



“The City with a Heart”

Rico E. Medina, Mayor
Irene O’Connell, Vice Mayor
Laura Davis, Councilmember
Marty Medina, Councilmember
Michael Salazar, Councilmember

AGENDA
SAN BRUNO CITY COUNCIL
SPECIAL MEETING
October 22, 2019

5:30 p.m.

Meeting Location: San Bruno Senior Center, 1555 Crystal Springs Road, San Bruno, CA

City Council meetings are conducted in accordance with Roberts Rules of Order Newly Revised and City Council Rules of Procedure. All regular Council meetings are recorded and televised on CATV Channel 1 and replayed the following Thursday, at 2:00 pm. In compliance with the Americans with Disabilities Act, individuals requiring reasonable accommodations or appropriate alternative formats for notices, agendas and records for this meeting should notify us 48 hours prior to meeting. Please call the City Clerk’s Office (650) 616-7061, or email your request to Melissa Thurman, City Clerk at mthurman@sanbruno.ca.gov.

1. CALL TO ORDER

2. ROLL CALL

3. PUBLIC COMMENT ON ITEMS NOT ON AGENDA:

Individuals allowed three minutes, groups in attendance, five minutes. It is the Council's policy to refer matters raised in this forum to staff for investigation and/or action where appropriate. The Brown Act prohibits the Council from discussing or acting upon any matter not agendized pursuant to State Law.

4. CLOSED SESSION – 5:30 p.m.:

- a. Conference with Labor Negotiators Pursuant to Gov't Code Section 54957.6
Agency Designated Representatives: City Manager and Assistant City Manager
Employee Organizations: San Bruno Management Employee Association, Mid Management Unit, Public Safety Mid Management Unit and Miscellaneous Unit.

5. SPECIAL MEETING – 6:00 p.m.:

- a. Annual Beautification Award Ceremony
Reception for Beautification Awards immediately following the ceremony.

6. ADJOURNMENT:

The next Regular City Council Meeting will be held on October 22, 2019 at 7:00 p.m. at the Senior Center, 1555 Crystal Springs Road, San Bruno.



“The City with a Heart”

Rico E. Medina, Mayor
Irene O’Connell, Vice Mayor
Laura Davis, Councilmember
Marty Medina, Councilmember
Michael Salazar, Councilmember

AGENDA

SAN BRUNO CITY COUNCIL

October 22, 2019

7:00 p.m.

Meeting Location: San Bruno Senior Center, 1555 Crystal Springs Road, San Bruno, CA

City Council meetings are conducted in accordance with Roberts Rules of Order Newly Revised and City Council Rules of Procedure. All regular Council meetings are recorded and televised on CATV Channel 1 and replayed the following Thursday, at 2:00 pm. In compliance with the Americans with Disabilities Act, individuals requiring reasonable accommodations or appropriate alternative formats for notices, agendas and records for this meeting should notify us 48 hours prior to meeting. Please call the City Clerk’s Office (650) 616-7061, or email your request to Melissa Thurman, City Clerk at mthurman@sanbruno.ca.gov.

Thanks to the San Bruno Garden Club for providing the floral arrangement.

1. CALL TO ORDER

2. ROLL CALL/PLEDGE OF ALLEGIANCE

3. PUBLIC COMMENT ON ITEMS NOT ON AGENDA:

Individuals allowed three minutes, groups in attendance, five minutes. It is the Council’s policy to refer matters raised in this forum to staff for investigation and/or action where appropriate. The Brown Act prohibits the Council from discussing or acting upon any matter not agendized pursuant to State Law.

4. ANNOUNCEMENTS/PRESENTATIONS:

- a. Vote by Mail ballots were mailed to all registered voters in San Mateo County on October 7. Replacement ballots will be mailed through Tuesday, October 29th. To receive a replacement ballot, please contact City Clerk Melissa Thurman.
- b. Upcoming Special Events
 - Happening at the Library this month, on October 25th a weekly Parent & Child Bilingual Activity Group begins and on October 26th adults can decorate sugar skulls for Dia de los Muertos. The Library will host a special Diwali festival of light family story time October 28th.
 - For Halloween fun, join us on October 24th for the 24th Annual Goblin Grotto event at the Recreation Center gymnasium. On October 31st the San Bruno Chamber of Commerce will sponsor Story Time at the Bay Area Entrepreneur Center located at 458 San Mateo Avenue and immediately following enjoy Trick-Or-Treat on the Ave. Also that day the Recreation Department will sponsor the Halloween Happening event at Tanforan Mall.
 - In City Park, the Culture and Arts Commission invites you to Shakespeare in the Park at the Rotary Pavilion at City Park on October 27th and the Recreation Department will also be hosting a mother-son kickball event at City Park on Saturday, November 3rd with a picnic to follow.

For more details on these events go to www.sanbruno.ca.gov/calendar

- c. Present Proclamation Celebrating Red Ribbon Week October 23rd - 31st.
- d. Receive Annual Presentation from the Culture & Arts Commission.

5. CONSENT CALENDAR:

All items are considered routine or implement an earlier Council action and may be enacted by one motion; there will be no separate discussion, unless requested.

- a. **Accept** Accounts Payable of October 7 and 14, 2019.
- b. **Accept** Payroll of October 4, 2019.
- c. **Approve** Draft Meeting Minutes for Special and Regular Meetings of October 7 and 8, 2019.
- d. **Adopt** Resolution Authorizing the Execution of a Three-Year Maintenance Agreement for the Police Department Computer Aided Dispatch and Record Management Systems with Sun Ridge Systems in the Amount of \$127,461.
- e. **Approve** City of San Bruno Response Letter to the San Mateo County Civil Grand Jury Report titled “Electric Vehicle Adoption in the Cities and County of San Mateo”.
- f. **Adopt** Resolution Accepting the Arbor Court Pressure Regulating Valve Replacement Project as Complete, Authorizing the Filing of Notice of Completion with the San Mateo County Recorder’s Office, and Authorizing Release of the Construction Contract Retention in the Amount of \$19,498.
- g. **Adopt** Resolution Accepting the Crystal Springs Road Sewer Replacement Project as Complete, Authorizing the Filing of Notice of Completion with the San Mateo County Recorder’s Office, and Authorizing Release of the Construction Contract Retention in the Amount of \$162,028.49.
- h. **Adopt** Resolution Adopting the Updated Sanitary Sewer Management Plan.
- i. **Adopt** a Resolution Approving Updates to the Policy for Establishing Special Parking Restrictions on Public Streets for On-Street Accessible Parking Stalls, Time Limit Parking Zones, Short Term Parking Zones, and Red Curb No Parking Zones Excluding Residential Permit Parking Program.
- j. **Adopt** Resolution Approving the Installation of Stop Signs at the Western Intersection of Parkview Drive and Santa Lucia Avenue on Parkview Drive at the East and West Sides of the Intersection.
- k. **Adopt** a Resolution Waiving the Encroachment Permit Fees, Staff Labor Reimbursement Fees, and Insurance Rider Premium Cost for the Encroachment Permit Application for a Halloween Road Closure on Park Avenue and Appropriating \$412 from the General Fund.
- l. **Accept** Resignation from Traffic Safety & Parking Committee Member Effective October 3, 2019 and Direct the City Clerk to Post a Notice of Vacancy in Accordance with State Law.

6. CONDUCT OF BUSINESS:

- a. **Appoint** Citizen to Fill One Vacancy on the San Bruno Planning Commission.
- b. **Adopt** Resolution Adopting the San Mateo Avenue Conceptual Streetscape Plan.
- c. **Adopt** Resolution Authorizing the Crestmoor Canyon Wildfire Mitigation Project in the Fiscal Year 2019-20 Capital Improvement Budget and Appropriating \$125,000 from the Emergency Disaster Reserve Fund to Initiate Project Planning and Environmental Clearance Processes.

- d. **Receive** Presentation and Update on the Crestmoor (Glenview Fire) Neighborhood Reconstruction Project and Adopt Resolution:
- Authorizing Appropriation of \$100,000 from the Capital Improvement/One-Time Initiative Reserve Fund (Fund 004) to Cover the Costs Associated with Fire Station 52 Geotechnical Work; and
 - Authorizing \$490,000 of Staff Time on Reserve in the Emergency Disaster Recovery Fund (Fund 190) for the Remaining Expenditures in Order to Complete the Project.
- e. **Adopt** Resolution:
- Authorizing the City Manager to Execute a Contract Amendment with Elite Landscape Construction, Inc. in the Amount of \$26,090 for the Completion of Construction for the **Earl Glenview Park**; and
 - Authorizing the City Manager to Execute a Contract Amendment with MIG, Inc. in the Amount of \$6,400 for Final Design Services for the Earl Glenview Park; and
 - Accepting the Earl Glenview Park as Complete and Authorizing the Filing of Notice of Completion with the San Mateo County Recorder's Office.
- f. **Adopt** Resolution Authorizing the City Manager to Release \$250,000 of Project Retention to Graniterock Construction for the Crestmoor Neighborhood Reconstruction – Phase IV Street Improvement Project.

7. COMMENTS FROM COUNCIL MEMBERS:

8. ADJOURNMENT:

The next Regular City Council Meeting will be held on November 12, 2019 at 7:00 p.m. at the Senior Center, 1555 Crystal Springs Road, San Bruno.

Posted Pursuant to Law 10/18/2019



**City Council Agenda Item
Staff Report**

CITY OF SAN BRUNO

DATE: October 7, 2019
TO: Honorable Mayor and Members of the City Council
FROM: Jovan D. Grogan, City Manager
PREPARED BY: Keith DeMartini, Finance Director
Kathleen O'Malley, Accounting & Customer Service Representative
SUBJECT: Accounts Payable Warrant Register

This is to certify that the claims listed on pages 1 to 3 inclusive, and/or claims numbered from 183852 through 183980 inclusive, totaling \$666,138.09 have been checked in detail and approved by the proper officials, and in my opinion, represent fair and just charges against the City in accordance with their respective amounts. The table below summarizes the total paid by Fund.

Fund	Fund Name	Amount
001	General Fund	\$123,970.35
111	Police Asset Forfeiture	\$1,266.50
132	Agency On Aging	\$5,323.25
133	Restricted Revenues	\$1,677.95
201	Parks and Facilities Capital	\$149.76
203	Street Improvement Projects	\$137,360.62
611	Water Fund	50,406.57
621	Stormwater Fund	5,712.63
631	Wastewater Fund	20,303.86
641	Cable TV Fund	26,623.46
701	Central Garage	9,238.96
702	Facility Maintenance Fund	1,329.20
707	Technology Development	957.64
711	Self-Insurance	281,817.34
TOTAL FOR APPROVAL		\$666,138.09

Respectfully submitted,



Finance Director

10/18/19

Date

Document group: komalley Bank: apbank 432000438

Vendor Code & Name	Check #	Check Date	Amount
0017341 AARONSON DICKERSON, COHN & LANZONE	183889	10/7/2019	2,079.00
0096852 ABAG PLAN CORPORATION	183852	10/7/2019	19,857.34
0017053 ACCOUNTEMPS	183853	10/7/2019	2,080.00
0107953 ACS SUPPORT	183854	10/7/2019	484.88
0106435 ACTION TOWING & ROAD SVC. INC.	183855	10/7/2019	125.00
0000163 AIRPORT AUTO PARTS INC.	183856	10/7/2019	861.12
0108428 AJ FIBER CONSULTANT LLC	183857	10/7/2019	5,440.00
0108661 ALBERT CALVIN SANDELL	183947	10/7/2019	20.83
0104542 ALTA LANGUAGE SERVICES, INC.	183858	10/7/2019	198.00
0107533 ANDREW AU	183866	10/7/2019	1,000.00
0096700 ANDY'S WHEELS & TIRES	183859	10/7/2019	1,222.22
0096113 AR AUTO GLASS	183860	10/7/2019	750.00
0106199 ARAGON VETERINARY CLINIC	183861	10/7/2019	91.75
0001202 ARAMARK UNIFORM SERVICES	183862	10/7/2019	335.30
0014617 AT&T	183863	10/7/2019	14.21
0016123 AT&T	183864	10/7/2019	2,614.89
0105649 ATLAS PLUMBING AND ROOTER	183865	10/7/2019	12,500.00
0000345 BAKER & TAYLOR BOOKS	183867	10/7/2019	4,127.90
0105553 BELLECCI & ASSOCIATES, INC.	183869	10/7/2019	18,644.00
0018688 BEST BEST & KRIEGER LLP	183870	10/7/2019	3,534.00
0102737 BURKE, WILLIAMS & SORENSEN,LLP	183873	10/7/2019	149.76
0094705 CACEO	183875	10/7/2019	200.00
0014739 CAL-STEAM	183876	10/7/2019	11.63
0017679 CDW GOVERNMENT, INC	183877	10/7/2019	116.97
0017206 CENTRAL CONCRETE SUPPLY CO.INC	183878	10/7/2019	494.67
0108670 CHRISTOPHER TRAILER	183968	10/7/2019	150.00
0016324 CINTAS CORPORATION #464	183879	10/7/2019	707.21
0097464 CINTAS FIRST AID & SAFETY	183880	10/7/2019	321.43
0000060 CITY OF MILLBRAE	183881	10/7/2019	876.88
0000227 CITY OF SAN BRUNO	183882	10/7/2019	4,931.48
0108663 CLAUDIO VERAS	183973	10/7/2019	9.46
0108671 COALICION PINOLERA SANTIAGO	183948	10/7/2019	400.00
0108645 CODY BRIGHT	183872	10/7/2019	18.92
0015857 COUNTY OF SAN MATEO	183884	10/7/2019	76.00
0105894 CRIME SCENE CLEANERS, INC.	183886	10/7/2019	70.00
0105811 CSAC EXCESS INSURANCE AUTHORITY	183894	10/7/2019	12,441.78
0107652 CUMMINS-ALLISON CORP.	183887	10/7/2019	887.75
0108639 CURTIS LI	183916	10/7/2019	1,000.00
0098385 DAN NOLAN	183929	10/7/2019	2,500.00
0101178 DISCOUNT PLUMBING	183891	10/7/2019	9,200.00
0106211 ED BARBERINI	183868	10/7/2019	358.00
0108651 ELM USA INC.	183892	10/7/2019	1,214.95
0018272 GALE/CENGAGE LEARNING	183896	10/7/2019	31.45
0108662 GAURAV GIROTRA	183897	10/7/2019	6.31
0016363 GCS ENVIRONMENTAL & EQUIPMENT SVC.	183893	10/7/2019	1,351.83
0108664 GEREL DASHTSEREN	183888	10/7/2019	12.57
0104135 GLOBAL TRACKING COMMUNICATIONS, INC.	183967	10/7/2019	24.99
0016154 GOETZ BROTHERS SPORTING GOODS	183898	10/7/2019	141.92
0108666 GOLDEN GATE REFRIGERATION	183899	10/7/2019	356.15
0016969 GOLDEN IDEAS	183900	10/7/2019	1,522.28
0108654 GRAHAM RICHARDS	183943	10/7/2019	44.43
0000162 GRAINGER	183901	10/7/2019	1,719.11
0095966 GREAT AMERICA FINANCIAL SVC.	183902	10/7/2019	700.33

Document group: komalley Bank: apbank 432000438

Vendor Code & Name	Check #	Check Date	Amount
0108657 HAILEIGH COURI	183885	10/7/2019	17.03
0108300 HDL SOFTWARE LLC	183903	10/7/2019	727.49
0105378 HOME MAID RAVIOLI COMPANY INC.	183904	10/7/2019	411.65
0103336 HUB INTERNATIONAL SERVICE INC.	183905	10/7/2019	814.50
0001786 IN DEMAND-NYC	183906	10/7/2019	992.01
0108449 INNERWORKINGS, INC.	183907	10/7/2019	4,478.16
0015531 INTERSTATE BATTERY SYS. OF SF	183908	10/7/2019	502.38
0099054 INTERSTATE TRS FUND	183909	10/7/2019	932.53
0018261 INTL MEDIA DISTRIBUTION, LLC	183910	10/7/2019	3,126.97
0093434 JT2 INTEGRATED RESOURCES	183911	10/7/2019	261,960.00
0018050 KAISER FOUNDATION HEALTH PLAN	183912	10/7/2019	5,059.05
0108655 KATHERINE FUNG	183895	10/7/2019	9.46
0000132 KELLY-MOORE PAINT CO INC.	183913	10/7/2019	221.25
0103049 LAURETTA PRINTING© CENTER	183914	10/7/2019	965.65
0105034 LFP BROADCASTING, LLC	183915	10/7/2019	15.60
0104424 LIDIA'S ITALIAN DELICACIES	183917	10/7/2019	4,710.00
0093274 LINDSTROM CO	183918	10/7/2019	2,500.00
0108205 LOTUS WATER	183919	10/7/2019	5,627.50
0091909 MANUEL & INEZ BUSTOS	183874	10/7/2019	1,000.00
0108653 MAUREEN E. BOLLA	183871	10/7/2019	27.51
0108669 MERWYN POBLETE	183936	10/7/2019	400.00
0102770 METLIFE	183921	10/7/2019	152.00
0016041 METROMOBILE COMMUNICATIONS	183922	10/7/2019	195.00
0092285 MICROMARKETING LLC	183923	10/7/2019	24.95
0000333 MOSS RUBBER & EQUIP. CORP.	183924	10/7/2019	45.71
0000783 MUFG UNION BANK N.A.	183925	10/7/2019	875.00
0018692 NHK COSMOMEDIA AMERICA, INC.	183927	10/7/2019	606.25
0092263 OFFICE DEPOT INC	183930	10/7/2019	81.31
0097567 ONE HOUR DRY CLEANING	183931	10/7/2019	488.10
0000012 PACIFIC GAS & ELECTRIC	183932	10/7/2019	79,709.35
0092971 PATRICIA MERCADO	183920	10/7/2019	150.00
0106530 PBTV LLC	183933	10/7/2019	3.60
0106269 PENINSULA PET RESORT INC.	183934	10/7/2019	341.60
0017260 PETERSON TRUCKS, INC.	183935	10/7/2019	120.88
0016770 PRAXAIR DISTRIBUTION INC -192	183938	10/7/2019	145.66
0097558 PURCHASE POWER	183939	10/7/2019	301.50
0000071 R & B COMPANY	183940	10/7/2019	1,169.30
0108074 RESOLVE CORP.	183942	10/7/2019	280.99
0101790 ROSANGELA DINIZ	183890	10/7/2019	176.10
0103712 RUEL REGUDON	183941	10/7/2019	98.74
0018839 RYAN JOHANSEN	183944	10/7/2019	1,002.24
0106070 SAFETY-KLEEN SYSTEMS, INC.	183945	10/7/2019	108.16
0096659 SAN BRUNO PET HOSPITAL	183946	10/7/2019	819.89
0017871 SCHOEN SIGNS	183949	10/7/2019	66.42
0018461 SERRAMONTE FORD, INC.	183950	10/7/2019	2,653.79
0097626 SHARP ELECTRONICS CORP.	183951	10/7/2019	1,121.50
0018962 SHOE DEPOT INC.	183952	10/7/2019	604.64
0098030 SHRED-IT USA	183953	10/7/2019	60.39
0104548 SLOAN SAKAI YEUNG & WONG LLP	183954	10/7/2019	2,283.16
0105916 SMITH'S GOPHER TRAPPING SVC.	183955	10/7/2019	2,490.00
0103492 SMITHSONIAN NETWORKS	183956	10/7/2019	595.35
0000102 SONITROL/PACIFIC WEST SECURITY, INC.	183977	10/7/2019	222.00
0106108 SPECIAL SERVICES GROUP, LLC	183957	10/7/2019	600.00
0105135 SPOSETO ENGINEERING, INC.	183958	10/7/2019	130,492.59

Document group: komalley Bank: apbank 432000438

Vendor Code & Name	Check #	Check Date	Amount
0097079 SPRINT	183959	10/7/2019	227.94
0016831 STAPLES CREDIT PLAN	183960	10/7/2019	381.56
0105796 SUNRISE FOOD DISTRIBUTOR INC.	183962	10/7/2019	201.60
0102962 SWANK MOTION PICTURES, INC.	183963	10/7/2019	463.00
0015671 TECHNOLOGY, ENGINEERING & CONSTRUCTION, II	183883	10/7/2019	170.00
0107708 TELCORDIA TECHNOLOGIES	183964	10/7/2019	74.43
0000241 THE ADAM-HILL COMPANY	183965	10/7/2019	65.57
0108668 THERESA NIELSENSTEVENON	183928	10/7/2019	150.00
0108658 THOMAS NG	183926	10/7/2019	7.57
0000036 THOMSON REUTERS	183966	10/7/2019	1,493.05
0108659 TODD STEWART	183961	10/7/2019	35.30
0106660 TRIDENT K9 CONSULTING INC.	183969	10/7/2019	375.00
0000665 TSQ SOLUTIONS INC.	183970	10/7/2019	375.00
0018500 TURF & INDUSTRIAL EQUIPMENT CO	183971	10/7/2019	250.04
0000019 U.S. POSTMASTER	183972	10/7/2019	2,250.00
0095749 VERIZON WIRELESS	183974	10/7/2019	3,303.50
0108656 VLADIMIR POLYAKOV	183937	10/7/2019	28.74
0108541 WARDELL AUTO INTERIORS & TOPS	183976	10/7/2019	856.62
0104660 WEST YOST ASSOCIATES, INC.	183978	10/7/2019	10,142.25
0106573 WILLDAN FINANCIAL SERVICES	183979	10/7/2019	3,780.00
0093430 WORLD BOOK INC	183980	10/7/2019	883.85
0108660 YIQIN WANG	183975	10/7/2019	9.46
		GrandTotal:	666,138.09
		Total count:	129



City Council Agenda Item
Staff Report


CITY OF SAN BRUNO

DATE: October 14, 2019
TO: Honorable Mayor and Members of the City Council
FROM: Jovan D. Grogan, City Manager
PREPARED BY: Keith DeMartini, Finance Director
Kathleen O'Malley, Accounting & Customer Service Representative
SUBJECT: Accounts Payable Warrant Register

This is to certify that the claims listed on pages 1 to 2 inclusive, and/or claims numbered from 183981 through 184067 inclusive, totaling \$450,732.74 have been checked in detail and approved by the proper officials, and in my opinion, represent fair and just charges against the City in accordance with their respective amounts. The table below summarizes the total paid by Fund.

