadways with "existing LOS deficiencies" are summarized below:

- Sunrise Boulevard – American River to Gold Country Boulevard (1.56)
- Sunrise Boulevard – Gold Country Boulevard to Coloma Road (1.54)
- Sunrise Boulevard – Coloma Road to Zinfandel Drive (1.53)
- Sunrise Boulevard – Zinfandel Drive to U.S. 50 Interchange (1.48)
- Sunrise Boulevard – U.S. 50 Interchange to Folsom Boulevard (0.96)
- Sunrise Boulevard –Folsom Boulevard to Sun Center Drive (1.06)
- Sunrise Boulevard – Douglas Road to Chrysanthy Boulevard (1.11)
- Sunrise Boulevard – Chrysanthy Boulevard to Kiefer Boulevard (1.00)
- Sunrise Boulevard – Kiefer Boulevard to SR-16 (0.92)

Since 2007, Sunrise Boulevard north of Kiefer Boulevard has been widened and thus no longer is an existing deficiency. The 2007 "Base Year" for the TDIF Program remains for this 2021 update of the TDIF Program.

Development that has occurred between 2007 and 2021 has contributed fees to help fund improvements – some of which have been constructed (such as the widening of Sunrise Boulevard north of Kiefer Boulevard). For CIP projects partially (or fully) built and/or funded by a different source these cost amounts have been subtracted from the total project cost (i.e., are not part of the fee calculations). Constructed projects remain on the TDIF CIP list to:

1. provide a complete accounting of TDIF funds and expenditures;
2. account for portions of the project that are partially the responsibility of the County to fund/implement (such as portions of Sunrise Boulevard);
3. account for unfunded portions of projects; and,
4. account for existing project credit or reimbursement agreements.

The General Plan calls for a maximum of six lanes on the City's busiest arterial roadways. Some of these roadways already have six lanes. Some two or four lane arterials could be widened under the CIP, but some roadway segments would operate at LOS E or F conditions in 2055 with the maximum of lanes allowed under the General Plan.

Intersection Deficiencies

Based on the analysis of traffic demand in the 2007 Base Year (documented in the TDIF Program adopted in 2013), there were five intersections shown to operate at LOS E or F conditions and are thus considered existing deficiencies as part of this analysis. These intersections are listed in Table 5.

Table 5
Existing Intersection Deficiencies

Project ID No.	North-South Street	East-West Street	2007 Base Level of Service	2007 Base Volume/Capacity
251	Sunrise Boulevard	Coloma Road	E	0.96
267.4	Mather Field Road	Folsom Boulevard	E	0.99
270	Sunrise Boulevard	Gold Country Blvd	F	1.02
273	Grant Line Road	Jackson Road	F	1.04
288	Sunrise Boulevard	Jackson Road	E	0.97

Source: DKS Associates, 2012

3.2 Travel Forecasts

To generate travel forecasts, the City applies a modified version of SACOG's SACSIM-19 Activity-Based Travel Model. The City modified SACSIM-19 to provide greater roadway and transit network detail and more refined traffic analysis zones (TAZs) within the City and adjacent surrounding areas. While the City's model is intended to focus on travel within the City, it covers the same area as SACSIM19 – the full six-county SACOG region. Thus, the City's model predicts how the City's development interacts with land uses region-wide and the entire regional transportation system.

The SACSIM-19 Activity-Based Travel Model gives the City of Rancho Cordova the capability to generate technical information pertinent to the understanding of travel behavior and transportation network performance within the City. This information is critical to the development, updating and monitoring of the City's transportation capital improvement program, analysis of specific transportation projects and programs, and General Plan land use and transportation strategies and policies. The City's travel model yields the future volume sets (i.e., roadway segment volumes and intersection turn movements) to inform operational analyses that determine whether a given road segment or intersection will operate acceptably in the future and the extent to which new development within the City limits will contribute to future infrastructure deficiencies.

The City's SACSIM-19 Activity-Based Travel Model reflects a baseline year of 2016 and a 2055 forecast horizon – the same planning horizon applied to the fee assessment. A planning horizon of 2055 is considered long enough to plan for long-term infrastructure needs, yet short enough to represent reasonably anticipated growth based on current land use policy. There are practical reasons for this length of horizon (i.e., implementing a transportation infrastructure project typically takes 4-15 years and regional agency travel demand models typically use a 20-30 forecast horizon pursuant to the federal metropolitan planning regulations). A key reason that transportation fee programs do not reflect planning horizons of 40 years or more is defensibility. If fees are not applied to advance projects listed in the program in a reasonable timeframe, the program CIP list could be considered too speculative and subject to legal challenge.

The 2055 land use assumptions present in the City's travel demand model is based on the following assumptions:

- Full Buildout of Residential Uses

- About 50% Buildout of Non-residential Uses (see Appendix A)
- SACOG's 2040 MTP/SCS Preferred Land Use assumptions for areas outside the City limits except in the following proposed development areas in Sacramento County adjacent to the City, where 2055 development estimates assumed:
  - Cordova Hills
  - Easton/Glenborough
  - Mather South
  - New Bridge

Based on the above land use assumptions, daily, AM and PM peak hour 2055 travel forecasts were developed. These peak hour forecasts account for future transit ridership associated with planned transit services in the City of Rancho Cordova and surrounding areas. This includes transit services partially funded by the Transit Benefit District.

3.3 Model Post Processing

Before "raw" model output can be considered suitable for operational determinations, post-processing adjustments must be performed. The recommended procedure is based on the National Cooperative Highway Research Program (NCHRP) Report 255, 1982. NCHRP-255 adjustments entail using model generated link-based growth (computed variation between base year and forecast year model link volumes) to adjust baseline traffic counts to reflect future conditions. These adjustments were performed for all daily roadway segment volumes and AM/PM peak hour intersection turn movements, respectively.

3.4 2055 Roadway Segment Capacity Needs

To determine the need for constructing or widening roadways to accommodate future development, a capacity threshold analysis was performed based on projected 2055 daily traffic volumes. As stated previously, these volumes account for the trip reduction benefit of planned transit services. The list of projects from the previous CIP and TDIF programs including additional projects identified as being necessary based on approved planned developments formed the basis for analysis. An iterative analysis was then performed to determine the need for additional roadway segment capacity relative to planned growth.

The roadway capacity needs analysis was guided by the level of service (LOS) policy in the Circulation Element of the General Plan, which calls for maintaining LOS D conditions on all roadways and intersections unless maintaining this standard would, in the City's judgment, be infeasible and/or conflict with the achievement of other goals. Assuming 85% of capacity (mid-point of LOS D) yields the following daily capacities expressed in vehicle per day (vpd) for roadway segment analysis:

- 6 Lane Threshold = 51,300 vpd
- 4 Lane Threshold = 30,600 vpd
- 2 Lane Threshold = 15,300 vpd

Typically, roadway widening is required if a given roadway segment has a projected volume-to-capacity (v/c) ratio of 0.85 or greater. However, the maximum number of lanes on a roadway segment should not exceed the number of lanes allowed in the General Plan "Roadway System and Sizing", which limits the

maximum number lanes on most arterial roadways to 6 lanes and limits Folsom Boulevard to 4 lanes. With those limits, the City recognizes that LOS D conditions may not be met on some portions of Sunrise Boulevard and Folsom Boulevard. Additionally, many new roadways planned to support new development would only require 2 lanes along their length but would require greater channelization capacity at their intersections. To maintain roadway lane continuity, particularly where intersection spacing is limited, these roadways were planned as 4 lane roadways.

Although much of the increase in traffic demand would result from growth within the City, some growth is attributed to "thru" vehicle trips that have neither end of the trip within the City. To determine whether the 2055 roadway improvements would still be needed with the growth in thru trips removed, the roadway segment analysis was performed in two phases. The first phase determined the ultimate roadway capacity needs. The second phase removed "thru" vehicle trips to determine the share of roadway improvements which should be attributed to the TDIF Program. As mentioned above, for any given roadway segment additional non-capacity related factors were also considered when determining facility sizing needs including existing policies; logical project limits; lane continuity; geometric and spacing characteristics at/between intersections (see Section 3.4).

Table 6 summarizes the roadway capacity improvements, forecasted average daily traffic (ADT), and level of service analysis including with thru trips removed. The roadway needs analysis identifies roadways that would need to be widened, extended, or created to accommodate future 2055 development growth and resulting travel demand relative to the City's General Plan LOS policy.

3.5 2055 Intersection Capacity Needs

The operational analysis used to determine the geometric needs at intersections (i.e., number of thru lanes and turn lanes), an LOS analysis was conducted for projected 2055 traffic demand during both the AM and PM peak commute hours on a typical weekday. The analysis was performed using the City's citywide Synchro network model. Intersection sizing needs to accommodate future growth was based on the City's LOS D threshold and HCM 6th Edition methodologies[3] as implemented in Synchro 10. The LOS analysis used in the TDIF analysis is based on average intersection delay for signals and all-way stop control intersections and the worst movement at two-way stop control intersections. Table 7 summarizes the breakdown of LOS thresholds from the HCM 6th Edition.

[3] Intersections along Grant Line Road fall under the jurisdiction of the Capitol SE Connector JPA whose policy requires LOS C conditions on all roadway segments and intersections.

Table 6: 2055 Roadway Lanes Needs Analysis

Fee ID	Roadway	From	To	Existing Volume	Existing Lanes	2055 Volume	2055 Lanes	2055 Volume Less Through Trips	Existing Geometrics		Fee Program Geometrics	
									Existing Service Deficiency	2055 Service Deficiency	2055 Service Deficiency	2055 Service Deficiency without Through Trips
1	Rio del Oro	Sunrise	Rancho Cordova	-	-	17,600	6	16,030	-	-	N	N
2		Rancho Cordova	Centennial	-	-	6,190	4	6,180	-	-	N	N
3		Centennial	Americanos	-	-	8,050	4	8,040	-	-	N	N
4		Americanos	White Rock	-	-	5,050	4	5,040	-	-	N	N
7		Easton	Folsom	-	-	14,330	4	13,390	-	-	N	N
8	Villagio	n/o Douglas	-	-	-	5,100	2	5,040	-	-	N	N
11		s/o White Rock	-	-	-	12,540	4	12,510	-	-	N	N
19	Easton / Eastern Valley Pkwy	Rancho Cordova	Rio del Oro	-	-	17,870	4	12,970	-	-	N	N
20		Rio del Oro	City Limits	-	-	29,980	4	16,810	-	-	N	N
24.1	Centennial	International	Rio del Oro	-	-	13,860	4	13,860	-	-	N	N
24.2		Rio del Oro	Villagio	-	-	12,800	4	12,800	-	-	N	N
24.3		Villagio	Americanos	-	-	8,520	4	8,520	-	-	N	N
25	Americanos	Kiefer	North Campus	-	-	3,280	4	3,280	-	-	N	N
25.1		North Campus	Chrysanthy	-	-	2,320	4	2,320	-	-	N	N
26		Chrysanthy	Douglas 103	-	-	5,670	4	5,670	-	-	N	N
27		Douglas	Centennial	-	-	4,150	4	4,150	-	-	N	N
28		Centennial	Villagio	-	-	3,610	4	3,610	-	-	N	N
29		Villagio	Rio del Oro	-	-	4,860	4	4,860	-	-	N	N
30		Rio del Oro	International	-	-	9,840	4	9,840	-	-	N	N
45	Chrysanthy	Sunrise	Rancho Cordova	4,770	4	10,030	4	9,820	N	N	N	N
45		Sunrise	Rancho Cordova	-	-	7,090	4	6,940	-	-	N	N
46		Rancho Cordova	Americanos	-	-	16,930	4	16,340	-	-	N	N
47		Americanos	Grant Line	-	-	14,370	4	13,680	-	-	N	N
54.1	Douglas	Zinfandel	City Limits	-	-	36,660	6	32,030	-	-	N	N
55		City Limits	Sunrise	11,320	2	44,990	6	38,740	N	Y	N	N
56		Sunrise	Villagio	6,710	5	35,260	6	30,260	N	Y	N	N
57		Villagio	Rancho Cordova	3,630	5	29,850	4	24,840	N	N	N	N
58		Rancho Cordova	Americanos	-	-	20,940	4	17,110	-	-	N	N
59		Americanos	Grant Line	3,660	2	22,300	4	16,900	N	Y	N	N
73	Femoyer	Mather	Peter McCuen	3,850	2	26,330	4	22,910	N	Y	N	N
93	Grant Line[1]	Jackson	Rancho Cordova	7,090	2	42,030	4	17,620	N	Y	Y	N
94		Rancho Cordova	Kiefer	7,090	2	42,030	4	12,260	N	Y	Y	N
95		Kiefer	Chrysanthy	7,090	2	42,030	4	12,370	N	Y	Y	N
96		Chrysanthy	Douglas	7,560	2	42,580	4	17,980	N	Y	Y	N
97		Douglas	City Limits	9,470	2	42,660	4	16,160	N	Y	Y	N
103	Old Placerville	Bradshaw	Routier	15,910	4	43,560	6	26,700	N	Y	N	N
104		Routier	Peter McCuen	15,180	4	44,280	6	28,840	N	Y	N	N
105	Peter McCuen	Old Placerville	Mather Field	-	-	20,080	4	19,700	-	-	N	N
105.1		Mather	Femoyer	-	-	14,240	4	13,970	-	-	N	N

[1] Grant Line Road falls under the jurisdiction of the Capitol SE Connector JPA whose policy requires LOS C conditions on all roadway segments.

Fee ID	Roadway	From	To	Existing Volume	Existing Lanes	2055 Volume	2055 Lanes	2055 Volume Less Through Trips	Existing Geometrics		Fee Program Geometrics	
									Existing Service Deficiency	2055 Service Deficiency	2055 Service Deficiency	2055 Service Deficiency without Through Trips
110	International	Kilgore	Sunrise	10,060	6	40,320	6	40,180	N	N	N	N
111		Sunrise	Rancho Cordova	-	-	40,070	6	40,010	-	-	N	N
112		Rancho Cordova	Centennial	-	-	33,980	4	33,890	-	-	Y	Y
113		Centennial	Americanos	-	-	12,960	4	12,890	-	-	N	N
114		Americanos	White Rock	-	-	12,540	4	12,470	-	-	N	N
124	Jackson	Sunrise	Grant Line	13,290	2	36,070	6	15,780	N	Y	N	N
126	Rancho Cordova	Grant Line	Kiefer	-	-	12,340	4	12,340	-	-	N	N
127		Kiefer	North Campus	-	-	10,060	4	10,000	-	-	N	N
127.1		North Campus	Chrysanthy	-	-	13,880	4	13,800	-	-	N	N
128		Chrysanthy	Douglas	-	-	28,190	4	27,630	-	-	N	N
129		Douglas	N Preserve Bdry	-	-	19,100	4	18,650	-	-	N	N
130		Villagio	Rio del Oro	-	-	26,060	4	25,600	-	-	N	N
131		Rio del Oro	International	-	-	42,520	6	40,390	-	-	N	N
132		International	White Rock	-	-	53,630	6	51,050	-	-	Y	N
133		White Rock	Easton	-	-	60,140	6	55,560	-	-	Y	Y
142	Kiefer	Sunrise	Rancho Cordova	4,510	2	19,500	4	19,400	N	Y	N	N
143		Rancho Cordova	Americanos	4,510	2	19,500	4	19,400	N	Y	N	N
143.1		Americanos	Grant Line	4,510	2	19,500	4	19,130	N	Y	N	N
147	Mather	Peter McCuen	Whitehead	4,130	2	19,470	4	18,110	N	Y	N	N
148		Whitehead	Bleckley	2,490	2	9,500	4	8,840	N	N	N	N
149		Femoyer	North Mather	-	-	28,840	4	24,490	-	-	N	N
173	Sun Center	Sunrise Gold Cir	Rancho Cordova	4,200	2	12,640	2	11,000	N	N	N	N
177	Sunrise	Jackson	Kiefer	17,490	2	31,790	6	29,780	Y	Y	N	N
178		Kiefer	Chrysanthy	20,770	5	40,270	6	37,830	N	Y	N	N
179		Chrysanthy	Douglas	29,360	5	51,010	6	48,240	N	Y	N	N
181		Rio del Oro	Fitzgerald	31,390	6	50,560	6	47,950	N	N	N	N
182		South of International	-	31,390	6	42,310	6	40,340	N	N	N	N
183		International	White Rock	36,540	6	58,330	6	55,340	N	Y	Y	Y
184		White Rock	Sun Center	37,810	6	57,420	6	54,560	N	Y	Y	Y
185		Sun Center	Folsom	52,930	6	67,450	6	64,270	Y	Y	Y	Y
186		Folsom	US 50	54,550	6	74,900	6	71,720	Y	Y	Y	Y
187		US 50	Zinfandel	83,020	6	104,270	6	87,380	Y	Y	Y	Y
188		Zinfandel	Coloma	78,390	6	96,830	6	80,820	Y	Y	Y	Y
189		Coloma	Gold Country	74,560	6	92,550	6	75,260	Y	Y	Y	Y
190		Gold Country	American River	82,570	6	97,720	6	70,020	Y	Y	Y	Y
194	White Rock	Kilgore	Sunrise	18,670	5	53,540	6	53,180	N	Y	Y	Y
195		Sunrise	Luyung	9,220	4	37,120	6	36,730	N	Y	N	N
196		Luyung	Rancho Cordova	3,920	2	43,080	6	42,630	N	Y	N	N
197		Rancho Cordova	International	-	-	22,480	6	20,930	-	-	N	N
198		International	Rio del Oro	-	-	25,670	6	24,160	-	-	N	N
199		Rio del Oro	Villagio	-	-	24,330	6	22,750	-	-	N	N
200		Villagio	City Limits	-	-	20,470	6	18,970	-	-	N	N
203	Zinfandel	Douglas	City Limits	10,850	2	54,460	6	45,210	N	Y	Y	N
204.1	North Campus	Rancho Cordova	Americanos	-	-	4,040	4	4,040	-	-	N	N

Fee ID	Roadway	Existing Volume	Existing Lanes	2055 Volume	2055 Lanes	2055 Volume Less Through Trips	Existing Geometrics		Fee Program Geometrics	
							Existing Service Deficiency	2055 Service Deficiency	2055 Service Deficiency	2055 Service Deficiency without Through Trips
-	Bradshaw Road north of Lincoln Village Drive	42,790	6	56,380	6	-	N	Y	Y	-
-	Bradshaw Road south of Business Park Drive	30,240	6	39,460	6	-	N	N	N	-
-	Coloma Road north of Folsom Boulevard	16,550	4	19,800	4	-	N	N	N	-
-	Coloma Road west of Sunrise Boulevard	20,060	4	23,320	4	-	N	N	N	-
-	Jackson Road west of Sunrise Boulevard	10,110	2	35,750	4	-	N	Y	Y	-
-	Kilgore Road north of White Rock Road	5,490	2	12,380	2	-	N	N	N	-
-	Kilgore Road south of Folsom Boulevard	8,650	2	10,870	2	-	N	N	N	-
-	Kilgore Road south of White Rock Road	4,150	4	26,010	4	25,980	N	N	N	N
-	Old Placerville Road south of Rockingham Road	14,090	4	21,070	4	-	N	N	N	-
-	Rockingham Road west of Mather Field Road	20,300	4	28,100	4	-	N	N	N	-
-	Routier Road north of Old Placerville Road	7,890	2	8,430	2	-	N	N	N	-
-	Routier Road south of Folsom Boulevard	7,930	2	11,470	4	-	N	N	N	-
-	White Rock Road east of Zinfandel Drive	14,850	6	34,920	6	-	N	N	N	-
-	White Rock Road west of Zinfandel Drive	11,230	2	14,580	2	-	N	N	N	-
-	Folsom Boulevard east of Bradshaw Road	17,680	4	22,800	4	-	N	N	N	-
-	Folsom Boulevard east of Mather Field Road	25,220	4	31,570	4	-	N	Y	Y	-
-	Folsom Boulevard east of Mercantile Drive	15,190	4	17,440	4	-	N	N	N	-
-	Folsom Boulevard east of Sunrise Boulevard	13,530	4	17,440	4	-	N	N	N	-
-	Folsom Boulevard east of Zinfandel Drive	13,880	4	17,180	4	-	N	N	N	-
-	Folsom Boulevard west of Mather Field Road	19,650	4	26,520	4	-	N	N	N	-
-	Folsom Boulevard west of Sunrise Boulevard	15,510	4	24,760	4	-	N	N	N	-
-	Folsom Boulevard west of Zinfandel Drive	18,930	4	24,570	4	-	N	N	N	-
-	International Drive east of Mather Field Road	18,410	6	28,130	6	-	N	N	N	-
-	International Drive east of Zinfandel Drive	12,360	6	36,980	6	-	N	N	N	-
-	International Drive west of Zinfandel Drive	15,960	6	43,740	6	-	N	N	N	-
-	Mather Field Road north of Mill Station Road	22,200	4	30,400	6	-	N	N	N	-
-	Mather Field Road north of Peter McCuen Boulevard	13,600	4	15,010	4	-	N	N	N	-
-	Mather Field Road north of Rockingham Drive	40,870	6	64,430	6	-	N	Y	Y	-
-	Zinfandel Drive north of Folsom Boulevard	7,030	2	7,290	4	-	N	N	N	-
-	Zinfandel Drive north of White Rock Road	47,440	6	77,770	6	-	N	Y	Y	-
-	Zinfandel Drive south of Folsom Boulevard	24,990	4	30,590	6	-	N	N	N	-
-	Zinfandel Drive south of International Drive	17,470	6	43,830	6	-	N	N	N	-
-	Zinfandel Drive south of White Rock Road	28,700	6	45,440	6	-	N	N	N	-

Source: DKS Associates, 2021

Table 7: Highway Capacity Manual Level of Service Threshold

Level of Service (LOS)	Total Delay Per Vehicle	
	Signalized Intersections	Unsignalized Intersections
A	≤ 10	≤ 10
B	> 10 and ≤ 20	> 10 and ≤ 15
C	> 20 and ≤ 35	> 15 and ≤ 25
D	> 35 and ≤ 55	> 25 and ≤ 35
E	> 55 and ≤ 80	> 35 and ≤ 50
F	> 80	> 50

Source: Highway Capacity Manual 6th Edition, 2016

An initial number of lanes at most intersections was determined by the required number of lanes on the adjacent roadway segments (determined as part of the analysis described in Section 3.3). New two-lane roads were assumed to have a single left and a single right turn lane at an intersection approach while new four and six lane roads were assumed to have a double left and a single right turn lane at an intersection approach. After the initial analysis, the number of through and turn lanes was adjusted based on capacity needs identified through the initial analysis.

Like roadway segments, the intersection analysis was performed in two phases, the second phase with thru trips removed. If the 2055 intersection improvement was still needed with the growth in thru trips removed, then the TDIF Program would be required to pay for the entire 2055 improvement. However, if a reduced intersection improvement would operate at acceptable levels, then the TDIF Program would include only the cost for the reduced improvement. Conversely, for intersections reflecting the maximum number of thru-lanes allowed in the General Plan but are shown to operate deficiently under 2055 conditions, inclusion of additional improvements into the TDIF Program (i.e., expensive grade separations) was deemed unwarranted if estimated total delay was shown not to be excessive (.e., greater than 120 seconds). This check was not triggered by any City intersection.

The City recognizes that future detailed operational analyses may indicate that either less or more turn lanes may be needed at a given intersection to achieve the City's LOS threshold (with thru trips removed). Figure 1 shows the CIP Project Map that shows the traffic lanes in the 2055 CIP along with the Project Numbers used in Table 6 and Table 8 as well as project cost estimation (see Appendix B).

3.6 Special Considerations

Zinfandel Complex

The Zinfandel Complex was not included as part of the fee program analysis as it includes significant growth with limited availability of right of way for improvements. The TDIF study found that there is a need for improvements along Zinfandel Boulevard, but these improvements are above and beyond what is considered in the City's General Plan and beyond the planning horizon of the fee program.

Sunrise Complex

The Sunrise Boulevard Complex is one of the most heavily traveled corridors in the region and will continue to see growth in regional volumes going forward. The TDIF program includes improvements south of

Kiefer Boulevard to widen to six lanes, but all other segments within the City have already been widened to a six-lane cross section. To mitigate the needs of future demand on Sunrise Boulevard will require significant improvements beyond what is considered in the City's General Plan. In addition, any capacity increases beyond providing six thru-lanes would need to involve Sacramento County given that the City and County of Sacramento share Sunrise Boulevard between Coloma and the river. Such considerations are beyond the planning horizon of the fee program.

In lieu of adding thru-lanes, the City has decided to include the cost of the "continuous right-turn lanes" on Sunrise Boulevard for all segments north of US 50 in the TDIF Program. These improvements will help to reduce congestion caused by vehicles turning right on and off Sunrise Boulevard. However, no additional through lanes would be added to its major intersections and thus they will continue to operate at LOS F conditions. Likewise, the City does not assume capacity improvements to the Sunrise Boulevard/US 50 interchange since they would have little impact without substantial improvements to Sunrise Boulevard north of US 50.

Folsom Boulevard

The City General Plan downgraded Folsom Boulevard from 6-lanes to a 4-lane arterial. To minimize the impact and improve levels of service, the General Plan identifies aggressive operational improvements on Folsom Boulevard. The CIP includes light rail transit grade separations at three locations along Folsom Boulevard (one of which is shared with the County). These grade separations would not benefit light rail trains, since crossing gates allow trains to travel across those roadways without delay but would help to mitigate traffic congestion along Folsom Boulevard.

3.7 Freeway Interchanges

The CIP includes the following improvements to freeway interchanges:

- Rancho Cordova Parkway/US 50 – Numerous studies have shown the clear need to construct a new interchange between Sunrise Boulevard and Hazel Avenue on US 50 to accommodate future development in the City. Without that interchange, Sunrise Boulevard south of US 50 would have excessive delays. A new interchange, coupled with the planned construction of Rancho Cordova Parkway south of US 50, would mitigate that impact.
- Mather Field Road/US 50 – The projected 2055 traffic demand shows that the eastbound ramp intersection would operate at an unacceptable level. A focused widening at the eastbound ramp intersection would improve this deficiency to an acceptable LOS in 2055. However, any capacity improvements to the interchange would need to go through a Caltrans process to get and would likely include bringing some elements up to standard, including widening the freeway overpass to provide a bike lane and sidewalk on the west side over the freeway.
- Zinfandel Drive – The need for improvements to this interchange is discussed in Section 3.2.

The City's CIP is consistent with the Sacramento County Transportation Development Fee Program which assumes no improvements to the Bradshaw Road/US 50 interchange.

Table 8: 2055 TDIF Intersection Analysis

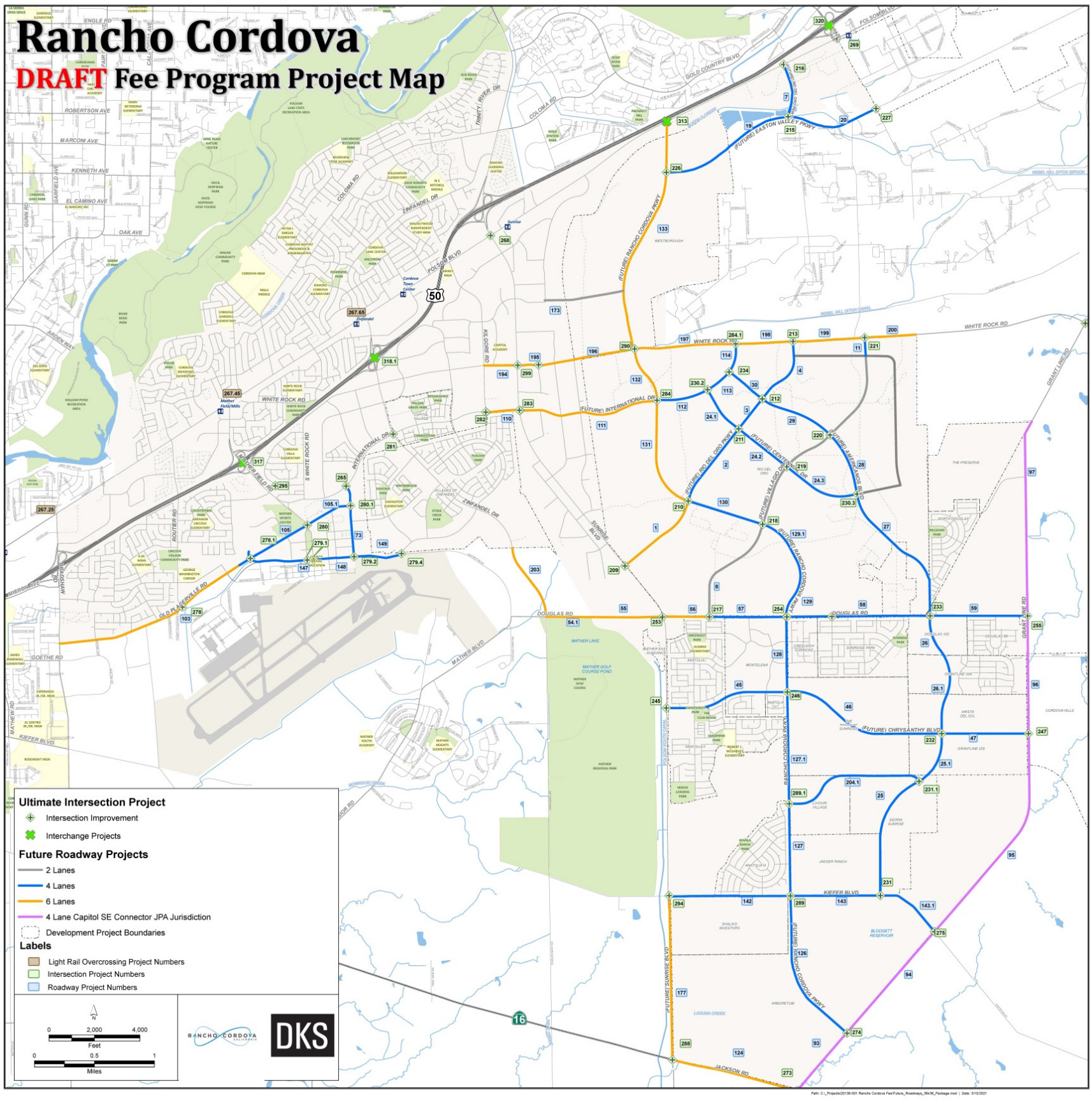
Fee Prog. Int. #	Intersection	Existing					2055 - No Build					2055 - Fee Program CIP					2055 - Fee Program CIP without Regional Thru Trips				
		Control	AM		PM		Control	AM		PM		Control	AM		PM		Control	AM		PM	
			Delay	LOS	Delay	LOS		Delay	LOS	Delay	LOS		Delay	LOS	Delay	LOS		Delay	LOS	Delay	LOS
209	Sunrise Blvd & Rio Del Oro Pkwy	-	-	-	-	-	-	-	-	-	-	Signal	12.7	B	9.8	A	Signal	12.1	B	9.7	A
210	Rio Del Oro Pkwy & Rancho Cordova Pkwy	-	-	-	-	-	-	-	-	-	-	Signal	19.2	B	17.1	B	Signal	18.9	B	17	B
211	Rio Del Oro Pkwy & Centennial Dr	-	-	-	-	-	-	-	-	-	-	Signal	20	B	18.8	B	Signal	20	B	18.8	B
212	Rio Del Oro Pkwy & Americanos Blvd	-	-	-	-	-	-	-	-	-	-	Signal	14.2	B	12.1	B	Signal	14.2	B	12.1	B
213	Rio Del Oro Pkwy & White Rock Rd	-	-	-	-	-	-	-	-	-	-	Signal	7.4	A	8.7	A	Signal	7.3	A	8.6	A
215	Easton Valley Pkwy & Rio Del Oro Pkwy	-	-	-	-	-	-	-	-	-	-	Signal	22.3	C	23.8	C	Signal	19.9	B	19.9	B
216	Rio Del Oro Pkwy & Folsom Blvd	-	-	-	-	-	-	-	-	-	-	Signal	14.1	B	13.7	B	Signal	14.1	B	13.7	B
217	Douglas Rd & Villagio Dr	-	-	-	-	-	-	-	-	-	-	Signal	38.1	D	20.5	C	Signal	22.5	C	18.1	B
218	Villagio Dr & Rancho Cordova Pkwy	-	-	-	-	-	-	-	-	-	-	Signal	14	B	12.5	B	Signal	13.9	B	12.5	B
219	Villagio Dr & Centennial Dr	-	-	-	-	-	-	-	-	-	-	Signal	19.3	B	17.7	B	Signal	19.3	B	17.7	B
220	Villagio Dr & Americanos Blvd	-	-	-	-	-	-	-	-	-	-	Signal	14.8	B	14.9	B	Signal	14.8	B	14.9	B
221	Villagio Dr & White Rock Rd	-	-	-	-	-	-	-	-	-	-	Signal	9.2	A	9.7	A	Signal	9.1	A	9.7	A
226	Rancho Cordova Pkwy & Easton Valley Pkwy	-	-	-	-	-	-	-	-	-	-	Signal	14.4	B	23.9	C	Signal	12	B	18.5	B
227	Easton Valley Pkwy & Hazel Ave	-	-	-	-	-	-	-	-	-	-	Signal	42.2	D	30.4	C	Signal	42.2	D	30.4	C
230.2	Centennial Dr & International Dr	-	-	-	-	-	-	-	-	-	-	Signal	13.8	B	16.8	B	Signal	13.8	B	16.8	B
230.3	Americanos Blvd Centennial Dr	-	-	-	-	-	-	-	-	-	-	Signal	20.6	C	20.7	C	Signal	20.6	C	20.7	C
231	Kiefer Blvd & Americanos Blvd	-	-	-	-	-	-	-	-	-	-	Signal	12.7	B	14.5	B	Signal	12.7	B	14.5	B
231.1	Americanos Blvd & N Campus Dr	-	-	-	-	-	-	-	-	-	-	Signal	11.7	B	8.8	A	Signal	11.7	B	8.8	A
232	Americanos Blvd & Chrysanthy Blvd	-	-	-	-	-	-	-	-	-	-	Signal	22.5	C	24.7	C	Signal	22.4	C	24.7	C
233	Americanos Blvd & Douglas Rd	-	-	-	-	-	-	-	-	-	-	Signal	14.9	B	13.1	B	Signal	14.7	B	13	B
234	International Dr & Americanos Blvd	-	-	-	-	-	-	-	-	-	-	Signal	11.8	B	15.6	B	Signal	11.8	B	15.6	B
245	Sunrise Blvd & Chrysanthy Blvd	Signal	11	B	10.8	B	Signal	35.1	D	14.9	B	Signal	18.9	B	8.6	A	Signal	16.4	B	8.3	A
246	Rancho Cordova Pkwy & Chrysanthy Blvd	-	-	-	-	-	-	-	-	-	-	Signal	33.6	C	15	B	Signal	33.5	C	15	B
247	Grant Line Rd & Chrysanthy Blvd	-	-	-	-	-	-	-	-	-	-	Signal	15.8	B	6.8	A	Signal	21	C	7.1	A
253	Sunrise Blvd & Douglas Rd	Signal	24.2	C	41.1	D	Signal	***218.2***	***F***	***263.5***	***F***	Signal	***74.3***	***E***	***79.5***	***E***	Signal	***62.9***	***E***	***72.8***	***E***
254	Rancho Cordova Pkwy & Douglas Rd	-	-	-	-	-	-	-	-	-	-	Signal	***69.9***	***E***	27.7	C	Signal	***64.1***	***E***	26.2	C
255	Grant Line Rd & Douglas Rd	AWSC	32.5	D	***46.6***	***E***	AWSC	***1272***	***F***	***1002.6***	***F***	Signal	16.5	B	29.8	C	Signal	9.6	A	12.7	B
265	Femoyer St & International Dr	Signal	16.9	B	18.3	B	Signal	***601.7***	***F***	***526.3***	***F***	Signal	36.9	D	36.6	D	Signal	36.9	D	36.6	D
269	Hazel Ave & Folsom Blvd	-	-	-	-	-	-	-	-	-	-	Signal	15.4	B	14.9	B	Signal	15.4	B	14.9	B
273	Grant Line Rd & Jackson Rd	Signal	***104.2***	***F***	***101.7***	***F***	Signal	***1278.1***	***F***	***796.1***	***F***	Signal	35.5	D	42.4	D	Signal	22.5	C	23.1	C
274	Grant Line Rd & Rancho Cordova Pkwy	-	-	-	-	-	-	-	-	-	-	Signal	20.3	C	12.2	B	Signal	10.8	B	9.4	A
275	Grant Line Rd & Kiefer Blvd	AWSC	14.5	B	17.4	C	AWSC	***800.3***	***F***	***621.9***	***F***	Signal	17.1	B	18.5	B	Signal	14.7	B	14	B
278.1	Old Placerville & Peter A McCuen Blvd	-	-	-	-	-	-	-	-	-	-	Signal	***81.5***	***F***	***58.5***	***E***	Signal	***81.5***	***F***	***58.5***	***E***
279.1	Von Karman St & Mather Blvd	-	-	-	-	-	-	-	-	-	-	AWSC	9.4	A	8.8	A	AWSC	8.9	A	8.5	A
279.1	Whitehead St & Mather Blvd	-	-	-	-	-	-	-	-	-	-	AWSC	10.6	B	11	B	AWSC	10.1	B	10.5	B
279.2	Femoyer St & Mather Blvd	AWSC	***37.3***	***E***	14.2	B	AWSC	***575.1***	***F***	***243.5***	***F***	Signal	16.4	B	18.2	B	Signal	15.9	B	18	B

