



**Harris & Associates**



# **Storm Drainage Impact Fee Study Lammers and Mountain House Watersheds**

For the  
**City of Tracy**  
**San Joaquin County, California**

**August 2019**



## Executive Summary

The City of Tracy (City), like most communities in California, has adopted development impact fees for storm drainage to promote the idea that “growth pays for growth”. The Mitigation Fee Act of 1987 (commonly referred to as AB1600) sets forth the findings an agency must make in the adoption of its fee program as well as the ongoing reporting requirements.

Harris in conjunction with Storm Water Consulting Inc. were tasked to review the Storm Drainage Fees for the Lammers and Mountain House Watersheds in the City’s Sphere of Influence with the intention of updating the proposed storm drainage infrastructure and the storm drainage fees new development in these areas would be responsible for paying. Storm Water Consulting Inc. prepared Supplement No. 3 to Citywide Storm Drainage Master Plan to present the proposed revisions to the storm drainage infrastructure. This review and Supplement No. 3 were completed with the following goals in mind:

- Adjust the selected alignments of the Lammers Outfall Storm Drain system.
- Minor changes to the Sub-basin boundaries and detention basin sizes and locations associated with proposed storm drainage infrastructure.
- Improving the opportunities to accelerate the construction of Lammers Outfall Storm Drain System, facilitating the conversion of several existing temporary retention basins serving existing development to detention basins having a positive drainage outflow.

The following tables illustrate the proposed fee updates for Lammers and Mountain House Watersheds and provides a comparison of the proposed fees to the fees currently being collected.

**Table 1  
 Proposed Fee Summary for Lammers Watershed**

DESCRIPTION	LAMMERS WATERSHED FEE		
	IMPACT FEE*	PROGRAM ADMIN. *(5%)	TOTAL IMPACT FEE*
Residential - Very Low Density	\$ 1,586	\$ 79	\$ 1,665
Residential - Low Density	\$ 1,456	\$ 73	\$ 1,529
Residential - Medium Density (attached 2-4)	\$ 969	\$ 48	\$ 1,017
Residential - High Density (Attached 4+)	\$ 868	\$ 43	\$ 911
Industrial	\$ 26,592	\$ 1,330	\$ 27,922
Office	\$ 26,592	\$ 1,330	\$ 27,922
Retail	\$ 26,592	\$ 1,330	\$ 27,922

\* Residential Fees are shown per dwelling unit, Non-residential Fees are shown per acre.



**Table 2**  
**Proposed Fee Summary for Mountain House Watershed**

DESCRIPTION	MOUNTAIN HOUSE WATERSHED FEE		
	IMPACT FEE*	PROGRAM ADMIN. *(5%)	TOTAL IMPACT FEE*
<b>Mountain House Watershed</b>			
Industrial	\$ 17,451	\$ 873	\$ 18,324
Office	\$ 17,451	\$ 873	\$ 18,324
Retail	\$ 17,451	\$ 873	\$ 18,324

\* Non-residential Fees are shown per acre. There are only non-residential land uses in the Mountain House Watershed.

**Table 3**  
**Lammers Watershed Fee Comparison**

DESCRIPTION	PREVIOUS FEE AMOUNT**	NEW FEE AMOUNT*	DELTA	PERCENT CHANGE
<b>Lammers Watershed</b>				
Residential - Very Low Density	\$ 1,610	\$ 1,665	\$ 55	3.4%
Residential - Low Density	\$ 1,478	\$ 1,529	\$ 51	3.5%
Residential - Medium Density (attached 2-	\$ 984	\$ 1,017	\$ 33	3.4%
Residential - High Density (Attached 4+)	\$ 880	\$ 911	\$ 31	3.5%
Industrial	\$ 26,993	\$ 27,922	\$ 929	3.4%
Office	\$ 26,993	\$ 27,922	\$ 929	3.4%
Retail	\$ 26,993	\$ 27,922	\$ 929	3.4%

\* Residential Fees are shown per dwelling unit, Non-residential Fees are shown per acre

\*\* TIMP fees were updated by ENR on 6/2019.

**Table 4**  
**Mountain House Watershed Fee Comparison**

DESCRIPTION	PREVIOUS FEE AMOUNT**	NEW FEE AMOUNT*	DELTA	PERCENT CHANGE
<b>Mountain House Watershed</b>				
Industrial	\$ 17,901	\$ 18,324	\$ 423	2.4%
Office	\$ 17,901	\$ 18,324	\$ 423	2.4%
Retail	\$ 17,901	\$ 18,324	\$ 423	2.4%

\* Non-residential Fees are shown per acre. There are only non-residential land uses in the Mountain House Watershed.

\*\* TIMP fees were updated by ENR on 6/2019.

It is recommended that the City adopt the proposed fees in a timely manner to successfully fund the storm drainage infrastructure required to serve the planning areas in the Lammers and Mountain House Watersheds area in the City’s Sphere of Influence. A comprehensive analysis and the required AB1600 findings are detailed in subsequent report sections.