Fund	Fund Name	Amount
001	General Fund	\$139,732.27
132	Agency On Aging	\$7,338.97
133	Restricted Revenues	\$1,901.04
611	Water Fund	41,909.22
621	Stormwater Fund	5,800.00
631	Wastewater Fund	5,126.37
701	Central Garage	12,354.87
707	Technology Development	1,075.74
711	Self-Insurance	58,787.14
880	Project Development Trust	176,707.12
TOTAL FOR APPROVAL		\$450,732.74

Respectfully submitted,



Finance Director

10/15/19

Date

Document group: komalley Bank: apbank 432000438

Vendor Code & Name	Check #	Check Date	Amount
0017341 AARONSON DICKERSON, COHN & LANZONE	184007	10/14/2019	6,492.78
0016499 ACTION SPORTS	183981	10/14/2019	5,624.78
0001170 AIRGAS USA, LLC	183982	10/14/2019	270.63
0000163 AIRPORT AUTO PARTS INC.	183983	10/14/2019	130.99
0016123 AT&T	183984	10/14/2019	93.53
0000345 BAKER & TAYLOR BOOKS	183986	10/14/2019	329.84
0018688 BEST BEST & KRIEGER LLP	183988	10/14/2019	6,835.00
0015988 BLACKSTONE PUBLISHING	183990	10/14/2019	37.00
0017361 BOETHING TREELAND FARMS, INC.	183991	10/14/2019	60.09
0000098 BRODART CO.	183992	10/14/2019	99.12
0102737 BURKE, WILLIAMS & SORENSEN,LLP	183993	10/14/2019	6,188.00
0018722 CA SURVEYING & DRAFTING SUPPLY	183994	10/14/2019	6,088.36
0105324 CAINE COMPUTER CONSULTING, LLC	183995	10/14/2019	3,120.00
0103670 CALIFORNIA BUILDING STANDARDS COMMISSION	184055	10/14/2019	1,017.00
0017679 CDW GOVERNMENT, INC	183997	10/14/2019	1,075.74
0106048 CIT	183999	10/14/2019	427.81
0091701 CITY OF BELMONT	184000	10/14/2019	65.00
0098588 CITY OF BURLINGAME	184001	10/14/2019	3,280.50
0000508 CLEARLITE TROPHIES	184002	10/14/2019	136.23
0018331 CSG CONSULTANTS INC.	184004	10/14/2019	8,014.11
0013926 DEPARTMENT OF CONSERVATION	184006	10/14/2019	2,869.48
0104678 DIVISION OF THE STATE ARCHITECT	184039	10/14/2019	403.20
0017752 DYETT & BHATIA	184008	10/14/2019	155,540.02
0000046 EWING IRRIGATION PRODUCTS INC	184011	10/14/2019	14.13
0013683 F. FERRANDO & CO.	184012	10/14/2019	9,131.00
0000944 FEDEX	184013	10/14/2019	30.72
0001782 FLOWERS ELECTRIC & SVC.CO.INC.	184016	10/14/2019	813.29
0107011 FRANK J. BIANCHI	183989	10/14/2019	187.20
0108572 GARY C. CHETCUTI	183998	10/14/2019	126.45
0016363 GCS ENVIRONMENTAL & EQUIPMENT SVC.	184010	10/14/2019	4,936.75
0108425 GOOD CITY COMPANY	184019	10/14/2019	8,852.50
0000541 GRANITE ROCK COMPANY	184020	10/14/2019	391.48
0096837 GYM DOCTORS	184021	10/14/2019	399.00
0105378 HOME MAID RAVIOLI COMPANY INC.	184022	10/14/2019	108.95
0018557 INTERSTATE SALES	184023	10/14/2019	4,620.21
0105884 JACKSON LEWIS P.C.	184024	10/14/2019	4,440.00
0108549 JEANETTE M FEINBERG	184014	10/14/2019	81.90
0018376 JT2 INTEGRATED RESOURCES	184025	10/14/2019	6,531.00
0093434 JT2 INTEGRATED RESOURCES	184026	10/14/2019	52,256.14
0000075 K-119 TOOLS OF CALIFORNIA INC.	184027	10/14/2019	1,507.06
0096379 KAREN OJAKIAN	184041	10/14/2019	239.30
0017661 KATHY M SCHMIDT	184050	10/14/2019	1,418.40
0018561 LANCE BAYER	184028	10/14/2019	900.00
0103799 LDVALI LLC	184030	10/14/2019	292.73
0018177 LOWE'S	184031	10/14/2019	214.17
0107892 MANAGEMENT PARTNERS	184032	10/14/2019	18,520.40
0104916 MANDELL MUNICIPAL COUNSELING	184033	10/14/2019	899.00
0108538 MANUEL M. CATANIA	183996	10/14/2019	200.25
0107928 MELISSA THURMAN	184063	10/14/2019	197.96
0016863 MIDWEST TAPE, LLC	184034	10/14/2019	113.75
0096800 MOBILE CALIBRATION SVCS. LLC	184035	10/14/2019	618.65
0000333 MOSS RUBBER & EQUIP. CORP.	184037	10/14/2019	569.02
0107980 OCT WATER QUALITY ACADEMY	184038	10/14/2019	1,170.00

Document group: komalley Bank: apbank 432000438

Vendor Code & Name	Check #	Check Date	Amount
0097654 OFELIA BAILEY	183985	10/14/2019	64.80
0092263 OFFICE DEPOT INC	184040	10/14/2019	898.64
0097567 ONE HOUR DRY CLEANING	184042	10/14/2019	147.60
0000012 PACIFIC GAS & ELECTRIC	184043	10/14/2019	9,785.28
0000101 PACIFIC NURSERIES	184044	10/14/2019	78.11
0108589 PERFORMANCE FOODSERVICE-LEDYARD	184017	10/14/2019	6,938.82
0000285 PREFERRED ALLIANCE, INC.	184045	10/14/2019	406.55
0000071 R & B COMPANY	184046	10/14/2019	16,170.26
0018312 R. GUERRA & ASSOCIATES	184047	10/14/2019	250.00
0018070 RON LAVEZZO	184029	10/14/2019	150.00
0108539 ROSALIE L. STEINWAY	184056	10/14/2019	174.60
0018846 SAFETY CENTER INC.	184048	10/14/2019	6,400.00
0099047 SAN MATEO CTY SHERIFF'S OFFICE	184049	10/14/2019	7,087.00
0108537 SCOTT TONG	184064	10/14/2019	60.75
0103732 SFO MEDICAL CLINIC	184051	10/14/2019	2,088.00
0103732 SFO MEDICAL CLINIC	184052	10/14/2019	1,068.00
0102917 SFPUC FINANCIAL SERVICES	184053	10/14/2019	3,168.00
0108622 SHAREVEST PROPERTY MGMT	184054	10/14/2019	214.44
0108678 SONIA DELGADILLO-PEREZ	184005	10/14/2019	400.00
0017036 STEVEN'S BAY AREA DIESEL SERVICE, INC.	183987	10/14/2019	4,383.60
0105796 SUNRISE FOOD DISTRIBUTOR INC.	184057	10/14/2019	291.20
0106825 SUPERIOR MOBILE PRESSURE WASHING	184036	10/14/2019	4,800.00
0002025 TELECOMMUNICATIONS ENGINEERING ASSOCIATE	184009	10/14/2019	496.00
0096616 TENNANT SALES AND SERVICE CO.	184058	10/14/2019	3,034.52
0017928 THE EDCCO GROUP, INC.	184059	10/14/2019	525.00
0000934 THE HAWKINS COMPANY	184060	10/14/2019	9,363.25
0018631 THE HOME DEPOT	184061	10/14/2019	124.21
0108402 THE HOME DEPOT PRO	184062	10/14/2019	958.72
0018618 UNITED SITE SERVICES INC.	184065	10/14/2019	194.05
0095749 VERIZON WIRELESS	184066	10/14/2019	2,927.97
0105955 WEST COAST CODE CONSULTANTS, INC.	184003	10/14/2019	36,502.15
0093259 WILLIAM FORESTER	184018	10/14/2019	79.73
0100184 WILLIAM J. FEISTER, PH.D.	184015	10/14/2019	800.00
0013841 WITMER-TYSON IMPORTS INC	184067	10/14/2019	2,720.87
		GrandTotal:	450,732.74
		Total count:	87



City Council Agenda Item
Staff Report

CITY OF SAN BRUNO

DATE: October 22, 2019
TO: Honorable Mayor and Members of the City Council
FROM: Jovan D. Grogan, City Manager
PREPARED BY: Benjie Lin, Payroll Specialist
SUBJECT: Payroll Acceptance

City Council acceptance of the City payroll distributed October 4, 2019 is recommended. The Labor Summary report reflecting the total payroll amount of \$1,577,261.06 for bi-weekly pay period ending September 29, 2019 by fund is shown below:

Fund	Amount
Fund: 001 - GENERAL FUND	\$1,203,485.95
Fund: 121 - FEDERAL/STATE GRANTS	5,520.17
Fund: 122 - SOLID WASTE/RECYCL.	1,849.25
Fund: 201 - PARKS AND FACILITIES CAPITAL	43.89
Fund: 203 - STREET IMPROVE. PROJECTS	9,826.91
Fund: 611 - WATER FUND	94,260.83
Fund: 621 - STORMWATER FUND	19,737.84
Fund: 631 - WASTEWATER FUND	81,458.31
Fund: 641 - CABLE TV FUND	95,173.05
Fund: 701 - CENTRAL GARAGE	7,101.78
Fund: 702 - FACILITY MAINT.FUND	33,942.41
Fund: 707 - TECHNOLOGY DEVELOPMENT	17,755.20
Fund: 711 - SELF INSURANCE	7,105.47
Total:	\$1,577,261.06

Respectfully Submitted,



Keith DeMartini, Finance Director

10/15/19
Date



“The City with a Heart”

Rico E. Medina, Mayor
Irene O’Connell, Vice Mayor
Laura Davis, Councilmember
Marty Medina, Councilmember
Michael Salazar, Councilmember

MINUTES
SAN BRUNO CITY COUNCIL
SPECIAL MEETING
October 7, 2019

5:30 p.m.

Meeting Location: San Bruno Senior Center, 1555 Crystal Springs Road, San Bruno, CA

- 1. CALL TO ORDER**
- 2. ROLL CALL** – All Council Members were present.
- 3. PLEDGE OF ALLEGIANCE**
- 4. PUBLIC COMMENT ON ITEMS NOT ON AGENDA**

There were no speakers for Public Comment.

5. CLOSED SESSION:

- a. Conference with Legal Counsel: Existing Litigation Pursuant to Government Code Section 54956.9(d)(1): California Public Utilities Commission Order Instituting Investigation Matters 1.15.11.015, R.14.11.001, I.15.08.019; USA v. PG&E.

The Closed Session meeting adjourned at 5:50 p.m.

6. SPECIAL MEETING – STUDY SESSION 6:00 p.m.

- a. Receive Proposal Presentations from Prospective Hotel Developers for the Vacant 1.5 Acre Site Located within The Crossing Development.

Jovan Grogan, City Manager, presented the report, with **Jay Scholl and Henry Bose (CBRE)**, also making a presentation.

Scott McChesney, BlackRidge Group made a presentation.

Shane Kuber, Sunil Patel and Gerald Kesler, Kuber Hotels made a presentation.

The following members of the public spoke regarding this item:

- Robert Riechel – Spoke regarding staff parking accommodations
- Pam Riechel – Spoke in regard to the proposed modular construction by Kuber Hotels.

7. ADJOURNMENT – The meeting adjourned at 7:25 p.m.

The next Regular City Council Meeting will be held on October 8, 2019 at 7:00 p.m. at the Senior Center, 1555 Crystal Springs Road, San Bruno.

City Council – Minutes

October 7, 2019

Page 2 of 2

Minutes were prepared by Melissa Thurman, City Clerk and will be presented to the City Council for approval at the meeting of October 22, 2019.

Melissa Thurman, CMC
City Clerk

Rico E. Medina
Mayor



“The City with a Heart”

Rico E. Medina, Mayor
Irene O’Connell, Vice Mayor
Laura Davis, Councilmember
Marty Medina, Councilmember
Michael Salazar, Councilmember

MINUTES

SAN BRUNO CITY COUNCIL

October 8, 2019

7:00 p.m.

Meeting Location: San Bruno Senior Center, 1555 Crystal Springs Road, San Bruno, CA

1. CALL TO ORDER

2. ROLL CALL/PLEDGE OF ALLEGIANCE – All Council Members were present.

3. PUBLIC COMMENT ON ITEMS NOT ON AGENDA:

The following members of the public spoke during Public Comment:

- Elizabeth Meyer – Spoke regarding dumping of trash at Glenview and San Bruno Ave.
- Tim O’Brien – Spoke regarding vehicles blocking public sidewalks.
- Sandra Perez-Vargas – Spoke regarding the homeless community near the San Bruno BART station.
- Jeffrey Tong – Spoke regarding increased traffic in San Bruno and the Bay Area.

4. ANNOUNCEMENTS/PRESENTATIONS:

- a. Vote by Mail ballots were mailed to all registered voters in San Mateo County on October 7, 2019. Replacement ballots will be mailed through Tuesday, October 29, 2019. To receive a replacement ballot, please contact City Clerk Melissa Thurman.
- b. The San Bruno Fire Department will be hosting an Open House on Saturday, October 12 from 11:00 a.m. – 2:00 p.m. at Fire Station 51, 555 El Camino Real. Please come meet your local Firefighters and learn about the various services they provide. The event will include fire safety and emergency preparedness information.
- c. The Library and Fire Department are teaming up to present a special Great California Shakeout story time. This story time take place on Thursday, October 17 at 11:15am in the children’s room of the Library. It will include information on earthquake preparedness for families with young children. Snacks and fire truck viewing will follow.
- d. Please join us at the Library for a family Dia de los Muertos celebration Monday, October 21 at 6:30pm. The event will include a bilingual story time followed by sugar skull decorating with icing.
- e. Trick-or-Treat early on October 24 at the annual Goblin Grotto Halloween event. Goblin Grotto offers Trick-or-Treating, carnival games, and more to children 10 years and younger in the Recreation Center Gym! Tickets are available for 5:30pm and 7:15pm start times and can be purchased at the Recreation Center. The cost is \$10 for residents and \$13 for non-residents.
- f. The Shops at Tanforan and the City of San Bruno Project Pride invites the community to bring out their goblins, ghouls and witches for the free Halloween Happening event on October 31st beginning at 3:00pm. Attendees will enjoy trick-or-treating, entertainment, raffle prizes, and goody bags. Children ages 10 and under are eligible for the Halloween goody bags and participation in raffle prize drawings.

5. CONSENT CALENDAR:

M/S Salazar/O’Connell to approve the Consent Calendar. **Motion carried unanimously by voice vote.**

- a. **Accept** Accounts Payable of September 23 and September 30, 2019.
- b. **Accept** Payroll of September 20, 2019.
- c. **Approve** Draft Meeting Minutes for the Special and Regular Meetings of September 24, 2019.
- d. **Approve** City of San Bruno Response Letter to the San Mateo County Civil Grand Jury Report titled “Fire Safety Inspection Program on the Road to Recovery” and Adopt a Resolution Defining the Fire Departments Annual Report for Compliance with Section 13146.4 of the California Health & Safety Code.
- e. **Approve** City of San Bruno Response Letter to the San Mateo County Civil Grand Jury Report titled “Soaring City Pension Costs – Follow-up on Grand Jury Report of 2017-2018”.
- f. **Adopt** Resolution Authorizing the City Manager to Execute an Agreement with Shah Kawasaki Architects for the Fire Station 52 Renovation Project in an Amount Not to Exceed \$136,790 and Approving a Total Design Budget of \$161,790.
- g. **Adopt** a Resolution Authorizing the City Manager to Execute and Accept a Public Access Easement in Connection with the Aperture Mixed Use Development at 406-418 San Mateo Avenue.
- h. **Adopt** a Resolution Authorizing the Application for, and Receipt of, State of California SB 2 Planning Grants Program Funds in the amount of \$160,000.
- i. **Adopt** a Resolution Amending the City Classification Plan by Adopting Position Description and Salary Range for Deputy City Clerk.

6. CONDUCT OF BUSINESS:

- a. **Adopt** a Resolution Authorizing the City Manager to Enter into an Exclusive Negotiating Rights Agreement with the Selected Developer.

Jovan Grogan, City Manager, presented the report, with **Jay Scholl and Henry Bose (CBRE)**, also making a presentation.

The following members of the public spoke regarding this item:

- Robert Riechel – Spoke regarding meeting room space importance.
- Hercilla Villalobos – Spoke in opposition of the project.
- Diana Chow – Spoke in opposition of the project.
- Cesar Palancares – Spoke in opposition of the project.
- Priscilla Paras-Huerta – Spoke in opposition of the project.
- Susan Young – Spoke in opposition of the project.
- Liselle Malona – Spoke in opposition of the project.
- Josephine Radbill – Spoke in opposition of the project.

M/S Davis/O’Connell to adopt a resolution authorizing the City Manager to enter into an Exclusive Negotiating Rights Agreement with the Selected Developer. The selected developer was BlackRidge Group. **Motion carried unanimously by roll call vote.**

7. COMMENTS FROM COUNCIL MEMBERS – None.

8. ADJOURNMENT – The meeting adjourned at 8:25 p.m.

The next Regular City Council Meeting will be held on October 22, 2019 at 7:00 p.m. at the Senior Center, 1555 Crystal Springs Road, San Bruno.

Minutes were prepared by Melissa Thurman, City Clerk and will be presented to the City Council for approval at the meeting of October 22, 2019.

Melissa Thurman, CMC
City Clerk

Rico E. Medina
Mayor



City Council Agenda Item Staff Report

CITY OF SAN BRUNO

DATE: October 22, 2019

TO: Honorable Mayor and Members of the City Council

FROM: Jovan D. Grogan, City Manager

PREPARED BY: Ed Barberini, Chief of Police

SUBJECT: Adopt Resolution Authorizing the Execution of a Three-Year Maintenance Agreement for the Police Department Computer Aided Dispatch and Record Management Systems with Sun Ridge Systems in the Amount of \$127,461

BACKGROUND:

The Police Department maintains all data related to police services in San Bruno in a records management database commonly referred to as the Records Management System (RMS). As part of the FY2013-14 Capital Improvement Program Budget (CIP), the Department replaced the existing Computer Aided Dispatch (CAD) and RMS with the Sun Ridge Systems product, entitled "RIMS," in order to leverage the latest advances in technology and to be compatible with all other police departments in San Mateo County. RIMS was purchased in conjunction with the Burlingame Police Department as a cost savings measure for both cities and to provide a shared virtual dispatch center that has proved beneficial in managing critical incidents.

Information contained within the RIMS system is sent electronically to police officers in the field via the CAD. The CAD/RIMS systems are connected to one another and are also linked to government databases used by law enforcement agencies. In addition to providing vital law enforcement communication links, the CAD and RIMS systems provide statistical and historical information regarding police response to reported incidents and crime in San Bruno. Since the purchase of RIMS, a specific maintenance agreement has not been in place with the vendor.

DISCUSSION:

When necessary, maintenance of RIMS has been performed and paid directly via budgeted funds by the Department. This maintenance agreement covers all RIMS public safety software licensed by the Department. Additionally, Sun Ridge, the vendor, maintains all software and message requirements for the Police Department to be compliant with the California Department of Justice (DOJ), California Law Enforcement Telecommunications System (CLETS), Department of Motor Vehicles (DMV) Calphoto system, and a number of

other confidential databases the Police Department relies on to properly function and to operate Dispatch and Records Centers while using RIMS.

FISCAL IMPACT:

The total three-year maintenance cost is \$127,461. An annual breakdown of maintenance costs is as follows:

4/03/2019 – 4/02/2020: \$41,616

4/03/2020 – 4/02/2021: \$42,448

4/03/2021 – 4/03/2022: \$43,397

The Police Department has included the first year of cost of maintenance of its CAD and records management systems in its FY2019-20 annual operating budget. Staff will plan to include the second and third year of cost in the FY2020-21 and FY2021-22 budget proposal, respectively.

ALTERNATIVES:

1. Do not proceed with the purchase of a three-year maintenance agreement resulting in an inability to fund the annual maintenance of RIMS.

RECOMMENDATION:

Adopt resolution authorizing the execution of a three-year maintenance agreement for the Police Department Computer Aided Dispatch and Record Management Systems with Sun Ridge Systems in the amount of \$127,461.

ATTACHMENTS:

1. Resolution

DATE PREPARED:

October 7, 2019

RESOLUTION NO. 2019-_____

RESOLUTION AUTHORIZING THE EXECUTION OF A THREE YEAR MAINTENANCE CONTRACT FOR THE POLICE DEPARTMENT COMPUTER AUTOMATED DISPATCH AND RECORDS MANAGEMENT SYSTEMS (RIMS) WITH SUN RIDGE SYSTEMS IN THE AMOUNT OF \$127,461

WHEREAS, the City Council authorized the joint purchase of RIMS in 2014 from Sun Ridge Systems in conjunction with the Burlingame Police Department to allow for cost savings and a backup virtual dispatch agency to compliment services in the event of an emergency;

WHEREAS, the Police Department currently stores, transmits, and maintains data related to police services on RIMS, the Records Management and Computer Automated Dispatch system database requiring annual maintenance;

WHEREAS, the Police Department does not have a RIMS maintenance agreement in place with Sun Ridge Systems;

WHEREAS, staff has established a maintenance agreement with Sun Ridge Systems that covers all RIMS public safety software licensed to the Department.

NOW THEREFORE, BE IT RESOLVED that the City Council of the City of San Bruno hereby authorizes the execution of a three year maintenance contract for the Police Department Computer Automated Dispatch and Records Management Systems (RIMS) with Sun Ridge Systems in the Amount of \$127,461.

Dated: October 22, 2019

ATTEST:

Melissa Thurman, CMC
City Clerk

-o0o-

I, Melissa Thurman, City Clerk, do hereby certify that the foregoing Resolution was duly and regularly passed and adopted by the City Council of the City of San Bruno this 22nd day of October, 2019 by the following vote:

AYES: Councilmembers: _____

NOES: Councilmembers _____

ABSENT: Councilmembers: _____



City Council Agenda Item Staff Report

CITY OF SAN BRUNO

DATE: October 22, 2019

TO: Honorable Mayor and Members of the City Council

FROM: Jovan D. Grogan, City Manager

PREPARED BY: Jimmy Tan, Public Works Director

SUBJECT: Approve City of San Bruno Response Letter to the San Mateo County Civil Grand Jury Report titled “Electric Vehicle Adoption in the Cities and County of San Mateo”

BACKGROUND:

On August 12, 2019, the San Mateo County Civil Grand Jury released a report entitled “Electric Vehicle Adoption in the Cities and County of San Mateo.” The stated purpose of the report is to determine what steps San Mateo County and its cities have taken to reduce greenhouse gas emissions by replacing 100 percent fossil-fueled government fleet vehicles with electric vehicles and what resources are available to the County and cities to assist in converting their fleets to zero emission vehicles.

The Grand Jury developed eleven findings and a total of four recommendations are applicable to the City of San Bruno. The City of San Bruno is required to respond to each finding, and to respond to each of the four recommendations applicable to the City, no later than ninety days following the issuance of the report.

DISCUSSION:

California is a leader in trying to reduce greenhouse gas emissions (GHG) associated with global heating. Forty percent of California’s GHG come from the transportation sector. In San Mateo County, the contribution from transportation is even higher at 60 percent, the largest contributor being solo driving. Although local government fleets are a relatively small part of that sector, the Grand Jury expressed in its report that it believes they are important in terms of setting an example for private industry and individuals to follow.

In December 2018, the Grand Jury surveyed the County and each of its 20 cities to determine the extent to which they are converting their fleets to electric vehicles. The survey results indicated that approximately 31 percent of the County of San Mateo’s government fleet vehicles are electric, however, the average for the 20 cities in the County is about 3 percent. Eleven (11) of the 20 cities have no electric vehicles in their fleets, including the City of San Bruno.