Fee Prog. Int. #	Intersection	Existing (2016)					2055 - No Build					2055 - Fee Program CIP					2055 - Fee Program CIP without Regional Thru Trips				
		Control	AM		PM		Control	AM		PM		Control	AM		PM		Control	AM		PM	
			Delay	LOS	Delay	LOS		Delay	LOS	Delay	LOS		Delay	LOS	Delay	LOS		Delay	LOS	Delay	LOS
280.1	Femoyer St & Peter A McCuen Blvd	-	-	-	-	-	-	-	-	-	-	Signal	14.4	B	10.5	B	Signal	14	B	10.4	B
282	Kilgore Rd & International Dr	Signal	12	B	14.4	B	Signal	***58.9***	***E***	33	C	Signal	19.4	B	21.3	C	Signal	19.4	B	21.3	C
283	Sunrise Blvd & International Dr/Monier Cir	Signal	17.9	B	26.4	C	Signal	***403.7***	***F***	***379.7***	***F***	Signal	***65.8***	***E***	***57.6***	***E***	Signal	***61.5***	***E***	54.4	D
284	Rancho Cordova Pkwy & International Dr	-	-	-	-	-	-	-	-	-	-	Signal	52.7	D	28.6	C	Signal	52.7	D	28.6	C
284.1	International Dr & White Rock Rd	-	-	-	-	-	-	-	-	-	-	Signal	10.9	B	11.2	B	Signal	10.8	B	10.9	B
288	Sunrise Blvd & Jackson Rd	Signal	***57.7***	***E***	30.4	C	Signal	***345.2***	***F***	***260.1***	***F***	Signal	32.3	C	27.4	C	Signal	23	C	21	C
289	Rancho Cordova Pkwy & Kiefer Blvd	-	-	-	-	-	-	-	-	-	-	Signal	23.3	C	22	C	Signal	23.3	C	22	C
289.1	Rancho Cordova Pkwy & N Campus Dr	-	-	-	-	-	-	-	-	-	-	Signal	7.1	A	4.8	A	Signal	7.1	A	4.8	A
290	Rancho Cordova Pkwy & White Rock Rd	-	-	-	-	-	-	-	-	-	-	Signal	40	D	30.6	C	Signal	37.4	D	30.2	C
294	Sunrise Blvd & Kiefer Blvd	Signal	22.9	C	15.2	B	Signal	***110.6***	***F***	40.6	D	Signal	28.3	C	21.3	C	Signal	27.5	C	21.1	C
295	Mather Field Rd & Rockingham Dr	Signal	50.4	D	***59.8***	***E***	Signal	***59***	***E***	***104.4***	***F***	Signal	39.7	D	***56.4***	***E***	Signal	39.7	D	***56.4***	***E***
299	Sunrise Blvd & White Rock Rd	Signal	32.4	C	42	D	Signal	***111.2***	***F***	***167.4***	***F***	Signal	***60.9***	***E***	***73.9***	***E***	Signal	***58.2***	***E***	***71.4***	***E***

[1] Grant Line Road falls under the jurisdiction of the Capitol SE Connector JPA whose policy requires LOS C conditions on all intersections.

Source: DKS Associates, 2021

Figure 1: CIP Roadway Sizing and Project Map



3.8 Transit Facilities

Transit improvements identified in the Capital Improvement Program are directly tied to recommendations from the following:

- City of Rancho Cordova Transit Master Plan, approved by City Council in 2006
- City of Rancho Cordova Mobility Master Plan, approved by City Council in 2019 (formally called the Transit Master Plan)

From those plans, the City has identified the following transit improvements to be included in the CIP for implementation by 2055:

- The Sunrise/Citrus Road Transit Corridor between the Sunrise RT light rail station and the American River connecting to an exclusive lane on the Sunrise Bridge over the River.
- Bus transit stations – an estimated 15 transit stations located in roadway medians
- Mobility Hubs/Regional Transit Centers – three centers
- A Transit Maintenance Facility
- Bus shuttle vehicles/autonomous vehicles – 26 vehicles
- Enhanced bus stops – includes lighting, benches, shelters, etc., at an estimated 96 locations
- ITS – including changeable message signs, DSRC and signal priority at key locations
- The Streetcar Starter Project - a 3.0-mile streetcar loop thorough the downtown area along a portion of the ultimate 18-mile Signature Route.
- Two new light rail stations on SacRT's Gold Line at Horn Road and Mine Shaft
- Light rail station upgrades on SacRT's Gold Line at four stations:
  - Mather Field/Mills
  - Zinfandel Drive
  - Cordova Town Center
  - Sunrise Boulevard

The CIP and the TDIF Program include capital costs for transit improvements but not cost for operations and maintenance (O&M). Funding transit O&M costs for new services must come from other sources and continues to be a considerable challenge.

3.9 Bikeways and Walkways

In 2016, the City Council approved the update to the City's Bicycle Master Plan to guide the requirements for bikeway facilities. The City has identified the following elements of its bikeway system to include in its CIP by 2055 and thus for partial funding by the TDIF Program:

- The Mather Heritage Trail
- The Rod Beaudry–Routier Road Bikeway
- The Anatolia Preserve Bike Trail

- The Stone Creek Trail Pedestrian Signals at Kilgore and Zinfandel
- The Douglas Road Bike and Pedestrian connection to Folsom South Canal
- Class I Bike Trail Connections:
  - Rio del Oro Trail (East Boundary to Grant Line)
  - Rio del Oro Trail (West Boundary to Folsom South Canal)
  - Aerojet Spur Trail (Folsom South Canal to Citrus Road Trail)
  - Sunrise Blvd. Trail (Folsom South Canal to Sunrise Station)
  - Sunrise Station to Citrus Road Trail
- Class II Bike Trail System

The City's bikeway "vision plan" has identified 53 locations where the Class I trail system should have grade separations where trails would go over or under major roadways or canals. Of those locations three were identified to be funded by Sacramento County. Of the remaining 49 locations, the City has identified 27 locations anticipated to be built by 2055 and therefore should be included in the CIP.

4.0 Improvement Costs

4.1 Roadway Improvements

Capital costs for roadway segment, intersection, and interchange projects in the TDIF Program are shown in Appendix B and summarized in Table 8. Roadway improvement costs reflect full project costs (i.e., costs associated with phasing and landscaping are reflected but administered separately). Roadway cost estimates were developed based on updated standard unit costs prepared by Wood Rogers. The methodology used to prepare these unit costs is described in Appendix C.

New roadway segments that will require four or six travel lanes by 2055 are assumed to be phased with two or four lanes constructed initially. Likewise, some existing two-lane roadway segments that will require six lanes by 2055 were assumed to be phased with an initial widening to four lanes.

Some individual project costs for improvements that have already been constructed were provided by City staff. The costs shown herein are only those considered for inclusion in the TDIF Program and do not include roadway and intersection frontage improvements considered to be the obligation of the adjacent landowner. Costs of completed projects were not escalated.

Table 8
Summary of Roadway Improvements

Improvement Type	Description	Cost
Roadway segments	New roadway segments or widening of existing segments	$535,382,802
Phasing of roadway segments	Additional cost for expected phasing of new segment improvements	$29,948,000
Intersections	New intersections or widening of existing intersections	$150,441,867
Light rail grade separations	Intended to improve LOS at adjacent intersections on Folsom Boulevard	$78,000,000
Interchange improvements		$263,747,000
	Total	**$1,057,519,669**

Sources: Wood Rodgers and City of Rancho Cordova

4.2 Transit Improvements

The costs for transit improvements in the CIP are shown in Appendix B and summarized in Table 9. The costs shown are for capital improvements related to the City's planned transit system and do not include cost for transit operations and maintenance. HDR originally prepared cost estimates for the streetcar vehicles, streetcar track work and the transit maintenance facility as part of the City's 2006 Transit Master Plan. These cost estimates were updated in 2019 as part of the update to the Transit Master Plan, now called the Mobility Master Plan. URS right-of-way unit costs were used for transit station and maintenance facility lands. Costs for bus shuttles, light rail stations, and light rail station upgrades, are based on consultation with Sacramento Regional Transit and other local service providers.

Table 9
Summary of Transit Improvement Costs

Project ID No	Facility	Description	Cost
304	City Transit System	Sunrise/Citrus Road Transit Corridor, transit stations, mobility hubs/regional transit centers, transit maintenance facility, bus shuttle vehicles and ITS	$89,864,000
305	Streetcar Starter Project	Streetcar vehicles and track work	$29,000,000
306	Light Rail Stations	Light Rail station Upgrades New Light Rail Stations	$19,360,000
		Total	**$138,225,000**

Source: City of Rancho Cordova

4.3 Bikeway Improvements

The bikeway system costs are based on the Rancho Cordova 2016 Bicycle Master Plan. Table 10 provides costs for bikeway improvements.

Table 10
Summary of Bikeway Improvement Costs

Project ID No	Facility	Description	Cost
307	Bike trail grade separations	27 priority locations on the Class I bike trail system for crossings over or under roadways and canals	$62,369,000
308	Bike Trails	Planned new trails east of Sunrise Boulevard and infill trails and trail gaps west of Sunrise Boulevard	$15,720,000
		Total	**$78,089,000**

Source: City of Rancho Cordova

5.0 Basis for Allocating Improvement Costs

The basis for allocating the cost of transportation improvements for the TDIF program update is summarized in Table 11 and is discussed in the following sections.

5.1 Roadway Capacity Improvements

The improvements included in the TDIF Program Update were identified to meet the City's LOS policy under 2055 travel demand levels after "thru trips" (those with neither trip end within the City) were subtracted from the traffic demand. Roadway capacity improvements were limited by the maximum number of lanes allowed under the General Plan.

Appendix B lists each of the roadway and intersections improvements that would be fully or partially funded by the TDIF Program and shows: 1) the project description and costs of the CIP improvements; 2) funding from sources other than the TDIF Program; and, 3) the cost allocated to the TDIF Program.

For a roadway that operated at LOS D or better conditions in the Base Year (2007) but would operate at LOS E or F conditions under "2055 traffic demand without thru trips", the entire cost of the capacity improvement was allocated to the TDIF Program. The cost of the capacity improvement allocated to the TDIF does not include the following:

- Roadway frontage improvements (i.e., curb, bike lane, curb and gutter plus sidewalk) where development is expected to occur; and,
- Portion of cross-section on roadways along jurisdictional boundaries that was assumed to be improved by Sacramento County.

An assumed 30% of the cost of improvements along Grant Line Road is assumed to come from Measure A funding and the remainder would be split with Sacramento County.

Existing Deficiencies

For existing deficiencies (roadways that operated at LOS E or F in the Base Year), the cost of the improvement that is allocated to the TDIF Program is equal to the percent of total cost that is needed to return the roadway to existing congestion levels. For a roadway segment, this allocation is equal to the percentage of the total change in volume/capacity (v/c) ratio (due to the improvement) that is needed to return the v/c ratio to current levels. For example, the v/c ratio of a two-lane roadway currently equals 0.94 (LOS E conditions) and its v/c ratio under 2055 traffic demand is estimated at 1.24 (LOS F conditions) without any improvements and at 0.62 if the roadway is widened to four lanes. The cost allocated to the TDIF program for this example is calculated as follows:

$(1.24 – 0.94) / (1.24 – 0.62) = 48\%$.

Tables 12A and 12B summarizes how the costs of the 2055 improvements on roadway and intersections that are existing deficiencies were allocated to new development in the TDIF Program. As described, only one of the existing deficiencies requires a fair share allocation other than 0% or 100%, Sunrise Boulevard from Kiefer Boulevard to Jackson Road (with an 92% fair share based on the 2013 TDIF Program). All other 2007 existing deficiencies either cannot be mitigated; no longer have an identified improvement; have already been improved; are funded with alternative (non-TDIF fee) sources; or are TDIF funded at 100%.

Table 11
Basis of Cost Allocation – TDIF Program Update

Improvement Type	Facility Type	Basis for Allocating Cost to TDIF Program[1]
Capacity Improvements on roadways and intersections	Roadway that operated at LOS D or better conditions in 2007 and would operate at LOS E or F conditions in 2055	Full implementation cost
	Existing Deficiencies - Roadway that operated at LOS E or F conditions in 2007 and would operate at LOS E or F conditions in 2055	Cost that is needed to bring roadway to existing congestion level based on: Percentage of the total change in volume/capacity (v/c) ratio due to the improvement that is needed to return the v/c ratio to current levels
	US 50 interchanges and LRT grade separations	See discussion below
Transit Improvements	Portion of Transit Master Plan included in TDIF Program	Costs are spilt between existing and new development based on: 2007 to 2055 growth in dwelling unit equivalents (DUEs) in the City as a percent of total 2055 DUEs
Bikeway Improvements	Bike trails as well as bikeway grade separations in City's Infill Area[2] that are included in TDIF Program	
	Bikeway grade separations in the City's Growth Area[2] that are included in TDIF Program	Full implementation cost

[1] The basis describes the allocation of project cost to TDIF Program after any "other funding" (i.e., grants, Sacramento County's share, etc.) has been subtracted from the total improvement cost.
[2] Map depicting the City's Infill Area and Growth Area is provided in Section 6.3 of this report

Source: DKS Associates, 2021

Freeway Interchanges

The CIP identifies one new freeway interchange on US 50 and improvements to two interchanges. The Rancho Cordova Parkway/US 50 interchange has been identified as a key improvement needed to accommodate future development in the City. This new interchange would not be constructed if not for planned new development. Thus, the full cost of this improvement is included in the TDIF Program.

At Mather Field Road/US 50 interchange, the intersections of the eastbound and westbound freeway ramps with Mather Field Road operated at an acceptable LOS in the Base Year, but the eastbound ramp intersection would have an unacceptable LOS in 2055. The full cost of roadway improvements was allocated to the TDIF, but the TDIF would only fund a portion of the cost of providing a bike lane and sidewalk on the west side over the freeway based on the allocation described in Section 5.3.

Table 12 A
Cost Allocation for Roadway Segments with Base Year Deficiencies

Roadway	Project ID No.	Segment	2007 LOS	2007 V/C	Reduction in 2055 Fees Needed	Reason
Sunrise Boulevard	190	American River to Gold Country Boulevard	F	1.56	No	Full Mitigation is not feasible and major improvements justify regional funding. The projects in CIP (continuous right-turn lanes) are consistent with (and split 50/50 with) Sacramento County and would not improve LOS more than the percent traffic increase due to City growth
	189	Gold Country Boulevard to Coloma Road	F	1.54		
	188	Coloma Road to Zinfandel Drive	F	1.53		
	187	Zinfandel Drive to U.S. 50 Interchange	F	1.48		
		U.S. 50 Interchange to Folsom Boulevard	E	0.96	No	No segment widening projects in CIP
		Folsom Boulevard to Sun Center Drive	F	1.06	No	2007 LOS based on 2 lanes and segments have since been widened to 5 lanes with 6th lane to be funded by Sacramento County
	179	Douglas Road to Chrysanthy Boulevard	F	1.11		
	178	Chrysanthy Boulevard to Kiefer Boulevard	F	1.00		
	177	Kiefer Boulevard to Jackson Road	E	0.92	8%	TDIF funds four CIP lanes with adjacent development and Sacramento County providing 5th and 6th lanes. The 2013 Nexus Study allocated 92% to TDIF.

Table 12 B
Cost Allocation for Intersections with Base Year Deficiencies

Project ID No.	North-South Street	East-West Street	2007 LOS	2007 V/C	Reduction in 2055 Fees Needed	Reason
251	Sunrise Boulevard	Coloma Road	E	0.96	No	See reasons for Projects 187-190 above
267.4	Mather Field Road	Folsom Boulevard	E	0.99	No	LRT grade separation would not mitigate LOS and only 50% of cost in TDIF program
270	Sunrise Boulevard	Gold Country Blvd	F	1.02	No	See reasons for Projects 187-190 above
273	Grant Line Road	Jackson Road	F	1.04	No	30% Measure A and 75% of remainder funded by Sacramento County - TDIF funds only 17.5% of cost (less than City growth)
288	Sunrise Boulevard	Jackson Road	E	0.97	No	75% funded by County - 25% in City Fees (less than City growth)

At the US 50/ Zinfandel Drive, the City has already obtained $7.8 million in grant funding that was used to help fund a significant interim improvement that adds capacity to the ramp intersections. While the new development will add a substantial amount of traffic to the interchange, the City has limited new development's share to 50% of the cost of interim and ultimate improvements.

Light Rail Grade Separations

The CIP includes light rail transit grade separations at three locations along Folsom Boulevard to help mitigate traffic congestion along Folsom Boulevard. The cost of grade separation at Bradshaw Road would be split with Sacramento County. While new development could be charged for nearly all of the remaining $65.5 million cost for those improvements, the City has decided to reduce new development's share to 50 percent of the total cost, thereby reducing new development's share of the improvements by about $32.75 million.

5.2 Transit Improvements

New development's "fair share" of transit improvements is based on the estimated growth in dwelling unit equivalents (DUEs) from development in the City between 2007 to 2055 growth as a percent of total 2055 DUEs. Section 6 describes DUEs and how they are calculated. The estimated growth in DUEs Citywide is as follows:

	DUEs	Percent
Base Year (2007)	41,688	44.0%
2007 to 2055 growth	52,951	56.0%
Total	94,639	100.0%

Table 13 shows this nexus-based allocation of transit improvement costs in the TDIF Program, which yields $77,406,000 allocated to new development.

The City will seek other sources, such as grants, to fund the City's share of transit improvements.

Table 13
Allocation of CIP Transit Improvements

	Cost	Percent
TDIF (New Development's) Share	$77,406,000	56%
City's Share	$60,819,000	44%
Total	**$138,225,000**	**100.0%**

Source: DKS Associates, 2021

5.3 Bikeway Improvements

Table 14 shows the allocation of bikeway improvements to the TDIF Program under a nexus-based allocation of costs. The City requires new development to fund bike grade-separations in the City's Growth Area (east of Sunrise Boulevard). As such, the full cost of the 24 grade separations located in the City's Growth Area would be included in the TDIF Program. The nexus-based allocation of the total cost to construct bike grade-separations in the City's Infill Area (west of Sunrise Boulevard), plus the citywide

bike trails in the CIP, is based on the estimated growth in DUEs from development in the City between 2007 to 2055 growth as a percent of total 2055 DUEs. Applying the allocation percentages yields approximately $66.3 million allocated to new development.

The City has decided to lower the level of TDIF funding for bike grade-separations citywide from $57.5 million to $26 million. This effectively reduces new development's allocation by $31.5 million. With about $1.3 million in existing funding, the cost of bikeway improvements allocated to new development by 2055 is about $33.5 million.

Table 14
Allocation of CIP Bikeway Improvements

Element	Cost	Allocation to TDIF	
		Percent	Amount
Nexus-Based Allocation of Bikeway Improvements in TDIF Program			
Bike grade separations – Infill Area[1] (3 locations)	$11,131,000	56%	S6,233,000
Bike grade separations – Growth Area[1] (24 locations)	$51,238,000	100%	$51,238,000
Subtotal	**$62,369,000**		**$57,471,000**
Bike Trails - Citywide	$15,720,000	56%	$8,803,000
Total	**$78,089,000**		**$66,274,000**
Selected Allocation of Bikeway Improvements in TDIF Program			
Reduced amount of grade separations in TDIF Program			$26,000,000
Bike Trails - Citywide			$8,803,000
Existing Funding			$1,313,096
Total			**$33,489,904**

[1] Map depicting the City's Infill Area and Growth Area is provided in Section 6.3 of this report
Source: DKS Associates, 2021

5.4 Program Contingency

A four percent (4%) program contingency has been applied to the total costs allocated to the TDIF Program. The program contingency will be managed at the City's sole discretion to cover project scope changes, alternative nexus-based projects, unforeseen and unbudgeted construction expenses, and other project related expenses. The program contingency will be first prioritized for projects being delivered by the City.

5.5 Improvements and Elements Not Included in TDIF Program

The CIP and TDIF Program does not include funding for "post-2055" improvements – that is additional improvements needed to accommodate full buildout of all land uses in the City. The TDIF program also does not include funding for roadway maintenance. The City will need to secure funding for its share of existing deficiencies, its share of transit, pedestrian, and walkway improvements, and to help fund those projects that the City decided to reduce new development's nexus-based share.

6.0 Methodology for Calculating Fees

6.1 Dwelling Unit Equivalents

In the allocation of costs to various types of developments, each development type is assigned a "dwelling unit equivalent" or "DUE" rate. DUE's are numerical measures of how the trip-making characteristics of a land use type compares to a single-family residential unit. A single-family residential unit is assigned a DUE of 1. Land uses which have greater overall traffic impacts than single-family residential units are assigned values greater than 1, while land uses with lower overall traffic impacts are assigned values less than 1.

DUE's were developed by comparing both the trip generation and trip length characteristics of various land uses to those of the single-family residential units. The DUE's reflect the relative PM peak hour trips generated by each general land use type in the travel demand model. Also considered in the calculation of DUE's are "percent new" trips since some of the vehicles attracted to non-residential uses would have been on the roadway system regardless of the presence of the new traffic generator. Average trip lengths for the remaining "primary" trips generated by a development were then utilized to better reflect overall impact of longer trips on the City's roadway system.

The DUE rates were thus based on estimates of the average daily vehicle-miles of travel (VMT) generated by each general land use type. The DUE rates used to estimate the fees are shown in Table 15. Thus, 1,000 square feet of retail development is estimated to have a traffic impact on the City's roadway system which is 1.24 times that of a single-family detached residential unit.

Table 15
DUE Rates

Land Use Category[1]	PM Peak Hour Trip Rate per Unit[2]	Unit	Trip Length (miles)	Percent New trips	Vehicle Miles of Travel (VMT) per Unit	DUE per Unit
Single-Family	0.99	Dwelling Unit	5.1	100	5.049	1.00
Multi-Family	0.56		5.1	100	2.856	0.57
Retail	5.43	1,000 Square Feet	2.3	50	6.245	1.24
Office	1.15		5.1	92	5.396	1.07
Industrial	0.63		4.8	92	2.782	0.55

[1] The definitions of the residential and non-residential uses are provided in Appendix A
[2] ITE Trip Generation 7th Edition

Source: DKS Associates, 2021

Table 16 shows the estimated growth in DUEs in the City between 2007 and 2055 which is calculated by applying the DUE per unit rates in Table 16 to the estimated development growth shown in Table 4. The City provides a lower fee rate for single-family units that are less than 1,200 square feet and has estimated that 2% of its future single-family units will have less than 1,200 square feet, which represents 581 units.

Table 16
Growth in Citywide DUEs

Land Use Category	Units	Growth in Units 2007 to 2055	DUE Rate per Unit	Growth in DUEs 2007 to 2055
Single-Family – greater than 1,200 sq. ft.	Dwelling Unit	28,455	1.00	28,455
Single-Family – less than 1,200 sq. ft.[1]		581	0.88	511
Multi-Family		10,922	0.57	6,226
Retail	1,000 Sq. Ft	6,046	1.24	7,497
Office		6,427	1.07	6,877
Industrial		6,155	0.55	3,385
			Total	**52,951**

[1] DUE rate for units that are less than 1,200 sq. ft. is based on trip generation analysis conducted for Sacramento County's Transportation Development Fee Program

Source: DKS Associates, 2021

6.2 Fees Calculation

Table 17 summarizes the costs allocated to new development in the TDIF Program and the resulting costs per DUE.

Table 17
Estimated Cost per DUE – TDIF Program Update

Elements of TDIF Program	Cost Allocated to New Development in TDIF Program
Roadways, Intersections, Interchanges and Light Rail Grade Separations	$744,026,732
Phasing of Roadway Improvements	$29,948,000
Traffic Signal System and ITS	$23,822,747
Transit	$77,406,000
Bikeways	$33,489,904
Program Contingency	$36,347,735
Total	$945,041,118
Fees Collected by City through January 2007	$33,143,248
Total Remaining Costs Funded by TDIF	**$911,897,870**
Total Growth in DUEs	52,951
Cost per DUE	**$17,221**
Administrative Cost (3.75%) per DUE	$646
Total Fee per DUE	**$17,867**

Source: DKS Associates, 2021
Adjusting for 2022 results in a Total Fee per DUE of $19,225

6.3 Fee Schedule Calculation

The total cost per DUE information presented in Table 16 and Table 17 is translated into a full fee schedule by land use category provided in Table 18 below.

Table 19 A compares the updated fee schedule to the current fee schedule. As shown, TDIF Program fees remain relatively stable between the current and proposed fee schedule with the exception of multi-family which experiences an approximate 20% decrease.

Given that for some land use categories TDIF fees differ between the City's designated Infill Area and Growth Area, Figure 2 provides a map delineating these areas of the city.

Table 18
2021 Fee Schedule – TDIF Program Update

Land Use	City-wide Updated Nexus-based Fees	Current Fees	
		Infill Area	Growth Area
Single Family Detached			
> 1,200 SF	$17,867	$10,816	$17,870
< 1,200 SF	$15,723	$7,221	$15,725
Multi-Family	$10,184	$7,041	$12,509
Commercial	$22.16	$10.16	$13.09
Office	$19.12	$9.84	$10.07
Industrial	$9.83	$5.12	$5.12

All DUE information presented in Table 18 and Table 19 A reflect 2021 conditions. TDIF fees are automatically adjusted on January 1 of each year by the City to account for the increase, if any, in the 20-City Construction Cost Index (CCI) as reported in the Engineering News Records (ENR) for the twelve-month period ending October of the prior year. Based on the ENR CCI increased by 8 percent in 2021. This percentage must then be reduced by 5% to account for TDIF funds already expended (i.e., expended funds are not escalated). This results in a 2022 TDIF fee adjustment of 7.6%. The 2022 Fee Schedule is provided in Table 19 B and includes a comparison of the ENR adjusted current fees.

Figure 2: City of Rancho Cordova Infill Area and Growth Area Map

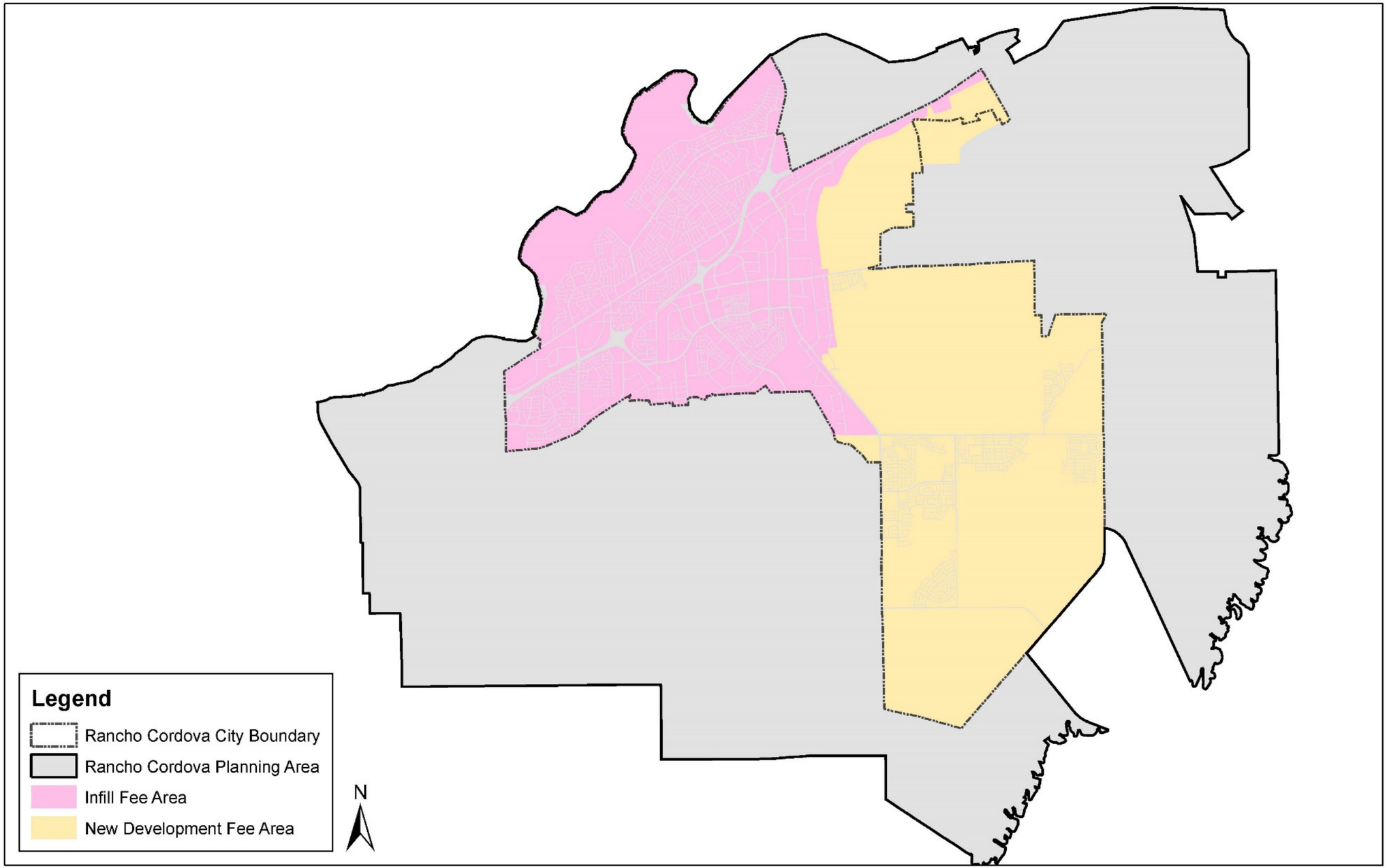


Table 19 A
2021 Fee Schedule – Comparison: Current TDIF vs. TDIF Update

Land Use	Units	Current Fees		Draft New Fees		
					Proposed Fees	
		Infill Area	Growth Area	Nexus Based Citywide	Infill Area	Growth Area
Single Family Detached						
> 1,200 SF	DU	$10,816	$17,870	$17,867	$10,815	$17,867
< 1,200 SF		$7,221	$15,725	$15,723	$7,221	$15,723
Multi-Family		$7,041	$12,509	$10,184	$5,733	$10,184
Commercial	Sq Ft	$10.16	$13.09	$22.16	$10.41	$13.41
Office		$9.84	$10.07	$19.12	$9.93	$10.16
Industrial		$5.12	$5.12	$9.83	$5.10	$5.23
Fee revenue by 2055				$945 million		$780 million
Funding required from alternative sources						$165 million

Table 19 B
2022 Fee Schedule – Comparison: Current TDIF vs. TDIF Update

Land Use	Units	Current Fees[1]		Draft New Fees[2]		
					Proposed Fees	
		Infill Area	Growth Area	Nexus Based Citywide	Infill Area	Growth Area
Single Family Detached						
> 1,200 SF	DU	$11,682	$19,299	$19,225	$11,637	$19,225
< 1,200 SF		$7,799	$16,983	$16,918	$7,770	$16,918
Multi-Family		$7,605	$13,509	$10,958	$6,169	$10,958
Commercial	Sq Ft	$10.97	$14.14	$23.84	$11.20	$14.23
Office		$10.63	$10.88	$20.57	$10.68	$10.93
Industrial		$5.53	$5.53	$10.58	$5.49	$5.63
Fee revenue by 2055				$945 million		$780 million
Funding required from alternative sources						$165 million
[1] Adjusting for 2021 ENR: 8%						
[2] Adjusting for 2021 ENR: 8% less 5% = 7.6%						

7.0 TDIF Nexus Findings

A nexus analysis has been prepared on the City's TDIF Program in accordance with the procedural guidelines established in AB1600 which is codified in California Government Section 66000 *et seq*. These code sections set forth the procedural requirements for establishing and collecting various development impact fees. These procedures require that "a reasonable relationship or nexus must exit between a governmental exaction and the purpose of the condition." Specifically, each local agency imposing a fee must:

- Identify the purpose of the fee;
- Identify how the fee is to be used;
- Determine how a reasonable relationship exists between the fee's use and the type of development project on which the fee is imposed;
- 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; and,
- Demonstrate a reasonable relationship between the amount of the fee and the cost of public facility or potion of the public facility attributable to the development on which the fee is imposed.