## Introduction

This impact fee analysis report has been prepared for Supplement No. 3 to the Citywide Storm Drainage Master Plan for Lammers and Mountain House Watersheds in the City's Sphere of Influence. Supplement No. 3 addresses the program storm drainage infrastructure requirements to serve new development in the Lammers and Mountain House Watershed areas.

The City adopted *the City of Tracy Citywide Storm Drainage Master Plan (SDMP)* on April 16, 2013 by resolution 2013-056, as well as the *City of Tracy Citywide Storm Drainage Master Plan Impact Fee Analysis and Supplement No. 1 for New Impact Fee Program Areas* on January 7, 2014 by Resolution 2014-10. On October 2, 2018, the City adopted *Supplement No. 2 for New Impact Fee Program Areas* by Resolution 2018-203 and *Storm Drainage Impact Fee Study for the Expanded Northeast Industrial Area and Eastside Industrial Area* by Resolution 2018-204.

At this time, Storm Water Consulting Inc. has prepared Supplement No. 3 to Citywide Storm Drainage Master Plan for the Lammers and Mountain House Watersheds in the City's Sphere of Influence (SDMP Update). The SDMP Update revises the storm drainage infrastructure and minor adjustments to sub-basins and watershed boundaries. As a result of this update, new impact fees are being calculated for the Lammers and Mountain House Watersheds.

The development areas included in the Citywide Storm Drainage Master Plan, with the exception of those listed above, are not affected by this impact fee analysis.

## Program Storm Drainage Areas and Infrastructure

With development occurring in the Lammers and Mountain House Watersheds, the SDMP Update revises the proposed Storm Drainage Master Plan infrastructure. A need for revised impact fees for these fee areas is the result of various factors. Some of these main factors are:

- Northward shift to select segments of the Lammers Outfall Storm Drain system to follow the south side of Eleventh Street and existing topography, and allow certain storm drain and sanitary sewer trunk lines to align parallel and contiguous to each other to improve efficiency of construction and maintenance.
- Minor changes to the proposed storm drainage Sub-basin boundaries and detention basin sizes and locations.
- Improving the opportunities to accelerate the construction of the Lammers Outfall Storm Drain System, facilitating the conversion of several existing temporary retention basins serving existing development to detention basins having a positive drainage outflow.

The following is a summary of the updated infrastructure for Lammers and Mountain House Watersheds from the SDMP Update and are depicted on Exhibit B. These updates and adjustments have been supported by Storm Water Consulting, Inc. through hydrologic and hydraulic calculations and additional investigation of physical conditions and input from the City staff.





- Changes to the alignment of selected segments of the proposed Lammers Outfall Storm Drain system.
- Minor Sub-basin changes, L17A/L17B transfer 22 acres of the Mountain House Watershed into the Lammers Watershed, L20/L14.
- DET MWH3a/3b/3c storage volume is reduced from 37 acre-feet (AF) to 33 AF due to a 22 acre reduction in the contributing drainage area per the watershed adjustment cited above.
- DET LW6 storage volume is increased from 101 AF to 103 AF due to minor sub-basin changes (L20/L14).
- DET LW9a storage volume is increased from 89 AF to 94 AF due to minor sub-basin changes (L17A/L17B) and watershed adjustments.
- DET LW8 is no longer depicted as a linear basin.
- DET LW10A, LW10B, LW9a and LW6 have minor location or configuration changes.
- DET LW3 is shown as an aggregate basin not located as of yet and will become three (3) or so smaller basins to be determined by the Specific Plan process for the property formerly known as Gateway.
- DET LW4 and LW5 will drain to the existing Lammers Road street storm drain system and/or future onsite storm drainage facilities serving the property formerly known as Gateway that will be directed to DET LW3; DET LW4 and LW5 (1 cfs outflow, total) will be “pass through” drainage in DET LW3 and will not affect the DET LW3 storage volume.

The SDMP Update does not alter the components of the Citywide SDMP as it pertains to the 2010 Drainage Agreement Between the City of Tracy and The West Side Irrigation District and also the outflow rates from detention basins proposed to serve these areas except for a DET LW3 outflow increase from 4 to 5 cfs for pass through of storm water already stored and detained in DET LW4 and LW5.

## Opinion of Probable Cost

### Overview

This section details the Opinions of Probable Cost for the storm drainage infrastructure that will serve the two fee areas in this fee analysis. These costs are taken from Supplement No. 3 to Citywide Storm Drainage Master Plan prepared by Storm Water Consulting Inc.

### Cost Estimating Considerations

Soft costs accounted for in all opinions of probable cost are as follows:

- Design and Planning – 10% of construction costs
- Construction Management – 10% of construction costs
- General Contingency – 15% of construction costs
- Program Administration – 5% of impact fees

The program administration is necessary to administer the impact fee programs. As the program administration will be collected into the City’s separate program administration fund, the program



administration has been removed from the probable costs and is included as a separate fee of five percent mark-up of the Lammers and Mountain House Watersheds Fees.