The survey also determined whether local jurisdictions have adopted Climate Action Plans (CAPs). CAPs are documents that identify methods that local jurisdictions such as the cities

and County can implement to reduce GHG emissions as a first step toward meeting the requirements mandated by AB 23, which required a GHG reduction of 15 percent below 2005 levels by 2020. While CAPs are not mandated, the County of San Mateo and 16 cities in the County have adopted them. The City of San Bruno is one of the four cities in the County that does not have a CAP.

Development of a Climate Action Plan (CAP) is anticipated to start after the City completes various long-range planning efforts that are currently a higher priority, including the Zoning Code Update to implement the General Plan and Transit Corridors Plan and the Bayhill Specific Plan. Additionally, funding needs to be secured for the development and implementation of a CAP.

The Grand Jury evaluation found that the policies related to the conversion of fleet vehicles to electric vehicles vary by jurisdiction. Since the majority of cities in the County have a low percentage of electric vehicles in their fleets, the Grand Jury is recommending that the County and each of the cities review their government fleet procurement policies relating to electric vehicles and evaluate the obstacles to converting the fleet to electric. As such, the agencies shall also review existing programs and toolkits available within the County specifically from the San Mateo County Office of Sustainability and also determine whether collaborative purchasing would be beneficial for the jurisdiction to save time and money.

The City of San Bruno is required to respond to all eleven findings and four recommendations. Staff has reviewed the findings and recommendations and has prepared a response letter for City Council approval attached to this report. In summary, most of the findings were related to confirming the percentage of electric vehicles within various agency fleets. The other finding was related to whether agencies that have a Climate Action Plan discussed adoption of sustainable purchasing policies to convert their fleets to fuel efficient vehicles. Furthermore, the recommendations indicated in the grand jury report require agencies in San Mateo County to conduct a review of their government fleet procurement policy related to electric vehicles, determine whether there are any obstacles with implementing such policies and present a report at a public meeting. The other recommendations include reviewing the San Mateo Office of Sustainability Roadmap for Municipal Green Fleets toolkit and investigating joining the Climate Mayors EV Purchasing Collaborative to take advantage of aggregate purchasing. Staff will be taking the necessary steps to comply with the listed recommendations.

FISCAL IMPACT:

There is no fiscal impact associated with this action. However, the addition of electric vehicles in the City's fleet will require additional budget for the vehicles as well as vehicle charging stations.

ALTERNATIVES:

The City of San Bruno is required to respond to the Grand Jury Report.

RECOMMENDATION:

Approve City of San Bruno response letter to the San Mateo County Civil Grand Jury Report titled "Electric Vehicle Adoption in the Cities and County of San Mateo"

ATTACHMENTS:

1. Response Letter to the San Mateo County Civil Grand Jury Report
2. San Mateo County Civil Grand Jury Report

DATE PREPARED:

August 30, 2019



Superior Court of California, County of San Mateo
Hall of Justice and Records
400 County Center
Redwood City, CA 94063-1655

NEAL TANIGUCHI
COURT EXECUTIVE OFFICER
CLERK & JURY COMMISSIONER

(650) 261-5066
FAX (650) 261-5147
www.sanmateocourt.org

August 12, 2019

RECEIVED
AUG 19 2019
CITY MANAGERS OFFICE

City Council
City of San Bruno
567 El Camino Real
San Bruno, CA 94066

Re: Grand Jury Report: "Electric Vehicle Adoption in the Cities and County of San Mateo"

Dear Councilmembers:

The 2018-2019 Grand Jury filed a report on August 12, 2019 which contains findings and recommendations pertaining to your agency. Your agency must submit comments, within 90 days, to the Hon. Donald J. Ayoob. Your agency's response is due no later than November 12, 2019. **Please note that the response should indicate that it was approved by your governing body at a public meeting.**

For all findings, your responding agency shall indicate one of the following:

1. The respondent agrees with the finding.
2. The respondent disagrees wholly or partially with the finding, in which case the response shall specify the portion of the finding that is disputed and shall include an explanation of the reasons therefore.

Additionally, as to each Grand Jury recommendation, your responding agency shall report one of the following actions:

1. The recommendation has been implemented, with a summary regarding the implemented action.
2. The recommendation has not yet been implemented, but will be implemented in the future, with a time frame for implementation.
3. The recommendation requires further analysis, with an explanation and the scope and parameters of an analysis or study, and a time frame for the matter to be prepared for discussion by the officer or director of the agency or department being investigated or reviewed, including the governing body of the public agency when applicable. This time frame shall not exceed six months from the date of publication of the Grand Jury report.
4. The recommendation will not be implemented because it is not warranted or reasonable, with an explanation therefore.

Please submit your responses in all of the following ways:

1. Responses to be placed on file with the Clerk of the Court by the Court Executive Office.
 - Prepare original on your agency's letterhead, indicate the date of the public meeting that your governing body approved the response address and mail to Judge Ayooob.

Hon. Donald J. Ayooob
Judge of the Superior Court
c/o Charlene Kresevich
Hall of Justice
400 County Center; 2nd Floor
Redwood City, CA 94063-1655.

2. Responses to be placed at the Grand Jury website.
 - Copy response and send by e-mail to: grandjury@sanmateocourt.org. (Insert agency name if it is not indicated at the top of your response.)
3. Responses to be placed with the clerk of your agency.
 - File a copy of the response directly with the clerk of your agency. Do not send this copy to the Court.

For up to 45 days after the end of the term, the foreperson and the foreperson's designees are available to clarify the recommendations of the report. To reach the foreperson, please call the Grand Jury Clerk at (650) 261-5066.

If you have any questions regarding these procedures, please do not hesitate to contact Paul Okada, Chief Deputy County Counsel, at (650) 363-4761.

Very truly yours,



Neal Taniguchi
Court Executive Officer

NT:ck
Enclosure

cc: Hon. Donald J. Ayooob
Paul Okada

✓ Information Copy: City Manager



ELECTRIC VEHICLE ADOPTION IN THE CITIES AND COUNTY OF SAN MATEO

ISSUE

What steps have San Mateo County and its cities taken to reduce their greenhouse gas emissions by replacing 100 percent fossil-fueled government fleet vehicles with electric vehicles? What resources are available to the County and the cities to assist in converting their fleets to zero emission vehicles (ZEVs)?

SUMMARY

Global warming and climate change are an everyday reality. California is a leader in trying to reduce greenhouse gas emissions. Sixty percent of greenhouse gas emissions in San Mateo County come from the transportation sector. Local government vehicle fleets are a relatively small part of that sector; however, the Grand Jury believes they are important in terms of setting an example for private industry and individuals to follow.

The Grand Jury surveyed the County and each of the 20 cities within the county to determine the extent to which they are converting their fleets to electric vehicles. The results of this survey show that approximately 31 percent of the County of San Mateo government fleet vehicles are electric vehicles. By comparison, the average of 20 cities in the County is about three percent. Eleven of the 20 cities have no electric vehicles in their fleets.

Purchase of electric vehicles has been cost prohibitive in the past, making it difficult for governments to justify the expense. Since 2009 when San Mateo County first discussed converting its fleet to electric vehicles, zero emissions vehicle technology has advanced, and costs of electric vehicles have dropped. As of 2019, the total life cycle cost, based on five years ownership, of a zero emissions vehicle is less than that for a comparable 100 percent fossil-fueled car. The cost savings may be as great as \$5,000 if the electric vehicle is eligible for certain rebates.

The Grand Jury recommends that the County and each of the cities in San Mateo County conduct a review of their government fleet procurement policies relating to electric vehicles, including an analysis of the obstacles to fleet conversion. The Grand Jury also recommends that the city governments and the County Department of Public Works review existing programs that could facilitate this analysis and the procurement of electric vehicles, including the Office of Sustainability's Roadmap for Municipal Green Fleets, which is a toolkit to assist local governments in replacing traditional gas powered fleets with electric fleet vehicles, and the Climate Mayors EV Purchasing Collaborative, which allows the coordination of a highly competitive contract aimed at saving time and money by combining the buying power of more than 50,000 government, education, and non-profit organizations.

GLOSSARY¹

- Greenhouse Gases (GHG): Any of various gaseous compounds, such as carbon dioxide and methane, that absorb infrared radiation and trap heat in the atmosphere contributing to the greenhouse effect and global warming.
- Government fleet: All vehicles owned or leased by a government entity for use by government employees including administrative, maintenance, police and emergency personnel.
- Fossil –Fueled Vehicles
 - PZEVs: 100 percent fossil-fueled, internal combustion engine (ICE), Partial Zero Emission Vehicles which are Super Ultra Low Emissions Vehicles that also have additional technology, such that their emissions are similar to a non-plug-in hybrid, such as the Honda Civic, the Ford Fiesta, and the Subaru Crosstrek.
 - AT PZEVs: Advanced Technology Partial Zero Emission Vehicles, which include non-plug-in hybrids, such as the Honda Accord Hybrid, the Toyota Camry Hybrid, and the Ford Fusion.
- Electric Vehicles
 - Enhanced AT PZEVs: Enhanced Advanced Technology Partial Zero Emissions Vehicles which include plug-in hybrid electric vehicles such as the Toyota Prius Prime, the Chevrolet Volt, and the Ford Fusion Energi.
 - ZEVs: Zero Emission Vehicles which include plug-in electric vehicles such as the Tesla Model 3, the Chevrolet Bolt, the Hyundai Ioniq, and electric carts.

BACKGROUND

California is a leader in trying to reduce greenhouse gas emissions (GHG) associated with global heating. Forty percent of California’s greenhouse gas emissions come from the transportation sector. In San Mateo County, the contribution from transportation is even higher at 60 percent, the largest contributor being solo driving.² Local government vehicle fleets are a relatively small part of that sector; however, the Grand Jury believes they are important in terms of setting an example for private industry and individuals to follow.

¹ Definitions based on California Environmental Protection Agency, Air Resources Board, Frequently Asked Questions: The California Zero Emission Vehicle Regulation, July 2011. https://www.arb.ca.gov/msprog/zevprog/factsheets/zev_fs.pdf

² Time to Act on Climate Change, Twenty-second Annual Report. www.SustainableSanMateo.org

State Actions

With nearly half of the state's greenhouse gas emissions coming from the transportation sector, California has made significant investments to encourage adoption of zero emission vehicles, including expanding the network of charging stations and providing rebates that lower the price of new cars by thousands of dollars.³

In 2018, the Governor set a goal of reaching five million ZEVs on California's roadways by 2030, and 250,000 public chargers by 2025.⁴ As of mid-2018, Californians were driving over 400,000 ZEVs out of 25 million registered passenger vehicles in California (1.6 percent). San Mateo County has 26,894 electric vehicles (Enhanced AT PZEVs and ZEVs) registered⁵, which is 4.2 percent of all registered vehicles; 8,229 were ZEVs.⁶

The state has passed the California Renewables Portfolio Standards Program SB 100 (2018) that mandates that all electricity be 100 percent renewable by 2045, ensuring that electric vehicles will be powered by clean energy sources.

In October 2016, the Governor of California released the 2016 ZEV Action Plan, which in part established new goals for state government fleet ZEV purchases, so that 50 percent of annual light-duty fleet purchases will be ZEV by 2025.⁷ While the state is addressing greenhouse gases and electrification of state vehicle fleets, there have been few measures directed to electrification of county or municipal fleets.

County Actions

In 2011, the Grand Jury investigated the County's 2008 Vehicle Purchase Program in which the San Mateo County Board of Supervisors resolved that "...all future [compact and midsize county] vehicle purchases will be hybrid models or other fuel-efficient models that are estimated by the manufacturer to achieve a minimum of thirty miles to the gallon."^{8,9} This program includes a policy of replacing fleet vehicles after seven years or 100,000 miles.¹⁰ According to the San Mateo County Department of Public Works, which oversees the County's fleet, the Board of Supervisors' resolution calls for an annual review of the 30 mpg standard. The policy

³ Koseff, Alexei, "Brown deems Trump 'liar, criminal, fool' on environment, signs electric vehicle bills", The Sacramento Bee, September 13, 2018. <https://www.sacbee.com/news/politics-government/capitol-alert/article218362510.html>

⁴ Lazo, Alejandro, "California Gov. Jerry Brown Calls for Five Million Zero-Emission Cars by 2030", Wall Street Journal, January 26, 2018. <https://www.wsj.com/articles/california-gov-jerry-brown-to-call-for-five-million-zero-emission-cars-by-2030-1516996404>

⁵ <https://smcenergywatch.org/electric-vehicle-adoption-in-san-mateo-county/>

⁶ Sustainable San Mateo County "Time to Act on Climate Change", Indicators Report 2018. www.sustainablesammateo.org May 4, 2018

⁷ State Administrative Manual Memorandum MM 16-07. https://www.documents.dgs.ca.gov/osp/sam/memos/MM16_07.pdf

⁸ San Mateo County Board of Supervisors, "Resolution No. 069650", September 9, 2008.

⁹ San Mateo County Civil Grand Jury 2010-2011, "San Mateo County's Vehicle Purchase Program", 2011. https://www.sanmateocourt.org/documents/grand_jury/2010/hybrid_vehicles.pdf

¹⁰ Ibid.

itself has not been updated and the fuel efficiency requirement has not been increased above 30 mpg.¹¹

Climate Action Plans

Since enactment of the California Global Warming Solutions Act of 2006 (AB 32), many local jurisdictions in California have adopted “Climate Action Plans” (CAPs). CAPs are documents that identify methods that local jurisdictions such as the cities and County can implement to significantly reduce GHG emissions as a first step toward meeting the requirements mandated by AB 32, which required a GHG reduction of 15 percent below 2005 levels by 2020. While such plans are not mandated, the County of San Mateo and 16 cities in the county have adopted them. Due to greenhouse gas emissions from transportation, CAPs include a section that discusses the status of greenhouse gas contribution from this sector and policies meant to reduce them. For purposes of this report, the Grand Jury reviewed the CAPs for the County and the cities that have them to determine whether the electrification of government fleets was addressed.¹²

DISCUSSION

The Grand Jury investigated what San Mateo County and the 20 cities within the county are doing to reduce their GHG emissions by converting their fleets to electric vehicles.

Grand Jury Survey

In December 2018, the Grand Jury surveyed each of the cities and the County (see Appendix A for form of the survey). The responses are summarized in Table 1. The survey results show that, as of the date of the survey, 11 of the 20 cities have no electric vehicles (as defined in the glossary) in their fleets. These are: Atherton, Belmont, Colma, Daly City, East Palo Alto, Half Moon Bay, Hillsborough, San Bruno, San Carlos, South San Francisco, and Woodside. In contrast, two of the cities (Burlingame and Foster City) have converted one percent of their fleet to electric vehicles, three of the cities (Pacifica, Redwood City, and San Mateo) have reached three percent, the City of Millbrae has reached seven percent, and two cities (Brisbane and Menlo Park) have reached ten percent. Of interest is that although not having a Climate Action Plan, the Town of Portola Valley has moved forward with converting a third (two out of six) of its fleet to electric vehicles.

¹¹ Email from SMC Department of Public Works

¹² Links to each of the CAPs are given in the bibliography.

Table 1: Cities and County of San Mateo Electric Fleet Vehicles (December 2018)

Cites/ County of San Mateo	# of Fleet Vehicles			Have Climate Action Plan? (Year*)	Climate Action Plan Discusses Government Fleet Electric Vehicles
	Total	Electric	% Elec		
Atherton	20	0	0%	Yes (2016)	Yes
Belmont	106	0	0%	Yes (2017)	Yes
Brisbane	23	2	9%	Yes (2015)	Yes
Burlingame	115	1	1%	Yes (2009)	Yes
Colma	27	0	0%	Yes (2013)	No
Daly City	26	0	0%	Yes (2010)	No
East Palo Alto	73	0	0%	Yes (2011)	Yes
Foster City	86	1	1%	Yes (2015)	Yes
Half Moon Bay	8	0	0%	No	No
Hillsborough	67	0	0%	Yes (2010)	No
Menlo Park	110	11	10%	Yes (2009)	Yes
Millbrae	58	4	7%	No	No
Pacifica	96	2	2%	Yes (2014)	Yes
Portola Valley	6	2	33%	No	No
Redwood City	240	6	3%	Yes (2013)	Yes
San Bruno	129	0	0%	No	No
San Carlos	49	0	0%	Yes (2009)	Yes
San Mateo	243	8	3%	Yes (2015)	Yes
South San Francisco	200	0	0%	Yes (2014)	No
Woodside	3	0	0%	Yes (2015)	No
Cities Total	1,685	37	2%	16 Yes	11 Yes
County of San Mateo	709	220	31%	Yes (2012)	Yes

* Year shown is date of document that references electric vehicles, if any

Combined, about two percent of the 20 municipalities' fleet vehicles are electric vehicles. By contrast, electric vehicles comprise approximately 31 percent of the total County of San Mateo government fleet.

As noted in Table 1, eleven of the cities and the County have as part of their CAP a section pertaining to converting their government fleets to fuel efficient vehicles (hybrid, electric, alternative fuel). These cities are: Atherton, Belmont, Brisbane, Burlingame, East Palo Alto, Foster City, Menlo Park, Pacifica, Redwood City, San Carlos, and San Mateo. Five cities

(Colma, Daly City, Hillsborough, South San Francisco, and Woodside) have CAPs that do not discuss conversion of fleet vehicles, to fuel-efficient vehicles and four cities (Half Moon Bay, Millbrae, Portola Valley, and San Bruno) have no Climate Action Plan.

In reviewing the cities' and County's CAPs as related to the conversion of fleet vehicles to electric vehicles, the Grand Jury finds that those cities, and the County, that include this discussion in their CAP vary in the strength of their approach. As noted above, the County already had a Fuel Efficient County Vehicle Purchasing Policy prior to developing their CAP, and this is emphasized in their document. Four of the cities (Atherton, Belmont, Burlingame, and Pacifica) describe policies to prioritize purchase of electric and alternative fuel vehicles, sometimes referred as a Sustainable Purchasing Policy, which are proposed for adoption by the city governments.

For the remaining seven cities, the wording in the CAPs propose specific actions rather than an overall policy. The CAPs of the cities of Brisbane and East Palo Alto suggest that their cities participate in a car-sharing program that has electric vehicles. The CAP from Menlo Park says that "one or several neighborhood electric vehicles could be purchased or leased."¹³ The CAPs from Foster City and San Mateo call for the cities to replace gasoline powered vehicles or conventional hybrids with low emissions vehicles, "as available and cost effective".¹⁴ The 2009 CAP from San Carlos is specific about the number of vehicles to be replaced by 2020 stating that, "The City has approximately 18 vehicles between the Public Works, Parks and Recreation, and Building Departments that have the possibility of being replaced in the future with alternative fuel or hybrid technology."¹⁵ And the CAP from Redwood City mentions that by 2013, 83 percent of all City sedans in Redwood City were hybrids and the Parks and Police Departments had three fully electric vehicles. Of particular note, the action recommended in Redwood City is headed, "Lead by Example – promote fuel-efficient and alternative fuel vehicles in the community by using the City's fleet as an example."¹⁶

As described above, there is a wide variation among local jurisdictions in San Mateo County in terms of their government fleet electric vehicle procurement policies. In this report, the Grand Jury has not investigated the reasons why local jurisdictions have adopted their specific policies, or no policy.

It should be noted that some CAPs were drafted and adopted prior to 2010, when electric vehicles were not widely available, some have been reviewed and revised since 2015, one city is currently working on an updated CAP, and one city has a draft 2030 plan.

¹³ City of Menlo Park, Climate Action Plan Update and Status Report, 2009
<http://worldcat.org/arcviewer/7/CBG/2013/04/17/H1366238244214/viewer/file1.pdf>

¹⁴ City of San Mateo, Climate Action Plan, April 2015.
<https://www.cityofsanmateo.org/DocumentCenter/View/65426/San-Mateo-CAP---Adopted?bidId>

¹⁵ City of San Carlos, Climate Action Plan, October 12, 2009
<https://www.cityofsancarlos.org/government/departments/city-manager-s-office-communications/responsible-environment/climate-action-plan>

¹⁶ City of Redwood City Community Climate Action Plan https://www.ca-ilg.org/sites/main/files/file-attachments/redwood_city_community_climate_action_plan.pdf

Sources of Financial and Technical Assistance

In October 2018, the San Mateo County Office of Sustainability received a grant for one year from Peninsula Clean Energy to develop a *Roadmap for Municipal Green Fleets*.¹⁷ This is a clean fuel toolkit to assist local governments in replacing traditional gas powered fleets with electric fleet vehicles. This toolkit includes sources of technical assistance for local governments interested in strategic planning of their fleet electrification efforts.¹⁸ The grant includes funding to support up to four cities initially in utilizing the toolkit through December 2019.

The Office of Sustainability is currently soliciting feedback from cities on whether there is interest to adopt an EV First Policy.¹⁹ If there is interest from the city and County leadership, the Office of Sustainability will draft a policy based on the one adopted by the City and County of San Francisco in 2017. San Francisco's EV First policy "requires that any new passenger vehicle procured for the City fleet be a Zero Emission Vehicle, absent a waiver, and that all passenger vehicles in the City fleet be Zero Emission Vehicles by December 31, 2022; and to encourage selection of Zero Emission Vehicles in other vehicle classes as technology improves."²⁰

On September 11, 2018, the *Climate Mayors EV Purchasing Collaborative* was launched. Cities from around the U.S. announced a large-scale commitment to electrify their municipal fleets. One founder stated, "This process allows the coordination of a highly competitive contract aimed at saving your fleet time and money by combining the buying power of more than 50,000 government, education, and non-profit organizations. The vehicles in your fleet need to meet the use needs of your company and staff, and the Cooperative EV Purchasing Collaborative is designed with products and services to fit your needs."²¹

"The Collaborative represents unprecedented cooperation among Climate Mayors cities across the country to leverage their collective buying power and accelerate the conversion of public fleets to [electric vehicles]...It is a turnkey, one-stop, online procurement portal providing U.S. cities, counties, [and] state governments...equal access to competitively bid [electric vehicles] and charging infrastructure, innovative financing options, and best practices and other forms of expertise."²²

The California Air Resources Board (CARB) has the Clean Vehicle Rebate Project (CVRP) which is designed to promote the purchase of battery electric, plug-in hybrid electric, and other electric vehicles. Rebates of up to \$7,000 per light-duty vehicle are available for individuals, nonprofits, government entities, and business owners who purchase or lease an eligible vehicle. Public agencies are eligible for up to 30 vehicle rebates annually. Some fleets may qualify for

¹⁷ Peninsula Clean Energy Pilot Program, <https://www.peninsulacleanenergy.com/community-pilots/> Peninsula Clean Energy (PCE) is San Mateo County's official electricity provider. It awarded grants through its Community Pilot Program of up to \$75,000 each for six innovative local pilot projects to reduce greenhouse gas emissions.

¹⁸ Office of Sustainability, *Roadmap for Municipal Green Fleets*". <https://www.smcsustainability.org>

¹⁹ Grand Jury Correspondence with San Mateo County Office of Sustainability.

²⁰ City and County of San Francisco Ordinance #115-17.