The prior sections of this report identify the facilities that are included in the City's CIP and TDIF Program, summarize the updated costs of those facilities and show how shares of those costs were allocated to new development to mitigate its transportation impacts. All this information is used in this section to demonstrate that the resulting fees meet the AB 1600 nexus requirements, as outlined below.

7.1 Purpose of Fees

The purpose of the TDIF Program is to fund improvements to the City's major roadway, transit and bikeway facilities needed to accommodate travel demand generated by new land development in the City through 2055.

The TDIF Program will help meet the City's General Plan policies including maintaining adequate LOS and safety for roadway facilities. New development in the City will increase the demand for all modes of travel (including walking, biking, transit, automobile, and truck/goods movement) and thus the need for improvements to transportation facilities. The TDIF Program will help fund transportation facilities necessary to accommodate residential and non-residential development in the City.

7.2 Use of Fees

The fees from new development in the TDIF Program will be used to fund additions and improvements to the transportation system needed to accommodate future travel demand resulting from residential and non-residential development. The TDIF Program will help fund improvements to roadways (include the widening or extensions of arterial and collector roadways and intersection improvements) transit facilities, bikeways, and walkways. The transportation improvements wholly or partially funded by the program are described in more detail in **Section 3.**

7.3 Relationship between use of Fees and Type of Development

Fee revenues generated by the TDIF Program will be used to develop the transportation improvements as outlined in **Section 3**. New development in the City will generate resident and employees who will demand new and expanded roadway, transit, bicycle, and pedestrian facilities. All these improvements increase the capacity of those segments of the transportation system affected by new development. The results of the transportation modeling analysis summarized in this report demonstrates that new development, both new residential and non-residential uses, will benefit from these improvements by improving service above levels that would occur if these improvements were not completed. Consequently, the cost of transportation improvements is allocated to both residential and non-residential development in the City.

7.4 Relationship between Need for Facility and Type of Development

The projected residential and non-residential development described in **Section 3** will add to the incremental need for new and/or expanded transportation facilities by increasing the amount of demand on the transportation system. The transportation improvements outlined in **Section 3** are required to minimize the degradation in current levels of service caused by new development.

7.5 Relationship between Amount of Fees and the Cost of Facility Attributed to Development upon which Fee is Imposed

Construction of necessary transportation improvements will directly serve residential and non-residential development within the City and will directly benefit new development. The basis for allocating improvement costs to development is described in **Section 5**.

To define the required roadway and intersection improvements that would be included in the TDIF Program, the roadway segment and intersection LOS analysis was performed first with total 2055 travel demand and then a second time with the growth in "thru trips" removed. This was done to determine whether the 2055 roadway improvement would still be needed with the growth in thru trips removed. If it was determined that a reduced roadway improvement would operate at acceptable levels with thru trips removed, the TDIF Program would only include the cost of the reduced improvement.

For existing deficiencies (roadways or intersections that operated at LOS E or F during the Base Year), the cost of the improvement that is allocated to the TDIF program is equal to the percent of total cost that is needed to return the roadway to existing congestion levels. This allocation is equal to the percentage of the total change in volume/capacity (v/c) ratio (due to the improvement) that is needed to return the v/c ratio to current levels

The fee that a developer pays for a new residential unit or commercial building varies by the type of development based on its impact on the transportation system. Each development type is assigned a "dwelling unit equivalent" or "DUE" rate based on its estimated vehicle-miles of travel (VMT) per unit of development. DUE's are numerical measures of how the trip-making characteristics of a land use type compares to a single-family residential unit. DUE's were developed by comparing both the trip generation and trip length characteristics of various land uses to those of the single-family residential units. Also considered in the calculation of DUE's are "percent new" trips. The DUE rates were thus based on estimates of the peak hour vehicle-miles of travel (VMT) generated by each land use type.

8.0 On-Going Administration of the TDIF Program

8.1 Administration Fee

To defray the City's costs associated with administering the TDIF, including program management of CIP projects, project scope refinements, updating engineering studies, updating the City's travel model, tracking fee credits and reimbursements, updating the Nexus Study, and any other necessary studies in support of the TDIF Program, the City will levy and collect an administration charge equal to 3.75% of the total fees. The program administration fee must be paid at building permit issuance, or as designated by the City, and cannot be credited through a fee credit or reimbursement agreement.

8.2 TDIF Adjustments

The TDIF may be adjusted in future years to reflect revised facility standards, receipt of funding from alternative sources (e.g., state, or federal grants), revised costs, or changes in demographics or land use. In addition to such adjustments, in January of each calendar year, the TDIF for each type of development will automatically be adjusted by the increase, if any, in the 20-city Construction Cost Index (CCI) as reported in the Engineering News Record for the twelve-month period ending October of the prior year. For example, the adjustment for January 2022 will be determined by calculating the increase, if any, from October 2020 to October 2021 in the 20-city CCI. Given that the annual adjustment should not escalate project costs that have already been expended (fees applied to CIP projects that have been constructed in 2007), the CCI for any given year shall be reduced by the proportion of total TDIF Program funds that have been expended for completed projects to date. At the time of this TDIF update, the percentage off-set is 5%. As an example, the 8 percent CCI increase recorded in 2021 would be reduced by the 5% offset to yield a 7.6% escalation rate for 2022 fee schedule. At a minimum, this off-set percentage will be recalculated as part of major TDIF Program updates but more frequently if in a particular year, or stretch of years, significant CIP expenditures occur.

The fee categories summarized in prior sections may not be applicable to specialized development projects in the City. For example, development of a cemetery or golf course would not fall under one of these categories. Other examples of specialized development projects are projects that increase trip generation rates, but do not include building square footage, such as a parking lot expansion. For specialized development projects, the City staff will review traffic generation rates applicable to the specialized development and decide on an applicable fee.

Certain redevelopment projects may also be eligible for a fee adjustment. If, for example, a project applicant demolishes an existing 10,000 square foot building and rebuilds a 20,000 square foot building of the same land use, the applicant may be eligible for a waiver of 50% of the TDIF. If a redevelopment project results in a change of land use on a particular parcel, City staff will determine the appropriate TDIF adjustment to reflect the different trip characteristics of the original and new land uses. The City will review redevelopment requests for fee adjustments on a case-by-case basis. If the previously built structure has been vacant for more than five years, the parcel will be treated as if it was undeveloped, and no such adjustment will be applied.

8.3 TDIF Smart Growth Discount

Pursuant to California Code–Section 66005.1, housing development projects that satisfy specific "smart growth" characteristics shall be provided a discounted fee. Housing development projects that satisfy all of the following "Smart Growth" characteristics shall be provided a discounted fee.

- The housing development is located within one-half mile of a transit station and there is direct access between the housing development and the transit station along a barrier-free walkable pathway not exceeding one-half mile in length[4].
- Convenience retail uses, including a store that sells food, are located within one-half mile of the housing development.
- The housing development provides either the minimum number of parking spaces required by the local ordinance, or no more than one onsite parking space for zero to two bedroom units, and two onsite parking spaces for three or more bedroom units, whichever is less.

Given that the average reduction in trip generation has been shown to be approximately 15% relative to the Institute of Transportation Engineers (ITE) based trip generation factors for housing developments without these characteristics (SANDAG, 2011), the City will provide a discount of 15% fee reduction from the maximum fee rate allowed in this Nexus Study for new residential projects which meet these specific criteria.

The City has developed a GIS map that shows the current condition of existing transit stations/stops in the City with a ½ mile buffer to assist is assessing the eligibility for this discount. The map, along with corresponding criteria, will be periodically updated as information becomes available.

Assuming all the above Smart Growth criteria is met, this discount would apply unless another mechanism for discounting applicable traffic fees is applied by the City. The post-nexus adjustments for the Infill Area shown in Table 18, Table 19 A, and Table 19 B represent such a mechanism. Note that the Infill Area post-nexus adjustments far exceeds the 15% Smart Growth Discount.

8.4 TDIF Credits and Reimbursements

The City established a set of policies and procedures regarding fee credits and reimbursements. These policies are codified in Ordinance No. 33-2005 ("Ordinance"), which was adopted by the City Council on December 19, 2005. The Ordinance added Chapter 16.84 to the Rancho Cordova Municipal Code. Among other things, the Ordinance specifies that the City may authorize and issue a credit toward the construction of any transportation facilities in order of "priority". In other words, developers who construct "priority" facilities will likely receive credits or reimbursements ahead of those developers who construct "non-priority" facilities. For purposes of this Nexus Study, "priority" facilities are those facilities as determined by the City Engineer to avoid substantial congestion levels on key roadways.

[4] "Housing development" means a development project with common ownership and financing consisting of residential use or mixed use where not less than 50 percent of the floor space is for residential use. For the purposes of this section, "transit station" has the meaning set forth in paragraph (4) of subdivision (b) of Section 65460.1.

"Transit station" includes planned transit stations otherwise meeting this definition whose construction is programmed to be completed prior to the scheduled completion and occupancy of the housing development. Transit headway criteria of 10 minutes or less at a transit hub served by three or more transit service lines is defined as cumulative headway versus individual service line headways.

8.5 TDIF Exemptions

All determinations regarding the exemptions provided in this section will be made by the City Manager or his/her designee. Generally, the following uses will be exempt from payment of the TDIF:

Public Agencies

All federal and state agencies, public school districts, and the City will be exempt from the TDIF. Other non-City public agencies will be subject to payment of the TDIF; however, the City may choose to waive some or all the TDIF in certain cases.

Replacement/Reconstruction

a. Any replacement or reconstruction (no change in use) of any residential unit that is damaged or destroyed as a result of fire, flood, explosion, wind, earthquake, riot, or other calamity, or act of God shall be exempt from the TDIF. However, if the residential unit(s) replaced or reconstructed exceeds the documented total number of units of the damaged/destroyed residential structure, the excess units are subject to the TDIF.

b. Any replacement or reconstruction (no change in use) of any non-residential structure that is damaged or destroyed as a result of fire, flood, explosion, wind, earthquake, riot, or other calamity, or act of God shall be exempt from the TDIF. However, if the building replaced or reconstructed exceeds the documented total floor area of the damaged/destroyed building, the excess square footage is subject to the TDIF.

c. If a residential and/or non-residential structure is replaced with an alternative land use, such as replacing an office building with a retail building, then City staff will determine the appropriate TDIF adjustment to reflect the different trip characteristics of the original and new land uses.

Additions/Alterations/Modifications/Temporary Facilities

a. Additions that increase the living area of a residential unit to more than 1,200 square feet.

b. Additions to single family residential structures provided no change in use occurs and a second full kitchen is not added.

c. Additions to multi-family residential structures that are not part of a mixed-use type project provided no change in use occurs and no additional units result.

d. Supporting use square footage in multi-family projects, such as the office and recreation areas required to directly serve the multi-family project. The residential unit fee will provide the full mitigation required in multi-family projects.

e. Non-habitable residential structures such as decks, pools, pool cabanas, sheds, garages, etc.

f. Construction of a granny unit that does not have a full kitchen.

g. Mobile or manufactured homes with no permanent foundation.

8.6 Fee Implementation

According to the California Government Code, prior to levying a new fee or increasing an existing fee, an agency must hold at least one open and public meeting. At least 14 days prior to this meeting, the agency must make data on infrastructure costs and funding sources available to the public. Notice of the time and place of the meeting, and a general explanation of the matter, are to be published in accordance with Section 6062(a) of the Government Code, which states that publication of notice shall occur for 14 days in a newspaper regularly published once a week or more. The City may then adopt the new fees at the second reading.

The nexus-based calculation of fee per Dwelling Unit Equivalent (DUE) documented in Sections 1 through 6 is based on general land use categories (single family, multi-family, retail, office, and industrial) which are the categories used in the transportation forecasting process. When a developer gets a building permit and pays fees, a more specific land use is known and the number of DUEs for some specific land use will be based on specific DUE rates for that category. Those DUE rates are based on estimates of the average vehicle-miles of travel (VMT) generated on an average weekday for each land use type. Table 20 shows the calculation of DUE factors for each detailed land use type.

The City will determine the appropriate trip DUE factors for other land uses that may develop within the City that are not shown in Table 20.

Table 20
Detailed DUE Rates

Land Use	PM Peak Hour Trip Rate	Units	Trip Length (miles)	Percent New Trips	Vehicle Miles of Travel (VMT)	Due Rate
Residential						
Single Family – greater than 1,200 sq. ft.[1]	0.99	Dwelling Units	5.1	100%	5.049	1.00
Single Family – less than or equal to 1,200 sq. ft.[2]						0.88
Multi-Family[3]	0.56		5.1	100%	2.856	0.57
Age Restricted Single-Family	0.30		5.1	100%	1.530	0.30
Age Restricted Multi-Family	0.26		5.1	100%	1.326	0.26
Non-Residential		1,000 Square Feet				
Commercial	5.43		2.3	50%	6.245	1.24
Office	1.15		5.1	92%	5.396	1.07
Industrial	0.63		4.8	92%	2.782	0.55
Miscellaneous						
Church	0.49		3.9	90%	1.720	0.34
Gasoline/Service Station	14.03	Position	1.9	20%	5.331	1.06
Hotel/Motel	0.38	Room	6.4	65%	1.581	0.31
Mobile Home Park	0.46	Unit	5.1	100%	2.346	0.46

[1] Includes all single family attached or detached residential units with more than 1,200 square feet of living area based on the square footage reflected on the building permit issued for construction of the unit.

[2] Includes all single family attached or detached residential units with 1,200 square feet or less of living area based on the square footage reflected on the building permit issued for construction of the unit. DUE rate is based on analysis conducted for Sacramento County's Transportation Development Fee Program

[3] Includes (i) all attached units within a structure comprising 5 or more units that are solely available for rent, and (ii) all attached units structure comprising 5 or more units that are 1,200 SF or less and are available for sale.

Appendix A

Land Use and Development Assumptions For 2021TDIF Program Update

Land Use Assumptions

The transportation needs and fee allocation for this update of the TDIF Program are based a 2007 "Base Year" (the same year as the current TDIF Program adopted in 2013) and a future development scenario that reflects full buildout of all residential uses within the City. The City of Rancho Cordova has prepared estimated development "capacities" for its adopted and planned specific plan areas, as well as likely residential capacities for its vacant or underutilized infill sites. Table A-1 shows the assumptions used to estimate residential development within the City for the TDIF update.

Table A-1
Residential Development Assumptions for the 2021 TDIF Update

Area	Base Year (2007)			2055			Growth		
	Single Family	Multi-family	Total	Single Family	Multi-family	Total	Single Family	Multi-family	Total
Infill	14,841	6,308	21,149	16,634	8,722	25,356	1,793	2,414	4,207
Sunridge	3,300		3,300	8,007	75	8,082	4,707	75	4,782
Suncreek				3,240	1,653	4,893	3,240	1,653	4,893
Rio Del Oro				9,641	2,548	12,189	9,641	2,548	12,189
Ranch				1,264	384	1,648	1,264	384	1,648
Westborough				3,900	3,171	7,071	3,900	3,171	7,071
Arboretum				4,040	677	4,717	4,040	677	4,717
Preserve				450	0	450	450	0	450
Total	**18,141**	**6,308**	**24,449**	**47,176**	**17,230**	**64,406**	**29,036**	**10,922**	**39,958**

Sources: City of Rancho Cordova and DKS Associates, 2020

SACOG prepares forecasts of future development throughout the six-county SACOG region every four years. Their latest forecasts prepared in 2020 define growth between 2016 and 2040. Using SACOG's projected average annual growth rate in housing units for the City of Rancho Cordova, the estimated year when the City would reach full buildout of its residential uses is about 2055. For non-residential uses, SACOG's projected average annual growth rates for retail, office and industrial uses were used to estimate the 2055 development levels for those types of uses.

For non-residential uses, fees are based on the square footage of a building while the travel demand model uses jobs to determine the trips generated by non-residential uses. Table A-2 shows the assumed job growth citywide as well as the assumptions used to convert jobs to square footage estimates.

Table A-2
Non-residential Development Assumptions

Land use	Units	2007	2055	Growth 2007 to 2055
Retail	jobs	7,603	19,695	12,092
Office		34,703	56,128	21,425
Industrial		7,541	17,799	10,258
Total		**49,847**	**93,622**	**43,775**
Assumed Average Square Feet per Job		**500**	**300**	**600**
Retail	Square feet	3,801,000	9,847,000	6,046,000
Office		9,479,000	15,906,000	6,427,000
Industrial		6,636,000	12,791,000	6,155,000
Total		**19,916,000**	**38,544,000**	**18,628,000**

Sources: DKS Associates, 2020

TDIF Program 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. General and detailed land use categories have been defined to distinguish between the number of trips generated by residents and employees associated with various types of land use. Existing and projected land uses generated are classified by general land use types (e.g., single family detached, single family attached, multi-family, retail/commercial, office, and industrial) and serve as the basis for the cost per dwelling unit equivalent calculation included in this Nexus Study. However, some detailed land use categories have been established for purposes of implementing the TDIF Program. These categories have been created to differentiate specific impacts from each detailed land use on transportation facilities. For example, residential land use categories are defined based on characteristics related to unit type (e.g., age-restricted) and unit size as discussed further below.

Data from the American Housing Survey and SACOG implies an indirect relationship between the size of a housing unit and the number of trips generated by a housing unit. The data indicates a negligible difference in trip generation for medium to large single-family homes; however, a significant reduction in overall trip generation applies to homes that are 1,200 square feet or less. Based on these findings, a 1,200 square feet cutoff is used to delineate between residential land uses for purposes of this Nexus Study. Specifically, the American Housing Survey for the Sacramento region suggests a proportional relationship between the square footage of a dwelling unit and the number of persons residing in that unit – generally, persons per unit increases as the size of a residential unit increases. In addition, data on travel characteristics from SACOG's 2000 Household Travel Survey suggests a proportional relationship between the number of persons in a home and the number of trips generated by that household, namely that trips per household increase as persons per household increase. Based on combined data from these two sources, it can be concluded that the average number of trips generated

per day is proportionally related to the number of people living in the dwelling unit, which is generally related to the size of the dwelling unit.

A TDIF has been calculated per dwelling unit for residential land uses and per square-foot of building space for most non-residential land use categories. Exceptions in the non-residential land use categories include the following: (i) gasoline/service stations for which impacts are calculated per vehicle position; (ii) mobile home parks impacts for which impacts are calculated per dwelling unit, and (iii) hotels and motels for which impacts are calculated per room. Specifically, the following detailed land use categories are identified for purposes of the TDIF Program:

Single Family Detached, greater than 1,200 sq. ft.: Includes all single family detached residential units with more than 1,200 square feet of living area based on the square footage reflected on the building permit issued for construction of the unit.

Single Family Detached, 1,200 sq. ft. or less: Includes all single family detached residential units with 1,200 square feet or less of living area based on the square footage reflected on the building permit issued for construction of the unit.

Single Family Attached: Includes the following:

- All units within a structure that has 2-4 attached units, whether such units are all offered for rent or for sale to individual owners.
- All units within a structure that has 5 or more attached units that (i) are available for sale to individual owners, and (ii) have a living area greater than 1,200 square feet.

Multi-Family: Includes the following:

- All units within a structure that has 5 or more units, all of which are offered for rent to the public.
- All units within a structure that has 5 or more attached units that (i) are available for sale to individual owners, and (ii) have a living area less than 1,200 square feet.

Retail/Commercial: Includes, but is not limited to, retail stores, clothing stores, book stores, video rental stores, drug stores, professional services (e.g., barber shops, dry cleaners), restaurants, supermarkets, hospitals, movie theaters, appliance and electronics stores, home supply stores, tire stores, auto parts stores, and other businesses providing auto-related products and services.

Office: Includes, but is not limited to, buildings in which professional, banking, insurance, real estate, administrative or in-office medical or dental activities are conducted.

Industrial: Includes, but is not limited to, all forms of industrial, manufacturing, and warehousing land uses. Specific portions of any building space within this category that are used distinctly for retail/commercial sales, office space, or other such specific use may be charged the

	representative fees according to use. Remaining portions of the building will be charged fees on the industrial rate.
Miscellaneous:	Includes churches, gas stations, hotels/motels, and mobile home parks.

City staff will make the final determination as to which land use category a particular development type will be assigned. Staff will determine the land use category that corresponds most directly to the development or, alternatively, can determine that none of the land use categories in this Nexus Study adequately correspond to the development in question and may work in conjunction with other members of City staff to determine the applicable fee amounts based on trip DUE factors.

Appendix B

Project Descriptions, Cost Estimates and Other Funding for TDIF Program Improvements

Appendix B
CIP Transportation Project Costs and Funding

This appendix provides general descriptions, cost estimates and funding assumptions for each of the CIP projects that are fully or partially funded by the City's Tranportation Development Impact Fee (TDIF) Program. The projects are divided into the following groups:

Group	Project Numbers
Roadway Segments	1 to 208
Intersections	209 to 299
Transit and Bikeways	300 to 312
Interchanges	313 to 320

Color Legend

CIP Buildout	=	Project has CIP portions fully buildout but it remains in Fee Program due to credit agreement and/or reimbursement of City funds
Credit Agreement	=	Project has been partially or fully buildout and has a credit agreement with one or more developers
City Project	=	Project is partially or fully buildout and had funding from the City, which the City will be reimbursed by Fees
COUNTY SHARED PROJECT	=	Sacramento County has a share of the funding project cost
FEE PORTION:	=	Amount or % of the project construction cost that is funded by the Fee Program
Notes	=	Project Notes

Roadway Segments

ID No **Project Information and Cost**

1 Rio del Oro Parkway
From Sunrise Boulevard to Rancho Cordova Pkwy
Existing Condition: Undeveloped

	2007	Ultimate	2055
Lanes	0	6	6

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 6 lane roadway	6-F	3200	LF	$1,049.61	$3,358,736

Subtotal		$3,358,736
Contingency	15%	$503,810
Engineering and Permits	35%	$1,175,558
Total		**$5,038,104**
Rounded		**$5,038,000**
Other Funding		$0
Remaining Fee Portion Cost		$5,038,000

2 Rio del Oro Parkway
From Rancho Cordova Parkway to Centennial Dr
Existing Condition: Undeveloped

	2007	Ultimate	2055
Lanes	0	4	4

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane roadway	4-F	3500	LF	$777.40	$2,720,900

Subtotal		$2,720,900
Contingency	15%	$408,135
Engineering and Permits	35%	$952,315
Total		**$4,081,350**
Rounded		**$4,081,000**
Other Funding		$0
Remaining Fee Portion Cost		$4,081,000

ID No **Project Information and Cost**

3 Rio del Oro Parkway
From Centennial Drive to Americanos Boulevard
Existing Condition: Undeveloped

	2007	Ultimate	2055
Lanes	0	4	4

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane roadway	4-F	1200	LF	$777.40	$932,880

Subtotal		$932,880
Contingency	15%	$139,932
Engineering and Permits	35%	$326,508
Total		**$1,399,320**
Rounded		**$1,399,000**
Other Funding		$0
Remaining Fee Portion Cost		$1,399,000

4 Rio del Oro Parkway
From Americanos Boulevard to White Rock Road
Existing Condition: Undeveloped

	2007	Ultimate	2055
Lanes	0	4	4

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane roadway	4-F	2200	LF	$777.40	$1,710,280

Subtotal		$1,710,280
Contingency	15%	$256,542
Engineering and Permits	35%	$598,598
Total		**$2,565,420**
Rounded		**$2,565,000**
Other Funding		$0
Remaining Fee Portion Cost		$2,565,000

ID No	Project Information and Cost					
7	Rio del Oro Parkway			2007	Ultimate	2055
	From Easton Valley Parkway to Folsom Boulevard		Lanes	0	4	4
	Existing Condition: Undeveloped					

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane roadway	4-F	1700	LF	$777.40	$1,321,580
Bridge/Culvert	Bridge/Culvert	31200	SF	$295.00	$9,204,000

		Subtotal	$10,525,580
	Contingency	15%	$1,578,837
	Engineering and Permits	35%	$3,683,953
		Total	**$15,788,370**
		Rounded	**$15,788,000**
		Other Funding	$0
		Remaining Fee Portion Cost	$15,788,000

8	Villagio Drive			2007	Ultimate	2055
	From Douglas Rd. to 111-OS (12Ac. Open Space)		Lanes	0	4	4
	Existing Condition: Undeveloped					

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane roadway	4-F	0	LF	$777.40	$0
Bridge/Culvert	Bridge/Culvert	0	SF	$295.00	$0

		Subtotal	$0
	Contingency	15%	$0
	Engineering and Permits	35%	$0
		Total	**$0**
		Rounded	**$0**
		Other Funding	$0

ID No	Project Information and Cost					
					Remaining Fee Portion Cost	$0

11 Villagio Drive
From Collector B to White Rock Rd.
Existing Condition: Undeveloped

	2007	Ultimate	2055
Lanes	0	4	4

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane roadway	4-F	500	LF	$777.40	$388,700

		Subtotal	$388,700
Contingency	15%		$58,305
Engineering and Permits	35%		$136,045
		Total	**$583,050**
		Rounded	**$583,000**
		Other Funding	$0
		Remaining Fee Portion Cost	$583,000

19 Easton Valley Pkwy
From Rancho Cordova Pkwy to Rio Del Oro Pkwy
Existing Condition: Undeveloped

	2007	Ultimate	2055
Lanes	0	6	6

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 6 lane roadway	6-4L-2055-F	2500	LF	$561.55	$1,403,863

		Subtotal	$1,403,863
Contingency	15%		$210,579
Engineering and Permits	35%		$491,352
		Total	**$2,105,794**
		Rounded	**$2,106,000**
		Other Funding	$0

ID No	Project Information and Cost					
					Remaining Fee Portion Cost	$2,106,000

20 Easton Valley Pkwy

From Rio Del Oro Pkwy to Hazel Avenue

Existing Condition: Undeveloped

	2007	Ultimate	2055
Lanes	0	6	6

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 6 lane roadway	6-4L-2055-F	3700	LF	$561.55	$2,077,717
Bridge/Culvert No. 1	Bridge/Culvert	6300	SF	$295.00	$1,858,500
Bridge/Culvert No. 2	Bridge/Culvert	8190	SF	$295.00	$2,416,050

Subtotal		$6,352,267
Contingency	15%	$952,840
Engineering and Permits	35%	$2,223,293
Total		**$9,528,400**
Rounded		**$9,528,000**
Other Funding		$0
Remaining Fee Portion Cost		$9,528,000

24.1 Centennial Drive

From International Drive to Rio del Oro Parkway

Existing Condition: Undeveloped

	2007	Ultimate	2055
Lanes	0	4	4

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane roadway	4-F	1300	LF	$777.40	$1,010,620

Subtotal		$1,010,620
Contingency	15%	$151,593
Engineering and Permits	35%	$353,717
Total		**$1,515,930**
Rounded		**$1,516,000**
Other Funding		$0

ID No	Project Information and Cost					
					Remaining Fee Portion Cost	$1,516,000

24.2 Centennial Drive
From Rio del Oro Parkway to Villagio Drive
Existing Condition: Undeveloped

	2007	Ultimate	2055
Lanes	0	4	4

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane roadway	4-F	1800	LF	$777.40	$1,399,320

Subtotal		$1,399,320
Contingency	15%	$209,898
Engineering and Permits	35%	$489,762
Total		**$2,098,980**
Rounded		**$2,099,000**
Other Funding		$0
Remaining Fee Portion Cost		$2,099,000

24.3 Centennial Drive
From Villagio Drive to Americanos Boulevard
Existing Condition: Undeveloped open field

	2007	Ultimate	2055
Lanes	0	4	4

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane roadway	4-F	2700	LF	$777.40	$2,098,980

Subtotal		$2,098,980
Contingency	15%	$314,847
Engineering and Permits	35%	$734,643
Total		**$3,148,470**
Rounded		**$3,148,000**
Other Funding		$0

ID No	Project Information and Cost					
					Remaining Fee Portion Cost	$3,148,000

25 Americanos Boulevard

From Kiefer Boulevard to North Campus Drive

Existing Condition: Undeveloped

	2007	Ultimate	2055
Lanes	0	4	4

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane roadway	4-F	4900	LF	$777.40	$3,809,260
Bridge/Culvert No. 1	Bridge/Culvert	2600	SF	$295.00	$767,000
Bridge/Culvert No. 2	Bridge/Culvert	2600	SF	$295.00	$767,000
				Subtotal	$5,343,260
			Contingency	15%	$801,489
			Engineering and Permits	35%	$1,870,141
				Total	**$8,014,890**
				Rounded	**$8,015,000**
				Other Funding	$0
				Remaining Fee Portion Cost	$8,015,000

25.1 Americanos Boulevard

From North Campus Drive to Chrysanthy Blvd

Existing Condition: Undeveloped

	2007	Ultimate	2055
Lanes	0	4	4

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane roadway	4-F	1470	LF	$777.40	$1,142,778
Bridge/Culvert	Bridge/Culvert	2600	SF	$295.00	$767,000
				Subtotal	$1,909,778
			Contingency	15%	$286,467
			Engineering and Permits	35%	$668,422
				Total	**$2,864,667**
				Rounded	**$2,865,000**
				Other Funding	$0
				Remaining Fee Portion Cost	$2,865,000

ID No **Project Information and Cost**

26 Americanos Boulevard

From Douglas Road to Douglas 103 southern Boundary

Existing Condition: Undeveloped

	2007	Ultimate	2055
Lanes	0	4	4

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane roadway	4-F	1425	LF	$777.40	$1,107,795
	4-D	1350	LF	$1,002.86	$1,353,858
Bridge/Culvert	Bridge/Culvert	5200	SF	$295.00	$1,534,000

Subtotal		$3,995,653
Contingency	15%	$599,348
Engineering and Permits	35%	$1,398,478
Total		**$5,993,479**
Rounded		**$5,993,000**
Other Funding		$0
Remaining Fee Portion Cost		$5,993,000

26.1 Americanos Boulevard

From Douglas 103 Boundary to Chrysanthy Boulevard

Existing Condition: Undeveloped

	2007	Ultimate	2055
Lanes	0	4	4

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane roadway	4-F	3400	LF	$777.40	$2,643,160
Bridge/Culvert	Bridge/Culvert	5200	SF	$295.00	$1,534,000

Subtotal		$4,177,160
Contingency	15%	$626,574
Engineering and Permits	35%	$1,462,006
Total		**$6,265,740**
Rounded		**$6,266,000**
Other Funding		$0

ID No	Project Information and Cost					
					Remaining Fee Portion Cost	$6,266,000

27 Americanos Boulevard

From Douglas Road to Centennial Drive

Existing Condition: Undeveloped

	2007	Ultimate	2055
Lanes	0	4	4

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane roadway	4-F	2050	LF	$777.40	$1,593,670
Bridge/Culvert	Bridge/Culvert	2600	SF	$295.00	$767,000

		Subtotal	$2,360,670
	Contingency	15%	$354,101
	Engineering and Permits	35%	$826,235
		Total	**$3,541,005**
		Rounded	**$3,541,000**
		Credit Agreement	$515,645
		Other Funding	$0
		Remaining Fee Portion Cost	$3,025,355.00

28 Americanos Boulevard

From Centennial Drive to Villagio Drive

Existing Condition: Undeveloped

	2007	Ultimate	2055
Lanes	0	4	4

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane roadway	4-F	1250	LF	$777.40	$971,750
Bridge/Culvert	Bridge/Culvert	2600	SF	$295.00	$767,000

		Subtotal	$1,738,750
	Contingency	15%	$260,813
	Engineering and Permits	35%	$608,563
		Total	**$2,608,125**
		Rounded	**$2,608,000**
		Other Funding	$0
		Remaining Fee Portion Cost	$2,608,000

ID No **Project Information and Cost**

29 Americanos Boulevard
From Villagio Drive to Rio del Oro Parkway
Existing Condition: Undeveloped

	2007	Ultimate	2055
Lanes	0	4	4

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane roadway	4-F	2500	LF	$777.40	$1,943,500