It is important to note, as the construction date for each facility is unknown at this point in time, it is critical that these cost estimates be updated annually by the Engineering News Record San Francisco Construction Cost Index or a similar index as adopted by City Council. Annual updates ensure that the cost estimates are continually relevant to the anticipated construction cost.

### Infrastructure Costs by Fee Area

#### Lammers Watershed

Table 5 details the opinion of probable cost for the remaining facilities in the Lammers Watershed.

The following storm drainage improvements been completed and fee credits have been issued. Since these project credits have been issued, these improvements are removed from the remaining costs.

- DET LWB 10b (18 acre-feet)
- DET LW6 (151 acre-feet)
- 24 inch line in Capital Parks (2,325 linear feet)
- 30 inch line for the West Side Irrigation District (345 linear feet)
- 24 inch Capital Parks (1,433 linear feet)
- 24 inch Huntington Way (332 linear feet)

In order to determine the cost that must be funded by remaining development, the fund balance is subtracted from the cost of the remaining facilities and the outstanding developer credits are added to the costs. These calculations are shown in Table 5.

A program administration fee of 5% is not included in this cost estimate but is added to the fee as an administrative component.



Table 5  
 Opinion of Probable Cost for Program Storm Drainage Infrastructure  
 Supplement No. 3 to the Citywide SDMP (Lammers Watershed)

DESCRIPTION	Total QTY	Remaining QTY	UNIT	UNIT COST	TOTAL COST
<b>LAMMERS WATERSHED</b>					
<b>Construction of Major Facilities</b>					
DET LW1 (90 AF, plus 32 AF add'l excavation)	122	122	AF	\$ 16,000	\$ 1,952,000
DET LW2 (27 AF, plus 10 AF add'l excavation)	37	37	AF	\$ 16,000	\$ 592,000
DET LW3 (87AF, plus 30 AF add'l excavation)	117	117	AF	\$ 16,000	\$ 1,872,000
DET LW5 (Non-Program)					
DET LW6 (103 AF, plus 50 AF add'l excavation)	153	3	AF	\$ 16,000	\$ 48,000
DET LW7 (Non-Program)					
DET LW8 (34 AF, plus 5 AF add'l excavation)	39	39	AF	\$ 16,000	\$ 624,000
DET LW9a (94 AF, plus 38 AF add'l excavation)	132	132	AF	\$ 16,000	\$ 2,112,000
DET LW9b (18 AF, plus 6 AF add'l excavation)	24	24	AF	\$ 16,000	\$ 384,000
DET LW10a/10b (20 AF, plus 7 AF add'l excavation)	27	9	AF	\$ 16,000	\$ 144,000
DET LW11 (30 AF, plus 11 AF add'l excavation)	41	41	AF	\$ 16,000	\$ 656,000
DET LW12 (13 AF, plus 4 AF add'l excavation)	17	17	AF	\$ 16,000	\$ 272,000
DET LW4 Pump Station (0.5 cfs capacity)	1	1	LS	\$ 350,000	\$ 350,000
DET LW5 Pump Station (0.5 cfs capacity, Non-Program)					
DET LW12 Pump Station (0.5 cfs capacity)	1	1	LS	\$ 350,000	\$ 350,000
Greenbelt Parkway	11,200	11,200	LF	\$ 340	\$ 3,808,000
<b>Construction of Storm Drains</b>					
12" SD & SDFM	13,400	13,400	LF	\$ 75	\$ 1,005,000
18" SD	4,100	4,100	LF	\$ 100	\$ 410,000
24" SD	7,900	3,810	LF	\$ 150	\$ 571,500
30" SD	6,185	5,840	LF	\$ 200	\$ 1,168,000
36" SD	3,590	3,590	LF	\$ 300	\$ 1,077,000
36" SD (Crossing of Eleventh Street)	102	102	LF	\$ 500	\$ 51,000
42" SD (Von Sosten Road, WSID Sub-Main Drain)	150	150	LF	\$ 500	\$ 75,000
<b>Other Items</b>					
Dewatering	1	1	LS	\$ 2,500,000	\$ 2,500,000
WSID Crossing Agreement	2	2	EA	\$ 5,000	\$ 10,000
Interflow Structure at WSID Connection (Lammers Road)	1	1	LS	\$ 30,000	\$ 30,000
WSID Discharge Agreement (First 30 Years)	1	1	EA	\$ 2,040,000	\$ 2,040,000
<b>Subtotal of Construction</b>					<b>\$ 22,101,500</b>
<b>Design &amp; Planning @ 10% of Construction Subtotal</b>					<b>\$ 2,210,150</b>
<b>Construction Management @ 10% of Construction Subtotal</b>					<b>\$ 2,210,150</b>
<b>General Contingency @ 15% of Construction Subtotal</b>					<b>\$ 3,315,225</b>
<b>Land Acquisition</b>					
DET LW1	35.0	35.0	AC	\$ 150,000	\$ 5,250,000
DET LW2	11.0	11.0	AC	\$ 150,000	\$ 1,650,000
DET LW3	48.0	48.0	AC	\$ 150,000	\$ 7,200,000
DET LW5 (Non-Program)					
DET LW6	21.0	21.0	AC	\$ 150,000	\$ 3,150,000
DET LW7 (Non-Program)					
DET LW8	5.0	5.0	AC	\$ 150,000	\$ 750,000
DET LW9a	25.0	25.0	AC	\$ 150,000	\$ 3,750,000
DET LW9b	7.0	7.0	AC	\$ 150,000	\$ 1,050,000
DET LW10a/10b	9.0	9.0	AC	\$ 150,000	\$ 1,350,000
DET LW11	12.0	12.0	AC	\$ 150,000	\$ 1,800,000
DET LW12	6.0	6.0	AC	\$ 150,000	\$ 900,000
Greenbelt Parkway	51.4	51.4	AC	\$ 150,000	\$ 7,710,000
12" SD Easement	2.2	2.2	AC	\$ 50,000	\$ 110,000
<b>Subtotal of Land Acquisition</b>					<b>\$ 34,670,000</b>
<b>TOTAL ESTIMATED COST</b>					<b>\$ 64,507,025.00</b>
<b>Less Lammers Watershed Fund Balance</b>					<b>\$ (131,861.96)</b>
<b>Outstanding Lammers Watershed Developer Credit<sup>2</sup></b>					<b>\$ 370,650.00</b>
<b>REMAINING COST FOR NEW PROGRAM STORM DRAINAGE INFRASTRUCTURE</b>					<b>\$ 64,745,813.04</b>