(<https://sfgov.legistar.com/View.ashx?M=F&ID=5205705&GUID=5B001FFA-9629-43BC-B1EC-B348B76F8B29>)

²¹ "Commitment to Electrification", <https://driveevfleets.org/#>

²² Ibid.

increased incentives if located within a California disadvantaged community census tract.²³ Current rebate statistics are available on the website of the Center for Sustainable Energy (CSE).²⁴

Why Now is the Time to Convert Government Fleets to ZEVs

Even those cities whose Climate Action Plans include proposed electric vehicle fleet procurement policies have not fully implemented them (see Table 1, last column vs. # of Fleet Vehicles). San Carlos, for example, has a strong and specific policy but has purchased no electric vehicles. In this report, the Grand Jury has not investigated the specific reasons each city may have for not implementing electric vehicle procurement policies. The following section reviews the general obstacles that local governments have encountered in the past and their current status in 2019.

“The California Air Resources Board first adopted the ZEV mandate in 1990 as part of the Low-Emission Vehicle regulation... whose goals were to accelerate industry investment in ZEV technology, discourage industry procrastination, establish initial supply chains, and signal to the many related companies and governments that they should be engaging sooner and more deeply with the transition to ZEVs.”²⁵ This was 18 years before the first commercially successful ZEV was sold to the public.^{26,27}

In 2013, the National Research Council identified the main obstacles to public adoption of ZEVs as:

- Lack of Customer Knowledge about ZEVs,
- High Purchase Price,
- Limited Driving Range,
- Limited Model Choice,
- Lack of Dealer/Mechanic Knowledge about ZEVs,
- Lack of Charging Infrastructure,
- Lack of Standardization of Charging Infrastructure, and
- Lack of Access to 100 percent Renewable Electricity.²⁸

Since 2013, many of these obstacles have been greatly reduced. Several more ZEV models have been introduced to the market and costs have come down to a large extent due to a significant

²³ According to Get Healthy San Mateo County, November 2017 Newsletter, “Implications of the Planning for Healthy Communities Act for San Mateo County”, portions of East Palo Alto, Redwood City, South San Francisco, Millbrae, San Bruno and unincorporated North Fair Oaks are “disadvantaged community census tracts.” <https://www.gethealthysmc.org/newsletter/november-2017-newsletter>

²⁴ CVRP Rebate Statistics Webpage

²⁵ Scott Hardman, et al., “Driving the Market for Plug-in Vehicles: Understanding ZEV Mandates”. <https://phev.ucdavis.edu/wp-content/uploads/zev-mandates-policy-guide.pdf>

²⁶ U.S. Department of Energy, “The History of the Electric Car”, September 2014. <https://www.energy.gov/articles/history-electric-car>

²⁷ Tesla website, “About Tesla”, <https://www.tesla.com/about>

²⁸ National Research Council, “Overcoming Barriers to Electric-Vehicle Deployment”, 2013. <http://gabrielse.physics.harvard.edu/gabrielse/papers/2013/OvercomingBarriersToElectricVehicleDeployment.pdf>

drop in battery prices.²⁹ In San Mateo County, both Pacific Gas & Electric and Peninsula Clean Energy both offer 100 percent renewable electricity plans.^{30,31}

“Most modern chargers and vehicles have a standard connector and receptacle, called the SAE J1772. Any vehicle with this plug receptacle can use any Level 1 [120 volt AC] or Level 2 [240 volt AC] EVSE. All major vehicle and charging system manufacturers support this standard.”³² And recently, “SAE International, an engineering standards-setting organization, has passed a standard for fast charging that adds high-voltage DC power contact pins to the SAE J1772 connector,”³³ so standardization of charging infrastructure should soon no longer be a concern.

As with individuals who purchase ZEVs, city and county governments will need to install charging infrastructure for their fleets. The cost of installing a charging facility ranges widely depending on the number of charging ports, the level of the charger, whether the units are networked for monitoring and/or billing purposes, and the proximity to existing electrical infrastructure.³⁴ However, in considering the useful range of their ZEVs, cities in San Mateo County should also take into account that there are currently 1,645 public charging stations in San Mateo County that could be used by government vehicles if they are in danger of running out of power before being able to return to their base charging location.³⁵

Even with all of these advances, in January 2019 Forbes Magazine listed the four lingering obstacles that purchasers of ZEVs, both public and private, contend with as perceived cost, range anxiety, driver understanding, and dealer understanding.³⁶ Driver and dealer understanding of ZEVs will come with greater education of the public, and the Grand Jury hopes that this report will contribute to that education. Retraining of mechanics to work on ZEVs is also a consideration, especially for government employees. However, according to the San Mateo County Department of Public Works, “This doesn’t present a problem and...mechanics are being trained on servicing of the EVs.”³⁷

“By a margin, the largest reason that consumers have avoided purchasing an electric car is range anxiety. That is, 58 percent of drivers are afraid that they will run out of power before being able

²⁹ Supra, Note 26

³⁰ Pacific Gas & Electric website, “Solar Choice program costs”. https://www.pge.com/en_US/residential/solar-and-vehicles/options/solar/solar-choice/rate-calculator.page

³¹ Peninsula Clean Energy website, “Where PCE’s Power Comes From”. <https://www.peninsulacleanenergy.com/energy-sources/>

³² U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, “Vehicle Charging”. <https://www.energy.gov/eere/electricvehicles/vehicle-charging>

³³ Ibid.

³⁴ New York State Energy Research and Development Authority, “Charging Station Installation Analysis: Tompkins County Plug-in Electric Vehicle Infrastructure Plan”, February 2017.

<http://tompkinscountyny.gov/files2/itctc/projects/EV/Tompkins%20EVSE%20Installation%20Analysis%20FINAL.pdf>

³⁵ San Mateo County Datahub, “Electrical Vehicle Charging Stations”.

<https://datahub.smcgov.org/Transportation/Electric-Vehicle-Charging-Stations/k4h3-yhwc>

³⁶ Jeff McMahon, “The 4 Lingerin Obstacles To Electric Vehicle Adoption (And What Might Overcome Them)”, Forbes, January 27, 2019. <https://www.forbes.com/sites/jeffmcmahon/2019/01/27/the-4-lingerin-obstacles-to-electric-vehicle-adoption-and-what-might-overcome-them/#2224ba695c54>

³⁷ Grand Jury communication.

to charge their vehicle, while another 49 percent fear the low availability of charging stations.”³⁸ In considering whether and when to convert government fleets in San Mateo County, the Grand Jury directs attention to the large number of public charging stations in the County mentioned above.

For all of the advances in technology, education, and infrastructure availability, a consistent theme in the CAPs and literature reviewed by the Grand Jury is the perceived cost of ZEVs versus 100 percent fossil-fueled cars and the importance of feasibility and cost effectiveness.

Choosing a ZEV over a conventional, internal combustion engine (ICE) vehicle can result in significant long term savings. ZEVs “cost less than half as much to operate as gas powered cars.”³⁹ “The average cost to operate a ZEV in the US is \$485 a year while the average for a gasoline powered vehicle is \$1,117.”⁴⁰

The average price for a gallon of gasoline in California is \$3.95 (May 2019). The average cost for electricity per gallon equivalent during the daytime is \$1.80.⁴¹ Fueling electric vehicles at night (off peak) would cost even less.^{42,43}

Maintenance cost for ZEVs is also lower because they have “fewer moving parts, no exhaust system, less need for cooling, less abrasive braking options and no need to change engine oil, coolant, transmission fluids, air filters, timing belts, head gaskets, cylinder heads and spark plugs.”⁴⁴ The largest maintenance expense of a ZEV is the battery pack.⁴⁵ ZEV batteries are drained and recharged constantly but some manufacturers will cover replacement with a battery warranty (such as for the Nissan Leaf, Chevrolet Bolt, and Tesla Model S).⁴⁶

In order to show how all of these factors result in a one-to-one cost comparison, an example lifecycle cost analysis of a ZEV as compared to a comparable internal combustion engine vehicle of the size used by the County of San Mateo is provided in Table 2. This analysis is based on a calculation available on the website of PG&E, but the values have been modified to reflect the rates and conditions that would be experienced by governments in San Mateo County.⁴⁷ For

³⁸ Rob Stumpf, “Americans Cite Range Anxiety, Cost as Largest Barriers for New EV Purchases: Study”, The Drive, February 26, 2019. <https://www.thedrive.com/news/26637/americans-cite-range-anxiety-cost-as-largest-barriers-for-new-ev-purchases-study>

³⁹ University of Michigan’s Transportation Research Institute 2018 Study Report No. SWT-2018-1.

⁴⁰ Ibid.

⁴¹ “egallon: What it is and Why it is Important” Department of Energy’s egallon. www.energy.gov

⁴² Ibid.

⁴³ Note egallon and miles per gallon (MPGe) is a measurement of the cost to drive a comparable vehicle the same distance you could go on a gallon of gasoline. MPGe is a measurement of how efficiently a vehicle uses energy based on the number of British Thermal Units (BTUs) in the fuel.

⁴⁴ Jeff McMahon, “Electric Vehicle Cost Less Than Half as Much to Drive”, Forbes, January 14, 2018. <https://www.forbes.com/sites/jeffmcmahon/2018/01/14/electric-vehicles-cost-less-than-half-as-much-to-drive/#45d1708e3f97>

⁴⁵ Ibid.

⁴⁶ “Costs and Benefits of Electric Cars vs. Conventional Vehicles”, November 15, 2018

<https://www.energysage.com/electric-vehicles/buyers-guide/battery-life-for-top-evs/>

⁴⁷ Pacific Gas & Electric Company, “Welcome to the EV Savings Calculator”. <https://ev.pge.com/>

purposes of this calculation, it is assumed that the vehicles would be driven 20,000 miles per year and resold after 100,000 miles (five years).

This analysis shows that with rebates currently in place, the total life cycle cost over five years for a ZEV is up to \$5,000 less than that of a comparable ICE driven car, and that even if the electricity cost were to double or the rebate was not available the total cost would still be less than that of the ICE car. Cities are encouraged to perform their own analyses. Therefore, the Grand Jury believes that now is the time to convert government fleets to ZEVs.

Table 2
5-Year (100,000 Mile) Life Cycle Cost Comparison of
Chevrolet Bolt ZEV to Toyota Camry ICE XLE/XSE

Description	2019		Comments
	Chevrolet Bolt EV	2019 Toyota Camry XLE	
Summary of Results			
Vehicle Purchase/Resale	\$22,676	\$20,058	Vehicle MSRP * (1 + Sales Tax) - Rebate - (Resale Value Percent * MSRP)
Total Electricity Cost	\$5,040	NA	Electricity Cost * Electricity Use * Mi/Yr * Number of Years
Total Gasoline Cost	NA	\$11,618	$\frac{\text{Gasoline Cost} * \text{Mi/Yr} * \text{Number of Years}}{\text{MPG}}$
Total Maintenance Cost	\$3,174	\$5,749	Maint. Cost per Mile * (1 - EV Cost Reduction) * Mi/Yr * Number of Years
Total Insurance Cost	\$8,639	\$8,288	Insurance Cost per Year * Number of Years
TOTAL 5-Yr Cost	\$39,529	\$45,712	

Description	2019		Comments
	Chevrolet Bolt EV	2019 Toyota Camry XLE	
Input Parameters			
Seats	5	5	Manufacturer Specification
Passenger Volume (cu.ft.)	94	100	Manufacturer Specification
Interior Cargo Volume (cu.ft.)	16.9	14.1	Manufacturer Specification
Type	Mid-Size	Mid-Size	Passenger+Cargo Volume 110 to 119 cu.ft. ⁴⁸
MSRP	\$36,620	\$29,175	Manufacturer's Suggested Retail Price
CARB EV Rebate	\$2,500	NA	California Air Resource Board ⁴⁹

⁴⁸ U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, "How are Vehicle Size Classes Defined". <https://www.fueleconomy.gov/feg/info.shtml#size-class>

⁴⁹ California Environmental Protection Agency, Air Resources Board, Clean Vehicle Rebate Project, "For Public Fleets". <https://cleanvehiclerebate.org/eng/fleet>

Table 2 (continued)

2019

Chevrolet Bolt EV 2019 Toyota Camry XLE

Description	Chevrolet Bolt EV	2019 Toyota Camry XLE	Comments
Input Parameters (cont.)			
Electricity Cost (\$/kWh)	\$0.18	NA	E-19 SV Rate from PCE, 100% ECO ⁵⁰
Electricity Use (kWh/mile)	0.28	NA	EPA Efficiency Rating ⁵¹
Gasoline Cost (\$/gal)	NA	\$3.95	AAA, CA avg. for May 2019 ⁵²
Miles per Gallon (MPG)	NA	34	EPA Rating ⁵³
Maint. Cost per Mile	\$0.0599	\$0.0575	Exponential cost curve based on MSRP of \$37,000 and a base rate of \$0.06/mi ⁵⁴
Insurance Cost per Year	\$1,728	\$1,658	Exponential cost curve based on MSRP of \$37,000 and a base rate of \$1,731/yr ⁵⁵
EV Maint. Cost Reduction	47%	NA	2 ^o Institute Report ⁵⁶
Number of Years	5	5	Assumed for analysis
Miles Driven per Year	20,000	20,000	Assumed for analysis
Sales Tax (%)	8.75%	8.75%	San Mateo County ⁵⁷
Resale Value @ 100,000 mi	40%	40%	CarFax ^{58,59}

⁵⁰ Pacific Gas & Electric Company, “PG&E – Peninsula Clean Energy Joint Rate Comparisons”.
https://www.pge.com/pge_global/common/pdfs/customer-service/other-services/alternative-energy-providers/community-choice-aggregation/pce_rateclasscomparison.pdf

⁵¹ U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, “Find and Compare Cars”.
<https://www.fueleconomy.gov/feg/noframes/40520.shtml>

⁵² AAA, “Gas Prices”. <https://gasprices.aaa.com/state-gas-price-averages/>

⁵³ U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, “Compare Side-by-Side”.
<https://www.fueleconomy.gov/feg/Find.do?action=sbs&id=40609>

⁵⁴ Supra, Note 46 – Equation is Cost per mile = 0.06 * (MSRP/37000)^{0.1799}.

⁵⁵ Supra, Note 46 – Equation is Cost per year = 1731 * (MSRP/37000)^{0.1825}.

⁵⁶ Ryan Logtenberg, et al., 2^o Institute, “Comparing Fuel and Maintenance Costs of Electric and Gas Powered Vehicles in Canada”, September 2018.

https://www.2degreesinstitute.org/reports/comparing_fuel_and_maintenance_costs_of_electric_and_gas_powered_vehicles_in_canada.pdf

⁵⁷ California Department of Tax and Fee Administration, “California Sales and Use Tax Rates by County and City”, April 1, 2019. <https://www.cdtfa.ca.gov/formspubs/cdtfa95.pdf>

⁵⁸ Charles Krome, “Car Depreciation: How Much Value Will a New Car Lose?”, Carfax, November 9, 2018.
<https://www.carfax.com/blog/car-depreciation>

⁵⁹ Depreciation is an important factor in this analysis as is it difficult to predict the demand for used cars in the future. See Edmunds, “Edmunds Report Reveals a Car With 100,000 Miles Is More Valuable Than Shoppers Think”, November 13, 2017. <https://www.edmunds.com/about/press/edmunds-report-reveals-a-car-with-100000-miles-is-more-valuable-than-shoppers-think.html>

FINDINGS

- F1. As of December 2018, eleven of the twenty cities in San Mateo County have no electric vehicles in their government fleets. These are:
- Atherton
 - Belmont
 - Colma
 - Daly City
 - East Palo Alto
 - Half Moon Bay
 - Hillsborough
 - San Bruno
 - San Carlos
 - South San Francisco
 - Woodside
- F2. As of December 2018, in two of the twenty cities in San Mateo County approximately one percent of the city fleet are electric vehicles. These are:
- Burlingame
 - Foster City
- F3. As of December 2018, in three of the twenty cities in San Mateo County approximately three percent of the city fleet are electric vehicles. These are:
- Pacifica
 - Redwood City
 - San Mateo
- F4. As of December 2018, in the City of Millbrae approximately seven percent of the city fleet is electric vehicles.
- F5. As of December 2018, in two of the twenty cities in San Mateo County approximately ten percent of the city fleet are electric vehicles. These are:
- Brisbane
 - Menlo Park
- F6. As of December 2018, the Town of Portola Valley has converted two of its six city vehicles to electric vehicles, or approximately 33 percent.
- F7. San Mateo County has 709 fleet vehicles. Of those, 218 are Enhanced AT PZEVs and two are ZEVs (approximately 31 percent).

- F8. The County and eleven of the cities in the county have Climate Action Plans that discuss adoption of sustainable purchasing policies for converting their fleets to fuel efficient vehicles (hybrid, electric, alternative fuel). The cities are:
- Atherton
 - Belmont
 - Brisbane
 - Burlingame
 - East Palo Alto
 - Foster City
 - Menlo Park
 - Pacifica
 - Redwood City
 - San Carlos
 - San Mateo
- F9. San Mateo Office of Sustainability released a “Green Municipal Fleet Toolkit” in March of 2019. The purpose of this Toolkit is to assist jurisdictions on how to reduce greenhouse gas emissions from their municipal fleets.
- F10. The San Mateo County Office of Sustainability technical support pilot program for municipal fleets, which is funded to assist up to four cities in converting their fleets to ZEVs, runs through December 2019.
- F11. The Climate Mayors EV Purchasing Collaborative is available to assist the cities and the County in conversion of fleet vehicles to ZEVs through aggregate purchasing.

RECOMMENDATIONS

- R1. By March 31, 2020, the County of San Mateo and each city within the county should conduct a review of its government fleet procurement policy relating to electric vehicles and present a report at a public meeting. At a minimum, the review should be based on an analysis that includes up-to-date life-cycle costs of commercially available electric vehicles and an up-to-date assessment of whether electric vehicles can meet the performance needs of local jurisdictions for power, range, battery life, and other relevant factors. If an agency has completed such a review within the last three years, then such review should be presented to its governing body at a public meeting on or before December 31, 2019.
- R2. By March 31, 2020, the County of San Mateo and each city within the county should conduct an analysis of the obstacles, if any, to the implementation of an EV government fleet procurement policy and present a report at a public meeting. This could include, for example, the availability of electric vehicle charging stations to serve the vehicle fleet and training of vehicle maintenance staff. If an agency has completed such an analysis within the last three years, then such analysis should be presented to its governing body at a public meeting on or before December 31, 2019.

- R3. By September 30, 2019, the County of San Mateo Department of Public Works and each city within the county should review the “Roadmap for Municipal Green Fleets” toolkit from the San Mateo County Office of Sustainability, including the information on the possibility of adopting an EV First Policy.
- R4. By September 30, 2019, the County of San Mateo and each city within the county, if they have not already initiated such a process, should investigate joining the Climate Mayors EV Purchasing Collaborative to take advantage of aggregate purchasing.

REQUEST FOR RESPONSES

Pursuant to penal Code section 933.05, the Grand Jury requests responses from the City Councils of the following cities in San Mateo County:

- Atherton, Belmont, Brisbane, Burlingame, Colma, Daly City, East Palo Alto, Foster City, Half Moon Bay, Hillsborough, Menlo Park, Millbrae, Pacifica, Portola Valley, Redwood City, San Bruno, San Carlos, San Mateo, South San Francisco, Woodside.
- The San Mateo County Board of Supervisors

The governing bodies indicated above should be aware that the comment or response of the governing body must be conducted subject to the notice, agenda, and open meeting requirements of the Brown Act.

METHODOLOGY

- The Grand Jury sent a survey/questionnaire to all the cities in San Mateo County. The same survey was sent to the County.
- The Grand Jury interviewed representatives from The Office of Sustainability, C/CAG, The County Department of Public Works and non- profit electric vehicles organizations.
- The Grand Jury attended city sponsored Electric Vehicle Workshops, the Sustainable San Mateo County Indicators forum, a seminar on The Future of Transportation: Clean Energy & Transformation presented by Peninsula Family Service Thought Leader Series, and the San Francisco Global Climate Change Summit.
- The Grand Jury conducted research using over forty-five internet sites and newspaper articles pertaining to electric vehicles, government agencies dealing with electric vehicles and greenhouse gas reduction in the transportation sector.