Subtotal		$1,943,500
Contingency	15%	$291,525
Engineering and Permits	35%	$680,225
Total		**$2,915,250**
Rounded		**$2,915,000**
Other Funding		$0
Remaining Fee Portion Cost		$2,915,000

30 Americanos Boulevard
From Rio del Oro Parkway to International Drive
Existing Condition: Undeveloped

	2007	Ultimate	2055
Lanes	0	4	4

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane roadway	4-F	1000	LF	$777.40	$777,400

Subtotal		$777,400
Contingency	15%	$116,610
Engineering and Permits	35%	$272,090
Total		**$1,166,100**
Rounded		**$1,166,000**
Other Funding		$0
Remaining Fee Portion Cost		$1,166,000

ID No	Project Information and Cost					
45	Chrysanthy Boulevard			2007	Ultimate	2055
	From Sunrise Blvd to Rancho Cordova Pkwy		Lanes	4	4	4
	Existing Condition: Undeveloped					

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane roadway	4-F	0	LF	$777.40	$0

Constructed prior to 2007 but funding of credit agreement remains

		Subtotal	$0
	Contingency	15%	$0
	Engineering and Permits	35%	$0
		Total	**$2,710,436**
		Rounded	**$2,710,000**
		Credit Agreement	$2,710,436
		Other Funding	$0
		Remaining Fee Portion Cost	$0

				2007	Ultimate	2055
46	Chrysanthy Boulevard					
	From Rancho Cordova Pkwy to Americanos Blvd		Lanes	0	4	4
	Existing Condition: Undeveloped					

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane roadway	4-F	6500	LF	$777.40	$5,053,100
Bridge/Culvert	Bridge/Culvert	2600	SF	$295.00	$767,000

		Subtotal	$5,820,100
	Contingency	15%	$873,015
	Engineering and Permits	35%	$2,037,035
		Total	**$8,730,150**
		Rounded	**$8,730,000**
		Other Funding	$0
		Remaining Fee Portion Cost	$8,730,000

ID No **Project Information and Cost**

47 Chrysanthy Boulevard
From Americanos Boulevard to Grant Line Road
Existing Condition: Undeveloped

	2007	Ultimate	2055
Lanes	0	4	4

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane roadway	4-F	3000	LF	$777.40	$2,332,200
Bridge/Culvert No.1	Bridge/Culvert	13000	SF	$295.00	$3,835,000
Bridge/Culvert No. 2	Bridge/Culvert	2600	SF	$295.00	$767,000

Subtotal		$6,934,200
Contingency	15%	$1,040,130
Engineering and Permits	35%	$2,426,970
Total		**$10,401,300**
Rounded		**$10,401,000**
Other Funding		$0
Remaining Fee Portion Cost		$10,401,000

54.1 (312.3) Douglas Road
From Eagles Nest Road to West City Limit
Existing Condition: 1500 lf of 2-lane road w/o median

	2007	Ultimate	2055
Lanes	2	6	6

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 6 Lanes	6-F	1500	LF	$1,049.61	$1,574,408
Frontage	6-D	1500	LF	$1,001.82	$1,502,734

*No fronting development anticipated

COUNTY SHARED PROJECT

Subtotal		$3,077,141
Contingency	15%	$461,571
Environmental	7.5%	$230,786
Engineering and Permits	35%	$1,076,999
Total		**$4,846,497**
Rounded		**$4,846,000**
Other Funding		$0
Remaining Fee Portion Cost		$4,846,000

ID No	Project Information and Cost					
55	Douglas Road			2007	Ultimate	2055
	From West City Limit to Sunrise Boulevard		Lanes	2	6	6
	Existing Condition: 2500 lf of 2-lane road w/o median					

Item Description	Section	Quantity	Units	Unit Cost	Cost
Improve Fee Portion	6-F	2500	LF	$1,049.61	$2,624,013
Bridge/Culvert No. 1	Bridge/Culvert	3150	SF	$295.00	$929,250
Bridge/Culvert No. 2 (Canal Crossing)	Bridge/Culvert	25200	SF	$295.00	$7,434,000
				Subtotal	$10,987,263
				Contingency 15%	$1,648,089
				Engineering and Permits 35%	$3,845,542
				Total	**$16,480,894**
				Rounded	**$16,481,000**
				Other Funding	$0
				Remaining Fee Portion Cost	$16,481,000

56	Douglas Road			2007	Ultimate	2055
	From Sunrise Boulevard to Villagio Drive		Lanes	6	6	6
	Existing Condition: Built					

Item Description	Section	Quantity	Units	Unit Cost	Cost
Widen to 6 Lanes	6-F	0	LF	$1,049.61	$0
				Subtotal	$0
				Contingency 15%	$0
				Engineering and Permits 35%	$0
				Total	**$3,754,099**
				Rounded	**$3,754,000**
				Credit Agreement	$3,754,099
				Other Funding	$0
				Remaining Fee Portion Cost	$0

ID No	Project Information and Cost					
57	Douglas Road			2007	Ultimate	2055
	From Villagio Drive to Rancho Cordova Parkway		Lanes	6	6	6
	Existing Condition: Built					

Item Description	Section	Quantity	Units	Unit Cost	Cost
Widen to 6 Lanes	6-F	0	LF	$1,049.61	$0

Project Construction Cost included in Project #56

		Subtotal	$0
	Contingency	15%	$0
	Engineering and Permits	35%	$0
		Total	**$0**
		Rounded	**$0**
See Project #56		Credit Agreement	$0
		Other Funding	$0
		Remaining Fee Portion Cost	$0

ID No	Project Information and Cost					
58	Douglas Road			2007	Ultimate	2055
	From Rancho Cordova Parkway to Americanos Blvd		Lanes	4	4	4
	Existing Condition: Built					

Item Description	Section	Quantity	Units	Unit Cost	Cost
Widen to 4 Lanes	4-F	0	LF	$777.40	$0
Landscaping		1	LS	$532,719.90	$532,720

		Subtotal	$532,720
	Contingency	0%	$0
	Engineering and Permits	0%	$0
		Total	**$6,278,185**
	Fee Program	**Rounded**	**$6,278,000**
		Credit Agreement	$5,745,465
		Other Funding	$0
		Remaining Fee Portion Cost	$533,000

ID No	Project Information and Cost						
59	Douglas Road				2007	Ultimate	2055
	From Americanos Boulevard to Grant Line Road			Lanes	4	4	4
	Existing Condition: Portions of Roadway are under construction as a condition of subdivision approval						
	Item Description	**Section**	**Quantity**	**Units**		**Unit Cost**	**Cost**
	Improve Fee Portion	4-F	0	LF	$	777.40	$0
	Bridge/Culvert	Bridge/Culvert	0	SF	$	295.00	$0
						Subtotal	$0
					Contingency	15%	$0
					Engineering and Permits	35%	$0
						Total	**$2,377,672**
						Rounded	**$2,378,000**
						Credit Agreement	$2,377,672
						Other Funding	$0
						Remaining Fee Portion Cost	$0
73	Femoyer Street				2007	Ultimate	2055
	From Mather Boulevard to Peter A. McCuen Blvd			Lanes	2	4	4
	Existing Conditions: 1200 lf of 2 lane road w/o median from Mather to Peter McCuen Extension.						
	Contains 700 ft developed both sides, 650 ft developed on side. 150 ft of vacant land.						
	Item Description	**Section**	**Quantity**	**Units**		**Unit Cost**	**Cost**
	Widen Remainder to 4 Lanes	4-F	0	LF		$777.40	$0
						Subtotal	$0
					Contingency	15%	$0
					Engineering and Permits	35%	$0
	Right of Way (Industrial)	Right of Way (Industrial)	0	SF		$55.00	$0
						City Project (already built)	$1,319,896
						Total	**$1,327,896**
						Rounded	**$1,328,000**
						Other Funding	$8,000

ID No	Project Information and Cost					
					Remaining Fee Portion Cost	$1,319,896
93	Grant Line Road			2007	Ultimate	2055
	From Jackson Highway to Rancho Cordova Parkway		Lanes	2	4	4
	Existing Condition: 2 Lane with no median, undeveloped area					
	Item Description	**Section**	**Quantity**	**Units**	**Unit Cost**	**Cost**
	Widen to 4 Lanes	6-F	2460	LF	$1,049.61	$2,582,028
	Bridge/Culvert	Bridge/Culvert	5200	SF	$295.00	$1,534,000
	6-F Section provides cost of 4 lanes in Fee Portion				Subtotal	$4,116,028
					Contingency 15%	$617,404
					Engineering and Permits 35%	$1,440,610
					Traffic Control 20%	$823,206
					Total	**$6,997,248**
					Rounded	**$6,997,000**
					Other Funding	$2,099,174
	COUNTY SHARED PROJECT				County Portion 50%	**$2,448,913**
					Remaining Fee Portion Cost	$2,448,913
94	Grant Line Road			2007	Ultimate	2055
	From Rancho Cordova Parkway to Kiefer Boulevard		Lanes	2	4	4
	Existing Condition: 2 Lane with no median, undeveloped area					
	Item Description	**Section**	**Quantity**	**Units**	**Unit Cost**	**Cost**
	Widen to 4 Lanes	6-F	5000	LF	$1,049.61	$5,248,025
	Bridge/Culvert	Bridge/Culvert	4680	SF	$290.00	$1,357,200
	6-F Section provides cost of 4 lanes in Fee Portion				Subtotal	$6,605,225
					Contingency 15%	$990,784
					Engineering and Permits 35%	$2,311,829
					Traffic Control 20%	$1,321,045
					Total	**$11,228,883**
					Rounded	**$11,229,000**
					Other Funding	$3,368,665
	COUNTY SHARED PROJECT				County Portion 50%	**$3,930,168**
					Remaining Fee Portion Cost	$3,930,168

ID No	Project Information and Cost					
95	Grant Line Road			2007	Ultimate	2055
	From Kiefer Boulevard to Chrysanthy Boulevard		Lanes	2	4	4
	Existing Condition: 2 Lane with no median, undeveloped area					
	Item Description	**Section**	**Quantity**	**Units**	**Unit Cost**	**Cost**
	Widen to 4 Lanes	6-F	9300	LF	$1,049.61	$9,761,327
	Bridge/Culvert	Bridge/Culvert	6760	SF	$295.00	$1,994,200
	6-F Section provides cost of 4 lanes in Fee Portion				Subtotal	$11,755,527
				Contingency	15%	$1,763,329
				Engineering and Permits	35%	$4,114,434
				Traffic Control	20%	$2,351,105
					Total	**$19,984,395**
					Rounded	**$19,984,000**
					Other Funding	$5,995,319
	COUNTY SHARED PROJECT			County Portion	50%	**$6,994,341**
					Remaining Fee Portion Cost	$6,994,341
96	Grant Line Road			2007	Ultimate	2055
	From Chrysanthy Boulevard to Douglas Road		Lanes	2	4	4
	Existing Condition: 2 Lane with no median, undeveloped area					
	Item Description	**Section**	**Quantity**	**Units**	**Unit Cost**	**Cost**
	Widen to 4 Lanes	6-F	4300	LF	$1,049.61	$4,513,302
	Bridge/Culvert	Bridge/Culvert	4680	SF	$295.00	$1,380,600
	6-F Section provides cost of 4 lanes in Fee Portion				Subtotal	$5,893,902
				Contingency	15%	$884,085
				Engineering and Permits	35%	$2,062,866
				Traffic Control	20%	$1,178,780
					Total	**$10,019,633**
					Rounded	**$10,020,000**
					Other Funding	$3,005,890
	COUNTY SHARED PROJECT			County Portion	50%	**$3,507,055**
					Remaining Fee Portion Cost	$3,507,055

ID No	Project Information and Cost						
97	Grant Line Road				2007	Ultimate	2055
	From Douglas Road to City Limit			Lanes	2	4	4
	Existing Condition: 2 Lane with no median, undeveloped area						
	Item Description	**Section**	**Quantity**	**Units**		**Unit Cost**	**Cost**
	Widen to 4 Lanes	6-F	8100	LF		$1,049.61	$8,501,801
	Bridge/Culvert No. 1	Bridge/Culvert	2600	SF		$295.00	$767,000
	Bridge/Culvert No. 2	Bridge/Culvert	5200	SF		$295.00	$1,534,000
	Demo Existing 2 Lane	Demolish Existing	300	LF		$85.00	$25,500
	Project is combined with #98					Subtotal	$10,828,301
	6-F Section provides cost of 4 lanes in Fee Portion				Contingency	15%	$1,624,245
					Engineering and Permits	35%	$3,789,905
					Traffic Control	20%	$2,165,660
	Right of Way Cost Agricultural	Right of Way (Agricultural)	18000	SF		$2.60	$46,800
						Total	**$18,454,911**
						Rounded	**$18,455,000**
						Other Funding	$5,536,473
	COUNTY SHARED PROJECT				County Portion	50%	**$6,442,870**
						Remaining Fee Portion Cost	$6,475,657

ID No	Project Information and Cost					
103	Old Placerville Road			2007	Ultimate	2055
	From Bradshaw Road to Peter A. McCuen Blvd		Lanes	2	4	4

Existing Condition: Developed area, 4 lane Bradshaw to Granby Drive - 1200 ft, painted median, bike lane, c&g and sidewalk both sides. 2 lane - Granby to Astral - 2700 ft, no median, bike lane, c&g or sidewalk. 4 lane - Astral to Routier - 1200 ft, painted median, north side - bike lane, c&g and sidewalk. South side - bike lane, no c&g or sidewalk.

Item Description	Section	Quantity	Units	Unit Cost	Cost
Widen to 6 Lanes	6-F	9550	LF	$1,049.61	$10,023,728
Improve Fee Portion	6-D	9550	LF	$1,001.82	$9,567,405
				Subtotal	$19,591,133
			Contingency	15%	$2,938,670
			Environmental	7.5%	$1,469,335
			Engineering and Permits	35%	$6,856,896
Right of Way Commercial	Right of Way (Commercial)	147600	SF	$105.00	$15,498,000
Right of Way Residential	Right of Way (Residential)	35000	SF	$40.00	$1,400,000
Right of Way Industrial	Right of Way (Industrial)	250800	SF	$55.00	$13,794,000
				Total	**$61,548,034**
				Rounded	**$61,548,000**
				Other Funding	$0
COUNTY SHARED PROJECT			County Portion	50%	**$15,428,017**
				Remaining Fee Portion Cost	$46,119,983

ID No	Project Information and Cost

105 Peter A. McCuen Boulevard

		2007	Ultimate	2055
From Old Placerville to Mather Field Rd	Lanes	2	4	4

Existing Condition: 600ft of parking lot, 3900ft of 2 lane road, no median, c&g or sidewalk, developed area

Item Description	Section	Quantity	Units	Unit Cost	Cost
Widen to 4 Lanes	4-F	1850	LF	$777.40	$1,438,190
Improve Fee Portion	4-D	1850	LF	$1,002.86	$1,855,286
				Subtotal	$3,293,476
			Contingency	15%	$494,021
			Environmental	7.5%	$247,011
			Engineering and Permits	35%	$1,152,717
Right of Way Industrial	Right of Way (Industrial)	81400	SF	$55.00	$4,477,000
				Total	**$9,664,225**
				Rounded	**$9,664,000**
				Other Funding	$0
				Remaining Fee Portion Cost	$9,664,000

105.1 Peter A. McCuen Boulevard

		2007	Ultimate	2055
From Mather Field Road to Femoyer St	Lanes	2	4	4

Existing Condition:

Item Description	Section	Quantity	Units	Unit Cost	Cost
Widen to 4 Lanes	4-F	1225	LF	$777.40	$952,315
Improve Fee Portion	4-D	1225	LF	$1,002.86	$1,228,500
				Subtotal	$2,180,815
			Contingency	15%	$327,122
			Environmental	7.5%	$163,561
			Engineering and Permits	35%	$763,285
Right of Way Industrial	Right of Way (Industrial)	90650	SF	$55.00	$4,985,750
				Total	**$8,420,534**
				Rounded	**$8,421,000**

ID No	Project Information and Cost					
					Other Funding	$0
					Remaining Fee Portion Cost	$8,421,000

110 International Drive

From Kilgore Road to Sunrise Boulevard

Existing Condition: Project completed in 2013

		2007	Ultimate	2055
Lanes		6	6	6

Item Description	Section	Quantity	Units	Unit Cost	Cost
Improvements	6-F	0	LF	$1,049.61	$0

Includes Intersection at Sunrise Boulevard (Projects 282 & 283)

		Subtotal	$0
Contingency	15%		
Environmental	7.5%		
		Total	**$13,815,430**
		Rounded	**$13,815,000**
		City Project	$3,710,915
		Other Funding	$10,104,515
		Remaining Fee Portion Cost	$3,710,915

111 International Drive

From Sunrise Boulevard to Rancho Cordova Parkway

2007 Condition: 1500 lf 4 lane w/ c&g and sidewalk, no bike lane; 1200 lf through industrial land and buildings;
3000 lf through undeveloped field

		2007	Ultimate	2055
Lanes		0	6	6

Item Description	Section	Quantity	Units	Unit Cost	Cost
Improve Fee Portion	6-F	2850	LF	$1,049.61	$2,991,374
Widen to 6 Lanes	6-D	5400	LF	$1,001.82	$5,409,842
Bridge/Culvert	Bridge/Culvert	6300	SF	$295.00	$1,858,500
				Subtotal	$10,259,716
			Contingency	15%	$1,538,957
			Environmental	7.5%	$769,479
			Engineering and Permits	35%	$3,590,901
	Right of Way Cost				$24,000,000
				Total	**$40,159,052**
				Rounded	**$40,159,000**

ID No	Project Information and Cost					
					Other Funding	$0
					Remaining Fee Portion Cost	$40,159,000

112 International Drive
From Rancho Cordova Parkway to Centennial Drive
Existing Condition: Undeveloped Field

		2007	Ultimate	2055
Lanes		0	4	4

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane roadway	4-F	1500	LF	$777.40	$1,166,100

Subtotal		$1,166,100
Contingency	15%	$174,915
Environmental	7.5%	$87,458
Engineering and Permits	35%	$408,135
Total		**$1,836,608**
Rounded		**$1,837,000**

Other Funding	$0
Remaining Fee Portion Cost	$1,837,000

113 International Drive
From Centennial Drive to Americanos
Existing Condition: Undeveloped Field

		2007	Ultimate	2055
Lanes		0	4	4

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane roadway	4-F	400	LF	$777.40	$310,960

Subtotal		$310,960
Contingency	15%	$46,644
Environmental	7.5%	$23,322
Engineering and Permits	35%	$108,836
Total		**$489,762**
Rounded		**$490,000**

ID No	Project Information and Cost					
					Other Funding	$0
					Remaining Fee Portion Cost	$490,000

114 International Drive
From Americanos Road to White Rock
Existing Condition: Undeveloped Field

	2007	Ultimate	2055
Lanes	0	4	4

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane roadway	4-F	400	LF	$777.40	$310,960
	4A-2-F	0	LF	$130.62	$0
				Subtotal	$310,960
			Contingency	15%	$46,644
			Environmental	7.5%	$23,322
			Engineering and Permits	35%	$108,836
				Total	**$489,762**
				Rounded	**$490,000**
				Other Funding	$0
				Remaining Fee Portion Cost	$490,000

124 Jackson Hwy.
From Sunrise Boulevard to Grant Line Road
Existing Condition: 2 lane, no median, undeveloped

	2007	Ultimate	2055
Lanes	0	4	4

Item Description	Section	Quantity	Units	Unit Cost	Cost
Widen to 4 lanes	6-F	4800	LF	$1,049.61	$5,038,104
Bridge/Culvert near Grant Line Road Intersection	Bridge/Culvert	6,300	SF	$295.00	$1,858,500
				Subtotal	$6,896,604
			Contingency	15%	$1,034,491
			Environmental	7.5%	$517,245
			Engineering and Permits	35%	$2,413,811
				Total	**$10,862,151**
				Rounded	**$10,862,000**
				Other Funding	$0

ID No	Project Information and Cost					
	COUNTY SHARED PROJECT				County Portion 50%	**$5,431,000**
					Remaining Fee Portion Cost	$5,431,000

126 Rancho Cordova Parkway
From Grant Line Road to Kiefer Boulevard
Existing Condition: Undeveloped Field

	2007	Ultimate	2055
Lanes	0	4	4

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane roadway	4-F	2900	LF	$777.40	$2,254,460
	4-F	2900	LF	$777.40	$2,254,460
Bridge/Culvert No. 1	Bridge/Culvert	2600	SF	$295.00	$767,000
Bridge/Culvert No. 2	Bridge/Culvert	2600	SF	$295.00	$767,000
				Subtotal	$6,042,920
			Contingency	15%	$906,438
			Engineering and Permits	35%	$2,115,022
				Total	**$9,064,380**
				Rounded	**$9,064,000**
				Other Funding	$0
				Remaining Fee Portion Cost	$9,064,000

127 Rancho Cordova Parkway
From Kiefer Boulevard to North Campus Drive
Existing Condition: 2 lane

	2007	Ultimate	2055
Lanes	2	4	4

Item Description	Section	Quantity	Units	Unit Cost	Cost
	4-F	3300	LF	$777.40	$2,565,420
	Bridge/Culvert	2600	SF	$295.00	$767,000
				Subtotal	$3,332,420
			Contingency	15%	$499,863
			Engineering and Permits	35%	$1,166,347
				Total	**$7,319,455**
				Rounded	**$7,319,000**
Credit agreement included Segment 127.1				Credit Agreement	$2,320,825

ID No	Project Information and Cost					
					Other Funding	$0
					Remaining Fee Portion Cost	$4,998,175

			2007	Ultimate	2055
127.1	Rancho Cordova Parkway				
	From North Campus Dr to Chrysanthy Blvd	Lanes	2	4	4
	Existing Condition: 2 lane				

Item Description	Section	Quantity	Units	Unit Cost	Cost
Widen to 4 lanes	4-F	3900	LF	$777.40	$3,031,860
Bridge/Culvert	Bridge/Culvert	2600	SF	$295.00	$767,000

		Subtotal	$3,798,860
	Contingency	15%	$569,829
	Engineering and Permits	35%	$1,329,601
		Total	**$5,698,290**
		Rounded	**$5,698,000**
		Other Funding	$0
		Remaining Fee Portion Cost	$5,698,000

			2007	Ultimate	2055
128	Rancho Cordova Parkway				
	From Chrysanthy Boulevard to Douglas Road	Lanes	2	4	4
	Existing Condition: Built				

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 Lanes	4-F	0	LF	$777.40	$0

		Subtotal	$0
	Contingency	15%	$0
	Engineering and Permits	35%	$0
		Total	**$2,188,480**
		Rounded	**$2,188,000**
		Credit Agreement	**$543,207**
		City Project	$445,273

ID No	Project Information and Cost					
					Other Funding	$1,200,000
					Remaining Fee Portion Cost	$444,793

129 Rancho Cordova Parkway

From Douglas Road to the Preserve

Existing Condition: Undeveloped

	2007	Ultimate	2055
Lanes	0	4	4

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane with wide median	4-F	1950	LF	$777.40	$1,515,930
Frontage	4-D	1950	LF	$1,002.86	$1,955,572
				Subtotal	$3,471,502
				Contingency 15%	$520,725
				Engineering and Permits 35%	$1,215,026
				Total	**$5,207,253**
				Rounded	**$5,207,000**
				Other Funding	$0
				Remaining Fee Portion Cost	$5,207,000

129.1 Rancho Cordova Parkway

From the Preserve to Villagio Drive

Existing Condition: Undeveloped

	2007	Ultimate	2055
Lanes	0	4	4

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane with wide median	4-F	1950	LF	$777.40	$1,515,930
Bridge/Culvert	Bridge/Culvert	2600	SF	$295.00	$767,000
				Subtotal	$2,282,930
				Contingency 15%	$342,440
				Engineering and Permits 35%	$799,026
				Total	**$3,424,395**
				Rounded	**$3,424,000**

ID No	Project Information and Cost					
					Other Funding	$0
					Remaining Fee Portion Cost	$3,424,000

130 Rancho Cordova Parkway
From Villagio Drive to Rio del Oro Parkway
Existing Condition: Undeveloped Field

	2007	Ultimate	2055
Lanes	0	6	6

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane with wide median	6-F	2500	LF	$1,049.61	$2,624,013

		Subtotal	$2,624,013
Contingency	15%		$393,602
Engineering and Permits	35%		$918,404
		Total	**$3,936,019**
		Rounded	**$3,936,000**

		Other Funding	$0
		Remaining Fee Portion Cost	$3,936,000

131 Rancho Cordova Parkway
From Rio del Oro Pkwy to International Dr
Existing Condition: Undeveloped Field

	2007	Ultimate	2055
Lanes	0	6	6

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 6 lane roadway	6-F	4200	LF	$1,049.61	$4,408,341

		Subtotal	$4,408,341
Contingency	15%		$661,251
Engineering and Permits	35%		$1,542,919
		Total	**$6,612,512**
		Rounded	**$6,613,000**

ID No	Project Information and Cost					
					Other Funding	$0
					Remaining Fee Portion Cost	$6,613,000

132 Rancho Cordova Parkway
From International Drive to White Rock Road
Existing Condition: Undeveloped Field

	2007	Ultimate	2055
Lanes	0	6	6

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 6 lane roadway	6-F	4200	LF	$1,049.61	$4,408,341

		Subtotal	$4,408,341
Contingency	15%		$661,251
Engineering and Permits	35%		$1,542,919
		Total	**$6,612,512**
		Rounded	**$6,613,000**
		Other Funding	$0
		Remaining Fee Portion Cost	$6,613,000

133 Rancho Cordova Parkway
From White Rock Rd to Easton Valley Pkwy
Existing Condition: Undeveloped Field

	2007	Ultimate	2055
Lanes	0	6	6

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 6 lane roadway	6-F	6400	LF	$1,049.61	$6,717,472
Bridge/Culvert	Bridge/Culvert	3150	SF	$295.00	$929,250

Project is combined with #134

		Subtotal	$7,646,722
Contingency	15%		$1,147,008
Environmental	7.5%		$573,504
Engineering and Permits	35%		$2,676,353
		Total	**$12,043,587**
		Rounded	**$12,044,000**
		Other Funding	$0

ID No	Project Information and Cost					
					Remaining Fee Portion Cost	$12,044,000

142 Kiefer Boulevard
From Sunrise Boulevard to Rancho Cordova Parkway
Existing Condition: 2 lane, no median

		2007	Ultimate	2055
Lanes		2	4	4

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane roadway	4-F	4300	LF	$777.40	$3,342,820
Bridge/Culvert	Bridge/Culvert	1040	SF	$295.00	$306,800

		Subtotal	$3,649,620
Contingency	15%		$547,443
Engineering and Permits	35%		$1,277,367
		Total	**$5,474,430**
		Rounded	**$5,474,000**
		Credit Agreement	$1,573,584
		Other Funding	$53,572
		Remaining Fee Portion Cost	$3,846,844

143 Kiefer Boulevard
From Rancho Cordova Pkwy to Americanos Blvd
Existing Condition: Undeveloped Field

		2007	Ultimate	2055
Lanes		0	4	4

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane roadway	4-F	4200	LF	$777.40	$3,265,080
Bridge/Culvert	Bridge/Culvert	10400	SF	$295.00	$3,068,000

		Subtotal	$6,333,080
Contingency	15%		$949,962
Engineering and Permits	35%		$2,216,578
		Total	**$9,499,620**
		Rounded	**$9,500,000**
		Other Funding	$0

ID No	Project Information and Cost					
					Remaining Fee Portion Cost	$9,500,000

143.1 Kiefer Boulevard

		2007	Ultimate	2055
From Americanos Road to Grant Line Road	Lanes	0	4	4

Existing Condition: 2 Lane, no median, undeveloped

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 lane roadway	4-F	1100	LF	$777.40	$855,140
Bridge/Culvert	Bridge/Culvert	8320	SF	$295.00	$2,454,400
				Subtotal	$3,309,540
			Contingency	15%	$496,431
			Engineering and Permits	35%	$1,158,339
				Total	**$4,964,310**
				Rounded	**$4,964,000**
				Other Funding	$0
				Remaining Fee Portion Cost	$4,964,000

147 Mather Boulevard

		2007	Ultimate	2055
From Peter A. McCuen Blvd to Whitehead St	Lanes	2	4	4

Existing Condition: 2 lane, no median, most parcels with c&g, some sidewalk, developed area

Item Description	Section	Quantity	Units	Unit Cost	Cost
Widen to 4 Lanes (Peter A McCuen Blvd to Eknes St)	4-D	700	LF	$1,002.86	$702,000
Widen Mather to 4 Lanes (Remove Couplet)	4-F	850	LF	$777.40	$660,790
				Subtotal	$1,362,790
			Contingency	15%	$204,419
			Engineering and Permits	35%	$476,977
Right of Way Industrial	Right of Way (Industrial)	77450	SF	$55.00	$4,259,750
				Total	**$6,303,935**
				Rounded	**$6,304,000**
				Other Funding	$0

ID No	Project Information and Cost					
					Remaining Fee Portion Cost	$6,304,000

148 Mather Boulevard

		2007	Ultimate	2055
From Whitehead Street to Bleckley Street	Lanes	2	4	4

Existing Condition: 2 lane, no median, most parcels with c&g, some sidewalk, developed area

Item Description	Section	Quantity	Units	Unit Cost	Cost
Widen Mather to 4 Lanes (Remove Couplet)	4A-2-F	700	LF	$130.62	$91,434
	4A-2-D	700	LF	$444.72	$311,304
				Subtotal	$402,738
			Contingency	15%	$60,411
			Engineering and Permits	35%	$140,958
Right of Way Industrial	Right of Way (Industrial)	34300	SF	$55.00	$1,886,500
				Total	**$2,490,607**
				Rounded	**$2,491,000**
				Other Funding	$0
				Remaining Fee Portion Cost	$2,491,000

149 Mather Boulevard

		2007	Ultimate	2055
From Femoyer St. to North Mather Blvd	Lanes	2	4	4

Existing Condition: Femoyer to beginning of N Mather Blvd - 1000ft of 2 lane, no median, undeveloped area and 1300ft of quarry.