Notes:

- 1) Infrastructure Cost Estimates Source: Storm Water Consulting, Inc. James Nelson, May 15, 2019.
- 2) Credits: Phase 1c Building 1 - LWB10b (18 AF) and LW6 (151 AF). Phase 1b Medline - 24" Capital Parks (2,325 LF), 30" WSID (345 LF). Phase 1e 24" Capital Parks (1,433 LF), 24" Huntington Way (332 LF). These items quantities have been deducted.
- 3) The following program administration has been removed from the cost estimate. A 5% PM fee is added on to the fee.



Mountain House Watershed

Table 6 details the opinion of probable cost for the remaining facilities in the Mountain House Watershed. The fund balance is subtracted from the remaining costs to determine the cost to be funded from remaining development. These calculations are shown in Table 6.

**Table 6**  
**Opinion of Probable Cost for Program Storm Drainage Infrastructure**  
**Supplement No. 3 to the Citywide SDMP (Mountain House Watershed)**

DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL COST
<b>MOUNTAIN HOUSE WATERSHED</b>				
<b>Construction of Major Facilities</b>				
DET MHW3a/3b/3c (33 AF, plus 14 AF add'l excavation)	47	AF	\$ 16,000	\$ 752,000
DET MHW 3a Pump Station (3.0 cfs capacity)	1	LS	\$ 350,000	\$ 350,000
<b>Construction of Storm Drains</b>				
18" SDFM	3,300	LF	\$ 100	\$ 330,000
<b>Other Items</b>				
Dewatering	1	LS	\$ 150,000	\$ 150,000
Mountain House Discharge Agreement	1	LS	TBD	TBD
<b>Subtotal of Construction</b>				<b>\$ 1,582,000</b>
<b>Design &amp; Planning @ 10% of Construction Subtotal</b>				<b>\$ 158,200</b>
<b>Construction Management @ 10% of Construction Subtotal</b>				<b>\$ 158,200</b>
<b>General Contingency @ 15% of Construction Subtotal</b>				<b>\$ 237,300</b>
<b>Land Acquisition</b>				
DET MHW3a/3b/3c	10.0	AC	\$ 150,000	\$ 1,500,000
18" SDFM Easement	1.5	AC	\$ 50,000	\$ 75,000
<b>Subtotal of Land Acquisition</b>				<b>\$ 1,575,000</b>
<b>TOTAL ESTIMATED COST</b>				<b>\$ 3,710,700.00</b>
<b>Less Mountain House Watershed Fund Balance</b>				<b>\$(531,140.83)</b>
<b>REMAINING COST FOR NEW PROGRAM STORM DRAINAGE INFRASTRUCTURE</b>				<b>\$ 3,179,559.17</b>

Note: TBD = To Be Determined and Added to Costs at a Later Date



## Storm Drainage Impact Fees

### Overview

New development within the Lammers and Mountain House Watersheds will fund the storm drainage infrastructure detailed in the Opinions of Probable costs shown in Table 5 and Table 6.

### Fee Methodology

There are several methodologies that can be used to determine the impact fees for new development. The applicability of these methodologies is primarily based on the type of infrastructure or facility that an impact fee is being calculated for and the technical documentation that is available to support the establishment of the fee.