BIBLIOGRAPHY

General References

- AAA, “Gas Prices”, Accessed June 8, 2019, <https://gasprices.aaa.com/state-gas-price-averages/>
- Acterra, “GoEV! Love the Planet AND Your Car”, Accessed May 19, 2019 <https://www.acterra.org/goev/>
- Calcars.org, “All About Plug-In Hybrids”, Accessed May 22, 2019 <http://www.calcars.org/vehicles.html>
- California Air Resources Board, “Assembly Bill 32 Overview”, Accessed May 19, 2019 <https://www.arb.ca.gov/cc/ab32/ab32.htm>
- California Department of Tax and Fee Administration, “California Sales and Use Tax Rates by County and City”, April 1, 2019, Accessed June 8, 2019 <https://www.cdtfa.ca.gov/formspubs/cdtfa95.pdf>
- California Environmental Protection Agency, Air Resources Board, “Frequently Asked Questions: The California Zero Emission Vehicle Regulation, July 2011”, Accessed June 8, 2019 https://www.arb.ca.gov/msprog/zevprog/factsheets/zev_fs.pdf
- California Environmental Protection Agency, Air Resources Board, Clean Vehicle Rebate Project, “For Public Fleets”, Accessed June 8, 2019 <https://cleanvehiclerebate.org/eng/fleet>
- C/CAG, Henderson, Ashley; Unnasch, Stefan; Boland, Susan; Pont, Jennifer; and Kaminski, Sandra. (Life Cycle Associates). 2016. Alternative Fuel Readiness Plan for San Mateo County. California Energy Commission. Accessed May 19, 2019 http://ccag.ca.gov/wp-content/uploads/2016/05/San-Mateo-AFRP_Summary_Report-FINAL_1.pdf
- C/CAG, “San Mateo County Transportation Programs Climate Impact Report”, November 2018, Accessed May 19, 2019 http://ccag.ca.gov/wp-content/uploads/2018/11/C-CAG-Climate-Action-Report-11-20-18_DRAFT1-1.pdf
- City and County of San Francisco, “Text of Ordinance 115-17 [EV First Policy]”, May 23, 2017 Accessed May 19, 2019 <https://sfgov.legistar.com/View.ashx?M=F&ID=5205705&GUID=5B001FFA-9629-43BC-B1EC-B348B76F8B29>
- City of San Mateo, “Electric Vehicle Charger Guide”, November 2015, Accessed May 19, 2019 <https://www.cityofsanmateo.org/DocumentCenter/View/47766/ELECTRIC-VEHICLE-CHARGER-Guide-v-10>

- Climate Mayors Electric Vehicle Purchasing Collaborative, “About the Collaborative”, 2018, Accessed May 19, 2019 <https://driveevfleets.org/>
- COLTURA, “Let’s get off gasoline and move to clean alternatives”, Accessed May 19, 2019 <https://www.coltura.org/>
- County of Santa Clara Office of Sustainability, “Plug-in Electric Vehicle Best Practices Compendium”, March 2018, Accessed May 19, 2019 <https://www.sccgov.org/sites/dnz/Documents/Task-1A-EV-Best-Practices-Compendium.pdf>
- County of Santa Clara Office of Sustainability, “Cash rebates for home energy improvements”, March 2018, Accessed May 19, 2019 <https://www.sccgov.org/sites/osp/pages/rebates.aspx>
- County of Santa Clara, “County of Santa Clara Approves Electric Car Charging Ordinance”, County News Press Release, December 18, 2013 Accessed May 19, 2019 <https://www.sccgov.org/sites/opa/nr/Pages/County-of-Santa-Clara-Approves-Electric-Car-Charging-Ordinance.aspx>
- County of Santa Clara, “Driving to Net Zero”, Accessed May 19, 2019 <https://www.sccgov.org/sites/dnz/Pages/home.aspx>
- Edmunds, “Edmunds Report Reveals a Car With 100,000 Miles Is More Valuable Than Shoppers Think”, November 13, 2017, Accessed June 8, 2019 <https://www.edmunds.com/about/press/edmunds-report-reveals-a-car-with-100000-miles-is-more-valuable-than-shoppers-think.html>
- Energy Upgrade California, “What is Climate Change”, California Public Utilities Commission & California Energy Commission, Accessed May 19, 2019 <https://www.energyupgradeca.org/climate-change/>
- Get Healthy San Mateo County, November 2017 Newsletter, Accessed June 7, 2019 <https://www.gethealthysmc.org/newsletter/november-2017-newsletter>
- Governor’s Interagency Working Group on Zero-Emission Vehicles, “ZEV Action Plan Priorities Update”, September 2018, Accessed May 19, 2019 <http://business.ca.gov/Portals/0/ZEV/2018-ZEV-Action-Plan-Priorities-Update.pdf>
- Halper, Evan, Barboza, Tony and Lauter, David, “California vows to fight Trump EPA's move to freeze fuel economy rules”, Los Angeles Times, August 2, 2018, Accessed May 19, 2019 https://www.latimes.com/politics/la-na-pol-trump-fuel-economy-20180802-story.html?utm_source=Center+for+Climate+Protection&utm_campaign=c064c62d82-EMAIL_CAMPAIGN_2018_08_07_02_22&utm_medium=email&utm_term=0_ff35bae2f-c064c62d82-381767537

- Hardman, Scott et al., “Driving the Market for Plug-in Vehicles: Understanding ZEV Mandates”, UC Davis International EV Policy Council, August 2018, Accessed May 22, 2019 <https://phev.ucdavis.edu/wp-content/uploads/zev-mandates-policy-guide.pdf>
- Kaufman, Alexander C., “California Lawmakers Pass Historic Bill Mandating Only Carbon-Free Power By 2045”, Huffington Post, August 29, 2018, Accessed May 19, 2019 https://www.huffpost.com/entry/california-100-percent-clean-energy_n_5b219200e4b09d7a3d79fbba
- Koseff, Alexei, “California approves goal for 100% carbon-free electricity by 2045”, The Sacramento Bee, September 10, 2018, Accessed May 19, 2019 <https://www.sacbee.com/news/politics-government/capitol-alert/article218128485.html>
- Koseff, Alexei, “Brown deems Trump ‘liar, criminal, fool’ on environment, signs electric vehicle bills”, The Sacramento Bee, September 13, 2018, Accessed May 19, 2019 <https://www.sacbee.com/news/politics-government/capitol-alert/article218362510.html>
- Krome, Charles, “Car Depreciation: How Much Value Will a New Car Lose?”, Carfax, November 9, 2018, Accessed June 8, 2019 <https://www.carfax.com/blog/car-depreciation>
- Lazo, Alejandro, “California Gov. Jerry Brown Calls for Five Million Zero-Emission Cars by 2030”, Wall Street Journal, January 26, 2018, Accessed May 19, 2019 <https://www.wsj.com/articles/california-gov-jerry-brown-to-call-for-five-million-zero-emission-cars-by-2030-1516996404>
- Logtenberg, Ryan, et al., 2o Institute, “Comparing Fuel and Maintenance Costs of Electric and Gas Powered Vehicles in Canada”, September 2018, Accessed June 8, 2019 https://www.2degreesinstitute.org/reports/comparing_fuel_and_maintenance_costs_of_electric_and_gas_powered_vehicles_in_canada.pdf
- McMahon, Jeff, “Electric Vehicle Cost Less Than Half as Much to Drive”, Forbes, January 14, 2018, Accessed June 7, 2019 <https://www.forbes.com/sites/jeffmcmahon/2018/01/14/electric-vehicles-cost-less-than-half-as-much-to-drive/#45d1708e3f97>
- McMahon, Jeff, “The 4 Lingerin Obstacles To Electric Vehicle Adoption (And What Might Overcome Them)”, Forbes, January 27, 2019, Accessed June 7, 2019 <https://www.forbes.com/sites/jeffmcmahon/2019/01/27/the-4-lingerin-obstacles-to-electric-vehicle-adoption-and-what-might-overcome-them/#2224ba695c54>
- National Research Council, “Overcoming Barriers to Electric-Vehicle Deployment”, 2013, Accessed June 7, 2019 <http://gabrielse.physics.harvard.edu/gabrielse/papers/2013/OvercomingBarriersToElectricVehicleDeployment.pdf>

- New York State Energy Research and Development Authority, “Charging Station Installation Analysis: Tompkins County Plug-in Electric Vehicle Infrastructure Plan”, February 2017, Accessed June 21, 2019
<http://tompkinscountyny.gov/files2/itctc/projects/EV/Tompkins%20EVSE%20Installation%20Analysis%20FINAL.pdf>
- Norcalcars.com, “EV Charging Stations in San Mateo County”, Accessed May 19, 2019
<https://www.norcalcars.com/ev-electricvehiclecharging/sanmateocounty.aspx>
- Open San Mateo County, “RICAPS Transportation Contribution to Greenhouse Gas Emissions (Data by City)”, Accessed May 19, 2019
<https://data.smcgov.org/Environment/RICAPS-Transportation-Contribution-to-Greenhouse-G/hnf7-xha6>
- Open San Mateo County, “Vehicle Registrations By Fuel Type and Vehicle Type by Zip Code”, Accessed May 19, 2019
<https://data.smcgov.org/Transportation/Vehicle-Registrations-By-Fuel-Type-and-Vehicle-Typ/2bsy-n4ih>
- Pacific Gas & Electric Company, “Electric Vehicle Recharging Station Doubles As A Relaxation Forest”, Accessed May 19, 2019
http://www.energyhousecalls.com/electric-vehicle-recharging-station-doubles-as-a-relaxation-forest/?WT.mc_id=20181008_REE_RES_NL_email_2018109_article4
- Pacific Gas & Electric Company, “PG&E – Peninsula Clean Energy Joint Rate Comparisons”, Accessed June 8, 2019
https://www.pge.com/pge_global/common/pdfs/customer-service/other-services/alternative-energy-providers/community-choice-aggregation/pce_rateclasscomparison.pdf
- Pacific Gas & Electric Company, “Solar Choice program costs”, Accessed June 7, 2019
https://www.pge.com/en_US/residential/solar-and-vehicles/options/solar/solar-choice/rate-calculator.page
- Pacific Gas & Electric Company, “Welcome to the EV Savings Calculator”, Accessed June 7, 2019
<https://ev.pge.com/>
- Pacific Gas & Electric Company, “Will California Save The US Auto Industry From Itself?”, Accessed May 19, 2019
http://www.energyhousecalls.com/will-california-save-the-us-auto-industry-from-itself/?WT.mc_id=20181008_REE_RES_Trigger_email_20181010_Auto-CTA
- Peninsula Advanced Energy Community (PAEC), “About Us”, Accessed May 19, 2019
<https://clean-coalition.org/peninsula-advanced-energy-community/>
- Peninsula Clean Energy website, “Where PCE’s Power Comes From”,
<https://www.peninsulacleanenergy.com/energy-sources/>

- Plug In America, “Making Plug-In Car Shopping Easy”, Accessed May 19, 2019 <https://pluginamerica.org/>
- San Mateo County Civil Grand Jury 2010-11, “San Mateo County’s Vehicle Purchase Program”, Accessed May 19, 2019 https://www.sanmateocourt.org/documents/grand_jury/2010/hybrid_vehicles.pdf
- San Mateo County Energy Watch, “Electric Vehicle Adoption in San Mateo County”, Accessed May 19, 2019 <https://smcenergywatch.org/>
- San Mateo County Office of Sustainability, “EV Charge Up! The County’s Electric Vehicle Charging Program” Accessed May 16, 2019 <https://www.smcsustainability.org/energy-water/ev-charge-up/>
- Strauss, Ben and Wiles, Richard, “San Mateo Is Most At-Risk County In California From Sea Level Rise”, Climate Central, June 11, 2018 Accessed May 19, 2019 <https://www.climatecentral.org/pdfs/SLR-CA-SM-PressRelease.pdf>
- Stumpf, Rob, “Americans Cite Range Anxiety, Cost as Largest Barriers for New EV Purchases: Study”, The Drive, February 26, 2019, Accessed June 8, 2019 <https://www.thedrive.com/news/26637/americans-cite-range-anxiety-cost-as-largest-barriers-for-new-ev-purchases-study>
- Sustainable San Mateo County, “Transportation”, Accessed May 19, 2019 <http://www.sustainablesanmateo.org/home/indicators/transportation/>
- Tesla website, “About Tesla”, Accessed June 7, 2019 <https://www.tesla.com/about>
- U.S. Department of Energy, “Plug-In Electric Vehicle Handbook for Consumers”, February 2015 Accessed May 19, 2019 https://afdc.energy.gov/files/u/publication/pev_consumer_handbook.pdf
- U.S. Department of Energy, “The History of the Electric Car”, September 2014, Accessed June 7, 2019 <https://www.energy.gov/articles/history-electric-car>
- U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy , “How are Vehicle Size Classes Defined”, Accessed June 8, 2019 <https://www.fueleconomy.gov/feg/info.shtml#size-class>
- U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy , “Compare Side-by-Side”, Accessed June 8, 2019 <https://www.fueleconomy.gov/feg/Find.do?action=sbs&id=40609>

- U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy , “Find and Compare Cars”, Accessed June 8, 2019
<https://www.fueleconomy.gov/feg/noframes/40520.shtml>
- U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, “Vehicle Charging”, Accessed June 7, 2019
<https://www.energy.gov/eere/electricvehicles/vehicle-charging>

Climate Action Plans

- Town of Atherton, Final Climate Action Plan, October 19, 2019.
<https://www.ci.atherton.ca.us/DocumentCenter/View/3535/CAP-Admin-Draft-ATT-2-10-19-16-FINAL-ADMIN-DRAFT-002?bidId=> (last reviewed February 23, 2019)
- City of Belmont, 2017 Climate Action Plan
<https://www.belmont.gov/home/showdocument?id=15622> (las viewed February 28, 2019)
- City of Brisbane, Climate Action Plan, adopted September 17, 2015
<http://brisbaneca.org/sites/default/files/Adopted%20CAP%209-17-15.pdf> (last viewed September 16, 2018)
- City of Burlingame, Climate Action Plan, June 2009 http://www.cecburlingame.com/wp-content/uploads/2015/02/climate_action_plan.pdf (last viewed September 16, 2018)
- City of Colma, Climate Action Plan, adopted May 8, 2013
https://storage.googleapis.com/proudcity/colmaca/uploads/2017/02/5_08_13_Adopted-CAP.pdf (last viewed September 16, 2018)
- City of East Palo Alto, Final Climate Action Plan, December 2011 <https://www.ci.east-palo-alto.ca.us/documentcenter/view/748> (last viewed on February 23, 2019)
- City of Foster City, Climate Action Plan, September 2015
https://www.fostercity.org/sites/default/files/fileattachments/city_manager/page/2861/final-foster-city-cap_9-16-15.pdf (last viewed on February 23, 2019)
- Town of Hillsborough, Climate Action Plan, February 2010.
<https://www.hillsborough.net/DocumentCenter/View/606/2010-Climate-Action-Plan?bidId=> (last viewed February 23, 2019)
- City of Menlo Park, Climate Action Plan Update and Status Report, 2009
<http://worldcat.org/arcviewer/7/CBG/2013/04/17/H1366238244214/viewer/file1.pdf> (last viewed May 30, 2019)

- City of Pacifica, Climate Action Plan, July 14, 2014
<http://www.cityofpacifica.org/civicax/filebank/blobdload.aspx?blobid=7490> (last viewed September 16, 2018)
- City of San Carlos, Climate Action Plan, October 12, 2009
<https://www.cityofsancarlos.org/government/departments/city-manager-s-office-communications/responsible-environment/climate-action-plan> (last viewed September 16, 2018)
- City of San Mateo, Climate Action Plan, April 2015.
<https://www.cityofsanmateo.org/DocumentCenter/View/65426/San-Mateo-CAP---Adopted?bidId> (last viewed February 24, 2019).
- City of Redwood City Community Climate Action Plan (no date). https://www.ca-ilg.org/sites/main/files/file-attachments/redwood_city_community_climate_action_plan.pdf (last viewed June 2, 2019)
- City of South San Francisco, Climate Action Plan, prepared by PMC, adopted February 13, 2014 <http://www.ssf.net/home/showdocument?id=5640> (last viewed September 16, 2018)
- Town of Woodside, Climate Action Plan, September 22, 2015
https://www.woodsidetown.org/sites/default/files/fileattachments/planning/page/4631/town_of_woodside_-_final_climate_action_plan.pdf (last viewed February 24, 2019)
- County of San Mateo, Energy Efficiency Climate Action Plan, June 2013.
<https://www.smcustainability.org/download/climate-change/Energy-Efficiency-Climate-Action-Plan.pdf> (last viewed February 24, 2019)

APPENDIX A

Civil Grand Jury Survey

The following is the text of the survey that was sent to the County and each of the cities.

[Name of addressee]

[Address]

Re: Request for documents from San Mateo County 2018-19 Civil Grand Jury

Dear _____:

In connection with an investigation being conducted by the San Mateo County 2018-19 Civil Grand Jury, we are interested in responses to the following questions:

The number of Electric Vehicle charging stations your municipality has installed for government use

The number of EV charging stations your city has installed for public use

The number of vehicles in your cities fleet

How many of those vehicles are electric?

Does your city have a Climate Action Plan?

If so does that plan include the reduction of Green House Gas emissions through eliminating fossil fuel driven vehicles and adopting the use of Electric vehicles for government employees?

We would appreciate it if you could provide your answers to us within the next seven days. If any of the requests are unclear, or unduly burdensome to respond to, or if you need additional time to gather responsive documents, please let me know and we will be happy to clarify and/or work with you to make the request more manageable.

As you may be aware, under California law, all matters relating to the Grand Jury's work including the nature or subject of any inquiries it makes and its requests for documents, are to be treated as confidential by you and not disclosed except as directed by a court of law. You are, of course, free to engage the assistance of other personnel in your office to gather information responsive to our requests, but we ask that, except to the extent absolutely necessary, you not disclose this letter or the fact that the documents are being gathered in response to a Grand Jury request. Any violation of your statutory confidentiality obligation is punishable as contempt of court.

Thank you so much for your help.

Very Truly Yours,

Issued: August 12, 2019



Rico E. Medina
Mayor

CITY OF SAN BRUNO
OFFICE OF THE MAYOR

October 22, 2019

Honorable Donald J. Ayoob
Judge of the Superior Court
c/o Charlene Kresevich
Hall of Justice
400 County Center; 2nd Floor
Redwood City, CA 94063-1655

Re: Response of the City of San Bruno to the Grand Jury Report “Electric Vehicle Adoption in the Cities and County of San Mateo”

Dear Judge Ayoob:

Thank you for the opportunity to respond to the Grand Jury report titled “Electric Vehicle Adoption in the Cities and County of San Mateo.”

The City of San Bruno’s (“City”) response to the eleven listed findings and the four recommendations applicable to the City are listed below. The City Council approved this response at its regular meeting on October 22, 2019.

FINDINGS

F1: As of December 2018, eleven of the twenty cities in San Mateo County have no electric vehicles in their government fleets. These are:

- Atherton
- Belmont
- Colma
- Daly City
- East Palo Alto
- Half Moon Bay
- Hillsborough
- San Bruno
- San Carlos
- South San Francisco
- Woodside

567 El Camino Real, San Bruno, CA 94066-4299
Voice: (650) 616-7060 • Fax: (650) 742-6515
www.sanbruno.ca.gov

The City agrees that San Bruno does not have any electric vehicles in its fleet. The City does not have information to either agree or disagree with the finding as it relates to cities other than San Bruno.

F2: As of December 2018, in two of the twenty cities in San Mateo County approximately one percent of the city fleet are electric vehicles. These are:

- **Burlingame**
- **Foster City**

The City does not have information to either agree or disagree with the finding as it relates to cities other than San Bruno.

F3: As of December 2018, in three of the twenty cities in San Mateo County approximately three percent of the city fleet are electric vehicles. These are:

- **Pacifica**
- **Redwood City**
- **San Mateo**

The City does not have information to either agree or disagree with the finding as it relates to cities other than San Bruno.

F4: As of December 2018, in the City of Millbrae approximately seven percent of the city fleet is electric vehicles.

The City does not have information to either agree or disagree with the finding as it relates to a city other than San Bruno.

F5: As of December 2018, in the two of the twenty cities in San Mateo County approximately ten percent of the city fleet are electric vehicles. These are:

- **Brisbane**
- **Menlo Park**

The City does not have information to either agree or disagree with the finding as it relates to cities other than San Bruno.

F6: As of December 2018, the Town of Portola Valley has converted two of its six city vehicles to electric vehicles, or approximately 33 percent.

The City does not have information to either agree or disagree with the finding as it relates to a city other than San Bruno.

F7: San Mateo County has 709 fleet vehicles. Of those, 218 are Enhanced AT PZEVs and two are ZEVs (approximately 31 percent).

The City does not have information to either agree or disagree with the finding as it relates to the County.

F8: The County and eleven of the cities in the county have Climate Action Plans that discuss adoption of sustainable purchasing policies for converting their fleets to fuel efficient vehicles (hybrid, electric, alternative fuel). The cities are:

- Atherton
- Belmont
- Brisbane
- Burlingame
- East Palo Alto
- Foster City
- Menlo Park
- Pacifica
- Redwood City
- San Carlos
- San Mateo

The City does not have information to either agree or disagree with the finding as it relates to cities other than San Bruno.

F9: San Mateo Office of Sustainability released a “Green Municipal Fleet Toolkit” in March of 2019. The purpose of this Toolkit is to assist jurisdictions on how to reduce greenhouse gas emissions from their municipal fleets.

The City agrees with the finding but is not aware of the date that the Green Municipal Fleet Toolkit was released.

F10: The San Mateo County Office of Sustainability technical support pilot program for municipal fleets, which is funded to assist up to four cities in converting their fleets to ZEVs, runs through December 2019.

The City does not have information to either agree or disagree with the finding.

F11: The Climate Mayors EV Purchasing Collaborative is available to assist the cities and the County in conversion of fleet vehicles to ZEVs through aggregate purchasing.

The City does not have information to either agree or disagree with the finding.

RECOMMENDATIONS

R1: By March 31, 2020, the County of San Mateo and each city within the county should conduct a review of its government fleet procurement policy relating to electric vehicles and present a report at a public meeting. At a minimum, the review should be based on an analysis that includes up-to-date life-cycle costs of commercially available electric vehicles and an up-to-date assessment of whether electric vehicles can meet the performance needs of local jurisdictions for power, range, battery life, and other relevant factors. If an agency has completed such a review within the last three years, then such

review should be presented to its governing body at a public meeting on or before December 31, 2019.

The recommendation will require further extensive and detailed analysis of the City’s fleet. The City will provide the results of the evaluation by the requested date.

R2: By March 31, 2020, the County of San Mateo and each city within the county should conduct an analysis of the obstacles, if any, to the implementation of an EV government fleet procurement policy and present a report at a public meeting. This could include, for example, the availability of electric vehicle charging stations to serve the vehicle fleet and training of vehicle maintenance staff. If an agency has completed such an analysis within the last three years, then such analysis should be presented to its governing body at a public meeting on or before December 31, 2019.

The recommendation will require further extensive and detailed analysis of the City’s fleet. The City will provide the results of the evaluation by the requested date.

R3: By September 30, 2019, the County of San Mateo Department of Public Works and each city within the county should review the “Roadmap for Municipal Green Fleets” toolkit from the San Mateo Office of Sustainability, including the information on the possibility of adopting an EV First Policy.

The City will comply with this recommendation.

R4: By September 30, 2019, the County of San Mateo and each city within the county, if they have not already initiated such a process, should investigate joining the Climate Mayors EV Purchasing Collaborative to take advantage of aggregate purchasing.

The City will comply with this recommendation.

Sincerely,

Rico E. Medina
Mayor



City Council Agenda Item Staff Report

CITY OF SAN BRUNO

DATE: October 22, 2019

TO: Honorable Mayor and Members of the City Council

FROM: Jovan D. Grogan, City Manager

PREPARED BY: Jimmy Tan, Public Works Director

SUBJECT: Adopt Resolution Accepting the Arbor Court Pressure Regulating Valve Replacement Project as Complete, Authorizing the Filing of Notice of Completion with the San Mateo County Recorder's Office, and Authorizing Release of the Construction Contract Retention in the Amount of \$19,498

BACKGROUND:

The City's Capital Improvement Program (CIP) includes the Arbor Court Pressure Regulating Valve (PRV) Replacement Project to replace an existing pressure regulating valve station located on Arbor Court that has reached the end of its life cycle. This pressure regulating station reduces high incoming water pressure to a normal distributing pressure for delivery to homes in the Rollingwood Neighborhood. The original location of the replaced PRV station was within a vault underneath the sidewalk at the intersection of Arbor Court / Greenwood Way. Due to the larger size of the replacement station it was required to relocate the PRV station to a vault underneath the roadway located approximately 6 feet from the previous location. The space that was previously occupied by the replaced station has been restored with concrete sidewalk.

The new PRV station contains larger regulating and bypass valves to help improve fire flows and allow the City flexibility in providing water to a different pressure zone during emergencies. Other improvements added to the PRV station include installation of supervisory control and data acquisition (SCADA) capability to this facility. The SCADA unit provides 24/7 monitoring of facility operations and is utilized to provide critical real-time information to City staff in the Water Department.

DISCUSSION:

On December 11, 2018, the City Council awarded a construction contract to Casey Construction in the amount of \$369,060 with a construction contingency of \$56,000 and construction management budget of \$37,000 for a total project budget of \$546,060. The project was scheduled to be completed within 120 calendar days after notice to proceed and the project reached substantial completion on August 2019.

Two change orders were issued to Casey Construction during the construction due to unforeseen conditions and work scope changes. The total change order amount of \$20,901

included removing an existing tapping sleeve and replacing the segment with ductile iron pipe, updating the SCADA antenna location, and installing 2 flow meters in the vault, which resulted in a final contract amount of \$389,961. The project was completed within budget and without any major issues.

All construction work as part of this contract has been completed to the satisfaction of the City's project management team. There are no unresolved stop notices or outstanding construction claims for this project. The construction contract requires a 5% retention which totals \$19,498 be withheld by the City. Staff recommends that the City Council accept the project as complete, authorize filing Notice of Completion with the San Mateo County Recorder's Office, and approve the release of the contract retention.