Item Description	Section	Quantity	Units	Unit Cost	Cost
Widen to 4 lanes	4-F	1270	LF	$777.40	$987,298
	4-D	1270	LF	$1,002.86	$1,273,629
				Subtotal	$2,260,927
			Contingency	15%	$339,139
			Engineering and Permits	35%	$118,699
				Total	**$2,718,765**
				Rounded	**$2,719,000**
				Other Funding	$0
				Remaining Fee Portion Cost	$2,719,000

ID No	Project Information and Cost					
173	Sun Center Drive			2007	Ultimate	2055
	From Sunrise Blvd to Rancho Cordova Pkwy		Lanes	2	2	2
	Existing Condition: 1300ft roadway at ultimate, 650ft through business parking lot, developed area					

Item Description	Section	Quantity	Units	Unit Cost	Cost
Improve Pavement (2 Lanes)	2-D	2700	LF	$1,048.26	$2,830,302
Bridge/Culvert	Bridge/Culvert	11200	SF	$295.00	$3,304,000
				Subtotal	$6,134,302
				Contingency 15%	$920,145
				Engineering and Permits 35%	$2,147,006
Right of Way	Right of Way (Industrial)	42840	SF	$55.00	$2,356,200
				Total	**$11,557,653**
				Rounded	**$11,558,000**
				Other Funding	$0
				Remaining Fee Portion Cost	$11,558,000

177	Sunrise Boulevard			2007	Ultimate	2055
	From Jackson Hwy. to Kiefer Boulevard		Lanes	2	6	6
	Existing Condition: 2 lane with shoulder					

Item Description	Section	Quantity	Units	Unit Cost	Cost
Improve Fee Portion	6-F	6400	LF	$1,049.61	$6,717,472
COUNTY SHARED PROJECT					
ASSUMES COUNTY FUNDS 6th Lane					
				Subtotal	$6,717,472
				Contingency 15%	$1,007,621
				Environmental 15.0%	$1,007,621
				Engineering and Permits 35%	$2,351,115
				Total	**$11,083,829**
				Rounded	**$11,084,000**
Existing Deficiency	FEE PORTION			**92%**	**$10,197,280**
				Other Funding	$886,720
				Remaining Fee Portion Cost	$10,197,280

ID No	Project Information and Cost					
178	Sunrise Boulevard			2007	Ultimate	2055
	From Kiefer Boulevard to Chrysanthy Boulevard		Lanes	5	6	6
	Existing Condition: 5 lane					

Item Description	Section	Quantity	Units	Unit Cost	Cost
Widen to 6 Lanes	6-F	0	LF	$1,049.61	$0

COUNTY SHARED PROJECT

6th lane/western frontage to be built by County

Subtotal		$0
Contingency	15%	$0
Environmental	7.5%	$0
Engineering and Permits	35%	$0
Total		**$8,005,647**
Rounded		**$8,006,000**
Credit Agreement		$5,878,323
Other Funding		$2,127,324
Remaining Fee Portion Cost		$0

179	Sunrise Boulevard			2007	Ultimate	2055
	From Chrysanthy Boulevard to Douglas Road		Lanes	5	6	6
	Existing Condition: 2 lane with shoulder					

Item Description	Section	Quantity	Units	Unit Cost	Cost
Widen to 6 Lanes	6-F	0	LF	$1,049.61	$0

COUNTY SHARED PROJECT

6th lane/western frontage to be built by County

Subtotal		$0
Contingency	15%	$0
Environmental	7.5%	$0
Engineering and Permits	35%	$0
Total		**$3,787,216**
Rounded		**$3,787,000**
Credit Agreement		$2,493,194
Other Funding		$1,294,022
Remaining Fee Portion Cost		$0.00

ID No	Project Information and Cost					
181	Sunrise Boulevard			2007	Ultimate	2055
	From Rio del Oro Parkway to Fitzgerald Road		Lanes	6	6	6
	Existing Condition: Built					

Item Description	Section	Quantity	Units	Unit Cost	Cost
Widen to 6 Lanes	6-F	0	LF	$1,049.61	$0
				Subtotal	$0
				Contingency 15%	$0
				Environmental 7.5%	$0
				Engineering and Permits 35%	$0
Right of Way Industrial	Right of Way (Industrial)	0	SF	$55.00	$0
				Total	**$596,720**
				Rounded	**$597,000**
				Credit Agreement	$514,358
				Other Funding	$82,362
				Remaining Fee Portion Cost	$0

187	Sunrise Boulevard			2007	Ultimate	2055
	From US 50-Interchange to Zinfandel Drive		Lanes	6	6+	6+
	Existing Condition: 6 lane					

Item Description	Section	Quantity	Units	Unit Cost	Cost
Additional Lane and Frontage	6-D	1850	LF	$1,001.82	$1,853,372
				Subtotal	$1,853,372
				Contingency 15%	$278,006
				Environmental 7.5%	$139,003
				Engineering and Permits 35%	$648,680
				Total	**$2,919,060**
				Rounded	**$2,919,000**
				Other Funding	$0
				Remaining Fee Portion Cost	$2,919,000

ID No	Project Information and Cost					
188	Sunrise Boulevard			2007	Ultimate	2055
	From Zinfandel Drive to Coloma Road		Lanes	6	6+	6+
	Existing Condition: 6 lane, median, c&g and sidewalk, no bike lanes					
	Item Description	**Section**	**Quantity**	**Units**	**Unit Cost**	**Cost**
	Additional Lane and Frontage	6-D	200	LF	$1,001.82	$200,365
					Subtotal	$200,365
				Contingency	15%	$30,055
				Environmental	7.5%	$15,027
				Engineering and Permits	35%	$70,128
					Total	**$315,574**
					Rounded	**$316,000**
					Other Funding	$0
					Remaining Fee Portion Cost	$316,000
189	Sunrise Boulevard			2007	Ultimate	2055
	From Coloma Road to Gold Country Boulevard		Lanes	6	6+	6+
	Existing Condition: 6 lane, median, c&g and sidewalk, bike lane east side only.					
	Fully developed area. Construct bike lane and sidewalk at back of curb using 110ft row.					
	Item Description	**Section**	**Quantity**	**Units**	**Unit Cost**	**Cost**
	Additional Lane and Frontage	6-D	2700	LF	$1,001.82	$2,704,921
					Subtotal	$2,704,921
				Contingency	15%	$405,738
				Environmental	7.5%	$202,869
				Engineering and Permits	35%	$946,722
	Right of Way Commercial	Right of Way (Commercial)	56700	SF	$105.00	$5,953,500
					Total	**$10,213,750**
					Rounded	**$10,214,000**
					Other Funding	$0
	COUNTY SHARED PROJECT			County Portion	50%	$2,130,125
					Remaining Fee Portion Cost	$8,083,625

ID No	Project Information and Cost					
190	Sunrise Boulevard			2007	Ultimate	2055
	From Gold Country Boulevard to American River		Lanes	6	6+	6+
	Existing Condition: 6 lane, painted median, c&g and sidewalk. Bike lane east side only.					
	Fully developed area. Construct sidewalk at back of curb with bike lane in existing 110ft row.					
	Item Description	**Section**	**Quantity**	**Units**	**Unit Cost**	**Cost**
	Additional Lane and Frontage	6-D	2000	LF	$1,001.82	$2,003,645
					Subtotal	$2,003,645
					Contingency 15%	$300,547
					Environmental 7.5%	$150,273
					Engineering and Permits 35%	$701,276
					Total	**$3,155,741**
					Rounded	**$3,156,000**
					Other Funding	$0
	COUNTY SHARED PROJECT				County Portion 50%	$1,578,000
					Remaining Fee Portion Cost	$1,578,000
194	White Rock Road			2007	Ultimate	2055
	From Kilgore Road to Sunrise Boulevard		Lanes	5	6	6
	Existing Condition: Kilgore to 650ft east - 5 lane, c&g and sidewalk both sides					
	650ft east to Sunrise - 6 lane, painted median, c&g and sidewalk, no bike lanes, Fully developed area					
	Item Description	**Section**	**Quantity**	**Units**	**Unit Cost**	**Cost**
	Widen to 6 Lanes	6-F	200	LF	$1,049.61	$209,921
	M (edian)	Median Island	500	LF	$180.00	$90,000
					Subtotal	$299,921
					Contingency 15%	$44,988
					Environmental 7.5%	$22,494
					Engineering and Permits 35%	$104,972
					Total	**$472,376**
					Rounded	**$472,000**
					Other Funding	$0
					Remaining Fee Portion Cost	$472,000

ID No **Project Information and Cost**

195 White Rock Road

		2007	Ultimate	2055
From Sunrise Boulevard to Luyung Drive	Lanes	2-6	6	6

Existing Condition: Sunrise to Fitzgerald - 6 lane at ultimate with painted median
Fitzgerald to Luyung - painted median, south side at ultimate, north side has 450ft of one lane, remainder at ultimate

Item Description	Section	Quantity	Units	Unit Cost	Cost
Widen and improve existing roadway and intersections		1	LS	$2,610,000.00	$2,610,000
					$0
					$0
Reflects detailed cost estimate prepared separately				Subtotal	$2,610,000
				Contingency 15%	$391,500
				Environmental 7.5%	$195,750
				Engineering and Permits 35%	$913,500
				Total	**$4,110,750**
				Rounded	**$4,111,000**
"Other funding" for Projects 195, 196 and 290 proportionally split based on total cost estimate				Other Funding	$3,812,085
				Remaining Fee Portion Cost	$298,665

196 White Rock Road

		2007	Ultimate	2055
From Luyung Drive to Rancho Cordova Parkway	Lanes	2	6	6

Existing Condition: 250ft of ultimate frontage, remainder at one lane each way

Item Description	Section	Quantity	Units	Unit Cost	Cost
Widen and improve existing roadway		1	LS	$3,340,000.00	$3,340,000
Reflects detailed cost estimate prepared separately				Subtotal	$3,340,000
				Contingency 20%	$668,000
				Environmental & ROW 7.5%	$250,500
				Engineering and Permits 35%	$1,169,000
				Total	**$5,427,500**
				Rounded	**$5,428,000**
"Other funding" for Projects 195, 196 and 290 proportionally split based on total cost estimate				Other Funding	$2,725,930
				Remaining Fee Portion Cost	$2,702,070

ID No	Project Information and Cost					
197	White Rock Road			2007	Ultimate	2055
	From Rancho Cordova Pkwy to International Dr		Lanes	2	6	6
	Existing Condition: 2 lane, no shoulder, no median					
	Item Description	**Section**	**Quantity**	**Units**	**Unit Cost**	**Cost**
	Widen to 6 Lanes	6-F	3700	LF	$1,049.61	$3,883,539
					Subtotal	$3,883,539
					Contingency 20%	$776,708
					Environmental & ROW 7.5%	$291,265
					Engineering and Permits 35%	$1,359,238
					Total	**$6,310,750**
					Rounded	**$6,311,000**
					Other Funding	$1,901,622
	COUNTY SHARED PROJECT				County Portion 50%	$2,204,689
					Remaining Fee Portion Cost	$2,204,688.80
198	White Rock Road			2007	Ultimate	2055
	From International Drive to Rio del Oro Parkway		Lanes			
	Existing Condition: 2 lane, no shoulder, no median					
	Item Description	**Section**	**Quantity**	**Units**	**Unit Cost**	**Cost**
	Improve Fee Portion	6-F	1700	LF	$1,049.61	$1,784,329
					Subtotal	$1,784,329
					Contingency 15%	$267,649
					Environmental 7.5%	$133,825
					Engineering and Permits 35%	$624,515
					Total	**$2,810,317**
					Rounded	**$2,810,000**
					Other Funding	$0
	COUNTY SHARED PROJECT				County Portion 50%	$1,405,000
					Remaining Fee Portion Cost	$1,405,000

ID No	Project Information and Cost					
199	White Rock Road			2007	Ultimate	2055
	From Rio del Oro Parkway to Villagio Drive		Lanes	2	6	6
	Existing Condition: 2 lane, no shoulder, no median					

Item Description	Section	Quantity	Units	Unit Cost	Cost
Improve Fee Portion	6-F	2200	LF	$1,049.61	$2,309,131
				Subtotal	$2,309,131
			Contingency	15%	$346,370
			Environmental	7.5%	$173,185
			Engineering and Permits	35%	$808,196
				Total	**$3,636,881**
				Rounded	**$3,637,000**
				Other Funding	$0
COUNTY SHARED PROJECT			County Portion	50%	$1,818,500
				Remaining Fee Portion Cost	$1,819,000

ID No	Project Information and Cost					
200	White Rock Road			2007	Ultimate	2055
	From Villagio Drive to City Limit		Lanes	2	6	6
	Existing Condition: 2 lane, no shoulder, no median					

Item Description	Section	Quantity	Units	Unit Cost	Cost
Improve Fee Portion	6-F	1800	LF	$1,049.61	$1,889,289
				Subtotal	$1,889,289
			Contingency	15%	$283,393
			Environmental	7.5%	$141,697
			Engineering and Permits	35%	$661,251
				Total	**$2,975,630**
				Rounded	**$2,976,000**
				Other Funding	$0
COUNTY SHARED PROJECT			County Portion	50%	$1,488,000
				Remaining Fee Portion Cost	$1,488,000

ID No	Project Information and Cost					
203	Zinfandel Drive			2007	Ultimate	2055
	From Douglas Road to Villages of Zinfandel / City Limit		Lanes	2	6	6
	Existing Condition: 2 lane built by county					

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 6 Lanes	4-F	2950	LF	$777.40	$2,293,330
Bridge/Culvert	Bridge/Culvert	4410	SF	$295.00	$1,300,950

Assumes 2 additional lanes and median (no frontage) funded by City and that 2 frontage lanes would be funded by County

Subtotal		$3,594,280
Contingency	15%	$539,142
Environmental	7.5%	$269,571
Engineering and Permits	35%	$1,257,998
Total		**$5,660,991**
Rounded		**$5,661,000**
Other Funding		$0
Remaining Fee Portion Cost		$5,661,000

204.1	North Campus Drive			2007	Ultimate	2055
	From Rancho Cordova Pkwy to Americanos Blvd		Lanes	0	4	4
	Existing Condition: Undeveloped					

Item Description	Section	Quantity	Units	Unit Cost	Cost
New 4 Lanes	4-F	5460	LF	$777.40	$4,244,604

Subtotal		$4,244,604
Contingency	15%	$636,691
Environmental	7.5%	$318,345
Engineering and Permits	35%	$1,485,611
Total		**$6,685,251**
Rounded		**$6,685,000**
Other Funding		$0

ID No	Project Information and Cost	
	Remaining Fee Portion Cost	$6,685,000

ID No	Project Information and Cost

Intersections

ID No **Project Information and Cost**

209 Rio del Oro Parkway / Sunrise Boulevard

Item Description	Section	Quantity	Units	Unit Cost	Cost
New Intersection	6x6 Tee-F	1	LS	$1,932,435.85	$1,932,436
Adjust for existing improvements and construction under traffic and sliver widening					-$163,693
				Subtotal	$1,768,743
			Contingency	15%	$265,311
			Engineering and Permits	35%	$619,060
Right of Way Agricultural	Right of Way (Agricultural)	11700	SF	$2.60	$30,420
				Total	**$2,683,534**
				Rounded	**$2,684,000**
				Other Funding	$0
				Remaining Fee Portion Cost	$2,684,000

210 Rio del Oro Parkway / Rancho Cordova Parkway

Existing Condition: undeveloped

Item Description	Section	Quantity	Units	Unit Cost	Cost
New Intersection	6x6-F	1	LS	$2,599,504.28	$2,599,504
				Subtotal	$2,599,504
			Contingency	15%	$389,926
			Engineering and Permits	35%	$909,826
				Total	**$3,899,256**
				Rounded	**$3,899,000**
				Other Funding	$0

ID No	Project Information and Cost				
				Remaining Fee Portion Cost	$3,899,000

211 Rio del Oro Parkway / Centennial Drive

Existing Condition: undeveloped

Item Description	Section	Quantity	Units	Unit Cost	Cost
New Intersection	4x4-F	1	LS	$1,904,175.27	$1,904,175
				Subtotal	$1,904,175
			Contingency	15%	$285,626
			Engineering and Permits	35%	$666,461
				Total	**$2,856,263**
				Rounded	**$2,856,000**
				Other Funding	$0
				Remaining Fee Portion Cost	$2,856,000

212 Rio del Oro Parkway / Americanos Boulevard

Existing Condition: undeveloped

Item Description	Section	Quantity	Units	Unit Cost	Cost
New Intersection	4x4-F	1	LS	$1,904,175.27	$1,904,175
				Subtotal	$1,904,175
			Contingency	15%	$285,626
			Engineering and Permits	35%	$666,461
				Total	**$2,856,263**
				Rounded	**$2,856,000**
				Other Funding	$0
				Remaining Fee Portion Cost	$2,856,000

ID No **Project Information and Cost**

213 Rio del Oro Parkway / White Rock Road

Existing Condition: undeveloped

Item Description	Section	Quantity	Units	Unit Cost	Cost
New Intersection	4x6 Tee-F	1	LS	$1,616,861.07	$1,616,861
Adjust for existing improvements and construction under traffic and sliver widening					$107,278
				Subtotal	$1,724,139
				Contingency 15%	$258,621
				Engineering and Permits 35%	$603,449
				Total	**$2,586,209**
				Rounded	**$2,586,000**
				Other Funding	$0
				Remaining Fee Portion Cost	$2,586,000

215 Rio del Oro Parkway / Easton Valley Parkway

Existing Condition: undeveloped

Item Description	Section	Quantity	Units	Unit Cost	Cost
New Intersection	4x6 Tee-F	1	LS	$1,616,861.07	$1,616,861
In the New Annexation Area					
				Subtotal	$1,616,861
				Contingency 15%	$242,529
				Engineering and Permits 35%	$565,901
				Total	**$2,425,292**
				Rounded	**$2,425,000**
				Other Funding	$0
				Remaining Fee Portion Cost	$2,425,000

ID No **Project Information and Cost**

216 Rio del Oro Parkway / Folsom Boulevard

Item Description	Section	Quantity	Units	Unit Cost	Cost
New Intersection	4x4 Tee-F	0.33	LS	$1,446,727.57	$477,420

In the New Annexation Area

Subtotal		$477,420
Contingency	15%	$71,613
Engineering and Permits	35%	$167,097
Total		**$716,130**
Rounded		**$716,000**
Other Funding		$0
Remaining Fee Portion Cost		$716,000

217 Villagio Drive / Douglas Road

Existing Condition: Two legs of Tee Intersection Built

Item Description	Section	Quantity	Units	Unit Cost	Cost
North Leg of Intersection	4x4 Tee-F	0.3	LS	$1,446,727.57	$434,018
Remaining cost of traffic signal		2	LS	$120,500.00	$241,000

Credit for improvements on Douglas Rd intersection legs included in Project #56

Subtotal		$675,018
Contingency	15%	$101,253
Engineering and Permits	35%	$236,256
Total		**$1,012,527**
Rounded		**$1,013,000**
Other Funding		$0
Remaining Fee Portion Cost		$1,013,000

ID No **Project Information and Cost**

218 Villagio Drive / Rancho Cordova Parkway

Item Description	Section	Quantity	Units	Unit Cost	Cost
New Intersection	4x6-F	1	LS	$2,211,418.54	$2,211,419

Subtotal		$2,211,419
Contingency	15%	$331,713
Engineering and Permits	35%	$773,996
Total		**$3,317,128**
Rounded		**$3,317,000**
Other Funding		$0
Remaining Fee Portion Cost		$3,317,000

219 Villagio Drive / Centennial Drive

Existing Condition: undeveloped

Item Description	Section	Quantity	Units	Unit Cost	Cost
New Intersection	4x4-F	1	LS	$1,904,175.27	$1,904,175

Subtotal		$1,904,175
Contingency	15%	$285,626
Engineering and Permits	35%	$666,461
Total		**$2,856,263**
Rounded		**$2,856,000**
Other Funding		$0
Remaining Fee Portion Cost		$2,856,000

ID No **Project Information and Cost**

220 Villagio Drive / Americanos Boulevard

Existing Condition: undeveloped

Item Description	Section	Quantity	Units	Unit Cost	Cost
New Intersection	4x4-F	1	LS	$1,904,175.27	$1,904,175

		Subtotal	$1,904,175
	Contingency	15%	$285,626
	Engineering and Permits	35%	$666,461
		Total	**$2,856,263**
		Rounded	**$2,856,000**
		Other Funding	$0
		Remaining Fee Portion Cost	$2,856,000

221 Villagio Drive / White Rock Road

Existing Condition: undeveloped

Item Description	Section	Quantity	Units	Unit Cost	Cost
New Intersection	4x6-F	1	LS	$2,211,418.54	$2,211,419

		Subtotal	$2,211,419
	Contingency	15%	$331,713
	Engineering and Permits	35%	$773,996
		Total	**$3,317,128**
		Rounded	**$3,317,000**
		Other Funding	$0
		Remaining Fee Portion Cost	$3,317,000

ID No **Project Information and Cost**

226 Easton Valley Parkway / Rancho Cordova Parkway

Existing Condition: undeveloped

Item Description	Section	Quantity	Units	Unit Cost	Cost
New Intersection	6x6-F	1	LS	$2,599,504.28	$2,599,504

		Subtotal	$2,599,504
	Contingency	25%	$649,876
	Engineering and Permits	35%	$909,826
		Total	**$4,159,207**
		Rounded	**$4,159,000**
		Other Funding	$0
		Remaining Fee Portion Cost	$4,159,000

227 Easton Valley Parkway / Hazel Avenue

Item Description	Section	Quantity	Units	Unit Cost	Cost
New Intersection	6x6-F	1	LS	$2,599,504.28	$2,599,504

In the New Annexation Area

		Subtotal	$2,599,504
	Contingency	25%	$649,876
	Engineering and Permits	35%	$909,826
		Total	**$4,159,207**
		Rounded	**$4,159,000**
		Other Funding	$0
COUNTY SHARED PROJECT	County Portion	50%	$2,079,500
		Remaining Fee Portion Cost	$2,080,000

ID No **Project Information and Cost**

230.2 Centennial Drive / International Boulevard

Existing Condition: Undeveloped

Item Description	Section	Quantity	Units	Unit Cost	Cost
New Intersection	4x4 Tee-F	1	LS	$1,446,727.57	$1,446,728

		Subtotal	$1,446,728
	Contingency	15%	$217,009
	Engineering and Permits	35%	$506,355
		Total	**$2,170,091**
		Rounded	**$2,170,000**
		Other Funding	$0
		Remaining Fee Portion Cost	$2,170,000

230.3 Centennial Drive / Americanos Boulevard

Existing Condition: undeveloped

Item Description	Section	Quantity	Units	Unit Cost	Cost
New Intersection	4x4 Tee-F	1	LS	$1,446,727.57	$1,446,728

		Subtotal	$1,446,728
	Contingency	15%	$217,009
	Engineering and Permits	35%	$506,355
		Total	**$2,170,091**
		Rounded	**$2,170,000**
		Other Funding	$0
		Remaining Fee Portion Cost	$2,170,000

ID No **Project Information and Cost**

231 Americanos Boulevard / Kiefer Boulevard

Existing Condition: undeveloped

Item Description	Section	Quantity	Units	Unit Cost	Cost
New Intersection	4x4 Tee-F	1	LS	$1,446,727.57	$1,446,728

		Subtotal	$1,446,728
	Contingency	15%	$217,009
	Engineering and Permits	35%	$506,355
		Total	**$2,170,091**
		Rounded	**$2,170,000**
		Other Funding	$0
		Remaining Fee Portion Cost	$2,170,000

231.1 Americanos Boulevard / North Campus Drive

Existing Condition: undeveloped

Item Description	Section	Quantity	Units	Unit Cost	Cost
New Intersection	4x4 Tee-F	1	LS	$1,446,727.57	$1,446,728

		Subtotal	$1,446,728
	Contingency	15%	$217,009
	Engineering and Permits	35%	$506,355
		Total	**$2,170,091**
		Rounded	**$2,170,000**
		Other Funding	$0
		Remaining Fee Portion Cost	$2,170,000

ID No **Project Information and Cost**

232 Americanos Boulevard / Chrysanthy Boulevard

Existing Condition: undeveloped

Item Description	Section	Quantity	Units	Unit Cost	Cost
New Intersection	4x4-F	1	LS	$1,904,175.27	$1,904,175
				Subtotal	$1,904,175
				Contingency 15%	$285,626
				Engineering and Permits 35%	$666,461
				Total	**$2,856,263**
				Rounded	**$2,856,000**
				Other Funding	$0
				Remaining Fee Portion Cost	$2,856,000

233 Americanos Boulevard / Douglas Road

Existing Condition: Partially built

Item Description	Section	Quantity	Units	Unit Cost	Cost
New Intersection	4x4-F	1	LS	$1,904,175.27	$1,904,175
Adjust for existing improvements and construction under traffic and sliver widening					-$107,278
				Subtotal	$1,796,897
				Contingency 15%	$269,535
				Engineering and Permits 35%	$628,914
				Total	**$2,695,346**
				Rounded	**$2,695,000**
				Credit Agreement	$1,185,138
				Other Funding	$0
				Remaining Fee Portion Cost	$1,509,862

ID No **Project Information and Cost**

234 Americanos Boulevard / International Drive

Existing Condition: undeveloped

Item Description	Section	Quantity	Units	Unit Cost	Cost
New Intersection	4x4 Tee-F	1	LS	$1,446,727.57	$1,446,728

Subtotal		$1,446,728
Contingency	15%	$217,009
Engineering and Permits	35%	$506,355
Total		**$2,170,091**
Rounded		**$2,170,000**
Other Funding		$0
Remaining Fee Portion Cost		$2,170,000

245 Chrysanthy Boulevard / Sunrise Boulevard

Existing Condition: Built

Item Description	Section	Quantity	Units	Unit Cost	Cost
New Intersection	4x6-F	0	LS	$2,211,418.54	$0

Subtotal		$0
Contingency	15%	$0
Engineering and Permits	35%	$0
Total		**$2,615,882**
Rounded		**$2,616,000**
Credit Agreement		$2,260,313
Other Funding		$355,569
Remaining Fee Portion Cost		$0.00

ID No	Project Information and Cost

246 Chrysanthy Boulevard / Rancho Cordova Parkway

Existing Condition: Partially built

Item Description	Section	Quantity	Units	Unit Cost	Cost
New Intersection	4x4-F	1	LS	$1,904,175.27	$1,904,175
Adjust for existing improvements and construction under traffic and sliver widening					$186,600
				Subtotal	$2,090,775
				Contingency 15%	$313,616
				Engineering and Permits 35%	$731,771
				Total	**$3,136,163**
				Rounded	**$3,136,000**
				Credit Agreement	$724,740
				Other Funding	$0
				Remaining Fee Portion Cost	$2,411,260

247 Chrysanthy Boulevard / Grant Line Road

Existing Condition: undeveloped

Item Description	Section	Quantity	Units	Unit Cost	Cost
New Intersection	4x6-F	1	LS	$2,211,418.54	$2,211,419
Adjust for existing improvements and construction under traffic and sliver widening					-$3,696
				Subtotal	$2,207,723
				Contingency 15%	$331,158
				Engineering and Permits 35%	$772,703
				Total	**$3,311,584**
				Rounded	**$3,312,000**
				Other Funding	$993,600
COUNTY SHARED PROJECT				County Portion 50%	$1,159,200
				Remaining Fee Portion Cost	$1,159,200

ID No **Project Information and Cost**

253 Douglas Road / Sunrise Boulevard

Existing Condition: Partially built

Item Description	Section	Quantity	Units	Unit Cost	Cost
New Intersection	6x6-F	1	LS	$2,599,504.28	$2,599,504
				Subtotal	$2,599,504
				Contingency 25%	$649,876
				Engineering and Permits 35%	$909,826
				Total	**$4,159,207**
				Rounded	**$4,159,000**
				Credit Agreement	$2,743,042
				Other Funding	$290,890
				Remaining Fee Portion Cost	$1,125,069

254 Douglas Road / Rancho Cordova Parkway

Existing Condition: Partially built

Item Description	Section	Quantity	Units	Unit Cost	Cost
Construct North Leg of Intersection	4x6-F	0.25	LS	$2,211,418.54	$552,855
Frontage on north side of intersection	4x6-D	0.5	LS	$1,704,978.13	$852,489
				Subtotal	$1,405,344
				Contingency 15%	$210,802
				Engineering and Permits 35%	$491,870
				Total	**$4,869,467**
				Rounded	**$4,869,000**
				Credit Agreement	$2,761,451
				Other Funding	$0
				Remaining Fee Portion Cost	$2,107,549

Total Cost includes Credit agreement

ID No **Project Information and Cost**

255 Douglas Road / Grant Line Road

Existing Condition: Partially built

Item Description	Section	Quantity	Units	Unit Cost	Cost
Modify Intersection	4x6-F	1	LS	$2,211,418.54	$2,211,419
Adjust for existing improvements and construction under traffic and sliver widening					-$42,000
				Subtotal	$2,169,419
				Contingency 15%	$325,413
				Engineering and Permits 35%	$759,296
				City Project already built	$774,011
				Total	**$4,028,139**
				Rounded	**$4,028,000**
				Other Funding	$1,678,597
COUNTY SHARED PROJECT				County Portion 50%	$1,174,702
				Remaining Fee Portion Cost	$1,174,702

265 Femoyer St. / International (Peter McQuen)

Item Description	Section	Quantity	Units	Unit Cost	Cost
New Intersection	4x6 Tee-F	0	LS	$1,616,861.07	$0
				Subtotal	$0
				Contingency 15%	$0
				Engineering and Permits 35%	$0
				Total	**$644,433**
				Rounded	**$644,000**
				City Project	$184,309
				Other Funding	$460,124
				Remaining Fee Portion Cost	$183,876

ID No	Project Information and Cost

267.25 LRT Grade Separation @ Bradshaw Road

Item Description	Section	Quantity	Units	Unit Cost	Cost
Bradshaw Rd	LRT Grade Separation	1	LS	$25,000,000	$25,000,000
25.0% NEW DEVELOPMENT SHARE, 25.0% CITY OBLIGATION				Subtotal	$25,000,000
				Total	**$25,000,000**
COUNTY SHARED PROJECT			County Portion	50.0%	$12,500,000
				Other funding	$6,250,000
			FEE PORTION:	25.0%	$6,250,000

267.45 LRT Grade Separation @ Mather Field Road

Item Description	Section	Quantity	Units	Unit Cost	Cost
Mather Field Rd	LRT Grade Separation	1	LS	$27,000,000	$27,000,000
50.0% NEW DEVELOPMENT SHARE, 50.0% CITY OBLIGATION				Subtotal	$27,000,000
				Total	**$27,000,000**
				Other funding	$13,500,000
			FEE PORTION:	50.0%	$13,500,000

267.65 LRT Grade Separation @ Zinfandel Drive

Item Description	Section	Quantity	Units	Unit Cost	Cost
Zinfandel Dr	LRT Grade Separation	1	LS	$26,000,000	$26,000,000
50.0% NEW DEVELOPMENT SHARE, 50.0% CITY OBLIGATION				Subtotal	$26,000,000
				Total	**$26,000,000**
				Other funding	$13,000,000
			FEE PORTION:	50.0%	$13,000,000

ID No **Project Information and Cost**

269 Folsom Boulevard / Hazel Avenue

Item Description	Section	Quantity	Units	Unit Cost	Cost
Urban Interchange	4x6-F	0	LS	$2,211,418.54	$0
Project Included in Interchange					
				Subtotal	$0
				Contingency 25%	$0
				Engineering and Permits 35%	$0
R/W	Right of Way	0	SF	$90.00	$0
				Total	**$0**
				Rounded	**$0**
				Other Funding	$0
				Remaining Fee Portion Cost	$0

273 Grant Line Road / Jackson Hwy.

Item Description	Section	Quantity	Units	Unit Cost	Cost
Modify Intersection	6x6-F	1	LS	$2,599,504.28	$2,599,504
				Subtotal	$2,599,504
				Contingency 25%	$649,876
				Engineering and Permits 35%	$909,826
				Total	**$4,159,207**
				Rounded	**$4,159,000**
				Other Funding	$1,247,700
COUNTY SHARED PROJECT				County Portion 75%	$2,183,475
				Remaining Fee Portion Cost	$727,825

ID No **Project Information and Cost**

274 Grant Line Road / Rancho Cordova Parkway

Item Description	Section	Quantity	Units	Unit Cost	Cost
New Intersection	6x4 Tee-F	1	LS	$1,724,690.54	$1,724,691
Adjust for existing improvements and construction under traffic and sliver widening					$26,603
				Subtotal	$1,751,294
				Contingency 15%	$262,694
				Engineering and Permits 35%	$612,953
				Total	**$2,626,940**
				Rounded	**$2,627,000**
				Other Funding	$788,100
COUNTY SHARED PROJECT				County Portion 33%	$612,354
				Remaining Fee Portion Cost	$1,226,546

275 Grant Line Road / Kiefer Boulevard

Item Description	Section	Quantity	Units	Unit Cost	Cost
Modify Intersection	6x4 Tee-F	1	LS	$1,724,690.54	$1,724,691
Adjust for existing improvements and construction under traffic and sliver widening					$22,701
				Subtotal	$1,747,392
				Contingency 15%	$262,109
				Engineering and Permits 35%	$611,587
Right of Way Industrial	Right of Way (Industrial)	22000	SF	$55.00	$1,210,000
				Total	**$3,831,087**
				Rounded	**$3,831,000**
				Other Funding	$1,149,300
COUNTY SHARED PROJECT				County Portion 50%	$1,340,850
				Remaining Fee Portion Cost	$1,340,850

ID No **Project Information and Cost**

278.1 Old Placerville Road / Mather Boulevard / Peter McCuen Boulevard
Old Placerville (International) – 6 lanes from west direction
Old Placerville – 4 lanes to north direction
Peter McCuen extension (International) – 4 lanes to east direction

Item Description	Section	Quantity	Units	Unit Cost	Cost
New Intersection	4x4x4x6-F	1	LS	$2,105,081.98	$2,105,082
Adjust for existing improvements and construction under traffic and sliver widening					-$277,099
				Subtotal	$1,827,983
			Contingency	15%	$274,197
			Engineering and Permits	35%	$639,794
Right of Way Commercial	Right of Way (Commercial)	112500	SF	$105.00	$11,812,500
				Total	**$14,554,474**
				Rounded	**$14,554,000**
				Other Funding	$0
				Remaining Fee Portion Cost	$14,554,000

279.1 Mather Boulevard / Whitehead Street & Von Karman Street Couplet

Item Description	Section	Quantity	Units	Unit Cost	Cost
Modify Intersection	4x4-F	1	LS	$1,904,175.27	$1,904,175
Adjust for existing improvements and construction under traffic and sliver widening					-$515,193
				Subtotal	$1,388,982
			Contingency	15%	$208,347
			Engineering and Permits	35%	$486,144
Right of Way Industrial	Right of Way (Industrial)	53100	SF	$55.00	$2,920,500
				Total	**$5,003,973**
				Rounded	**$5,004,000**
				Other Funding	$0
				Remaining Fee Portion Cost	$5,004,000

ID No **Project Information and Cost**

279.2 Mather Boulevard / Femoyer Road

Existing Conditions: North, south and west legs at ultimate width

Item Description	Section	Quantity	Units	Unit Cost	Cost
Widening of east leg of intersection	4x4-F	0.25	LS	$1,904,175.27	$476,044
Remaining cost of new traffic signal		3	LS	$120,500.00	$361,500
Widening needed on east leg of intersection				Subtotal	$837,544
			Contingency	15%	$125,632
			Engineering and Permits	35%	$293,140
Right of Way (East leg only)	Right of Way (Industrial)	28800	SF	$55.00	$1,584,000
				Total	**$2,840,316**
				Rounded	**$2,840,000**
				Other Funding	$0
				Remaining Fee Portion Cost	$2,840,000

279.4 Mather Boulevard / North Mather Boulevard

Existing Conditions: two lanes on each leg

Item Description	Section	Quantity	Units	Unit Cost	Cost
Widen intersection	4x4 Tee-F	1	LS	$1,446,727.57	$1,446,728
Assumes Mather Boulevard narrowed to two lanes east of intersection				Subtotal	$1,446,728
			Contingency	15%	$217,009
			Engineering and Permits	35%	$506,355
Right of Way	Right of Way (Industrial)	5000	SF	$55.00	$275,000
				Total	**$2,445,091**
				Rounded	**$2,445,000**
				City Project	$336,657
				Other Funding	$153,624
				Remaining Fee Portion Cost	$1,954,720

ID No **Project Information and Cost**

280.1 Peter A McCuen Boulevard / Femoyer Street

Existing Conditions: South leg improved to ultimate

Item Description	Section	Quantity	Units	Unit Cost	Cost
Widening of north and west legs	4x4 Tee-F	0.67	LS	$1,446,727.57	$969,307
Remaining cost of traffic signal		1	Leg	$120,500.00	$120,500
				Subtotal	$1,089,807
				Contingency 15%	$163,471
				Engineering and Permits 35%	$381,433
Acquisition of Row Industrial	Right of Way (Industrial)	28800	SF	$55.00	$1,584,000
				Total	**$3,218,711**
				Rounded	**$3,219,000**
				Other Funding	$0
				Remaining Fee Portion Cost	$3,219,000

281 International Dr. / Zinfandel Dr.
Ultimate Buildout: 6 x 6 Intersection

Item Description	Section	Quantity	Units	Unit Cost	Cost
6x6 Intersection	6x6-F	0	LS	$2,599,504.28	$0
				Subtotal	$0
				Contingency 15%	$0
				Engineering and Permits 35%	$0
				Total	**$232,985**
				Rounded	**$233,000**
				Credit Agreement	$232,985
				Other Funding	$0
				Remaining Fee Portion Cost	$0