For the purpose of this fee analysis, a Plan-Based fee methodology was used for calculating the storm drainage impact fees and is consistent with the methodology utilized in the *2013 Impact Fee Analysis for New Impact Fee Program Areas* prepared by Stantec.

The methodology used in calculating the fees is shown below:

1. The net remaining undeveloped acreage for each watershed was determined and is shown in Exhibit C.
2. The net areas for each proposed land use category within the impact fee program area were divided by the total net area of undeveloped land to yield a proportional land use area percentage.
3. In order to establish an equitable fee structure, the land use area percentages were then weighted according to their assigned percent impervious values. The percent impervious values are per the impervious values used in the *2013 Impact Fee Analysis for New Impact Fee Program Areas* prepared by Stantec.
4. Each land use is then assigned a proportional funding responsibility (share of the costs) by dividing their impervious area by the total impervious area.
5. The total fee responsibility for each land use category is then determined by multiplying the proportional funding responsibility percentages by the total infrastructure cost for the impact fee program area.
6. The total funding responsibility for each land use category is then divided by the net acreage to calculate the impact fee for each land use category on a per acre basis.
7. For residential land uses, the impact fee per acre is then converted to a fee per dwelling unit using density assumptions.



8. An Administration Fee is determined by multiplying the impact fees by five percent.

Table 7 and 8 details the storm drainage impact fees by planning area and subsequently by land use that were derived using the preceding methodology.



**Table 7**  
**City of Tracy**  
**Storm Drainage Impact Fees (Updated Lammers Watershed)**

Impact Fee Program Area	Remaining Infrastructure Cost*	Land Use Category	Remaining Net Acreage by Land Use Category***	Proportional Land Use Area Within Impact Fee Program Area	Percent Impervious	Proportional Funding Factor (Land Use % times % Impervious)	Proportional Funding Responsibility (Funding Factor % of Total)	Total Fee Responsibility	Impact Fee (Per Acre)	Residential Dwelling Units	Impact Fee (Per Dwelling Unit)	Program Administration **	Total Impact Fee **
Lammers Watershed	\$ 64,745,813	Residential - Very Low Density	34.00	1.35%	6%	0.0008	0.1%	\$ 95,173	\$ 2,799.00	60	\$ 1,586.00	\$ 79.00	\$ 1,665.00
		Residential - Low Density	23.80	0.95%	16%	0.0015	0.3%	\$ 177,656	\$ 7,465.00	122	\$ 1,456.00	\$ 73.00	\$ 1,529.00
		Residential - Medium Density (attached 2-4)	23.80	0.95%	22%	0.0021	0.4%	\$ 244,277	\$ 10,264.00	252	\$ 969.00	\$ 48.00	\$ 1,017.00
		Residential - High Density (Attached 4+)	45.90	1.83%	41%	0.0075	1.4%	\$ 877,969	\$ 19,128.00	1012	\$ 868.00	\$ 43.00	\$ 911.00
		Industrial	1562.04	62.24%	57%	0.3548	64.2%	\$ 41,538,324	\$ 26,592.00	N/A	N/A	\$ 1,330.00	\$ 27,922.00
		Office	596.70	23.77%	57%	0.1355	24.5%	\$ 15,867,684	\$ 26,592.00	N/A	N/A	\$ 1,330.00	\$ 27,922.00
		Retail	223.55	8.91%	57%	0.0508	9.2%	\$ 5,944,731	\$ 26,592.00	N/A	N/A	\$ 1,330.00	\$ 27,922.00
		<b>Total</b>	<b>2509.79</b>	<b>100.00%</b>		<b>0.5530</b>	<b>100.0%</b>	<b>\$ 64,745,813</b>					

\* Remaining Infrastructure not yet in approved OIA as of May 2019.  
 \*\* Residential Fees are shown per dwelling unit, Non-residential Fees are shown per acre.  
 \*\*\* Land that has paid impact fees as of May 2019 are removed from acreage.

**Table 8**  
**City of Tracy**  
**Storm Drainage Impact Fees (Updated Mountain House Watershed)**

Impact Fee Program Area	Remaining Infrastructure Cost*	Land Use Category	Remaining Net Acreage by Land Use Category**	Proportional Land Use Area Within Impact Fee Program Area	Percent Impervious	Proportional Funding Factor (Land Use % times % Impervious)	Proportional Funding Responsibility (Funding Factor % of Total)	Total Fee Responsibility	Impact Fee (Per Acre)	Program Administration (Per Acre)	Total Impact Fee (Per Acre)
Mountain House Watershed	\$ 3,179,559	Industrial	152.45	83.67%	57%	0.4769	83.7%	\$ 2,660,403	\$ 17,451.00	\$ 873.00	\$ 18,324.00
		Office	18.70	10.26%	57%	0.0585	10%	\$ 326,326.99	\$ 17,451.00	\$ 873.00	\$ 18,324.00
		Retail	11.05	6.06%	57%	0.0346	6.1%	\$ 192,830	\$ 17,451.00	\$ 873.00	\$ 18,324.00
		<b>Total</b>	<b>182.20</b>	<b>100.00%</b>		<b>0.5700</b>	<b>100.0%</b>	<b>\$ 3,179,559</b>			

\* Remaining Infrastructure not yet in approved OIA as of May 2019.  
 \*\* Land that has paid impact fees as of May 2019 are removed from acreage.