FISCAL IMPACT:

The Fiscal Year 2019-24 Capital Improvement Program Budget for the project includes an allocation of \$546,060 from the Water Enterprise Fund to complete the design, bid and construction phases. As detailed below, the total expenditure for the project was \$519,200. City staff performed the civil design as well as construction management and inspection on this project. The remaining project budget of approximately \$26,860 will be returned to the Water Enterprise Fund.

	<u>Expenditure</u>
Construction Contract	\$ 389,961
Reproduction and Advertisement	\$ 929
PG&E New Service	\$ 3,815
Design	\$ 70,031
Construction Management and Inspection	<u>\$ 54,464</u>
Project Total	\$ 519,200

ALTERNATIVES:

1. Do not accept the construction contract as complete and do not authorize filing of a Notice of Completion.

RECOMMENDATION:

Adopt Resolution Accepting the Arbor Court Pressure Regulating Valve Replacement Project as Complete, Authorizing the Filing of Notice of Completion with the San Mateo County Recorder's Office, and Authorizing Release of the Construction Contract Retention in the Amount of \$19,498.

DISTRIBUTION:

None

ATTACHMENTS:

1. Resolution
2. Project Acceptance Information Form

DATE PREPARED:

September 17, 2019

RESOLUTION NO. 2019 - ____

RESOLUTION ACCEPTING THE ARBOR COURT PRESSURE REGULATING VALVE REPLACEMENT PROJECT AS COMPLETE, AUTHORIZING THE FILING OF NOTICE OF COMPLETION WITH THE SAN MATEO COUNTY RECORDER'S OFFICE, AND AUTHORIZING RELEASE OF THE CONSTRUCTION CONTRACT RETENTION IN THE AMOUNT OF \$19,498

WHEREAS, the City's Capital Improvement Program (CIP) included the replacement of the existing pressure regulating valve station at Arbor Court; and

WHEREAS, On December 11, 2019, the City Council awarded a construction contract for the Arbor Court Pressure Regulating Valve Replacement Project to Casey Construction in the amount of \$369,060 with a construction contingency of \$56,000, construction management staff time of \$37,000 and a total project budget of \$546,060; and

WHEREAS, Casey Construction began construction in April 2019 and reached substantial completion in August 2019; and

WHEREAS, two contract change orders totaling \$20,901 were issued which increased the contract amount to \$389,961; and

WHEREAS, all construction work as part of this contract has been completed to the satisfaction of the City's project management team; and

WHEREAS, the construction contract requires the filing of a Notice of Completion of this project with the San Mateo County Recorder's Office and release of the construction contract retention in the amount of \$19,498 upon the acceptance of the project as complete.

NOW, THEREFORE, BE IT RESOLVED that the City Council accepts the Arbor Court Pressure Regulating Valve Replacement Project as complete, authorizing the filing of Notice of Completion with the San Mateo County Recorder's Office, and authorizing release of the construction contract retention in the amount of \$19,498.

Dated: October 22, 2019

ATTEST:

Melissa Thurman, City Clerk

-o0o-

I, Melissa Thurman, City Clerk, do hereby certify that the foregoing Resolution was duly and regularly passed and adopted by the City Council of the City of San Bruno this 22nd day of October 2019 by the following vote:

AYES: Councilmembers: _____

NOES: Councilmembers _____

ABSENT: Councilmembers: _____



**Capital Improvement Program
Project Acceptance Information Form**

As of September 18, 2019

Contract Name:	Arbor Court Pressure Regulating Valve Replacement Project	Contract No.:	11005
Construction Contractor:	Casey Construction		
Construction Management and Inspection Services	Performed by City Staff		

Project Information:

Project Description:	Install new Pressure Regulating Valve Station at Arbor Court with SCADA monitoring system
Construction Contract Award:	December 11, 2018
Start of Construction:	April 4, 2019
Contract Change Orders (CCO):	Two change orders were issued for installing flow meters in the vault, removing an existing tapping sleeve and replacing with a new section of pipe, and relocating the SCADA antenna location.
Substantial Completion:	August 1, 2019
Final Completion:	September 16, 2019
Notice of Completion:	Scheduled for filing on October 25, 2019

Project Costs:

	Budget	Actual
TOTAL PROJECT	\$ 546,060	\$ 519,200
Design (in-house, surveying, electrical consultant)	\$ 80,000	\$ 70,031
PG&E (new service cost)	\$ 4,000	\$ 3,815
Construction Contract	\$ 369,060	\$ 369,060
Contingency	\$ 56,000	-
Construction Management Staff Time	\$ 37,000	\$ 54,464
Change Order	-	\$ 20,901
Reproduction & Advertisement	-	\$ 929



**City Council Agenda Item
Staff Report**

CITY OF SAN BRUNO

DATE: October 22, 2019

TO: Honorable Mayor and Members of the City Council

FROM: Jovan D. Grogan, City Manager

PREPARED BY: Jimmy Tan, Public Works Director

SUBJECT: Adopt Resolution Accepting the Crystal Springs Road Sewer Replacement Project as Complete, Authorizing the Filing of Notice of Completion with the San Mateo County Recorder's Office, and Authorizing Release of the Construction Contract Retention in the Amount of \$162,028.49

BACKGROUND:

The FY 2018-19 Sewer Main Improvement and Replacement Capital Improvement Program (CIP) includes a project to replace the sewer main along Crystal Springs Road. Projects identified in the Sewer Main Improvement and Replacement CIP are based on sewer main segments identified as priorities in the work program that considered the following issues:

- Regulatory deadlines that require completion of sewer capacity projects.
- Sewer condition assessments that identify pipelines requiring replacement.
- Replacement of aging and under-sized sewer infrastructure to reduce infiltration/inflow and ongoing maintenance needs.

The Crystal Springs Road Sewer Replacement Project replaced approximately 3,000 feet of sewer main pipelines ranging from 8-inches to 24-inches in diameter beginning at the intersection of Oak Avenue and Crystal Springs Road, progressing easterly along Crystal Springs Road to El Camino Real, and northerly along El Camino Real. The primary purpose of the Crystal Springs Road Sewer Replacement Project was to alleviate capacity deficient sewer pipelines along Crystal Springs Road and reduce the risk of future sanitary sewer overflows by rerouting the flow to the new pipeline. The completion of this project provides residents with a more reliable sewer infrastructure system and prevent future sanitary sewer overflows.

City staff provided construction notices to residents in the construction zone to notify them of the construction schedule, posted regular updates to the City's website and sent updates to the school in the area.

DISCUSSION:

On July 24, 2018, the City Council approved a construction contract with K.J. Woods Construction, Inc. in the amount of \$3,348,000 with a construction contingency of \$502,200 and

a contract for construction management and inspection services with 4Leaf, Inc. in an amount not to exceed \$230,720, along with project contingency, and staff construction management and inspection totaling in the amount of \$4,469,581 for the Crystal Springs Road Sewer Replacement Project. The project was scheduled to be completed within 120 working days after notice to proceed which was in February 2019. K.J. Woods Construction, Inc. completed construction of the Crystal Springs Road Sewer Replacement Project in July 2019.

Six change orders were issued to K.J. Woods Construction, Inc. during the construction due to unforeseen conditions and work scope changes. The total change orders amounted (\$107,430.21), which was reduced the total contract price. The changed orders included items related to conflicting utilities, installation of additional pipeline, installation of a new manhole, additional pothole work, cost in additional material, and bid quantity adjustments to match actual completed quantities, which resulted in the final contract amount of \$3,240,569.79. The project was completed within budget and without any major issues.

All construction work as part of this contract has been completed to the satisfaction of the City's project management team. There are no unresolved stop notices or outstanding construction claims for this project. The construction contract required a 5% retention, which totals \$162,028.49, be withheld by the City. Staff recommends that the City Council accept the project as complete, authorize filing a Notice of Completion with the San Mateo County Recorder's Office, and approve release of the contract retention.

FISCAL IMPACT:

The total approved project budget which included design, K.J Woods Construction, Inc. contract, 4Leaf Inc. construction management and inspection services contract, project contingency, and staff project management during construction was \$4,469,581. As detailed below, the total expenditure for the project was approximately \$3,708,091.50. The remaining budget of approximately \$761,489.50, will be returned to the Wastewater Enterprise Fund.

	<u>Expenditure</u>
Design Contract (Bellecci & Associates)	\$ 244,356
Staff Project Management (Design Phase)	\$ 9367.01
Construction Contract (K.J. Woods Construction, Inc.)	\$ 3,240,569.79
Construction Management & Inspection Contract (4Leaf, Inc.)	\$ 207,860
Staff Project Management (Construction Phase)	\$ 4247.37
Reproduction & Advertisement	<u>\$ 1691.33</u>
	\$ 3,708,091.50

ALTERNATIVES:

1. Do not accept the construction contract as complete and do not authorize filing of a Notice of Completion.

RECOMMENDATION:

Adopt resolution accepting the Crystal Springs Road Sewer Replacement Project as complete, authorizing the filing of Notice of Completion with the San Mateo County Recorder's Office, and authorizing release of the construction contract retention in the amount of \$162,028.49.

DISTRIBUTION:

None

ATTACHMENTS:

1. Resolution
2. Project Acceptance Information Form

DATE PREPARED:

September 25, 2019

RESOLUTION NO. 2019 - ____

RESOLUTION ACCEPTING THE CRYSTAL SPRINGS ROAD SEWER REPLACEMENT PROJECT AS COMPLETE, AUTHORIZING THE FILING OF NOTICE OF COMPLETION WITH THE SAN MATEO COUNTY RECORDER'S OFFICE, AND AUTHORIZING RELEASE OF THE CONSTRUCTION CONTRACT RETENTION IN THE AMOUNT OF \$162,028.49

WHEREAS, the FY 2018-19 Sewer Main Improvement and Replacement Capital Improvement Program (CIP) includes a project to replace the sewer main along Crystal Springs Road; and

WHEREAS, the completion of this project will help alleviate on-going maintenance issues and reduce potential future sanitary sewer overflows; and

WHEREAS, on July 24, 2018, the City Council approved a construction budget in the amount of \$1,297,719 for Crystal Springs Road Sewer Replacement Project which included \$997,719 for the construction contract to K.J. Woods Construction, Inc., \$150,000 for construction contingencies, \$100,000 for staff construction management and inspection services, and \$50,000 for material and compaction testing services; and

WHEREAS, the Crystal Springs Road Sewer Main Replacement Project replaced approximately 3,000 feet of sewer main pipelines ranging from 8-inches to 24-inches in diameter beginning at the intersection of Oak Avenue and Crystal Springs Road, progressing easterly along Crystal Springs Road to El Camino Real, and northerly along El Camino Real; and

WHEREAS, six change orders totaling the amount of \$(107,430.21) included items related to conflicting utilities, installation of additional pipeline, installation of a new manhole, additional pothole work, cost in additional material, and bid quantity adjustments to match actual completed quantities; and

WHEREAS, the total approved project budget which included design, the K.J. Woods Construction, Inc. contract, the 4Leaf Inc. construct management and inspection services contract, project contingency, and staff construction management and inspection was \$4,469,581; and

WHEREAS, the total expenditure for the project was approximately \$3,708,091.50; and

WHEREAS, remaining budget of approximately \$761,489.50 will be returned to the Wastewater Capital Fund; and

WHEREAS, all construction work as part of this contract has been completed to the satisfaction of the City's project management team; and

WHEREAS, the construction contract requires the filing of a Notice of Completion of this project with the San Mateo County Recorder's Office and release of the construction contract retention in the amount of \$162,028.49 upon the acceptance of the project as complete.

NOW, THEREFORE, BE IT RESOLVED that the City Council accepts the Crystal Springs Road Sewer Replacement Project as complete, authorizes the filing of Notice of Completion with the San Mateo County Recorder's Office, and authorizes release of the construction contract retention in the amount of \$162,028.49.

Dated: October 22, 2019

ATTEST:

Melissa Thurman, City Clerk

-o0o-

I, Melissa Thurman, City Clerk, do hereby certify that the foregoing Resolution was duly and regularly passed and adopted by the City Council of the City of San Bruno this 22nd day of October, 2019 by the following vote:

AYES: Councilmembers: _____
NOES: Councilmembers _____
ABSENT: Councilmembers: _____



**Capital Improvement Program
Project Acceptance Information Form**

As of September 31, 2019

Contract Name:	Crystal Springs Road Sewer Replacement Project	Contract No.:	84342
Construction Contractor:	K.J. Woods Construction Inc.		
Construction Management and Inspection Services	4Leaf, Inc.		

Project Information:

Project Description:	The project replaced approximately 3,000 feet of sewer main pipelines ranging from 8-inches to 24-inches in diameter beginning at the intersection of Oak Avenue and Crystal Springs Road, progressing easterly along Crystal Springs Road to El Camino Real, and northerly along El Camino Real.
Construction Contract Award:	K.J. Woods Construction, Inc. – September 17, 2018
Start of Construction:	February 12, 2019
Contract Change Orders (CCO):	Six change orders were issued to K.J. Woods Construction, Inc. during the construction for unforeseen conditions work scope changes. The total change order amount of \$107,430.21 included items related to conflicting utilities, installation of additional pipeline, installation of a new manhole, additional pothole work, cost in additional material, and bid quantity adjustments to match actual completed quantities, which resulted in the final contract amount of 3,240,569.79.
Substantial Completion:	July 2019
Final Completion:	August 2019
Notice of Completion:	Scheduled for filing by October 25, 2019

Construction Project Costs:

	Budget	Actual
TOTAL PROJECT	\$ 4,469,581	\$ 3,708,091.50
Design Contract (Bellecci & Associates)	\$ 244,356	\$ 244,356
Staff Project Management (Design Phase)	\$ 19,305	\$ 9,367.01
Construction Contract (K.J. Woods Construction, Inc.)	\$ 3,348,000	\$ 3,348,000
Contingency	\$ 502,200	\$ -
Contract Change Orders CCOs	\$ -	\$ (107,430.21)
Construction Management & Inspection Contract (4Leaf, Inc.)	\$ 230,720	\$ 207,860
Staff Project Management (Construction Phase)	\$ 125,000	\$ 4,247.37
Reproduction & Advertisement	-	\$ 1,691.33



**City Council Agenda Item
Staff Report**

CITY OF SAN BRUNO

DATE: October 22, 2019

TO: Honorable Mayor and Members of the City Council

FROM: Jovan D. Grogan, City Manager

PREPARED BY: Jimmy Tan, Public Works Director
Dennis Bosch, Deputy Public Works Director

SUBJECT: Adopt Resolution Adopting the Updated Sanitary Sewer Management Plan

BACKGROUND:

The City of San Bruno provides residents with sanitary sewer services through a collection system that includes approximately 85 miles of gravity sewer mains, two miles of pressure (force) mains, and six sewerage pump stations. All wastewater is conveyed to the City of South San Francisco's Shaw Road Pump Station, from there it is pumped to the Water Quality Control Plant jointly owned by the cities of South San Francisco and San Bruno. Protection of the community's public health requires that the system is managed in the most effective and efficient way possible.

In 2006, the State of California Water Resources Control Board (Water Board) adopted the Statewide General Waste Discharge Requirement (WDR) (Order No. 2006-0003-DWQ), for Sanitary Sewer Systems. The WDR set rules and regulations for operators of Sanitary Sewer Systems with important goals to ensure proper sewer system operations, maintenance of collection system, and treatment. One of the regulations within the WDR requires that each agency maintaining and operating a sanitary sewer system must have a Sanitary Sewer Management Plan (SSMP). The plan must outline and demonstrate that the City of San Bruno is in compliance with all State rules, regulations, and requirements for a sanitary sewer system operator. Updates to the SSMP are required to be submitted to the Water Board every five years.

The City of San Bruno developed its first SSMP in 2008 which contained multiple elements such as Standard Specifications and Drawings, Legal Authority, Fats, Oils, and Grease (FOG) Program, Master Plan Study Assessment and future plan of rehabilitation projects, Emergency Response Plan, Sanitary Sewer Overflow (SSO) Reduction Plan, Best Management Practices, Maintenance and Repair requirements, and a Capacity Assurance Plan. The completion of the document met the WDR rules and requirements.

In 2013, the State of California Water Resources Control Board updated the original 2006 WDR, with new rules and requirements for Sewer System Operators (Order No. WQ 2013-0058-EXEC). One of the changes contained in the new order was the adjustment of the Two

Tiered/Category SSO reporting requirements to a Three Tiered/Category requirement. The recommendation to report SSOs from privately owned laterals remained unchanged. The SSO reporting is being performed in accordance with the WDR requirements. The revised WDR also required every sewer system operator to revise and resubmit a SSMP to match the requirements set forth in the updated Order. Reporting changes require operators to include the causes and circumstances of the discharge and corrective action completed.

The SSMP describes all operator procedures, equipment, and resources to respond and prevent sanitary sewer discharges / SSOs. It also includes applicable elements of the Sewer Master Plan, Capital Improvement Program goals, legal authority, and operational goals and standards for operating a sanitary sewer system in a responsible order.

DISCUSSION:

There were no significant changes to this year's SSMP update. Staff updated the annual number of SSOs and related information since the previous SSMP along with updating City emergency contact information. The last significant changes were in the 2015 SSMP update, which included changes to the SSO category identification numbering and reporting requirements, staff training requirements, role responsibilities for legal reporting, chain of command flow charts, and overflow sample testing. The Wastewater Division incorporated these changes into its current operational work program. There are no operational changes required of the City with approval of this updated SSMP.

The 2013 Statewide General Waste Discharge Requirements (WDR) requires SSMP updates be adopted by the sanitary sewer operator's governing council, which for San Bruno is the City Council. The last SSMP was approved by the City Council at the April 12, 2016 City Council Meeting.

Once approved by the City Council, the updated Sanitary Sewer Management Plan will be submitted to the Water Board for review and be posted on the City's website. The updated SSMP is also designed to satisfy the specific requirements of the Cease and Desist Order (CDO) with the San Francisco Bay Regional Water Quality Control Board and the Consent Decree with San Francisco Baykeeper.

The Water Board is expected to release revisions to the Statewide General Waste Discharge Requirements (WDR) in the next few years. SSMP will be updated per the Water Board requirements at that time.

FISCAL IMPACT:

This document update was completed with internal staff and there were no additional preparation or consulting costs. There is also no direct financial impact associated with adoption of the updated Sanitary Sewer Management Plan.

ALTERNATIVES:

1. Request additional information from staff and delay adoption of the Sanitary Sewer Management Plan.
2. Do not adopt the updated Sanitary Sewer Management Plan. This alternative will leave the City out of compliance with State Law and will result in potential notice of violations from the State Water Quality Control Board and Baykeeper.

RECOMMENDATION:

Adopt resolution adopting the updated Sanitary Sewer Management Plan.

ATTACHMENTS:

1. Resolution
2. Sanitary Sewer Management Plan

DISTRIBUTION:

None

DATE PREPARED:

September 10, 2019

RESOLUTION NO. 2019 - ____

ADOPTING THE UPDATED SANITARY SEWER MANAGEMENT PLAN

WHEREAS, in 2006, the State of California Water Resources Control Board adopted the Statewide General Waste Discharge Requirement (WDR), (Order No. 2006-0003-DWQ), for Sanitary Sewer Systems; and

WHEREAS, the WDR sets out rules and regulations for operators of Sanitary Sewer Systems with important goals to ensure proper sewer system operations, maintenance of collection systems, and treatment; and requires affected agencies develop a Sanitary Sewer Management Plan (SSMP) and update the Plan every five years or as revised WDR requirements are adopted by the Water Board;

WHEREAS, the purpose of the Sanitary Sewer Management Plan is to provide comprehensive sewer operations elements including the applicable Sewer Master Plan, Capital Improvement Program, legal authority, and operational goals and standards for operating a sanitary sewer system in a responsible order; and

WHEREAS, the City of San Bruno, as an Operator of a Sanitary Sewer System, developed the first Sanitary Sewer Management Plan in 2008 and the most recent update was adopted by the City Council at the April 12, 2019 City Council Meeting; and

WHEREAS, in 2013 the California Water Resources Control Board updated the 2006 Waste Discharge Requirement (Order No. WQ 2013-0058-Exec), which expanded the number of sanitary sewer overflow categories from two to three; required operators to include the causes and circumstances of each discharge and the corrective action(s) completed; and

WHEREAS, the proposed Sanitary Sewer Management Plan update is in compliance with the 2013 State Waste Discharge Requirement and designed to satisfy the requirements of the Cease and Desist Order with the San Francisco Bay Regional Water Quality Control Board and the Consent Decree with San Francisco Baykeeper; and

WHEREAS, there are no significant changes to this year's SSMP, other than providing updates to the number of sanitary sewer overflows and related information to the SSMP since the previous update along with updating City emergency contact information; and

WHEREAS, there was no cost to prepare this updated Sanitary Sewer Management Plan and there is no anticipated financial impact by adopting the updated plan.

NOW, THEREFORE, BE IT RESOLVED: that the City Council adopts the Updated Sanitary Sewer Management Plan.