ID No **Project Information and Cost**

282 International Drive / Kilgore Road

Item Description	Section	Quantity	Units	Unit Cost	Cost
4 x 6 Intersection	4x6-F	0	LS	$2,211,418.54	$0

Project Construction Cost included in Project 110

Subtotal		$0
Contingency	15%	$0
Engineering and Permits	35%	$0
Total		**$0**
Rounded		**$0**
Other Funding		$0
Remaining Fee Portion Cost		$0

283 International Drive / Sunrise Boulevard

Item Description		Section	Quantity	Units	Unit Cost	Cost
New Intersection		6x6-F	0	LS	$2,599,504.28	$0
Intersection	6x6 I-Dev less pole relocation	6x6-D	0	LS	$1,787,896.09	$0

Project Construction Cost included in Project 110

		Subtotal	$0
	Contingency	15%	$0
	Engineering and Permits	35%	$0
Acquisition of Row Residential	Right of Way (Residential)	$40.00	$0
		Total	**$0**
		Rounded	**$0**
		Other Funding	$0
		Remaining Fee Portion Cost	$0

ID No **Project Information and Cost**

284 International Drive / Rancho Cordova Parkway

Item Description	Section	Quantity	Units	Unit Cost	Cost
New Intersection	6x6-F	1	LS	$2,599,504.28	$2,599,504
				Subtotal	$2,599,504
				Contingency 15%	$389,926
				Engineering and Permits 35%	$909,826
				Total	**$3,899,256**
				Rounded	**$3,899,000**
				Other Funding	$0
				Remaining Fee Portion Cost	$3,899,000

284.1 International Drive at White Rock

International – 4 lane on south side
White Rock – 6 lanes through

Item Description	Section	Quantity	Units	Unit Cost	Cost
New Intersection	4x6 Tee-F	1	LS	$1,616,861.07	$1,616,861
Adjust for existing improvements and construction under traffic and sliver widening					$88,904
				Subtotal	$1,705,765
				Contingency 15%	$255,865
				Engineering and Permits 35%	$597,018
				Total	**$2,558,648**
				Rounded	**$2,559,000**
				Other Funding	$0
				Remaining Fee Portion Cost	$2,559,000

ID No **Project Information and Cost**

288 Jackson Highway / Sunrise Boulevard

Item Description	Section	Quantity	Units	Unit Cost	Cost
Intersection (6x6)	6x6-F	1	LS	$2,599,504.28	$2,599,504
Laguna Creek Bridge (6 lane; full cost)	Bridge/Culvert	0	SF	$295.00	$0
Bridge: Jackson Highway (east leg)	Bridge/Culvert	4410	SF	$295.00	$1,300,950
				Subtotal	$3,900,454
Jackson/FSC bridge is full County cost at a later time				Contingency 25%	$975,114
				Environmental 15.0%	**$585,068**
				Engineering and Permits 35%	$1,365,159
				Total	**$6,825,795**
				Rounded	**$6,826,000**
				Other Funding	$0
COUNTY SHARED PROJECT				County Portion 75%	$5,119,500
				Remaining Fee Portion Cost	$1,707,000

289 Rancho Cordova Parkway / Kiefer Boulevard

Item Description	Section	Quantity	Units	Unit Cost	Cost
4x4 Ultimate, Phase 1 2x2	4x4-F	1	LS	$1,904,175.27	$1,904,175
				Subtotal	$1,904,175
				Contingency 15%	$285,626
				Engineering and Permits 35%	$666,461
				Total	**$2,856,263**
				Rounded	**$2,856,000**
				Credit Agreement	$631,338
				Other Funding	$0
				Remaining Fee Portion Cost	$2,224,662

ID No **Project Information and Cost**

289.1 Rancho Cordova Parkway / North Campus Drive

Item Description	Section	Quantity	Units	Unit Cost	Cost
4x4 Tee	4x4 Tee-F	1	LS	$1,446,727.57	$1,446,728

Subtotal		$1,446,728
Contingency	15%	$217,009
Engineering and Permits	35%	$506,355
Total		**$2,170,091**
Rounded		**$2,170,000**
Other Funding		$0
Remaining Fee Portion Cost		$2,170,000

290 Rancho Cordova Parkway / White Rock Road

Item Description	Section	Quantity	Units	Unit Cost	Cost
6x6 Intersection	6x6-F	1	LS	$2,250,000.00	$2,250,000

Reflects detailed cost estimate prepared separately

Subtotal		$2,250,000
Contingency	25%	$562,500
Engineering and Permits	35%	$787,500
Total		**$3,600,000**
Rounded		**$3,600,000**

"Other funding" for Projects 195, 196 and 290 proportionally split based on total cost estimate

Other Funding		$1,807,912
Remaining Fee Portion Cost		$1,792,088

ID No **Project Information and Cost**

294 Kiefer Boulevard / Sunrise Boulevard

Item Description	Section	Quantity	Units	Unit Cost	Cost
4 x 6 Intersection	4x6-F	1	LS	$2,211,418.54	$2,211,419
Adjust for existing improvements and construction under traffic and sliver widening					$107,278
				Subtotal	$2,318,697
				Contingency 15%	$347,804
				Engineering and Permits 35%	$811,544
Acquisition of Row Agricultural	Right of Way (Agricultural)	134100	SF	$2.60	$348,660
				Total	**$3,826,705**
				Rounded	**$3,827,000**
				Credit Agreement	$1,175,916
				Other Funding	$495,840
				Remaining Fee Portion Cost	$2,155,244

295 Mather Field Road / Rockingham Road

Item Description	Section	Quantity	Units	Unit Cost	Cost
4 x 6 Intersection	4x6-F	1	LS	$2,211,418.54	$2,211,419
Adjust for existing improvements and construction under traffic and sliver widening					-$1,084,494
				Subtotal	$1,126,925
				Contingency 15%	$169,039
				Engineering and Permits 35%	$394,424
				Total	**$1,690,387**
				Rounded	**$1,690,000**
				Other Funding	$0
				Remaining Fee Portion Cost	$1,690,000

ID No **Project Information and Cost**

299 Sunrise Boulevard / White Rock Road

Item Description	Section	Quantity	Units	Unit Cost	Cost
Widen Intersection	6x6-F	1	LS	$2,599,504.28	$2,599,504
Fee Portion based on widening west leg only				Subtotal	$2,599,504
			Contingency	25%	$649,876
			Engineering and Permits	35%	$909,826
Acquisition of ROW	Right of Way	**12000**	SF	$90	$1,080,000
				Total	**$5,239,207**
				Rounded	**$5,239,000**
		FEE PORTION		**25%**	**$1,309,750**
				Other Funding	$3,929,250
				Remaining Fee Portion Cost	$1,309,750

ID No	Project Information and Cost

Transit, Bike & ITS Projects

ID No **Project Information and Cost**

304 City Transit System

Item Description	Section	Quantity	Units	Unit Cost	Cost
Sunrise/Citrus Road Transit Corridor - Sunrise Station to River		9000	LF	$850	$7,650,000
Transit Stations in Roadway Medians		15	EA	$500,000	$7,500,000
Mobility Hubs/Regional Transit Centers		3	EA	$4,000,000	$12,000,000
Transit Maintenance Facility		1	EA	$10,000,000	$10,000,000
Bus Shuttle Vehicles/ Autonomous Vehicles		26	EA	$800,000	$20,800,000
ITS (Changeable message signs, DSRC, signal priority)		1	LS	$1,000,000	$1,000,000
Enhanced Bus Stops (includes lighting, benches, shelters, etc.)		96	EA	$10,000	$960,000
				Subtotal	$59,910,000
56% NEW DEVELOPMENT SHARE, 44% CITY OBLIGATION			Contingency	15%	$8,986,500
			Engineering and Permits	35%	$20,968,500
				Total	**$89,865,000**
			FEE PORTION:	56.0%	$50,324,400
				Other funding	$39,540,600

305 City Transit System
Street Car Starter Project

Item Description	Section	Quantity	Units	Unit Cost	Cost
Streetcar Vehicles		2	EA	$1,000,000	$2,000,000
Streetcar Track Work		3	Miles	$9,000,000	$27,000,000
56% NEW DEVELOPMENT SHARE, 44% CITY OBLIGATION				**Total**	**$29,000,000**
				Rounded	**$29,000,000**
			FEE PORTION:	56.0%	$16,240,000
				Other funding	$12,760,000

ID No **Project Information and Cost**

306 Transit Facilities
Light Rail

Item Description	Section	Quantity	Units	Unit Cost	Cost
B. Light Rail Stations at					
•Horn Road		1	LS	$8,000,000	$8,000,000
•Mine Shaft		1	LS	$5,000,000	$5,000,000
C. Station Upgrades at		4	EA	$500,000	$2,000,000
•Mather Field/Mills					
•Zinfandel					
•Cordova Town Center					
•Sunrise Boulevard					
				Subtotal	$15,000,000
			Contingency	25%	$3,750,000
			Engineering and Permits	0%	$0
Acquire R/W for Horn Road LRT Station		1	ACRE	$610,000	$610,000
				Total	**$19,360,000**
56% NEW DEVELOPMENT SHARE, 44% CITY OBLIGATION				**Rounded**	**$19,360,000**
		FEE PORTION:		56.0%	$10,841,600
				Other funding	$8,518,400

ID No **Project Information and Cost**

307 Canal & Roadway Bike Trail Undercrossings and Overcorssings

Item Description	Section	Quantity	Units	Unit Cost	Cost
See "Bike Grade Sep" Tab in Spreadsheet, does not include "Vision" crossings					
				Subtotal	$62,368,660
			Contingency	0%	$0
			Engineering and Permits	0%	$0
				Total	**$62,368,660**
				Rounded	**$62,369,000**
		FEE PORTION:			$26,000,000
			Other	Existing	$286,620
			Funding	Not Identified	$36,369,000
			Remaining Fee Portion Cost		$25,713,380

308 Bike Trails

Item Description	Section	Quantity	Units	Unit Cost	Cost
Mather Heritage Trail		1	LS	$4,103,546	$4,103,546
Rod Beaudry - Routier Road Bikeway		1	LS	$2,315,549	$2,315,549
Anatolia Preserve Bike Trail		1	LS	$1,577,331	$1,577,331
Stone Creek Trail Ped Signals @ Kilgore and Zinfandel		1	LS	$700,041	$700,041
Douglas Road Bike & Pedestrian connection to Folsom South Canal		1	LS	$230,423	$230,423
Class I Bike Trail Connections					
Rio del Oro Tr. East Boundary to Grant Line		0.9	miles	$1,200,000	$1,080,000
Rio del Oro Tr. West Boundary to FSC		0.5	miles	$1,200,000	$600,000
Aerojet Spur Tr. FSC to Citrus Rd. Trail		0.8	miles	$1,200,000	$960,000
Sunrise Blvd. Tr. FSC to Sunrise Station		0.7	miles	$1,200,000	$840,000
Sunrise Station to Citrus Rd. Trail		0.25	miles	$1,200,000	$300,000
Class II Bike Trail System		1	LS	$400,000	$400,000
Right of Way for Trail Connections		3	ACRE	$871,200	$2,613,600
56% NEW DEVELOPMENT SHARE, 44% CITY OBLIGATION				Subtotal	$15,720,490
				Total	**$15,720,490**
				Rounded	**$15,720,000**
		FEE PORTION:		56.0%	$8,803,200
				Other Funding	$7,943,477
			Other Funding Beyond 44% City Obligation		$1,026,677
			Remaining Fee Portion Cost		$7,776,523

ID No **Project Information and Cost**

311 Traffic Signal Control System

Area: 34% - 1; 66% - 2

Item Description	Section	Quantity	Units	Unit Cost	Cost
Traffic Control Center		1	LS	$7,500,000	$7,500,000
				Subtotal	$7,500,000
			Contingency	15%	$1,125,000
			Engineering and Permits	35%	$2,625,000
Intermediate Street Signals		40	EA	$403,000	$16,120,000
			City Projects already built		$1,552,449
				Total	**$28,922,449**
				Rounded	**$28,922,000**
				Credit Agreement	$3,289,941
				Other Funding	$5,099,253
				Remaining Fee Portion Cost	$20,532,806

ID No	Project Information and Cost

Interchanges

ID No	Project Information and Cost

313 Rancho Cordova Parkway Interchange
Interchange
District 2

Item Description	Section	Quantity	Units	Unit Cost	Cost
Total Cost Interchange		1	LS	$89,154,250	$89,154,250
Total Cost Auxiliary Lanes		1	LS	$27,741,250	$27,741,250
				Subtotal	$116,895,500
			Contingency	0%	$0
			Engineering and Permits	0%	$0
				Total	**$116,895,500**
				Rounded	**$116,896,000**
				City Project	$5,000,000
				Other Funding	$500,000
				Remaining Fee Portion Cost	$116,396,000

316 Bradshaw Road Interchange
No Improvements in Fee Program
District 1

Item Description	Section	Quantity	Units	Unit Cost	Cost
No Improvements in Fee Program		1	LS	$0	$0
				Subtotal	$0
			Contingency	15%	$0
			Engineering and Permits	35%	$0
Acquisition of Right of Way	Right of Way (Commercial)		SF	$105.00	$0
				Total	**$0**
				Rounded	**$0**
COUNTY SHARED PROJECT			County Portion	50%	$0
				Other funding	$0
				Remaining Fee Portion Cost	$0

ID No **Project Information and Cost**

317 Mather Field Road Interchange
Capacity and Bike Improvements

Item Description	Section	Quantity	Units	Unit Cost	Cost
Widen EB Ramp to add turn lane plus portion of SB Mather Field Rd to 3 Lanes (from SB On-ramp to SB Off Ramp)		1	LS	$2,000,000	$2,000,000
Upgrade some elements to Caltrans standards		1	LS	$2,000,000	$2,000,000
Bike Lane and Sidewalk along SB (west side)- requires bridge widening		1	LS	$4,000,000	$4,000,000
				Subtotal	$8,000,000
56% Development Share for Bike Lane and Sidewalk			Contingency	15%	$1,200,000
			Engineering and Permits	35%	$2,800,000
				Total	**$12,000,000**
				Rounded	**$12,000,000**
	44% Share of bike lane and sidewalk			Other Funding	**$2,640,000**
	FEE PORTION				**$9,360,000**

318.1 Zinfandel Drive Interchange
Zinfandel Complex

Item Description	Section	Quantity	Units	Unit Cost	Cost
Same as Initial Phase, plus widened White Rock Road for 3 WB thru lanes and 3 EB to NB left turn lanes, and widened Zinfandel to 6 lanes from US50 to Folsom		1	LS	$51,449,000	$51,449,000
				Subtotal	$51,449,000
Replaces 302, 318, 207			Contingency	0%	$0
			Engineering and Permits	0%	$0
				Total	**$51,449,000**
50% NEW DEVELOPMENT SHARE, 50% CITY OBLIGATION				**Rounded**	**$51,449,000**
	FEE PORTION			**50%**	**$25,724,500**
				City Project	$8,585,000
			Other	Identified	$7,815,000
			Funding	Not Identified	$17,909,500
			Remaining Fee Portion Cost		**$25,724,500**

ID No	Project Information and Cost
320	Hazel Avenue Interchange Modify Interchange with Grade Separation of Folsom Blvd and Light Rail

Item Description	Section	Quantity	Units	Unit Cost	Cost
County Interchange Project		1	LS	$83,402,000	$83,402,000
100% COUNTY					

Total		**$83,402,000**
County Portion	100%	**$83,402,000**
Fee Portion	0%	**$0**

Appendix C

Improvement Cost Estimation Methodology

WOOD RODGERS
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME

To: City of Rancho Cordova

From: Steven Robinson P.E.

Date: July 23, 2021

Subject: Rancho Cordova Fee Program 2021 Update: Unit Cost and Cost Estimate Methodology

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Wood Rodgers, Inc. (Wood Rodgers) was tasked by the City of Rancho Cordova (City) to update the roadway and intersection cost estimates with current 2021 construction costs for use in the 2021 Fee Program Update. This memorandum summarizes the methodology used to develop the item unit prices and cost estimates.

UNIT PRICES

Construction item unit prices for the major roadway construction items were updated from their 2013 values. The City provided to Wood Rodgers bid results of City projects that were constructed between 2016 and 2018 to use as a basis for adjusting unit prices. However, since these results were over two years old, the provided information was deemed to be outdated for the purposes of this update. To update the unit prices for items to current 2021 unit costs, Wood Rodgers increased 2013 Fee Program unit prices by approximately 2 percent per year, based on the Engineering News-Record Construction Cost Index information between 2013 and 2021. This resulted in an overall unit price increase of approximately 18 percent between 2013 and 2021.

Since the Engineering News-Record Construction Cost Index uses an average of nationwide bid prices, Wood Rodgers compared the escalated unit prices to local Caltrans District 3 unit prices from the Caltrans Contract Cost Database, which is a database Caltrans maintains of all bid results from their projects. However, at the time of the unit price update, the Caltrans Contract Cost Database only contained bid results up to the year of 2020. Those results were further increased by approximately 2 percent to escalate unit costs to 2021. The more conservative price (i.e. highest price) between the Engineering News-Record Construction Cost Index and the Caltrans Contract Cost Database was chosen as the 2021 unit price for each item in the Fee Program calculation.

A few items, such as storm drain system, street lights (frontage), storm water pollution prevention plan, and traffic signals were calculated differently than the rest of the construction items. Details on those unit price calculations are described in the following sections of this memorandum.

STORM DRAIN SYSTEM

Storm drain system unit prices were developed with the assumption that the Fee Program will be responsible for constructing the storm drain main along the middle of the road, and the Developers will be responsible for constructing the drainage inlets and lateral pipes that connect to the main pipe. The unit price for Storm Drain System (Fee) was developed assuming an average storm drain main pipe size and type of 24-inch reinforced concrete pipe and one (1) manhole every 500 feet, per Sacramento County standard for maximum manhole spacing. This assumption is consistent with the 2013 Fee Program Update. The following formula was used to calculate a per linear foot cost for Storm Drain System (Fee):

(($180/Ft 24-inch-Pipe x 500 Ft 24-inch-Pipe) + ($4,500 x 1 Manhole)) / 500 Ft ≈ $200 per linear foot

The 2013 Fee Program Update assumed a unit price of $85 per linear foot for 24-inch reinforced concrete pipe. This price was based on the average bid price for 24-inch reinforced concrete pipe in 2013, as obtained from the Caltrans Contract Cost Data website. As shown in **Figure 1**, the unit price for 24-inch reinforced concrete pipe was at a 10-year low in 2012-2013 when the 2013 Fee Program Update was prepared. Since 2013, the unit price per linear foot of 24-inch reinforced concrete pipe has steadily increased to a total of $176 per linear foot in 2020. The 2020 unit price of the pipe was increased by 2 percent and rounded to $180 per linear foot. This results in the unit price having more than doubled since 2013.

It should be noted that the large spike between 2019 and 2020 is likely due to worldwide shortages in concrete building materials caused by COVID-19. However, it is unknown when or if these prices will drop, so reducing the unit price for 24-inch reinforced concrete pipe could result in a funding shortfall.

The unit price for Storm Drain System (Developer) was developed assuming a storm drain lateral of 12-inch plastic pipe and two (2) drain inlets (DIs) every 500 feet. The following formula was used to calculate a per linear foot cost for Storm Drain System (Developer):

(($120/Ft 12-inch-Pipe x 80 Ft 12-inch Pipe) + ($3,000 x 2 DIs)) / 500 Ft ≈ $30 per linear foot

The 2013 Fee Program Update assumed a unit price of $70 per linear foot for 12-inch plastic pipe. This price was based on the average bid price for 12-inch pipe in 2013, as obtained from the Caltrans Contract Cost Data website. As shown in **Figure 2**, the unit price of the item has varied throughout the years. Since 2013, the unit price per linear foot of 12-inch plastic pipe has increased to a total of approximately $116 per linear foot in 2020. The 2020 unit price of the pipe was increased by 2 percent and rounded to $120 per linear foot.

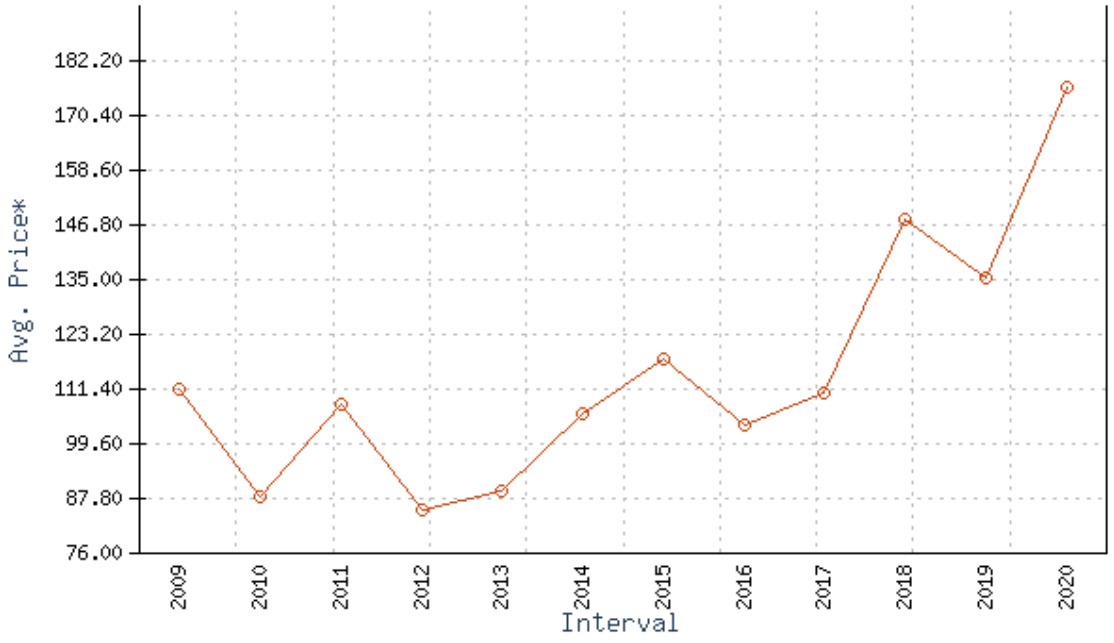
STREET LIGHTS (FRONTAGE)

Street lighting was not included on any of the projects used to develop unit price assumptions, and as such, bid prices for street lighting were not available. Therefore, Wood Rodgers used its best judgment and knowledge based on various other projects to develop the unit price. Based on several roadway projects Wood Rodgers has recently been involved with in Northern California, street light prices have been observed to vary between $5,000 and $10,000 each in 2020. Averaging these prices and rounding to the nearest thousand results in an average per street light price of $8,000. This price also includes equipment necessary for street lighting, such as pull boxes, conduit, and wiring. City street lighting standards require street lights to be spaced approximately 200 feet apart. At this spacing, 10 street lights will be needed for every 1,000 feet of road [five (5) each side]. The following formula was used to calculate a per linear foot cost for Street Lights (Frontage):

($8,000 x 10 Street Lights) / 1,000 feet x 1.02 escalation factor = $82 per linear foot

Figure 1. Price History of 24" Reinforced Concrete Pipe (Caltrans Item Code: 650018)

Select an interval: (•) Year ( ) Quarter ( ) Month Unit: LF

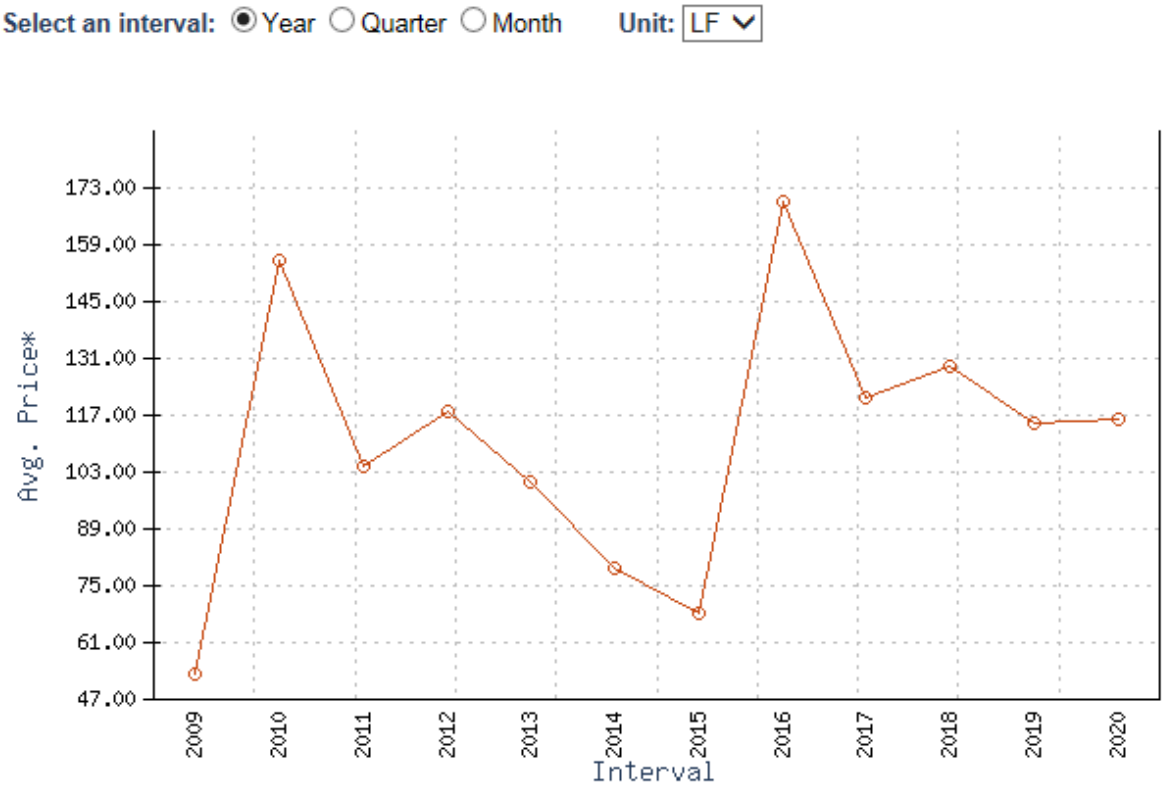


Interval	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Avg. Price*	$111.42	$88.41	$108.06	$85.40	$89.40	$106.20	$117.95	$103.75	$110.57	$148.17	$135.60	$176.30
Project Count	19	21	24	42	20	30	28	29	22	33	33	47

* Average price is weighted by the quantity of the item used.
Note: All districts' and all years' data used to generate graph.

Source: Caltrans Contract Cost Data Website: https://sv08data.dot.ca.gov/contractcost/

Figure 2. Price History of 12" Plastic Pipe (Caltrans Item Code: 641101)



Warning: Some of your time intervals include less than 5 projects to generate an average.

Interval	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Avg. Price*	$53.17	$155.29	$104.35	$117.82	$100.65	$79.20	$68.11	$169.67	$121.12	$129.24	$114.89	$115.93
Project Count	2	1	2	4	9	6	3	1	1	4	5	6

* Average price is weighted by the quantity of the item used.
Note: All districts' and all years' data used to generate graph.

Source: Caltrans Contract Cost Data Website: https://sv08data.dot.ca.gov/contractcost/

STORM WATER POLLUTION PREVENTION PLAN

The price for Storm Water Pollution Prevention Plan (SWPPP) is typically a lump sum price in bids/estimates and therefore is challenging to estimate. The Caltrans Contract Cost Database could not be used for calculations because the lump sum price on a SWPPP varies by project, as every project has different requirements. The previous Fee Program estimated $18 per linear foot of roadway based on Wood Rodgers' judgment and experience. Similar to other items, a two (2) percent increase per year was applied to the 2013 unit price, escalating the unit price of SWPPP to $25 per linear foot in 2021.

TRAFFIC SIGNALS

The 2013 Fee Program Update assumed a unit price of $55,000 per leg for new traffic signals, and $37,500 per leg for modify traffic signal. Since 2013, Caltrans has released new standards for traffic signals that have significantly increased the cost of materials of traffic signal equipment, particularly poles and the costs for constructing foundations. Both the County of Sacramento and the City follow Caltrans standards for traffic signal equipment. Wood Rodgers is aware that these new standards have also increased the time and labor it takes to manufacture the

equipment, with those labor costs passed on to the City. Collectively, this has resulted in an increase in the cost of traffic signals by approximately 60 percent. In 2013, the cost to install a traffic signal at a 4-leg intersection was averaging around $250,000. In 2020, bid results show that cost had increased to approximately $450,000, with some large intersections costing as much as $500,000. Because of this, the unit price for the 2021 Fee Program has increased to $120,500 per leg for new traffic signals, and to $82,000 per leg for modify traffic signal.

LANDSCAPING

The 2013 Fee Program Update used a unit price of $6 per square foot Frontage Landscaping and permanent Median Landscaping. Recent bid results for projects in and around the City of Rancho Cordova from the past few years have provided landscaping unit prices that range between $11 and $14 per square foot. After review of the bids, Wood Rodgers determined that the prices at the higher $13 to $14 per square foot bid prices have primarily come in 2020. Wood Rodgers believes that these increased prices in 2020 are largely a result of the scarcity of materials due to the COVID-19 pandemic. Because the price increases due to COVID-19 are expected to be temporary, a unit price of $11 per square foot was used for Frontage Landscaping and permanent Median Landscaping in the 2021 Fee Program.

ROADWAY SEGMENT COST ESTIMATES

The 2013 spreadsheet used in the 2013 unit price evaluation was set up to calculate the Fee and Developer funded portions of the cost per foot of a typical 2-lane, 4-lane, and 6-lane roadway section. Using this spreadsheet as a template, Wood Rodgers created new 2-lane, 4-lane and 6-lane roadway sections for both ultimate buildout and phased options based on possible phased construction per DKS Associates' new future traffic demand model and City input. New quantities were calculated for each section, and the updated 2021 item unit prices were applied to calculate an overall roadway cost per linear foot. Asphalt concrete and aggregate base thicknesses were assumed to be the same as those used in 2013. Roadway segment sections are provided in the appendix.

FEE FUNDED PORTION

The Fee funded portion of the roadway consists of all roadway and features necessary to construct the No. 1 lanes and median on a 4-lane roadway, or the No. 1 and No. 2 lanes and median on a 6-lane roadway. Included in this cost is the roadway excavation and clearing and grubbing (for those lanes and median), asphalt concrete, aggregate base, median curb, cold plane asphalt concrete pavement and/or sawcut, temporary and permanent median landscaping, striping, and storm drain system main (see Storm Drain). Signal interconnect is also included as a Fee item. The Fee funded portion of the SWPPP is assumed to be 50 percent of the total SWPPP cost when roadwork includes both a City (Fee) portion and a Developer portion on the same phase. However, the Fee is assumed to pay for the full cost of the SWPPP on any phase that does not include Developer work.

Section types for roadway segments have a varying construction contingency between 20 to 30 percent. It includes 10 percent for mobilization, 10 percent for unknown and miscellaneous items, and 0 to 10 percent for stage construction and traffic handling. A percentage for stage construction and traffic handling is only applied to roadways that were partially constructed by a previous project or phase; this percentage is zero for new roadways. The contingency of each section type varies according to stage and number of lanes.

DEVELOPER FUNDED PORTION

Consistent with the assumptions used in the 2013 Fee Program Update, it was assumed that the Developer funded portion is made up of a 33-foot wide section (on each side of road) consisting of outside frontage landscaping (8 feet wide), curb, gutter, sidewalk (7 feet wide), and street lighting. Also included is the outside 15 feet of roadway (outermost lane and shoulder), consisting of all asphalt concrete, aggregate base, striping, and storm drain DI's and

laterals (see Storm Drain). The Developer funded portion includes all excavation and clearing and grubbing required within this 33 feet.

The Developer funded portion of the SWPPP is assumed to be 50 percent of the total SWPPP cost when roadwork is required by both the City (Fee) and the Developer on the same phase. The Developer is assumed to cover the full cost of the storm drain system and SWPPP when no City (Fee) work is required, such as on 2-lane roads.

ROADWAY PHASING

Roadway phasing is applicable when a roadway segment is only partially built with the initial construction and is then completed as a separate project in the future. Three different roadway segment phasing options/configurations were developed based on discussions with the City. Since every project and roadway segment is constructed under different circumstances, these phasing options/configurations are generalizations of the various ways the City has typically been phasing projects since the 2013 Fee Program Update. In general, roadways have been constructed from the outside in, with the outermost lane(s) and frontage being constructed first at the same time the adjacent development that necessitates the roadway is built, with the inner lanes built in a later phase. The three options/configurations are:

1. Option A: This option assumes that parcels on one (1) side of the road are fully developed by the end of the first phase of roadway construction. Land on the opposite side of the road is projected to be developed soon after the roadway segment is complete. This option constructs the frontage and outside lane (Developer portion) on the developed side of the road, and the inside lane (Fee portion) on the undeveloped side in the first phase.

2. Option B: This option assumes that one (1) side of the road is fully developed by the end of the first phase of roadway construction, and the opposite side is not anticipated to be developed or completed in the near future. This option constructs all frontage and lanes (Fee and Developer portions) on the developed side of the road in the first phase, and nothing on the undeveloped side.

3. Option C: This option assumes that parcels on both side of the roadway are fully developed by the end of the first phase of roadway construction. This option constructs the frontage and outside lane (Developer portion) on both sides of the road in the first phase, and no lanes in the Fee portion on either side.