## AB 1600 Findings

This section provides the nexus findings for establishing and/or revising development impact fees for storm drainage pursuant to Assembly Bill (AB) 1600.

AB 1600, which was enacted by the State of California in 1987, created the Mitigation Fee Act – Section 66000 et seq. of the Government Code. The Mitigation Fee Act requires that all public agencies satisfy five requirements when establishing, increasing, or imposing a fee as a condition of approval of a development project. These requirements are as follows:

1. Identification of the purpose of the fee.
2. Identification of how the fee will be used.
3. Determination of how there is a reasonable relationship between the fee's use and the type of development projects on which the fee is imposed.
4. Determination of how there is a reasonable relationship between the need for the public storm drainage facilities and the type of development projects on which the fee is imposed.
5. Determination of how there is a reasonable relationship between the amount of the fee and the cost of the public storm drainage facilities (or portion of facilities) attributable to new development.

These required findings are made below:

### *Requirement #1: Identify the purpose of the fee.*

New development increases the impervious area and generates the need for additional storm drainage facilities. These storm drainage facilities are required in order to provide adequate drainage to the parcels in the Lammers and Mountain House Watershed Areas. The purpose of the Lammers Watershed and Mountain House Watershed impact fees are to provide a source of funding for the improvements and to ensure that each development pays their fair share of the cost for the storm drainage infrastructure specific to each watershed area as identified in the City of Tracy Supplement No. 3 to the Citywide Storm Drainage Master Plan. These facilities are illustrated in Exhibit B and the opinions of probable costs are summarized in Tables 5 and 6.

### *Requirement #2: Identify the use to which the fee will be put.*

The Lammers Watershed impact fee and the Mountain House Watershed impact fees will be used to construct the program storm drainage facilities in each watershed area per Supplement No. 3 to Citywide Storm Drainage Master Plan. These facilities include underground storm drains, detention basins, and appurtenant improvements as summarized in Tables 5 and 6 and illustrated in Exhibit B.

### *Requirement #3: Determine how there is a reasonable relationship between the fee's use and the type of development project on which the fee is imposed.*

New development within the Lammers and Mountain House Watershed Areas will increase the impervious area, which generates additional storm water runoff and the associated need for storm drainage facilities within the respective program areas. The Lammers Watershed and Mountain House Watershed impact fees are calculated based on the estimated impervious area generated by each land



use. This methodology ensures the fees are directly related to the impact created by the new development.

*Requirement #4: Determine how there is a reasonable relationship between the need for the public facility and the type of development project on which the fee is imposed.*

Each new development will generate additional runoff in the Lammers and Mountain House Watershed Areas as defined in the Storm Drainage Master Plan and Supplement No. 3. Hydrologic and hydraulic calculations were performed by Storm Water Consulting Inc. and additional investigation of physical conditions and input was provided by the City staff. The result of the findings were utilized to develop the recommended storm drainage infrastructure for the Lammers and Mountain House Watershed Areas, summarized in Tables 5 and 6. Each new development will pay for their fair share of the required storm drainage infrastructure in their respective watershed based on the estimated impervious area.

*Requirement #5: Determine how there is a reasonable relationship between the amount of the fee and the cost of the public facility or portion of the public facility attributable to the development on which the fee is imposed.*