Dated: October 22, 2019

ATTEST:

Melissa Thurman, City Clerk

-o0o-

I, Melissa Thurman, City Clerk, do hereby certify that the foregoing Resolution was duly and regularly passed and adopted by the City Council of the City of San Bruno this 22nd day of October 2019 by the following vote:

AYES: Councilmembers: _____

NOES: Councilmembers _____

ABSENT: Councilmembers: _____

CITY OF SAN BRUNO



Sewer System Management Plan October 2019

Original Council Adoption Date: November 2, 2007
City Council Recertified: October 22, 2019
Resolution Number: _____
City Wastewater Discharge Identification (WDID): SSO10176

Table of Contents

Introduction.....	7
Sewer System Management Plan	7
Sanitary Sewer System Facilities	8
Definitions, Acronyms, and Abbreviations	11
References	18
Element I: Goals.....	20
I.1 SSMP Goals.....	20
Element II: Organization	21
II-1 Organizational Structure.....	21
II-2 Authorized Representatives.....	23
II-3 Responsibility for SSMP Implementation and Maintenance.....	27
II-4 SSO Reporting Chain of Communication	29
III: Legal Authority	31
III-1 Municipal Code	31
III-2 References	33
Element IV: Operations and Maintenance Program	34
IV-1 Collection System Mapping	34
IV-2 Preventive Operation and Maintenance.....	35
IV-2.1 Gravity Sewers	36
IV-2.2 Pump Stations.....	41
IV-2.3 Force Mains	42
IV-2.4 Private Sewer Laterals.....	43
IV-2.5 Root Foaming	43
IV-2.6 Rehabilitation and Replacement Program	44
IV-2.7 Training	45
IV-2.8 Equipment and Replacement Parts	48
IV-2.9 Outreach to Sewer Service Contractors.....	48
IV-3 Element IV Appendices.....	49
Appendix IV-1: Sewer Cleaning Results Matrix.....	49
Appendix IV-2: Renewal & Replacement Program Budget in \$1,000's.....	50
Appendix IV-3: Major Sewer System Equipment Inventory	51

Appendix IV-4: Critical Sewer System Replacement Parts Inventory.....	52
IV-4 References	52
Element V: Design and Performance Provisions.....	53
V-1 Sanitary Sewer Design Standards and Specifications	53
V-2 Procedures and Standards for Inspection and Testing of New and Rehabilitated Facilities	54
V-3 References- Design and Performance Provision Documents	54
Element VI: Overflow Emergency Response Plan	55
VI-1 Purpose	55
VI-2 Policy.....	56
VI-3 Goals.....	56
VI-4 SSO Detection and Notification	56
VI-4.1 Public Observation	57
VI-4.2 City Staff Observation.....	58
VI-4.3 Contractor Observation	58
VI-5 SSO Response Procedures.....	60
VI-5.1 Sewer Overflow/Backup Response Summary.....	60
VI-5.2 First Responder Priorities	60
VI-5.3 Safety.....	60
VI-5.4 Initial Response	62
VI-5.5 Initiate Spill Containment Measures	62
VI-5.6 Restore Flow.....	63
VI-5.7 Equipment.....	63
VI-6 Recovery and Cleanup.....	64
VI-6.1 Estimate the Volume of Spilled Sewage	64
VI-6.2 Recovery of Spilled Sewage.....	64
VI-6.3 Clean-up and Disinfection	64
VI-6.4 Public Notification.....	65
VI-7 Water Quality	66
VI-7.1 Waters of the State.....	66
VI-7.2 Water Quality Sampling and Testing	66
VI-7.3 Water Quality Monitoring Plan	66
VI-7.4 SSO Technical Report	67
VI.8 Sewer Backup Into/Onto Private Property Claims Handling Policy	68

VI-9	Notification, Reporting, Monitoring and Recordkeeping Requirements.....	68
VI-9.1	Regulator Required Notifications.....	69
VI-9.2	Complaint Records.....	71
VI-10	Post SSO Event Debriefing.....	71
VI-11	Failure Analysis Investigation.....	72
VI-12	SSO Response Training.....	73
VI-12.1	Initial and Annual Refresher Training.....	73
VI-12.2	SSO Response Drills.....	74
VI-12.3	SSO Training Record Keeping.....	75
VI-12.4	Contractors Working On City Sewer Facilities.....	75
VI-13	Authority.....	75
VI-14	References.....	75
Element VII: Fats, Oils, and Grease (FOG) Control Program.....		76
VII-1	Nature and Extent of FOG Problem.....	76
VII-2	FOG Public Education Outreach.....	78
VII-3	FOG Disposal Plan.....	79
VII-4	Legal Authority for FOG Discharges.....	79
VII-5	Grease Disposal Devices, BMPs, Recordkeeping and Reporting Requirements.....	79
VII-6	FOG Inspection and Enforcement Authority.....	80
VII-7	FOG Cleaning Program Requirements – Hot Spot Cleaning.....	81
VII-8	FOG Characterization Assessment.....	81
VII-9	References.....	81
Appendix VII - 1: List of Grease Waste and Used Oil Haulers.....		82
Element VIII: System Evaluation and Capacity Assurance Plan.....		83
VIII-1	System Evaluation - Collection System Master Plan.....	83
VIII-2	Design Criteria.....	84
VIII-3	Capacity Enhancement Measures – Capital Improvement Program.....	85
VIII-4	Schedule.....	85
VIII-5	References.....	87
Element IX: Monitoring, Measurement, and Program Modifications.		88
IX-1	Performance Measures.....	88
IX-2	Baseline Performance.....	90
IX-2.1	Lower Laterals.....	93

IX-3	Performance Monitoring and Program Changes	95
IX-1	References	95
Element X: SSMP Program Audits.....		96
X-1	Audits Procedures, Roles and Responsibilities	96
X-2	SSMP Program Modification/Updates Process	97
X-3	References	103
Element XI: Communication Program		104
XI-1	Communication during SSMP Development and Implementation	104
XI-2	Availability of the SSMP and All Reference Documents	105
XI-3	Communication with Satellite Wastewater Collection Systems	105
XI-4	References	105
Appendices.....		111
Appendix A: Sewer System Management Plan Audit Reports		111
Appendix B: Log of Sewer System Management Plan Changes		126
Appendix C: Sewer System Management Plan Council Adoption Documents		127

Table of Tables

Intro Table 1: Gravity Sewer System Size Distribution	9
Intro Table 2: Sewer System Materials of Construction.....	9
Intro Table 3: Inventory of Sewer Lines by Pipe Age	10
Table II - 1: Responsible Officials in Water Quality Chain of Communication	28
Table III - 1: Summary of Legal Authorities in the San Bruno Municipal Code and Other Sources	31
Table IV - 1: Hot Spot Cleaning Lines	37
Table IV - 2: Historical Line Cleaning Results	37
Table IV- 3: Historical Results of Closed Circuit Television.....	38
Table IV - 4: Pump Station Locations and Descriptions	42
Table IV - 5: Force Main Locations and Descriptions	43
Table IV - 6: Sewer Cleaning results Matrix	49
Table IV - 7: Renewal & replacement Program Budget in \$1000's.....	50
Table IV - 8: Major Sewer System Equipment Inventory	51
Table IV - 9: Critical Sewer System Replacement Parts Inventory.....	52
Table VI - 1: Regulator required notifications.....	70
Table VII - 1 FOG Control Program Roles and Responsibilities	77
Table VII - 2: Grease Waste Haulers	82
Table VII - 3: Used Cooking Oil Haulers	82
Table VIII - 1: Recommended Sewer System Capital Improvement Program, 2014 Sewer System Master Plan.....	86
Table IX - 1: Total Volume of Spills Per Year	89
Table IX - 2: Gravity Sewer, Pump Station, and Force Main SSOs by Fiscal Year	90
Table IX - 3: FY Totals for SSOs by Cause	91
Table IX - 4: FY Totals for Sewer Mains (Volume Spilled, Portion Contained, and Volume to Surface Waters).....	92
Table IX - 5: Lower Lateral SSOs by Fiscal Year.....	93
Table X - 1: SSMP Audit Checklist.....	98
Table XI - 1: SSMP Communications Strategies	110
Table B - 1: Log of SSMP Changes.....	126

Table of Figures

Intro Figure 1: San Bruno Sewer System Map	8
Figure II - 1: San Bruno Organization Chart	22
Figure II - 2: Reporting Chain of Communications.....	31
Figure IV - 1: San Bruno Public Works Department Organization Chart.....	35
Figure IV - 2: PACP Pipeline Sewer Ratings	39
Figure IV - 3 CCTV Return Frequency based upon PACP Ratings.....	39
Figure IV - 4: Pump Station Location Map	41
Figure VI – 1: Overview of Receiving a Sewage Overflow or Backup Report Procedure	59
Figure VI - 2: Overview of the response activities	61
Figure IX - 3: Trend in Gravity Sewer, Pump Station and Force Main SSOs by Cause.	91
Figure IX - 4: Trend in Volume of Sewer Main Spills, Volume Reaching Surface Waters and Volume Recovered.....	92
Figure IX - 5: Trend in Private Sewer Lateral SSO's	93
Figure IX - 6: Comparison of Consent Decree SSO Allowance to Actual.....	94
Figure IX - 7: Comparison of Consent Decree SSOs Greater than 1000 Gallons to Actual	94

Introduction

Sewer System Management Plan

This Sewer System Management Plan (SSMP) has been prepared by the Public Works Department of the City of San Bruno with the assistance of Causey Consulting, Walnut Creek, CA. It is a compendium of the policies, procedures, and activities that are included in the planning, management, operation, and maintenance of the City's sanitary sewer system.

The State Water Resources Control Board (SWRCB) has issued statewide waste discharge requirements for sanitary sewer systems, which include requirements for development of an SSMP. The State Water Board requirements are outlined in Order No. 2006-0003-DWQ, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, dated May 2, 2006 (GWDR), and Order No. WQ-2008-0002-EXEC, dated February 20, 2008, which was amended by Order No. 2013-0058-EXEC, effective September 9, 2013, which changed the Monitoring and Reporting Program (MRP). This SSMP is intended to update the City's existing SSMP, in continued compliance with the GWDR.

The structure (section numbering and nomenclature) of this SSMP follows the above referenced GWDR and MRP. This SSMP is organized by the SWRCB outline of elements; and contains language taken from the GWDR as at that beginning of each element. The GWDR uses the term "Enrollee" to mean each individual municipal agency that has completed and submitted the required application for coverage under the WDR (in this case, the Enrollee is the City of San Bruno). The City's waste discharge identification number (WDID) in the California Integrated Water Quality System (CIWQS) is 2SSO10176. All state required information is submitted using this identification number and the number can be used to see all submitted information by the customers, City employees, regulators, environmental organizations and professionals interested in the City collection system operations and performance results.

Settlement Agreements: in 2011, the San Francisco Regional Water Quality Control Board (SFRWQCB) imposed a Cease and Desist order mandating certain improvements to the City's wastewater system and the City negotiated settlement of a lawsuit by San Francisco Baykeeper regarding sanitary sewer overflows (SSOs). Both have significant impacts on day-to-day maintenance requirements and capital investment. The Regional Board Cease and Desist Order include specific sewer system performance requirements and implementation of a supplemental environmental programs (SEP). The agreement

with San Francisco Baykeeper also addresses a range of programs to improve sewer system performance. The City is required to achieve significant reductions in sanitary sewer overflows by 2019 - limiting maximum SSOs to eight under the SFRWQCB order and a maximum of three under the Baykeeper agreement. Reducing SSOs to these levels requires aggressive capital investment to rehabilitate aging pumping stations and collection mains.

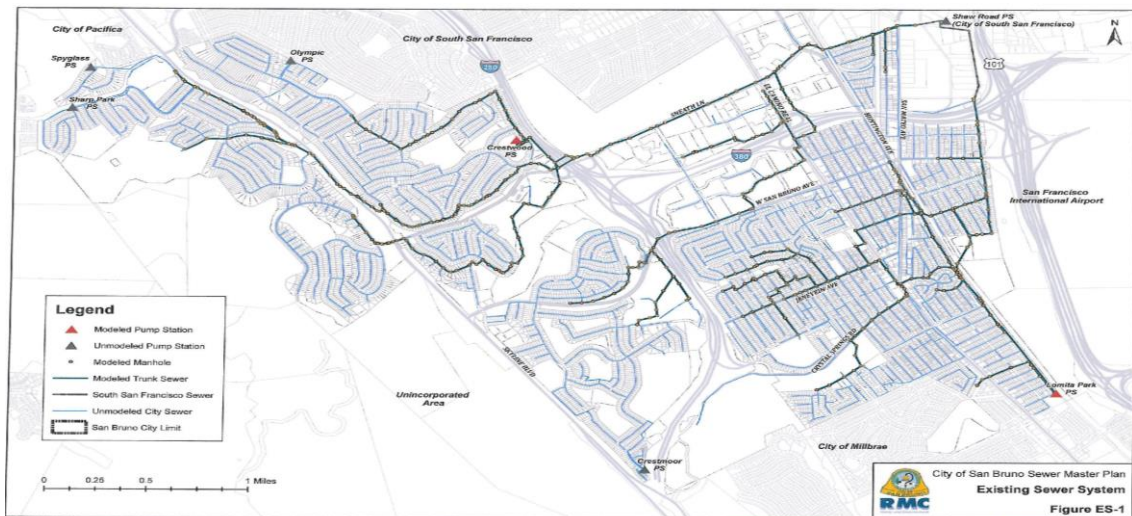
Sanitary Sewer System Facilities

The City operates a sanitary sewer system that serves a population of approximately 41,114 in a 4.9 square mile service area. The sewer system serves 13,090 residential connections and 740 commercial, industrial and institutional customers as of 2015. The sewer system consists of 87.6 miles of gravity sewers (2,415 line segments), 2040 manholes, 2.21 miles of force mains, and 6 sewage-pumping stations. The sewers range in size from four (4) inches to thirty-six (36) inches in diameter. The property owner is fully responsible for installation, maintenance and repair of the private sewer lateral(s) unless they have an approved clean-out at the property line and then the City will inspect and clean the lateral for the private property owner.

Intro Figure 1 contains an overview map of the City’s sanitary sewer system.

Intro Table 1 and **Intro Table 2** provide the composition of the sewer piping by size and material of construction.

Intro Table 3 provides the installation age distribution of the City’s collection system.



Intro Figure 1: San Bruno Sewer System Map

Intro Table 1: Gravity Sewer System Size Distribution

Diameter, inches	Number of Line Segments	Pipe Length, linear feet	Portion of Sewer System, %
<6 or unknown	68	21,120	4.5
6	1,585	305,353	66.0
8	409	40,300	8.7
10	117	29,200	6.3
12	89	17,100	3.7
14 - 16	13	8,700	1.9
15	1	1,169	0.2
18	44	14,200	3.1
20	14	4,000	0.8
21	11	3,386	0.7
24	53	14,500	3.1
30 - 36	11	3,500	0.8
Total	2,415	462,528	100.0
Source: City Staff, December 2018			

Intro Table 2: Sewer System Materials of Construction

Material	Number of Line Segments	Pipe Length, LF	Percent of Sewer System
VCP	1,994	416,269	90.0
HDPE/PVC	416	38,218	8.3
CIP	3	5,345	1.1
ACP	2	2,696	0.6
Total	2,415	462,528	100.0
Source: City Staff, December 2018			

Intro Table 3: Inventory of Sewer Lines by Pipe Age

Age in Years	Construction Period	Percent of System	Miles of Main Sewer
0-15	2000 - current	10	8.38
16 – 35	1980 – 1999	10	8.76
36 – 55	1960 – 1979	30	26.28
56 – 75	1940 – 1959	30	26.28
76 – 95	1920 – 1939	10	8.76
95 – 115	1900 – 1119	7	6.76
>115	Before 1900	3	2.38
Total, miles			87.6
Total, Linear Feet			462,528
Source: CIWQS Operational Performance Report February 2015, updated December 2018			

Definitions, Acronyms, and Abbreviations

Asbestos Cement Pipe (ACP)

Association of Bay Area Governments (ABAG)

Best Management Practices (BMP)

Refers to the procedures employed in commercial kitchens to minimize the quantity of grease that is discharged to the sanitary sewer system. Examples include scraping food scraps into a garbage can and dry wiping dishes and utensils prior to washing.

Building Lateral – see Private Sewer lateral

Calendar Year (CY)

California Integrated Water Quality System (CIWQS)

Refers to the State Water Resources Control Board online electronic reporting system that is used to report SSOs, certify completion of the SSMP, and provide information on the sanitary sewer system.

Capital Improvement Plan (CIP)

Refers to the document that identifies future capital improvements to the City's sanitary sewer system.

Cast Iron Pipe (CIP)

City

Refers to the City of San Bruno

Closed Circuit Television (CCTV)

Refers to the process and equipment that is used to internally inspect the condition of gravity sewers.

Computerized Maintenance Management System (CMMS)

Refers to the computerized maintenance management system that is used by the City to plan, dispatch, and record the work on its sanitary sewer system. Maintstar is the propriety software the City uses for CMMS.

Ductile Iron Pipe (DIP)

Division of Water Quality (DWQ)

Refers to the State of California Division of Water Quality of the State Water Resources Control Board.

Fats, Oils, and Grease (FOG)

Refers to fats, oils, and grease typically associated with food preparation and cooking activities that can cause blockages in the sanitary sewer system.

Feet per sec (fps)

First Responder

Refers to the field crew or the On Call personnel that are the City's initial response to an SSO event or other sewer system event.

Fiscal Year (FY)

Means a 12-month period beginning July 1 and ending June 30

Food Service Establishment (FSE)

Refers to commercial or industrial facilities where food is handled/prepared/served that discharge to the sanitary sewer system.

Full-time Equivalent (FTE)

Refers to the equivalent of 2,080 paid labor hours per year by a regular, temporary, or contract employee.

General Waste Discharge Requirements (GWDR or WDR)

Refers to the State Water Resources Control Board Order No. 2006-0003, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, dated 5/2/2006.

Geographical Information System (GIS)

Refers to the City's system that it uses to capture, store, analyze, and manage geospatial data associated with the City's sanitary sewer system assets.

Global Positioning System (GPS)

Refers to a field device it that is recommended to determine the longitude and latitude of sanitary sewer overflows for use in meeting CIWQS reporting requirements.

Gallons per Day (GPD)

Gallons per Minute (GPM)

Grease Removal Device (GRD)

Refers to grease traps and grease interceptors that are installed to remove FOG from the wastewater flow at food service establishments.

High Density Polyethylene (HDPE)

Horsepower (Hp)

Kilowatt (KW)

Infiltration/Inflow (I/I)

Refers to water that enters the sanitary sewer system from storm water and groundwater.

- Infiltration enters through defects in the sanitary sewer system after flowing through the soil.
- Inflow enters the sanitary sewer without flowing through the soil. Typical points of inflow are holes in manhole lids and direct connections to the sanitary sewer (e.g. storm drains, area drains, and roof leaders).

Lateral – See Private Sewer Lateral

Legally Responsible Official (LRO)

Person(s) designated by San Bruno to be responsible for formal reporting and certifying of all reports submitted to CIWQS.

Manhole (MH)

Refers to an engineered structure that is intended to provide access to a sanitary sewer for maintenance and inspection.

Mainline Sewer

Refers to City wastewater collection system piping that is not a private lateral connection to a user.

Monitoring, Measurement, and Plan Modifications (MMPM)

Monitoring and Reporting Program (MRP)

Refers to the State Water Resources Control Board WQ 2013-0058-EXEC effective September 9, 2013.

Municipal Separate Storm Sewer System (MS4)

National Association of Sewer Service Companies (NASSCO)

Notification of an SSO

Refers to the time at which the City becomes aware of an SSO event through observation or notification by the public or other source.

Nuisance

California Water Code section 13050, subdivision (m), defines nuisance as anything that meets all of the following requirements:

- a. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.
- b. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.
- c. Occurs during, or as a result of, the treatment or disposal of wastes.

Office of Emergency Services (OES)

Refers to the California State Office of Emergency Services.

Operations and Maintenance (O&M)

Overflow Emergency Response Plan (OERP) SSMP Element VI

Pipeline Assessment and Certification Program (PACP)

Refers to the NASSCO certification program that is used for the evaluation and condition assessment of sewer lines and appurtenances from closed circuit televising of the lines and appurtenances.

Polyvinylchloride Pipe (PVC)

Preventive Maintenance (PM)

Refers to maintenance activities intended to prevent failures of the sanitary sewer system facilities (e.g. cleaning, CCTV, repair, etc.).

Private Sewer Lateral (PSL)

That portion of a private property's building sewer as defined by the plumbing code, and is further defined as the piping of a drainage system that extends from the end of the building drain to the public sewer which includes the connection to the public sewer

unless a property line cleanout has been installed and then the private sewer lateral extends just to the property line cleanout..

Private Lateral Sewage Discharges (PLSD)

Sewage discharges that are caused by blockages or other problems within a privately owned lateral.

Property Damage Overflow

Refers to a sewer overflow or backup that damages a property owner's premises.

Public Services (PW)

Pump Station (PS)

A facility that transmits and lifts sewage into the City gravity sanitary sewer collection system

Regional Water Quality Control Board (SFRWQCB)

Refers to the San Francisco Regional Water Quality Control Board.

Reinforced Concrete Pipe (RCP)

San Bruno Municipal Code (SBMC)

Codifications of general orders of the City of San Bruno

Sanitary Sewer Backup (Backup)

A wastewater backup into a building and/or on private property caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.

Sanitary Sewer Overflow (SSO)

Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include:

- (i) Overflows or releases of untreated or partially treated wastewater that reach waters of the United States;
- (ii) Overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and
- (iii) Wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.

SSOs that include multiple appearance points resulting from a single cause will be considered one SSO for documentation and reporting purposes in CIWQS.

NOTE: Wastewater backups into buildings caused by a blockage or other malfunction of a building lateral that is privately owned are not SSOs.

SSO Categories:

Category 1: Discharge of untreated or partially treated wastewater of any volume resulting from a sanitary sewer system failure or flow condition that either:

- Reaches surface water and/or drainage channel tributary to a surface water; or
- Reached a Municipal Separate Storm Sewer System (MS4) and was not fully captured and returned to the sanitary sewer system or otherwise captured and disposed of properly.

Category 2: Discharge of untreated or partially treated wastewater greater than or equal to 1,000 gallons resulting from a sanitary sewer system failure or flow condition that either:

- Does not reach surface water, a drainage channel, or an MS4, or
- The entire SSO discharged to the storm drain system was fully recovered and disposed of properly.

Category 3: All other discharges of untreated or partially treated wastewater resulting from a sanitary sewer system failure or flow condition.

Sanitary Sewer System or Sewer System

Refers to the sanitary sewer facilities that are owned and operated by the City of San Bruno.

Sensitive Areas

Refers to areas where an SSO could result in a fish kill or pose an imminent or substantial danger to human health.

Sewer Service Lateral

Refers to the piping that conveys sewage from the building to the City's wastewater collection system.

Sewer System Management Plan (SSMP)

Refers to the Plan required by the State of California General Waste Discharge Requirements for Sanitary Sewer Systems.

South San Francisco (SSF)

South San Francisco/San Bruno Water Quality Control Plant (SSF/SB WQCP)

Refers to the wastewater treatment plant jointly owned by the two agencies and operated by the City of South San Francisco.

Standard Operating Procedures (SOP)

Refers to written procedures that pertain to specific activities employed in the operation and maintenance of the San Bruno Sanitary Sewer System.

State Water Resources Control Board (SWRCB)

Refers to the California Environmental Protection Agency, State Water Resources Control Board.

Superintendent

The Superintendent of the South San Francisco Water Quality Control Plant who has the authority to enforce compliance with the provisions of the San Bruno FOG Control Plan and to promulgate regulations designed to assist in achieving FOG Control Plan compliance (SBMC 10.04.500 and 10.2.260) (SSFMC 14.04.040 and 14.08.400).

Supplemental Environmental Project (SEP)

Supervisory Control and Data Acquisition (SCADA)

Refers to the system that is employed by the City to monitor the performance of its pump stations and to notify the operating staff when there is an alarm condition that requires attention.

System Evaluation and Capacity Assurance Plan (SECAP) SSMP Element VIII

Untreated or Partially Treated Wastewater

Any volume of wastewater discharged from the sanitary sewer system upstream of a wastewater treatment plant headworks.

Vitrified Clay Pipe (VCP)

Waste Discharge Identification Number (WDID)

Unique identification number issued by the SWRCB to the City of San Bruno (Enrollee) for the tracking and reporting of all requirements under the GWDR.

Waste Discharge Requirements (WDR) – see GWDR above.

Wastewater (WW)

Water Body

Any stream, creek, river, pond, impoundment, lagoon, wetland, or bay.

Waters of the State

Refers to “any surface water or groundwater, including saline waters, within the boundaries of the state.” (California Water Code § 13050(e)).

Waters of the United States

Refers to the Environmental Protection Agency definition included in the Clean Water Act Part 230.3 Definitions.

Water Quality Control Plant (WQCP)

South San Francisco/San Bruno treatment plant jointly owned by the two agencies but operated by the City of South San Francisco.

Water Quality Monitoring Plan (WQMP)

Refers to the Plan required by the Monitoring and Reporting Program as of September 9, 2013 for sanitary sewer overflows of 50,000 gallons or greater.

Work Order (WO)

Refers to a document (paper or electronic) that is used to assign work and to record the results of the work.

References

State Water Resources Control Board Order No. 2006-0003, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, California State Water Resources Control Board, May 2, 2006.