When a roadway is phased, the first phase will include a 2 to 5-foot wide inside paved shoulder and a total minimum paved roadbed width of 20 feet in each travel direction, with frontage on at least one side of the road. This requires that the storm drain system (main and manholes) always be constructed under Phase 1, as the gutter and drainage inlets installed by the Developer need the main storm drain pipe to drain to. Median area intended to be converted to roadway in a future phase will be minimally landscaped with temporary plants and/or ground cover. The permanent median area will be landscaped with permanent plants and ground cover if either of the No. 1 lanes are included. It is also assumed that signal interconnect is always installed in Phase 1, as most if not all major intersections will be signalized in the first phase. Excavation, clearing and grubbing, asphalt concrete, aggregate base, curb for the median, striping, signal interconnect, storm drain system and SWPPP are all assumed to be required as part of the Fee cost in Phase 1. It is assumed that the cost of the SWPPP is split 50-50 between the Fee and the Developer.

For each future phase, the temporary median being converted to roadway will require excavation, clearing and grubbing, asphalt concrete, aggregate base, striping of the new lane, and possibly median. A new SWPPP is also assumed to be required at full cost to the Fee if there is no Developer portion required. The cost of the SWPPP is split 50-50 between the Fee and the Developer if there is a Developer portion.

The City has found that the sequence of how roadway segments are being constructed are largely based on the Developer's needs, and the phasing estimates from the 2013 Fee Program Update have not generally matched actual phasing/staging. In an effort to provide more flexibility with how the roadways are ultimately phased, a flat phasing percentage has been calculated and applied to each roadway segment rather than assuming a specific phasing option/configuration for the 2021 Fee Program Update.

To develop the flat phasing cost percentage, estimated construction costs of ultimate roadway segment buildout without phasing of each roadway section type, excluding all contingencies, were compared to the costs of each phase respective to its option and roadway width. A calculation was performed to approximate the percentage increase of the total ultimate buildout unit cost. For example, Phase 1 Option A of an ultimate 4-lane roadway constructs one (1) lane in each direction and a median. The cost to construct one (1) linear foot of Phase 1 Option A is calculated to be approximately 76 percent of the cost to construct one (1) linear foot of a complete 4-lane roadway. The cost to construct one (1) linear foot of Phase 2 Option A, which constructs the remainder of the roadway including frontage, would cost approximately 32 percent of the cost to construct one (1) linear foot of a complete 4-lane roadway. For each additional phase, an additional 10 percent each was added to the increased phase construction cost for both mobilization and traffic handling. This cost was split 50-50 between Fee and Developer portions. Per this example, a linear foot cost of phased Option A will ultimately cost approximately eight (8) percent more than the same linear foot of roadway constructed entirely at one time.

Phase # Buildout Cost / Ultimate Buildout without Phasing Construction Cost = Phase # Cost Percentage

Phase 1 Cost Percentage + Phase 2 Cost Percentage – 100% = Increased Phase Construction Cost

76% + 32% - 100% = 8% Increased Phase Construction Cost

Total Phase Construction Cost Increase = 8% + 10%/2 (Mobilization) + 10%/2 (Traffic Handling) = 18%

The phasing costs for all 4-lane roadway options/configurations were evaluated and averaged together to develop a single 4-lane roadway segment phasing cost. The result was an average cost increase of 20 percent for a phased 4-lane roadway segment compared to a 4-lane road segment that was not phased. A similar evaluation was performed for 6-lane road segments, which resulted in an average cost increase of 30 percent for a phased 6-lane roadway segment compared to a 6-lane road segment that was not phased. In the Fee calculations, these percent increases were applied as an additional cost to the ultimate roadway segment buildout without phasing 4-lane and 6-lane roadway segments as appropriate.

INTERSECTION COST ESTIMATES

The intersection cost estimates were developed to provide a single total cost for each intersection configuration assuming full buildout. Intersection costs include all features on each leg of the roadway within 450 feet of the center of the intersection. Similar to the roadway estimates, a spreadsheet was set up to calculate the Fee and Developer funded portions for each intersection configuration per DKS Associates' future traffic demand model. Configurations were based on the number of lanes per leg of an intersection. For example, a 4x4 intersection configuration consists of a 4-lane roadway segment on all legs; a 4x6 Tee intersection configuration consists of a 4-lane roadway segment in the through direction legs, with a 6-lane roadway segment in the Tee leg. Phased construction of the intersection was not included in the fee calculation as part of the 2021 Fee Program Update due to the City finding that intersections have generally not been constructed under any consistent methodology that can be easily documented or quantified. Intersection sections are provided in the appendix.

FEE FUNDED PORTION

The Fee funded portion of the roadway consists of all roadway and features necessary to construct the No. 1 lanes and median on a 4-lane roadway, or the No. 1 and No. 2 lanes and median on a 6-lane roadway, and all left turn lanes, at an intersection. Included in this cost is the roadway excavation and clearing and grubbing for the inside lane(s) and median, asphalt concrete, aggregate base, median curb, temporary and permanent median landscaping, striping, and storm drain system main (see Storm Drain). Also included is the curb, gutter, sidewalk, and curb ramps at the curb returns, plus 25 feet in either direction. The Developer funded portion does not include this 70± feet of hardscape at

the curb return. The Fee funded portion of the SWPPP is assumed to be 50 percent of the total SWPPP cost. Also included in the Fee funded portion is an item for signal interconnect and all traffic signal costs.

Each intersection configuration has a 15 percent contingency applied to the Fee cost, regardless of the type or the size of the intersection. It includes five (5) percent for mobilization (10 percent total split 50-50 between Developer and Fee), and 10 percent to account for unknowns and miscellaneous items. The contingency does not account for phased construction.

DEVELOPER FUNDED PORTION

Consistent with the assumptions used in the 2013 Fee Program Update, it was assumed that the Developer funded portion of 4-lane and 6-lane intersections consist of a 33-foot wide section (on each side of road) consisting of outside frontage landscaping (8 feet wide), curb, gutter, sidewalk (7 feet wide) (see Fee Funded Portion for exception), and street lighting. Also included was the outside 15 feet of roadway (outermost lane and shoulder), consisting of any asphalt concrete, aggregate base, striping, and storm drainage DI's and laterals (see Storm Drain). The Developer funded portion includes all excavation and clearing and grubbing required between the right of way line and the outside 15 feet of roadway. The Developer funded portion of the SWPPP is assumed to be 50 percent of the total SWPPP cost when roadwork is required by both the City (Fee) and the Developer on the same phase.

Each intersection configuration has a 15 percent contingency applied to the Developer cost, regardless of the type or the size of the intersection. It includes five (5) percent for mobilization (10 percent split 50-50 between Developer and Fee), and 10 percent to account for unknowns and miscellaneous items.

INTERSECTION PHASING

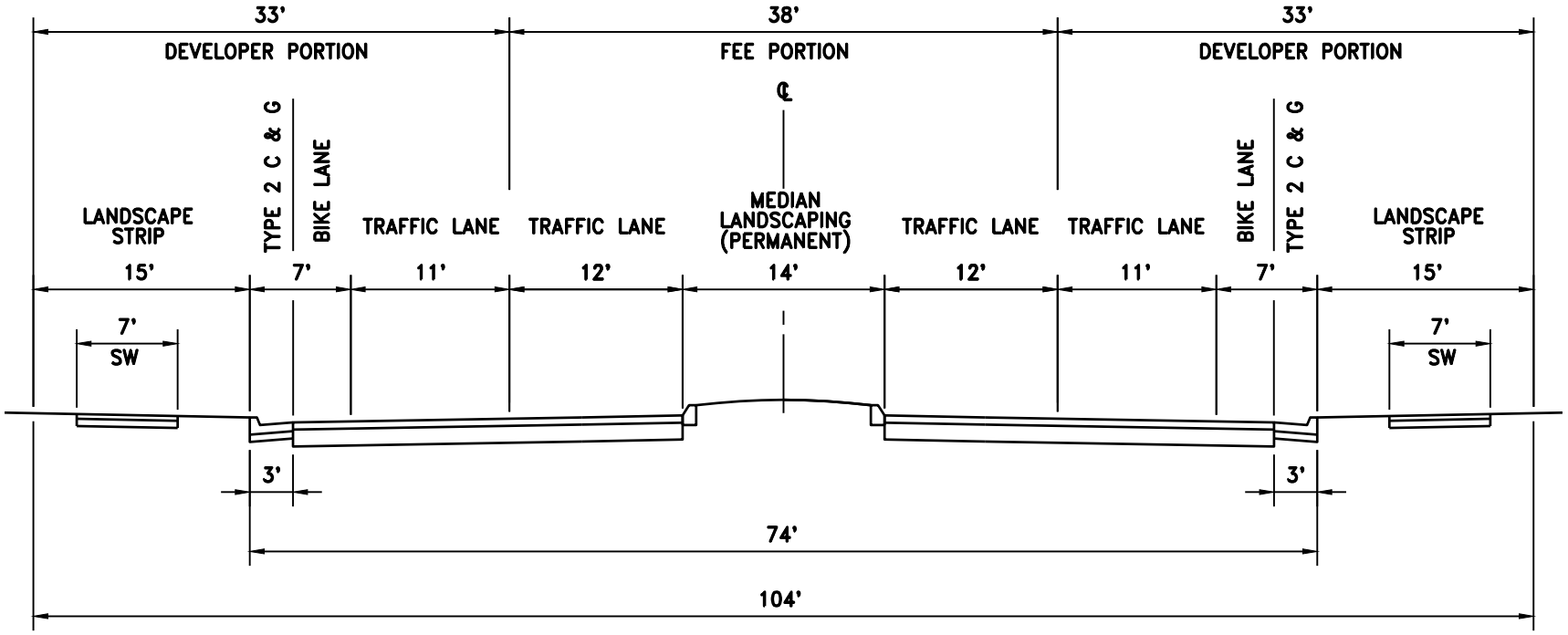
If the City chooses to construct an intersection under phases at a later time, phase cost percentage increases were approximated for manual calculations on a project by project basis. Two (2) separate percentage increases were prepared based on whether an intersection is a full or a Tee intersection. The calculation was performed similar to the percentage cost increase calculations for a roadway segment (see Roadway Phasing). 2013 Fee Program Update unit prices were used for the percentage increase calculations because the 2013 Fee Program Update was the last update to develop phased intersection options. Although unit prices have increased since 2013, the increase in cost to construct a full buildout intersection without phasing and a full buildout intersection with phasing were assumed have increased uniformly.

Phase # Buildout Cost / Ultimate Buildout without Phasing Construction Cost = Phase # Cost Percentage

Phase 1 Cost Percentage + Phase 2 Cost Percentage – 100% = Increased Phase Construction Cost

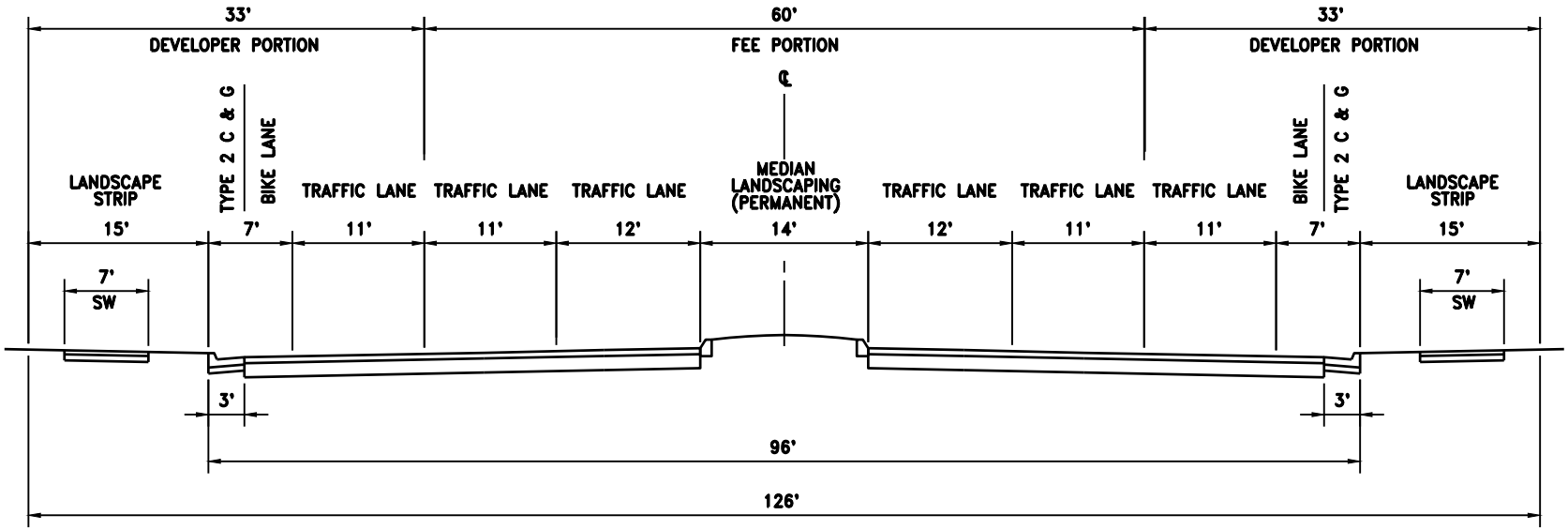
The increased phase construction cost was determined to be 30 percent for four leg intersections and 20 percent for Tee intersections.

APPENDIX



4 LANE

NO SCALE



6 LANE

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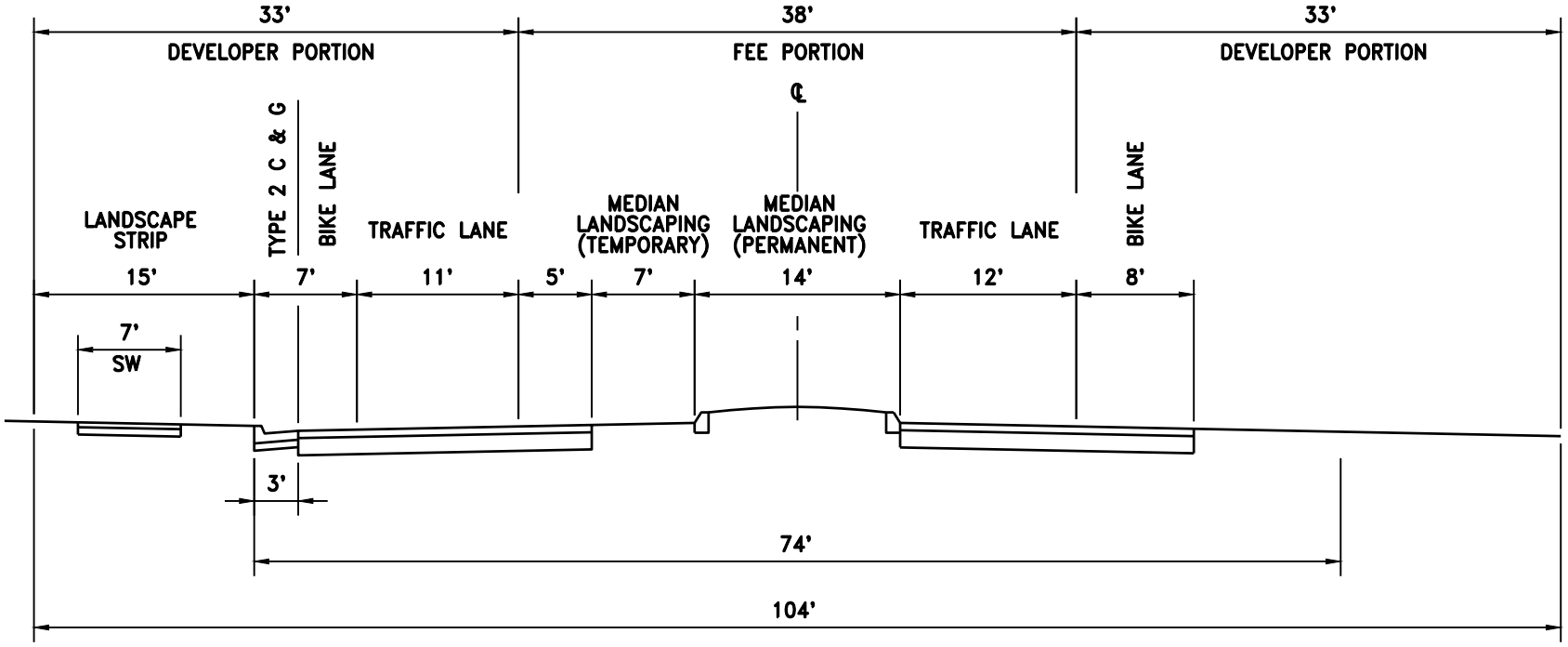
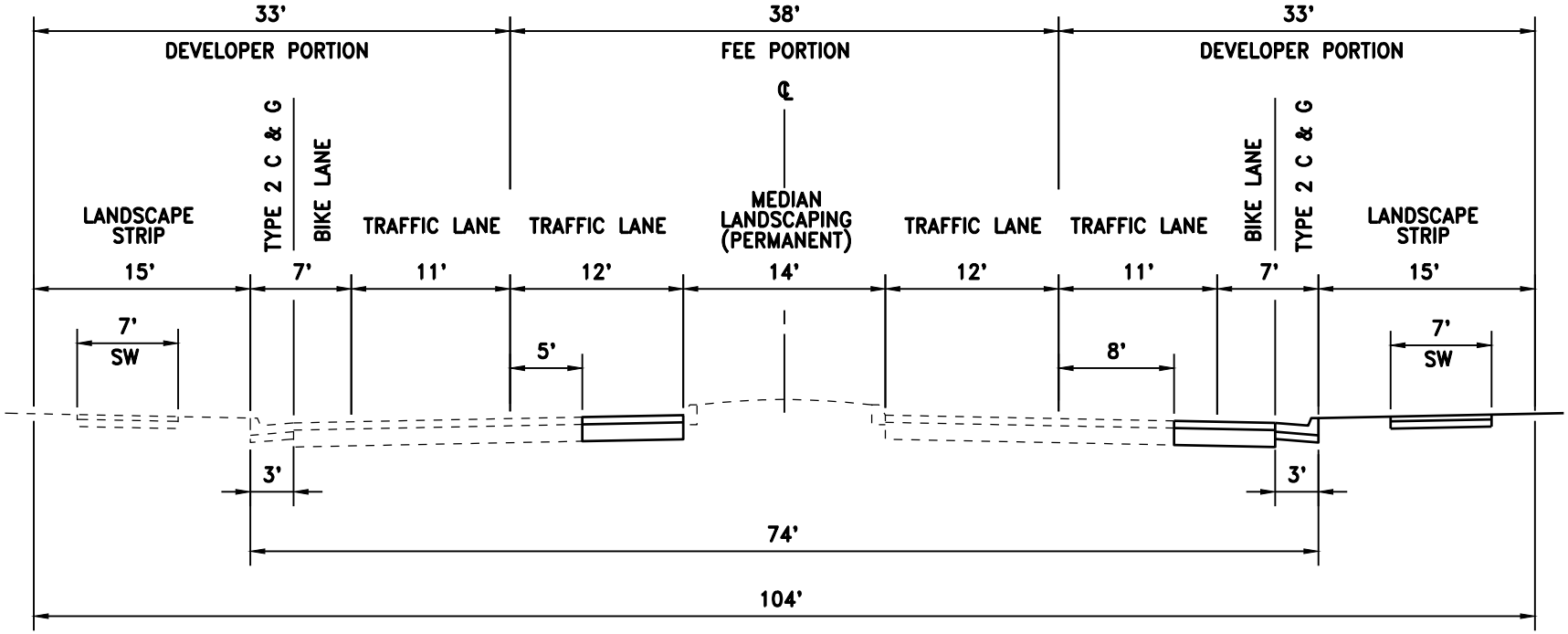


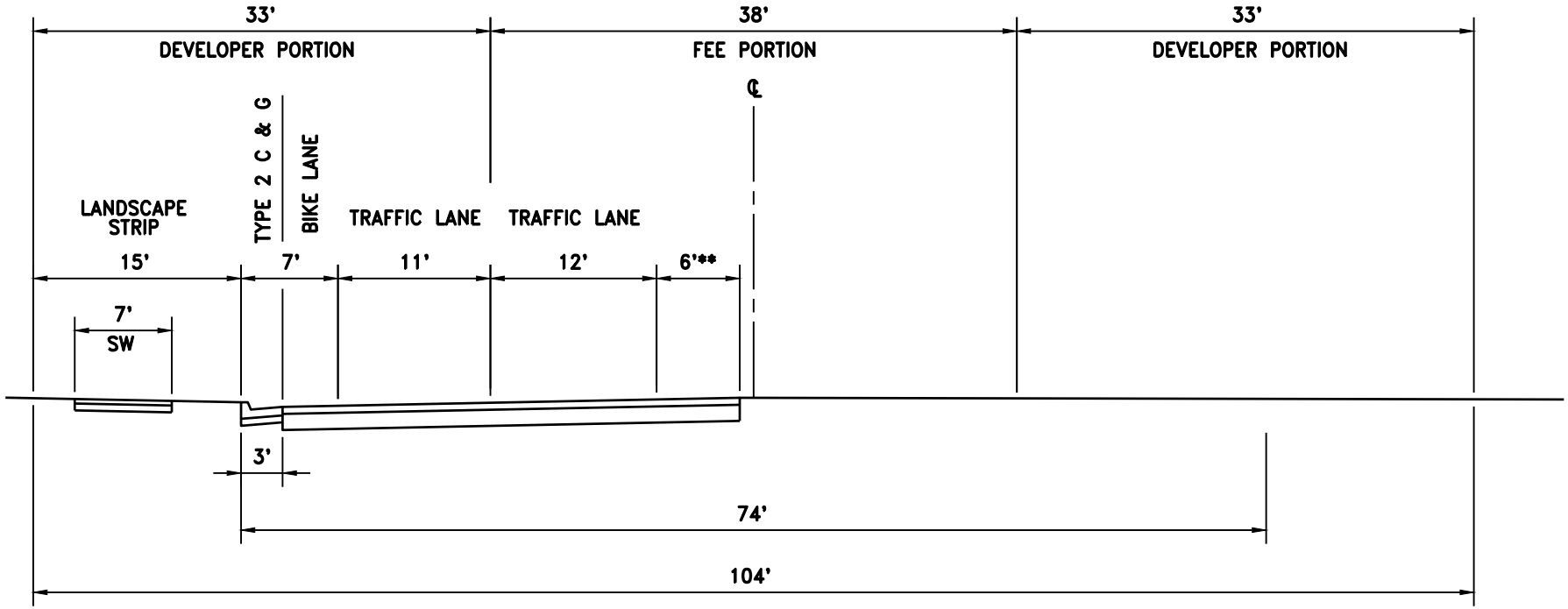
4 LANE - OPTION A
PHASE 1

NO SCALE



4 LANE - OPTION A
PHASE 2

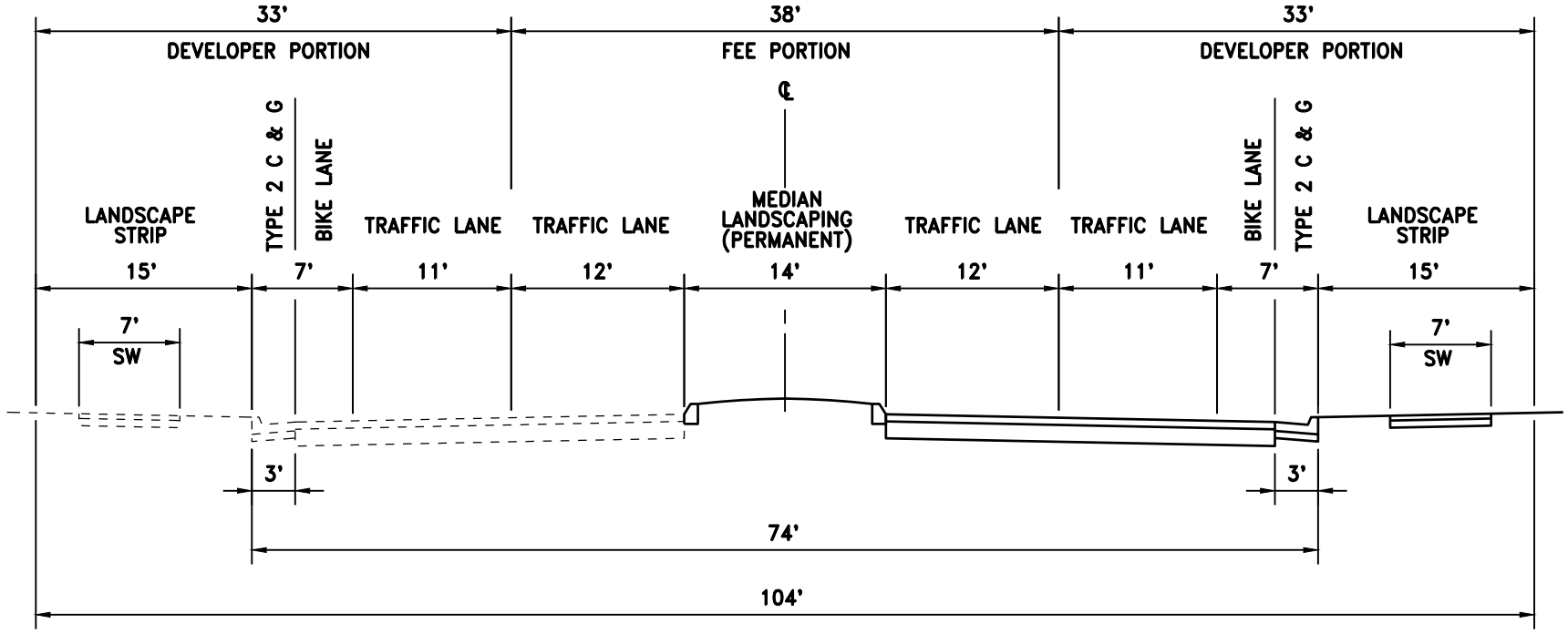
NO SCALE



4 LANE - OPTION B
PHASE 1

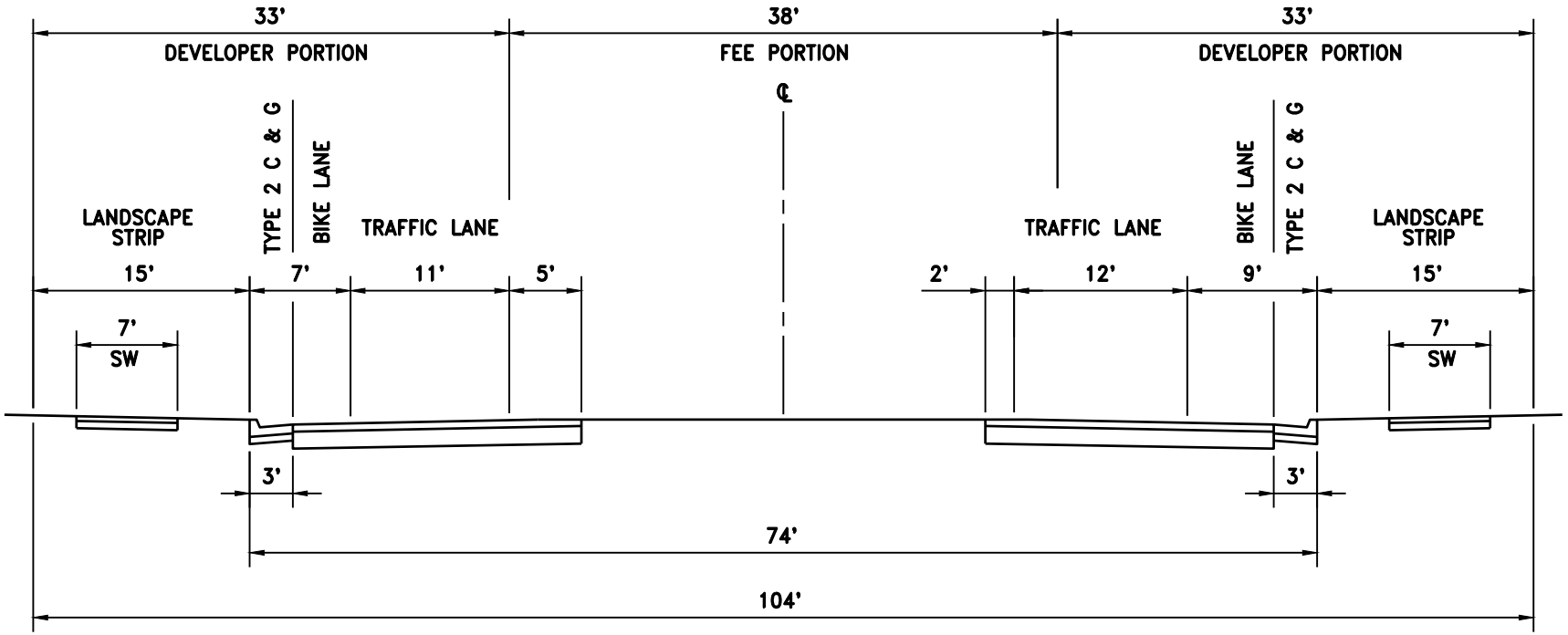
NO SCALE

** PAVED SHOULDER IS NON-REIMBURSABLE



4 LANE - OPTION B
PHASE 2

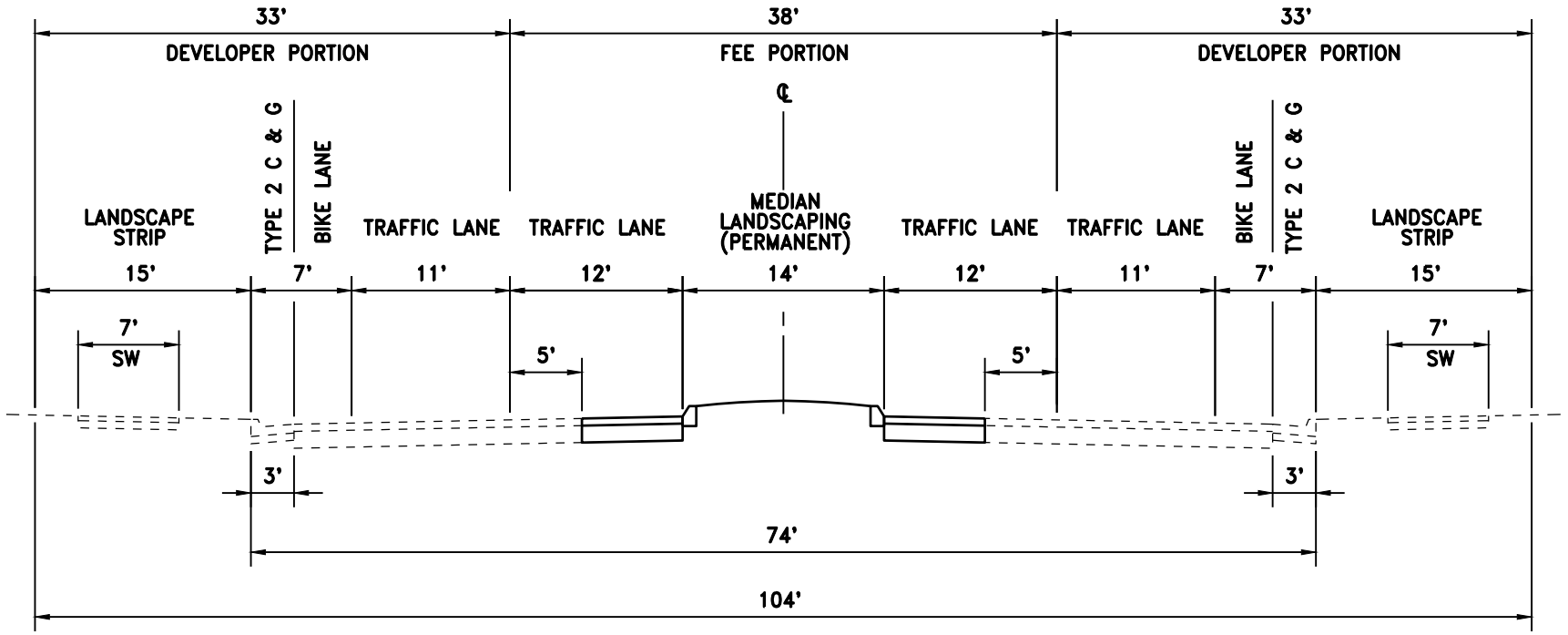
NO SCALE



4 LANE - OPTION C

PHASE 1

NO SCALE



4 LANE - OPTION C
PHASE 2

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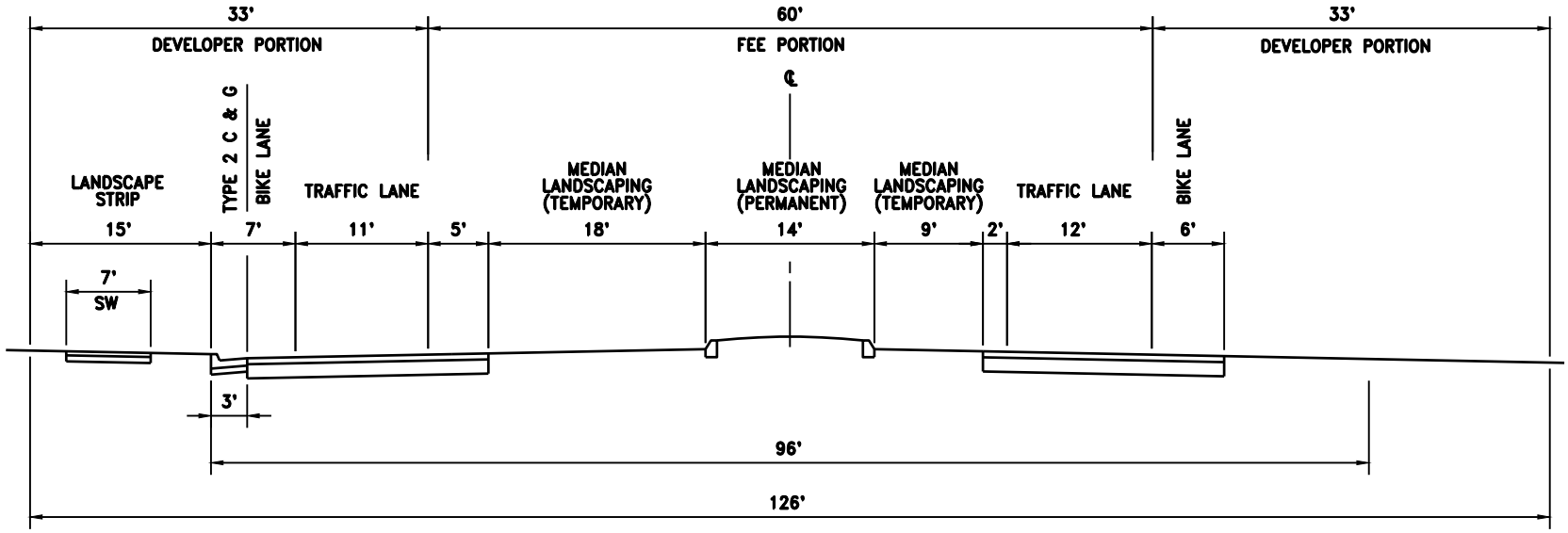
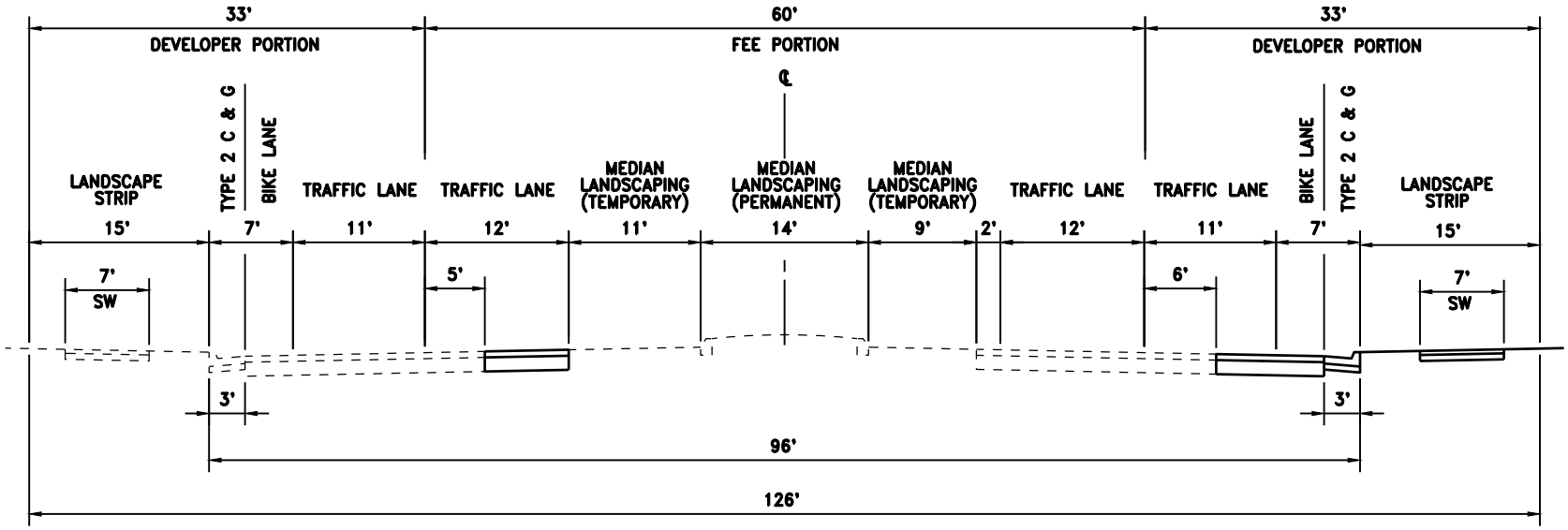