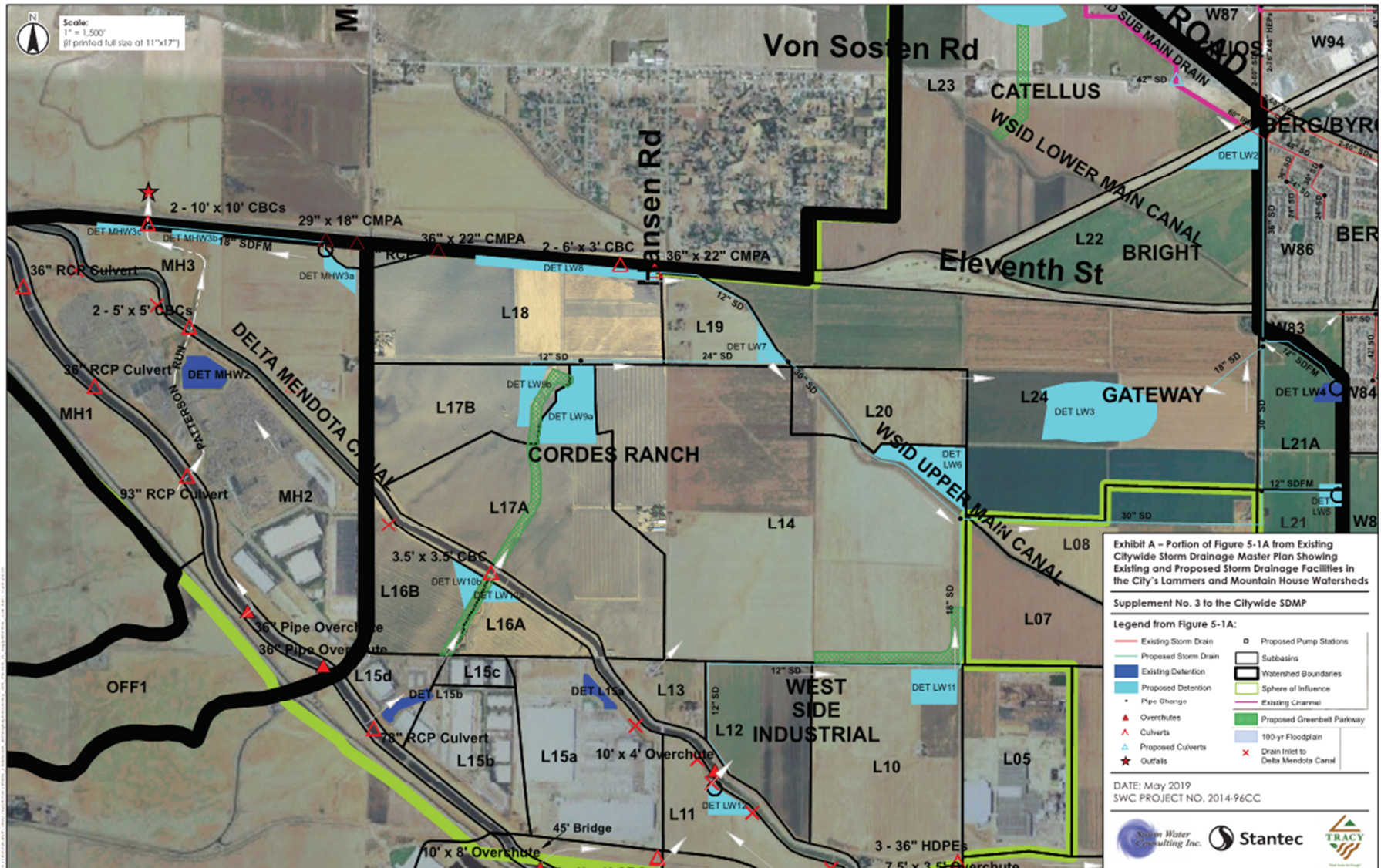
The opinions of probable cost for the required storm drainage collection facilities for the Lammers Watershed and Mountain House Watershed depicted in Tables 5 and 6 are spread to each respective watershed based on the estimated impervious area. This calculation for the Lammers Watershed and Mountain House Watershed impact fees are shown in Tables 7 and 8. These calculations ensure that new development projects fund their fair share of the required storm drainage infrastructure based on the increased impervious area created by each new development.

### Exhibits

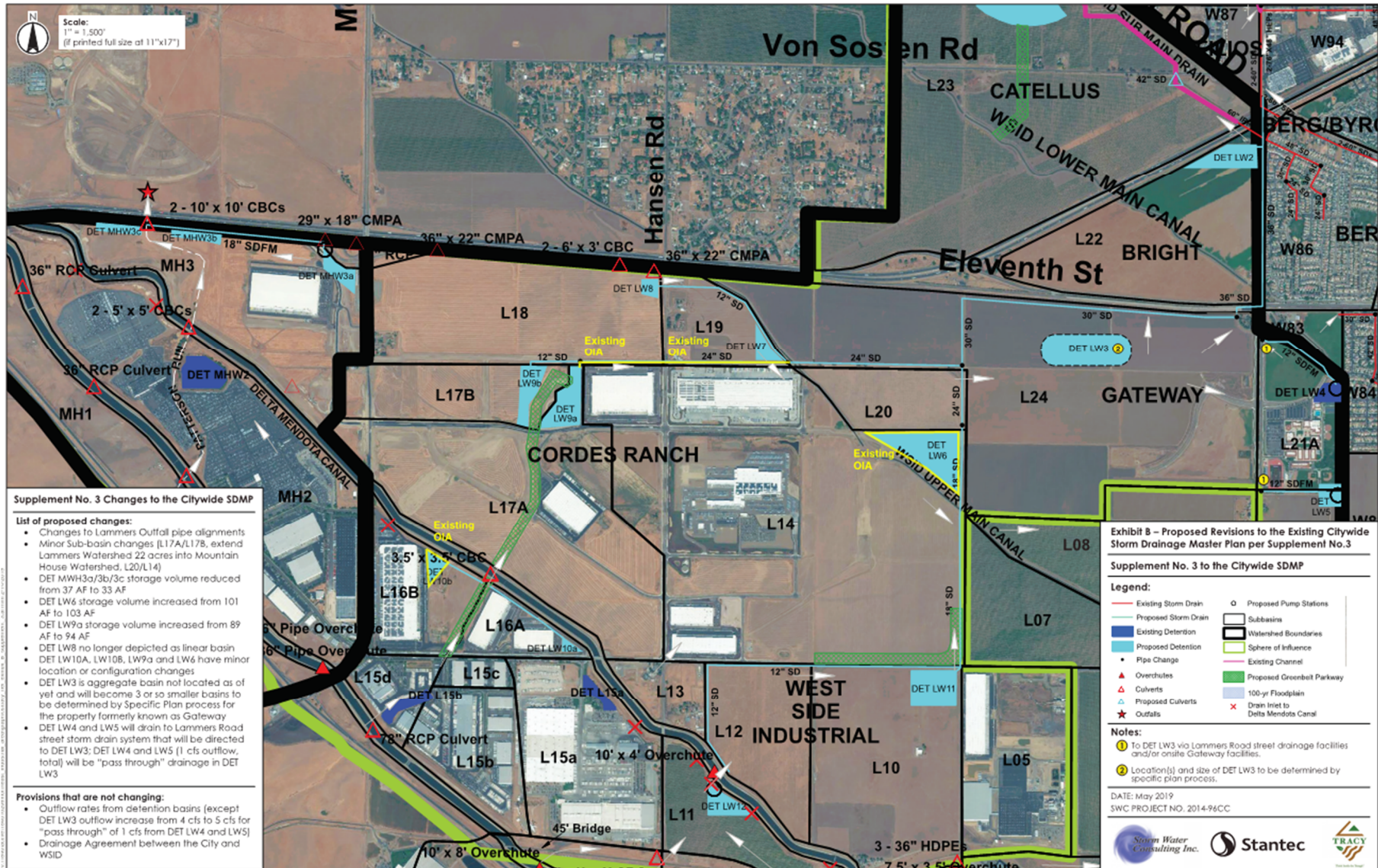
Exhibit A: Portion of Figure 5-1A from Existing Citywide Storm Drainage Master Plan Showing Existing and Proposed Storm Drainage Facilities in the City's Lammers and Mountain House Watersheds

Exhibit B: Proposed Revisions to the Existing Citywide Storm Drainage Master Plan per Supplement No. 3

Exhibit C: Remaining "undeveloped" acreages (as of 5/2019)









**Exhibit C**

**Lammers Watershed Acreages (as of 5/2019)**

Land Use Category	Gross Acreage <sup>1</sup>	Net Acreage by Land Use Category (Gross Acreage X 85%)	Developed Net Acres (Acreage)	Remaining Net Acreage
Residential - Very Low Density	40.00	34.00	0.00	34.00
Residential - Low Density	28.00	23.80	0.00	23.80
Residential - Medium Density (attached 2-4)	28.00	23.80	0.00	23.80
Residential - High Density (Attached 4+)	54.00	45.90	0.00	45.90
Industrial	2287.00	1943.95	381.91	1562.04
Office	702.00	596.70	0.00	596.70
Retail	263.00	223.55	0.00	223.55
<b>Total:</b>	<b>3402.00</b>	<b>2891.70</b>	<b>381.91</b>	<b>2509.79</b>

Notes:

1) Gross acreage is per the November 2013 Citywide Storm Drainage Master Plan

**Mountain House Watershed Acreages (as of 5/2019)**

Land Use Category	Gross Acreage <sup>1</sup>	Net Acreage by Land Use Category (Gross Acreage X 85%)	Developed Net Acres (Acreage)	Remaining Net Acreage
Industrial	221.00	187.85	35.40	152.45
Office	22.00	18.70	0.00	18.70
Retail	13.00	11.05	0.00	11.05
<b>Total:</b>	<b>256.00</b>	<b>217.60</b>	<b>35.40</b>	<b>182.20</b>

Notes:

1) Gross acreage is per the November 2013 Citywide Storm Drainage Master Plan

**Developed Net Acres as of 5/2019**

Development	Parcel No.	Acres
<b>Lammers Watershed</b>		
Buildings 3 and 4	209-120-09	30.44
IPC 6	209-120-09 & 10	25.60
Building 1	209-120-08	52.97
Medline	209-220-13	57.60
FedEx	209-220-10 & 11	117.08
IPC 12	209-120-10	33.90
Thermo Fisher	209-220-12	10.60
IPC 23	209-220-12	16.72
IPC 9	209-120-09	37.00
<b>Mountain House Watershed</b>		
Building 25	209-080-39	35.40
<b>Lammers Subtotal:</b>		<b>381.91</b>
<b>Mountain House Subtotal:</b>		<b>35.40</b>
<b>Total:</b>		<b>417.31</b>