6 LANE - OPTION A
PHASE 1

NO SCALE



6 LANE - OPTION A
PHASE 2

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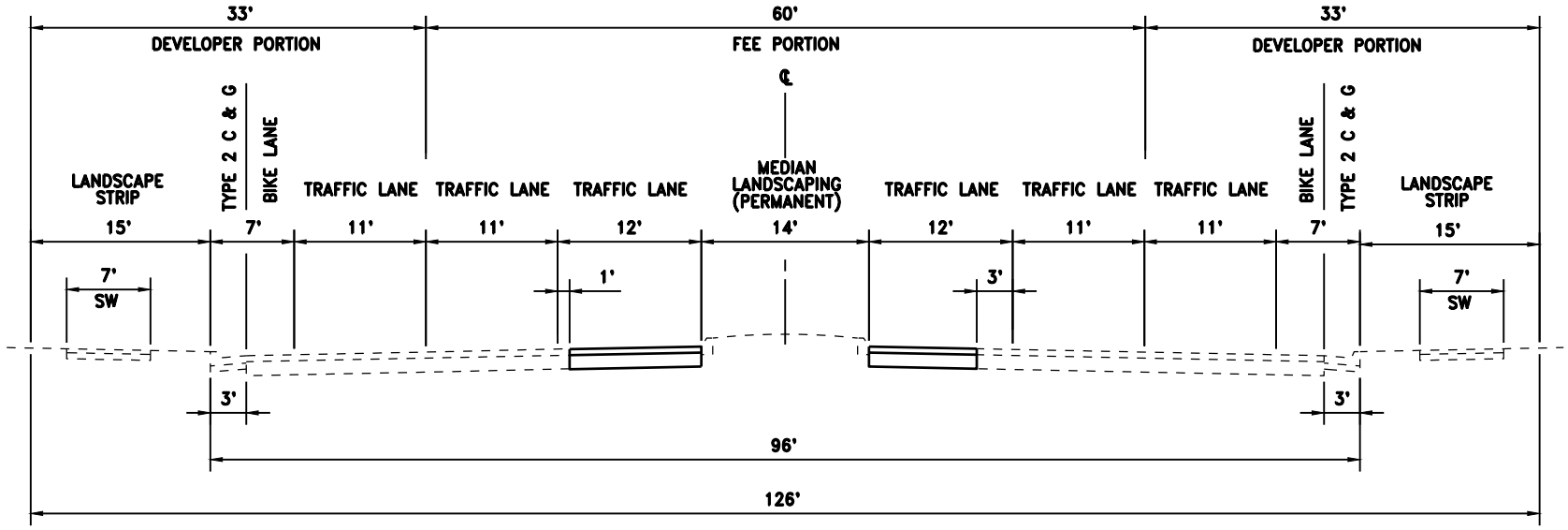
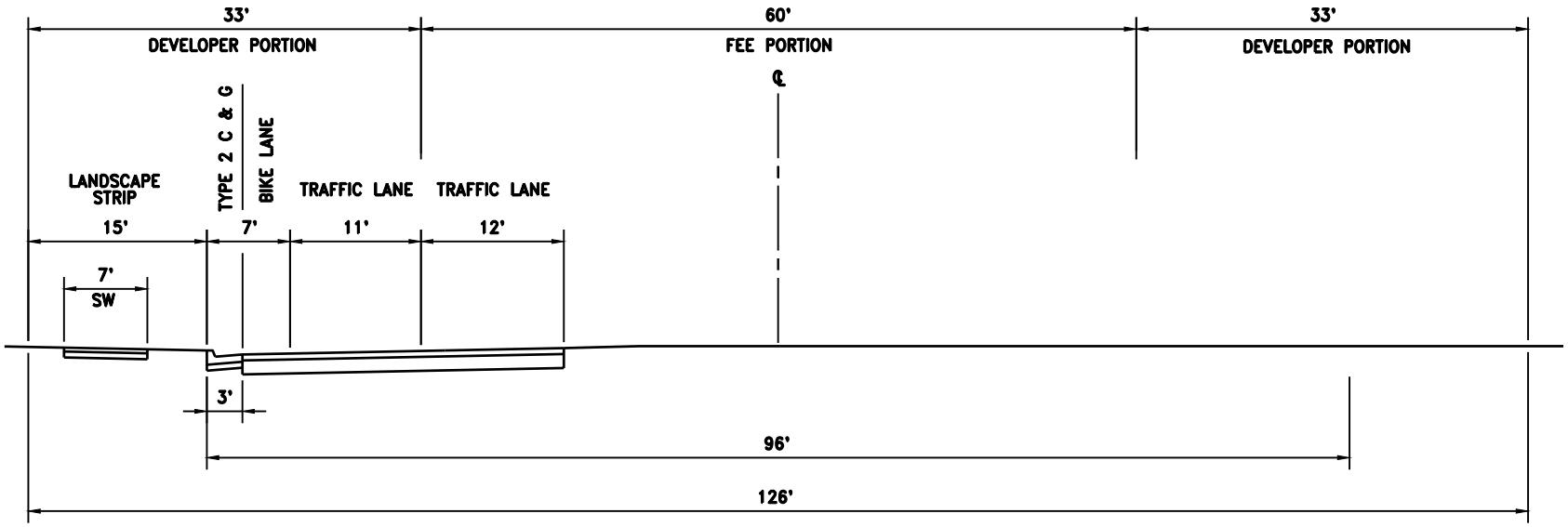


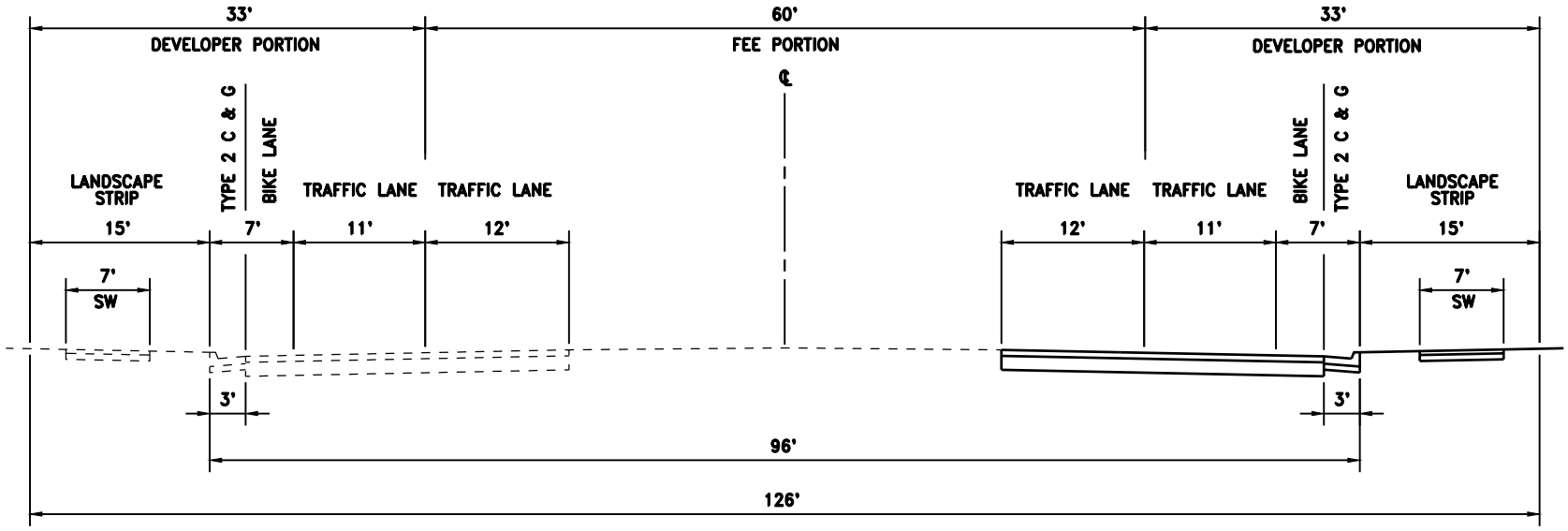
6 LANE - OPTION A
PHASE 3

NO SCALE



6 LANE - OPTION B
PHASE 1

NO SCALE



6 LANE - OPTION B
PHASE 2

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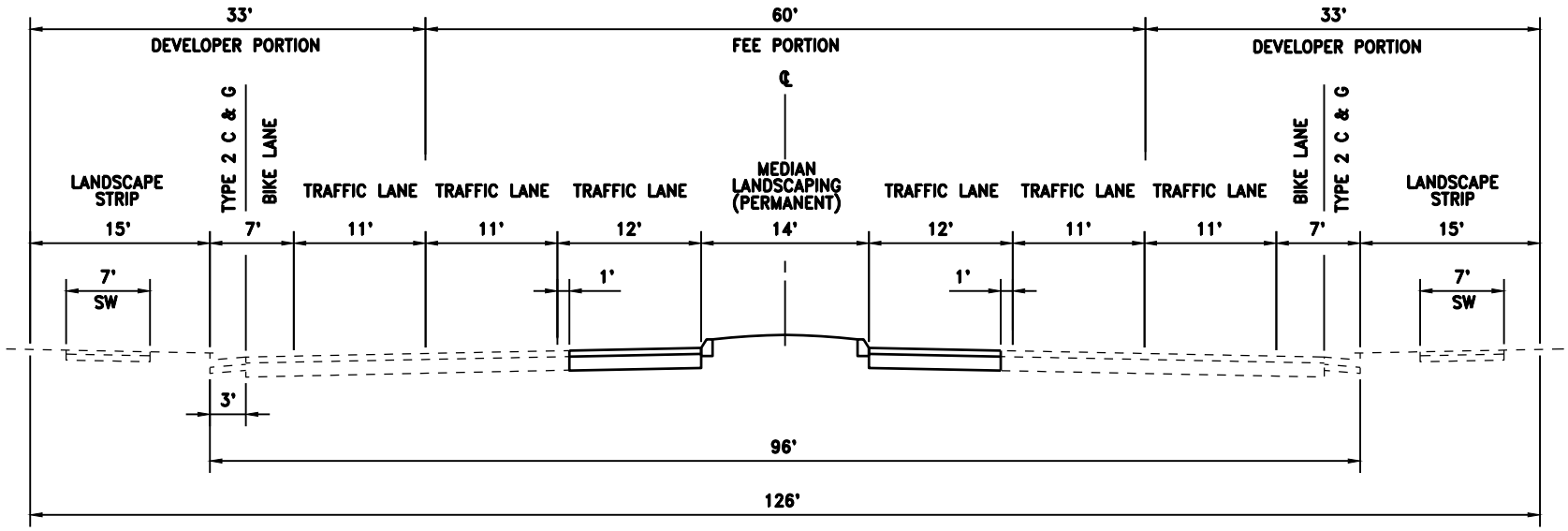

6 LANE - OPTION B
PHASE 3

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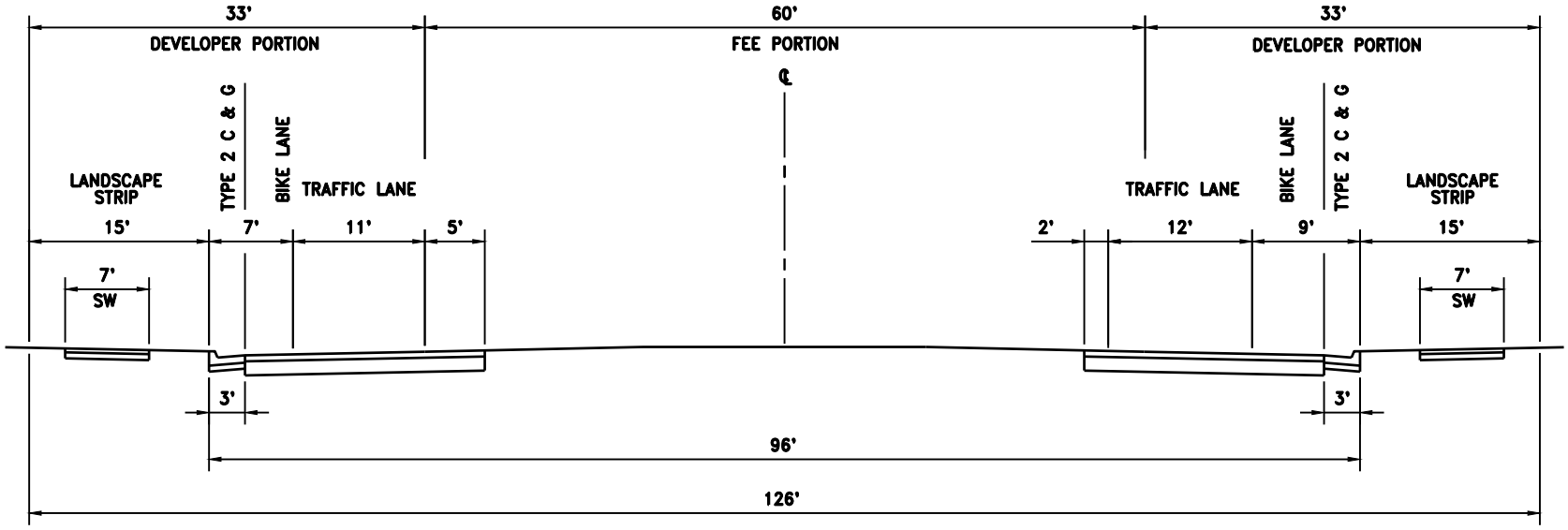
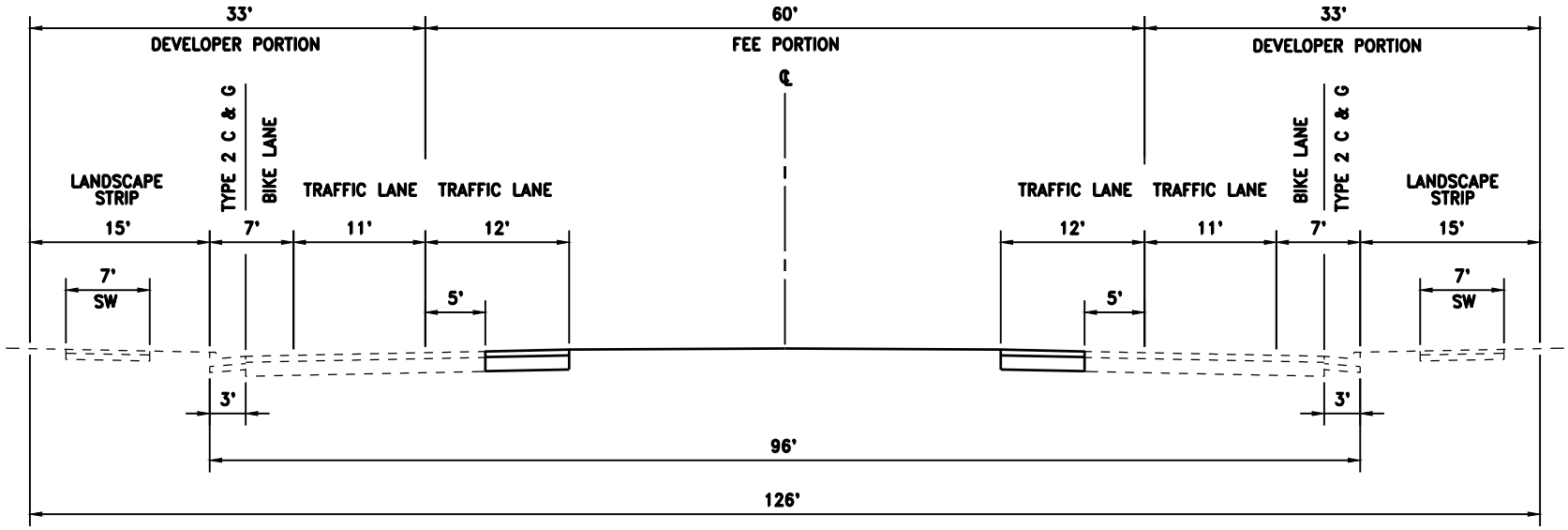


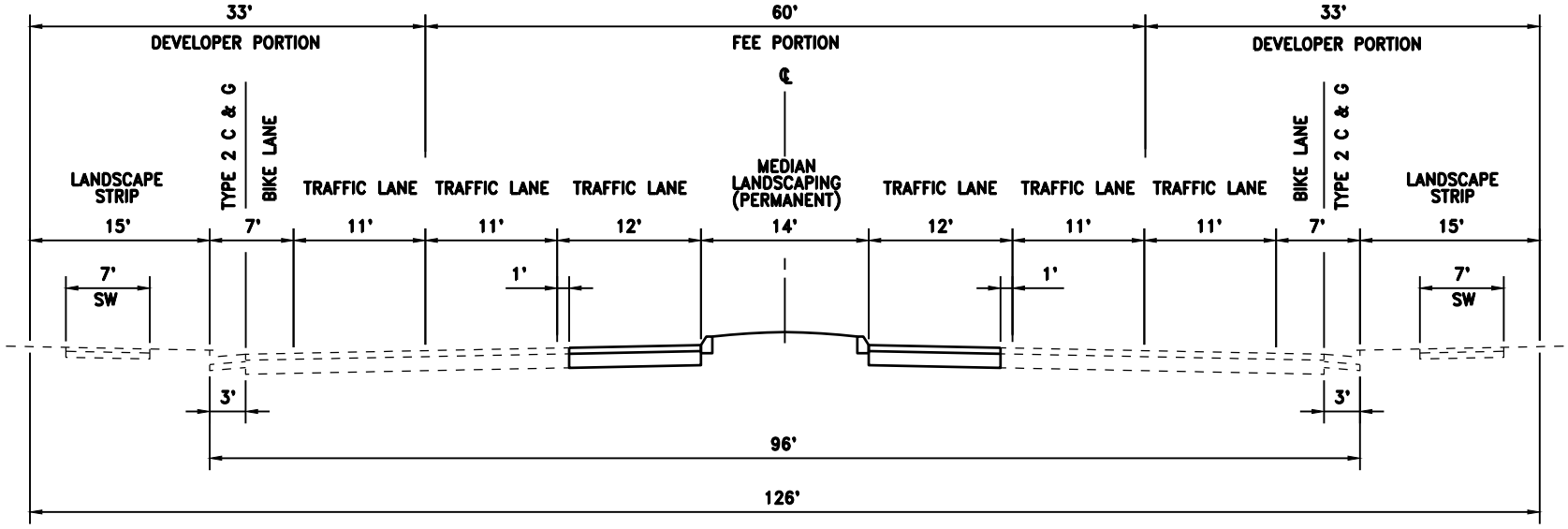
6 LANE - OPTION C
PHASE 1

NO SCALE



6 LANE - OPTION C
PHASE 2

NO SCALE



6 LANE - OPTION C
PHASE 3

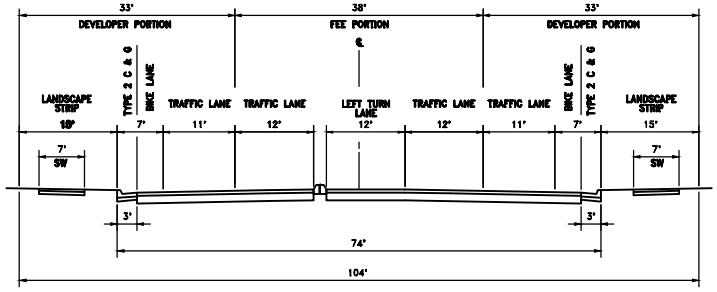
NO SCALE

LEGEND

FEE LIMITS OF WORK

STREET SEGMENT
TYPICAL

INTERSECTION LIMITS
450' TYPICAL EACH LEG



4 x 4 INTERSECTION

NO SCALE

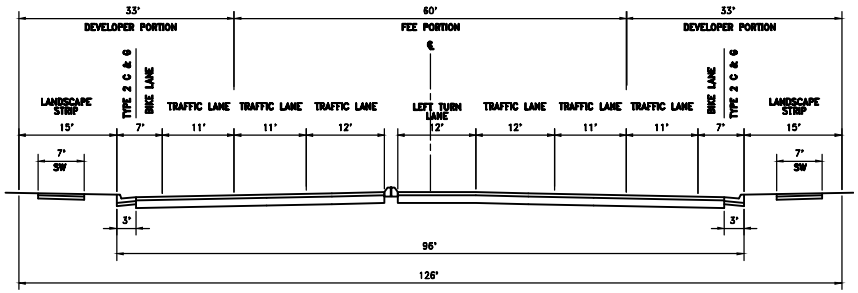
NOT ADOPTED INTERSECTION DETAIL.
FOR RANCHO CORDOVA CIP ESTIMATING PURPOSES ONLY.

LEGEND

FEE LIMITS OF WORK

STREET SEGMENT
TYPICAL

INTERSECTION LIMITS
450' TYPICAL EACH LEG



6 x 6 INTERSECTION

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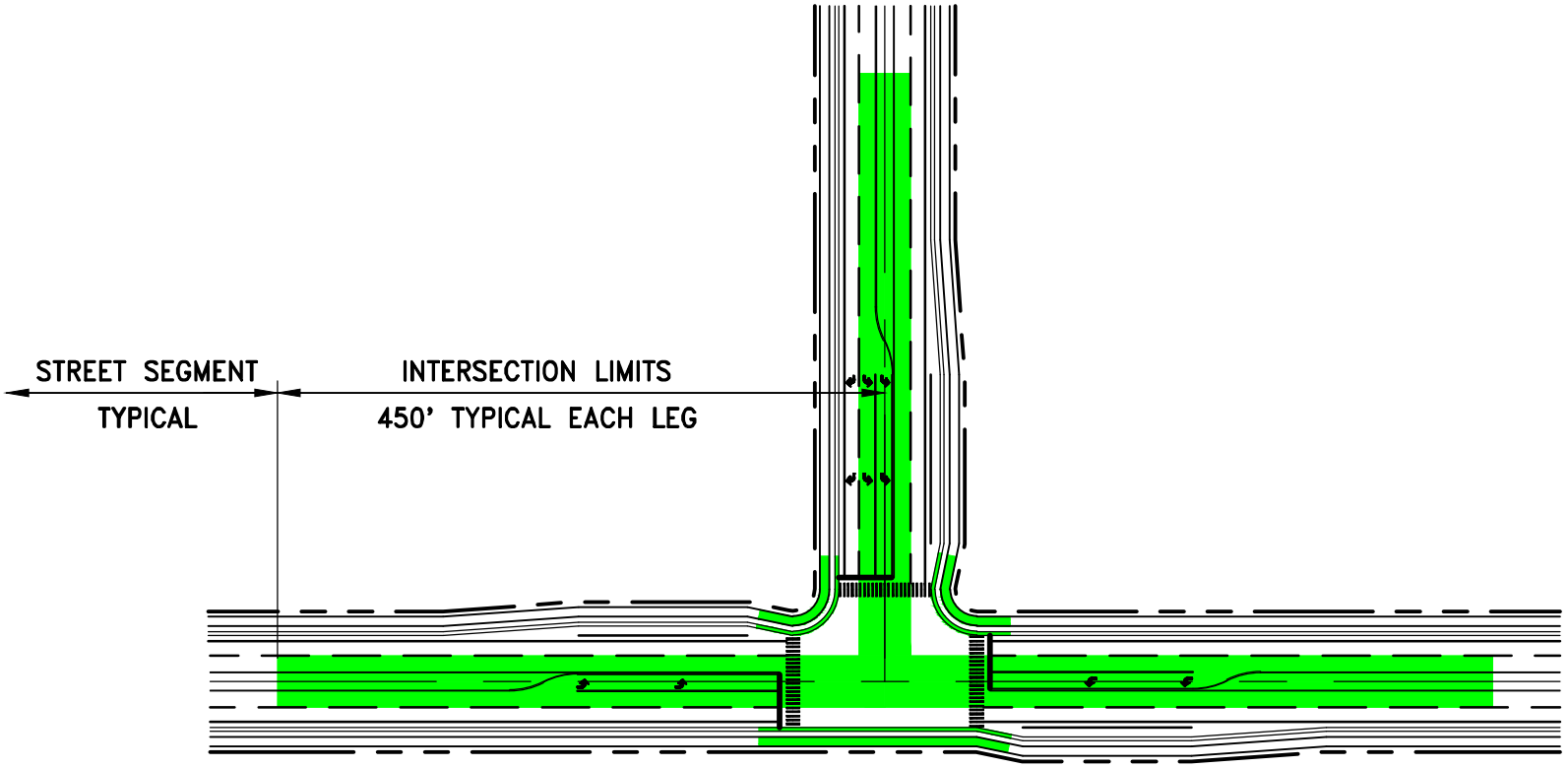
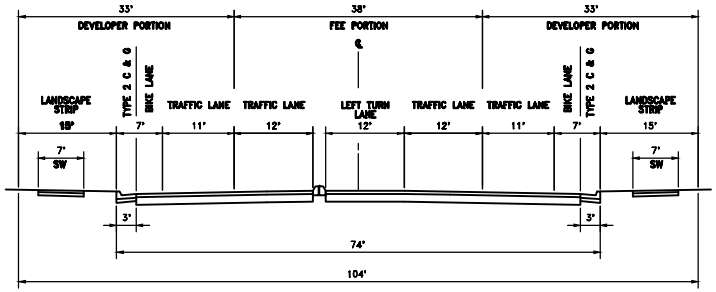
FOR RANCHO CORDOVA CIP ESTIMATING PURPOSES ONLY.

LEGEND

INTERSECTION LIMITS OF WORK





4 x 4 TEE INTERSECTION

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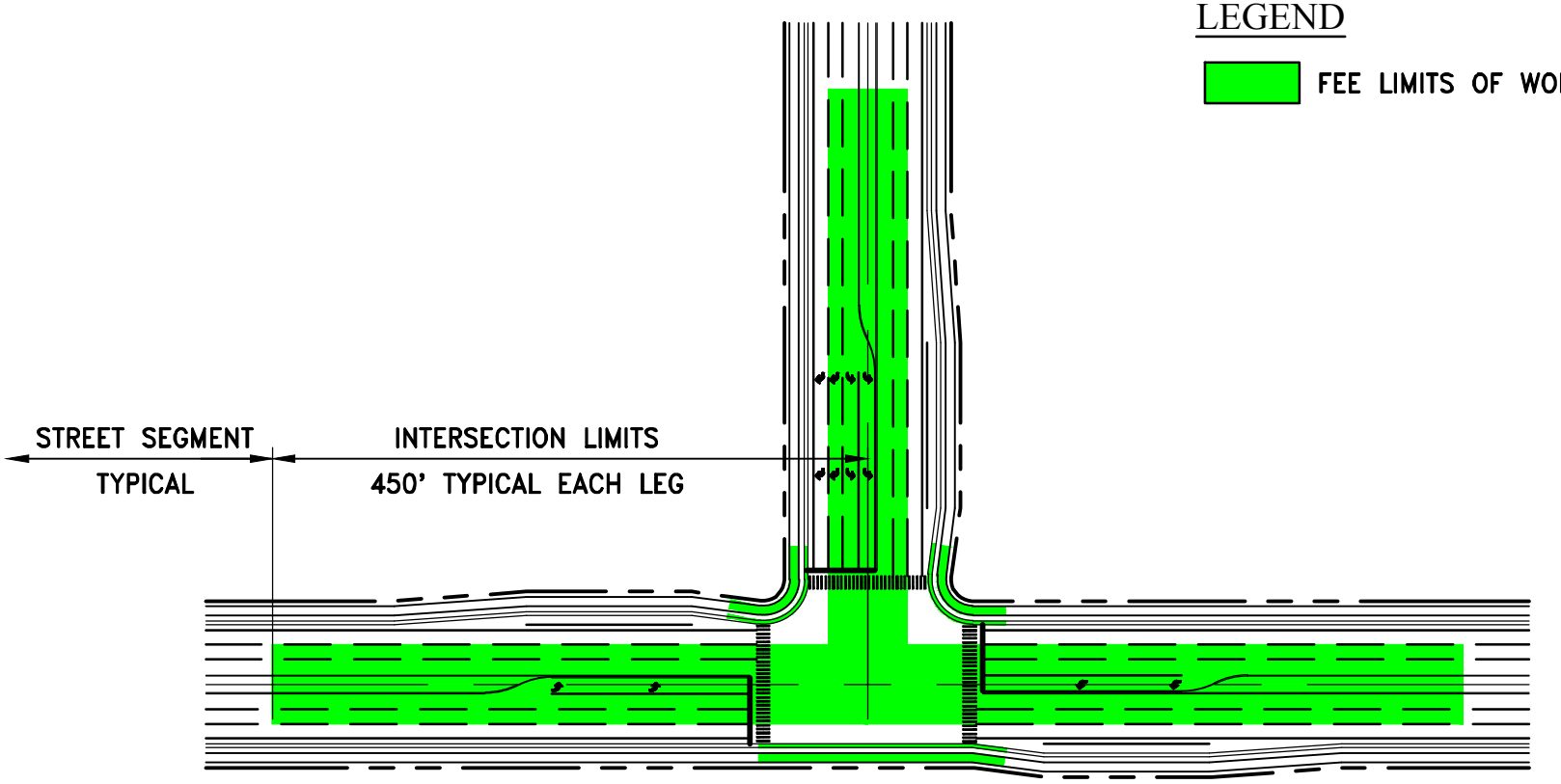
NOT ADOPTED INTERSECTION DETAIL.
FOR ESTIMATING PURPOSES ONLY FOR RANCHO CORDOVA CIP.



6 x 6 TEE INTERSECTION

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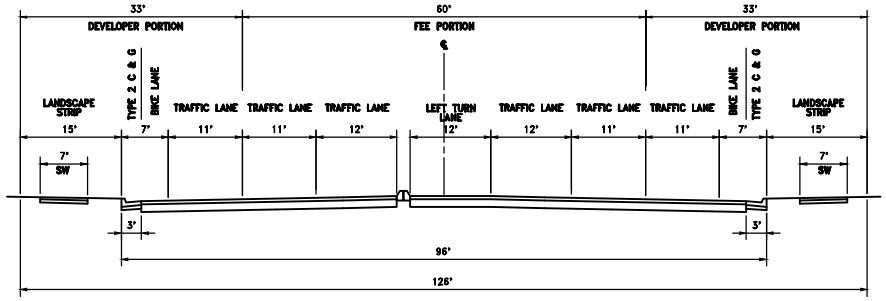

NOT ADOPTED INTERSECTION DETAIL.
FOR RANCHO CORDOVA CIP ESTIMATING PURPOSES ONLY.