State Water Resources Control Board Order No. Order No. 2013-0058-EXEC, Amending Monitoring And Reporting Program For Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, September 9, 2013.

Consent Decree, Baykeeper, Inc. vs. City of San Bruno, United States District Court,
Northern District of California, San Francisco Division Civil Case No. CV 10-00753 SC,
Filed 9/27/11

Settlement Agreement and Stipulation for Entry of Order, Order Number R2-2011-0044,
Administrative Civil Liability Complaint No. R2-2010-0004

California Regional Water Quality Control Board San Francisco Bay Region, Cease and
Desist Order No. R2-2011-0051.

Element I: Goals

SWRCB Waste Discharge Requirement:

The goal of the Sewer System Management Plan (SSMP) is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system. This will help reduce and prevent SSOs, as well as mitigate any SSOs that do occur.

I.1 SSMP Goals

The City has established seven (7) goals to guide the implementation and success of the City's SSMP. These goals are designed to facilitate and target the management, operations and maintenance of the sanitary sewer collection system in a manner that will sustain the infrastructure, protect public health and the environment, and achieve compliance with the State Water Resources Control Board's General Waste Discharge Requirement (GWDR) for Sanitary Sewer Systems. These goals include:

1. To properly manage, operate, and maintain all portions of the City wastewater collection system.
2. To provide adequate capacity to convey peak wastewater flows.
3. To minimize the frequency and volume of sanitary sewer overflows (SSO).
4. To contain SSOs to the extent feasible.
5. To minimize public contact with SSOs.
6. To mitigate the impacts that are associated with all SSOs that may occur.
7. To comply with all applicable regulatory notifications and reporting requirements

Element II: Organization

SWRCB Waste Discharge Requirement:

The Sewer System Management Plan (SSMP) must identify:

- a. The name of the responsible or authorized representative as described in Section J of this Order.
- b. The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation; and
- c. The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health San Bruno, Regional Water Board, and/or State Office of Emergency Services (OES)).

II-1 Organizational Structure

The organization chart for the management, operation, and maintenance of the City's wastewater collection system is shown below.

Figure 2-1
SSMP Responsibility Organization Chart

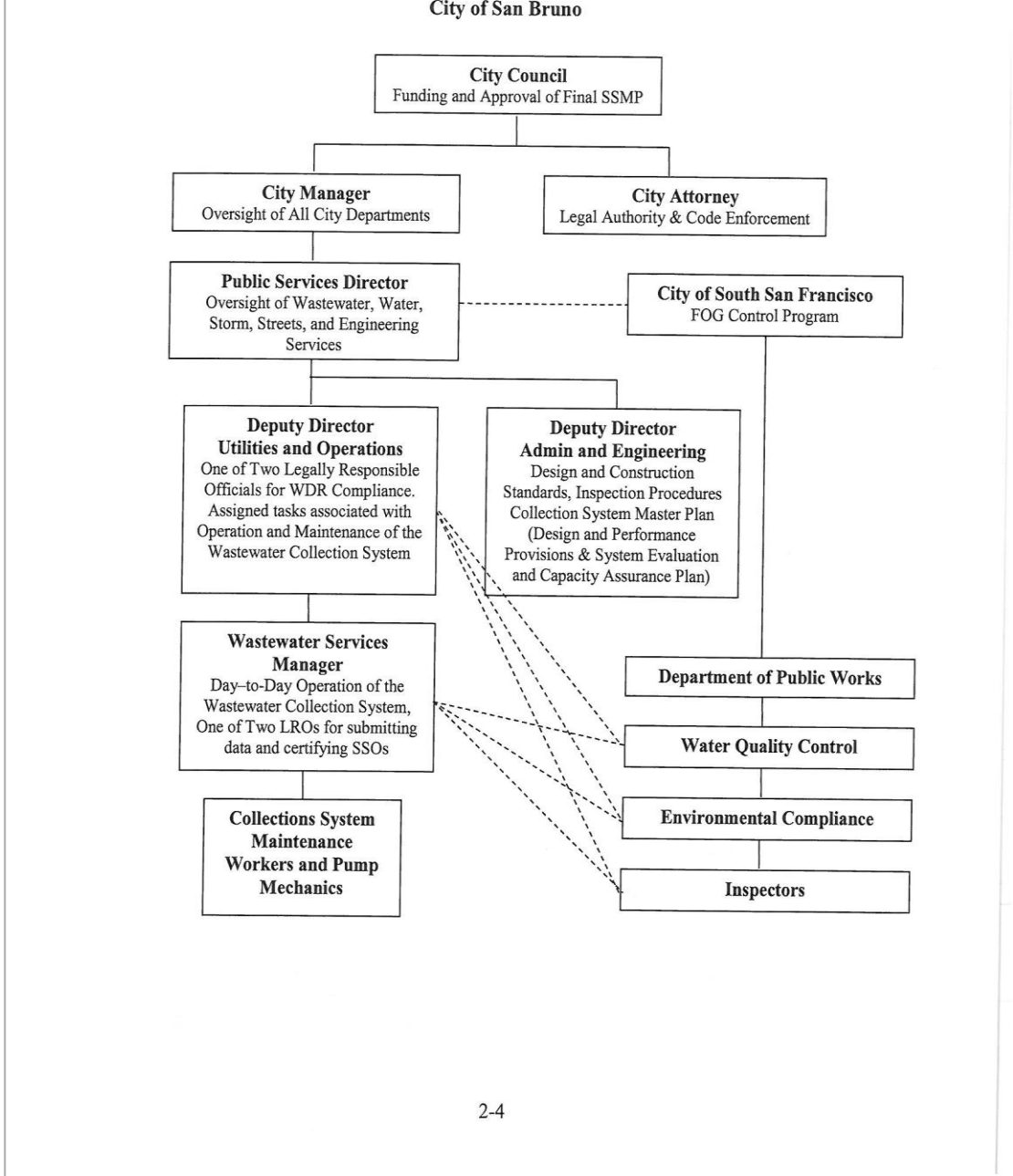


Figure II - 1: San Bruno Organization Chart

II-2 Authorized Representatives

The City's *Legally Responsible Officials* (LRO) for wastewater collection system matters are identified below along with their roles and responsibilities for the collection system operations. They are authorized to submit electronic and written spill reports to the Office of Emergency Services (OES). They are the City's legally responsible officials who are authorized to certify all other required submittals to the SWRCB.

The following are the general position descriptions along with the LRO designations for interaction with the SWRCB and the RWQCB on all sewer system responsibilities.

City Council: The City of San Bruno was incorporated on December 23, 1914 as a General Law City. San Bruno is governed by the City Council and operates under a Council-Manager form of government. As the policy making body, it has the ultimate responsibility to the people of San Bruno and the implementation of all programs and City services. It approves all ordinances, resolutions, and major contracts, modifies and approves the budget, and has the responsibility of employing a City Manager and City Attorney.

All major changes in direction or emphasis and organizational changes must be approved by the City Council. The City Council sets the policy and adopts the City budget. The City Manager and staff enforce the laws and implement the programs and policies that are established by the City Council. The City Council has the responsibility and authority for funding and final approval of this SSMP. All major changes in direction or emphasis and organizational changes must be approved by the City Council. The City Council sets the policy and adopts the City budget.

The City of San Bruno operates under the Council/Manager form of government. In accordance with the provisions of the Municipal Code, the City Manager is responsible for preparing, and upon City Council adoption, managing implementation of the City budget which outlines the City's annual work program and which balances the cost of providing City services within the available financial resources. The City Manager serves as the Chief Executive Officer of the municipal corporation and as Executive Director of the San Bruno Redevelopment Agency. As such, the City Manager is responsible for the appointment and supervision of all City department heads and for oversight of all full-time employees and all City operations to ensure that City services are delivered in an economical and effective manner.

City Attorney: The City Council appoints the City Attorney to serve as "corporate" legal counsel to the City as an entity and advises the City Council and City staff on a broad range of municipal issues. These matters typically include open meeting laws, public record laws, conflicts of interests, land use and environmental laws, claims and litigation, municipal elections, employment and labor relations, municipal utilities, public services contracts, code enforcement, and resolutions, ordinances and other legal documents. The City Attorney receives policy direction from the City Council and acts as legal advisor and counsel to the City Council, City Boards and Commissions, City Manager, and City departments and represents the City in litigation against the City.

Public Works Director (LRO): The Public Works Department (PWD) Director is responsible and has been assigned authority to plan, organize, direct, and review the activities and operations of the Public Works Department. This includes Wastewater, Water, Storm, Streets, and Engineering.

Deputy Public Works Director, Administration and Engineering (City Engineer) (LRO): The City Engineer is responsible for all municipal engineering. This includes the development and implementation of design and construction standards as well as inspection procedures (Design and Performance Provisions within the SWRCB WDR)

Deputy Public Works Director, Utilities & Operations (LRO): Under general direction, plans, organizes, coordinates and directs the activities of the various functional working units in the Utilities and Operations Divisions of the Public Works Department; supervises technical staff and subordinate personnel in the planning and implementation of division functions including water operations, wastewater operations, storm drainage systems, fleet and equipment maintenance, streets, sidewalks, signs, traffic signals and street lighting; and performs related work as required..

The Deputy Director for Utilities & Operations also has the overall task but not overall authority for the operation and maintenance of the wastewater collection system. The Deputy Director for Utilities & Operations is assigned and takes on the work associated for the preparation of the SSMP, for all audits, and for all monitoring and reporting under the SWRCB's WDR.

Wastewater Services Manager (LRO): The Wastewater Services Manager manages, supervises and participates in a wide range of maintenance and repair related projects involving the City's wastewater collection system.

Management Analyst I/I: Assists with the following Wastewater programs and tasks: budget preparation, training programs, reports regarding CD and CDO, RFQ's, RFP's, contract creation, and any other WW related tasks requested by the Department. No CMMS entry tasks. However, does utilize CMMS for queries and budget extraction information.

Associate Engineer: Performs complex engineering work in the provision of office and engineering support and field engineering support for environmental, water, sewer, street, and other Public Works projects and programs ensuring technical competence and compliance with all current codes and criteria; serves as a Project Manager.

Principal Engineer: Plans, supervises and coordinates difficult, professional engineering work in support of a wide range of complex Public Works projects; directs the work of subordinate professional and technical engineering staff; assists in the administration and supervision of the Engineering Division.

Engineering Technician: The class of Engineering Technician/Public Works Inspector performs a variety of sub-professional engineering work involving both office and field assignments. These include design detailing, surveying, right-of-way and public works inspection.

Executive Assistant: Performs a variety of highly responsible, complex and confidential clerical, technical administrative and secretarial duties for a department or division. Employees perform the most difficult and responsible types of duties including providing administrative support to a department or division in areas such as budget, personnel or a department program or function, as well as providing responsible secretarial support to management and professional staff which requires frequent use of tact, discretion, initiative and independent judgment.

Secretary: Assists with the following Wastewater tasks: CMMS information entry, invoice processing, customer service, inventory purchasing, scheduling and any other WW related tasks requested by the Department.

Lead Maintenance Worker: The Lead Maintenance Worker receives general supervision from the Wastewater Services Manager, performs a variety of semi-skilled and/or skilled tasks in wastewater operations, maintenance, repair and/or construction work including providing lead worker assistance to supervisory and/or management staff as appropriate to the Department. The Lead Maintenance Worker is responsible for day-to-day operation of the collection system and the Overflow Emergency Response Plan under the SWRCB's WDR.

Pump Mechanic: Under general supervision of the Wastewater Service Manager performs semi-skilled, skilled, and administrative work in the repair and maintenance of mechanical equipment at wastewater pump stations and storm water pumping stations operated by the City. A Flood Control District owns the storm water stations and the pump mechanics perform basic maintenance required and notify the Flood Control District for significant issues about the two storm water pumping stations.

Public Works Maintenance Worker II: The Public Works Maintenance Worker II receives general level supervision from higher-level staff such as Wastewater Services Manager. Duties include performing a variety of semi-skilled and skilled tasks in maintenance work, and operating equipment in the construction, operation, repair, maintenance, and replacement of the City's wastewater collection and conveyance facilities and systems. The Public Works Maintenance Worker IIs are also responsible to respond to and mitigate SSOs.

Public Works Maintenance Worker I: The Public Works Maintenance Worker I receives immediate supervision from higher level staff such as Wastewater Services Manager progressing to general supervision over time with training and demonstrated work performance. This is the entry level - journey level class in the Public Works Maintenance Worker series. Positions in this class usually perform most of the duties required of Maintenance Worker II's but are not expected to function at the same skill level and usually exercise less independent direction and judgment on matters related to work procedures and methods. The Public Works Maintenance Worker I's are also responsible to respond to and mitigate SSOs.

Building Inspectors: Performs a variety of routine and complex technical work in building inspection to ensure that the Uniform Building Code and other related codes and standards are met. Performs inspections of all private sewer related improvements, rehabilitations and repairs on private sewer laterals.

The following position classifications at the South San Francisco Wastewater Treatment Plant provide support and compliance for the City fats, oils and grease program in the City of San Bruno as designated in the San Bruno Municipal Code.

Superintendent: The South San Francisco Publicly Owned Treatment Plant Superintendent or the Superintendent's authorized representative is an employee of the City of South San Francisco, and except as otherwise provided, has the authority to administer, implement and enforce the provisions of the San Bruno FOG Control Program on behalf of the City of San Bruno.

Environmental Compliance Inspector: The Environmental Compliance Inspector of the City of South San Francisco as the designated representative for the permitting, inspection and enforcement of the San Bruno FOG Control Program.

II-3 Responsibility for SSMP Implementation and Maintenance

The Public Works Director shall have the overall responsibility for, implementing, periodically auditing, and maintaining the City’s SSMP. He/she may delegate these responsibilities to his/her staff.

Other City Staff responsible for developing, implementing, and maintaining specific elements of the City’s SSMP, along with their job titles and contact information, are shown in **Table II - 1**.

Table II - 1: Responsible Officials in Water Quality Chain of Communication

Element	Element Title	Responsible City Official	Phone	Email
	Introduction	“Acting” Wastewater Manager, D. Bosch	650-616-7172	dbosch@sanbruno.ca.gov
1	Goals	Public Works Director, J. Tan	650-616-7075	jtan@sanbruno.ca.gov
2	Organization	Public Works Director, J. Tan	650-616-7075	jtan@sanbruno.ca.gov
3	Legal Authority	City Attorney, M. Zafferano	670-616-7003	mzafferano@sanbruno.ca.gov
4	Operations and Maintenance Program	“Acting” Wastewater Manager, D. Bosch	650-616-7172	dbosch@sanbruno.ca.gov
5	Design and Performance Provisions	Public Works Director, J. Tan	650-616-7075	jtan@sanbruno.ca.gov
6	Overflow Emergency	Deputy Director, D. Bosch	650-616-7179	dbosch@sanbruno.ca.gov
7	Fats, Oils and Grease (FOG)	Deputy Director, D. Bosch	650-616-7179	dbosch@sanbruno.ca.gov
8	System Evaluation and Capacity	Public Works Director, J. Tan	650-616-7075	jtan@sanbruno.ca.gov
9	Monitoring, Measurement and Program Modifications	Deputy Director, D. Bosch	650-616-7179	dbosch@sanbruno.ca.gov
10	Program Audits	Management Analyst, R. Wood	651-616-7046	rwood@sanbruno.ca.gov
11	Communications Program	Public Works Director, J. Tan	650-616-7075	jtan@sanbruno.ca.gov

II-4 SSO Reporting Chain of Communication

The SSO Reporting Chain of Command follows the Organization Chart shown above in Figure II - 1: San Bruno Organization Chart. The SSO Reporting process and responsibilities are described in detail in the **Overflow Emergency Response Plan, Figure II – 2 Below.**

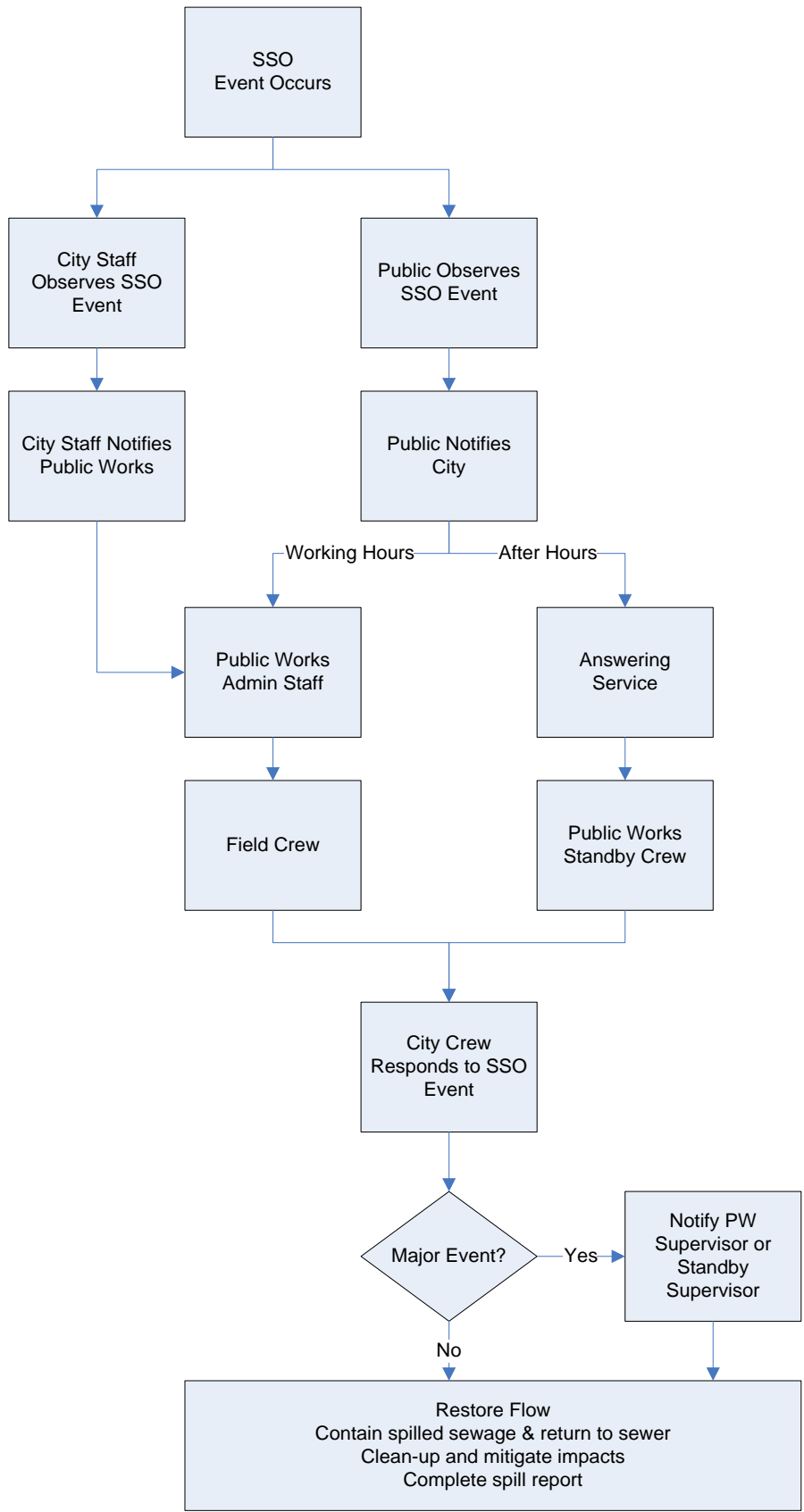


Figure II - 2: Reporting Chain of Communications

III: Legal Authority

SWRCB Waste Discharge Requirement:

Each Enrollee must demonstrate, through sanitary sewer system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:

- Prevent illicit discharges into its sanitary sewer system (examples may include I/I, storm water, chemical dumping, unauthorized debris and cut roots, etc.);
- Require that sewers and connections be properly designed and constructed;
- Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency;
- Limit the discharge of fats, oils, and grease and other debris that may cause blockages, and
- Enforce any violation of its sewer ordinances.

III-1 Municipal Code

The San Bruno Municipal Code describes the City’s current legal authority required for compliance with the GWDR. That authority is specifically contained within Title 10 of the Municipal Code and generally within other Municipal Code Titles that are summarized in **Table III - 1** below.

Table III - 1: Summary of Legal Authorities in the San Bruno Municipal Code and Other Sources

Requirement	Legal Authority Reference San Bruno Municipal Code Chapter 10.12 South San Francisco Municipal Code SSFMC
Prevent illicit discharges into the wastewater collection system	10.12.010 10.12.150 10.12.200 10.12.400

	SSFMC 14.08.210 (c)
Limit the discharge of fats, oils, and grease and other debris that may cause blockages*	10.12.150 11.20.10 11.20.20 R2-2008-0094, NPDES No. CA0038130
Require that sewers and connections be properly designed and constructed	10.12.100 10.12.180
Require proper installation, testing, and inspection of new and rehabilitated sewers	10.12.100 10.12.180 12.44.080 San Bruno Standard Plans & Specifications
Clearly define City responsibility and policies for the private sewer laterals	10.13.010 to 10.13.070
Ensure access for maintenance, inspection, or repairs for portions of the service lateral owned or maintained by the City	10.08.100
Control infiltration and inflow (I/I) from private service laterals	10.12.200
Requirements to install grease removal devices (such as traps or interceptors), design standards for the grease removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements	11.20.010 11.20.020 SSFMC 14.08.530
Authority to inspect grease producing facilities	6.08.150 10.12.030
Enforce any violation of its sewer ordinances	10.12.260 10.12.360 to 10.12.420 10.12.500 10.12.540 10.13.050 to 10.13.070 11.20.020 SSFMC 14.08.030, 14.08.210 (b) and (c), 15.12.060

* Joint Agreement between the City of South San Francisco and City of San Bruno for the Operation, Maintenance and Construction of the Publicly Owner Treatment Plant dated April 3, 1972 as amended.

III-2 References

South San Francisco/San Bruno Joint Operating Agreement for the Water Quality Control Plant

San Francisco Bay Region Water Quality Control Board Order No. R2-2014-0012, National Pollution Discharge Elimination System Permit No. CA0038130

San Bruno Municipal Code

South San Francisco Municipal Code

Baykeeper, Inc. vs. City of San Bruno, United States District Court, Northern District of California, San Francisco Division Civil Case No. CV 10-00753 SC, Filed 9/27/11, Consent Decree

Settlement Agreement and Stipulation for Entry of Order, Order Number R2-2011-0044, Administrative Civil Liability Complaint No. R2-2010-0004

California Regional Water Quality Control Board San Francisco Bay Region, Cease and Desist Order No. R2-2011-0051.

Element IV: Operations and Maintenance Program

SWRCB Waste Discharge Requirement:

The Sewer System Management Plan (SSMP) must include those elements listed below that are appropriate and applicable to the Enrollee's system:

- a) Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable storm water conveyance facilities;
- b) Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventive Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders;
- c) Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;
- d) Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and provide equipment and replacement part inventories, including identification of critical replacement parts.

IV-1 Collection System Mapping

The City of San Bruno Public Works Department is comprised of the following Divisions including Engineering, Water, Wastewater, and Streets/Stormwater. Division staff identifies all City utilities and facilities. Divisions have been GIS mapping their utilities since 2006. And the maps are constantly being updated. Division staffs identify changes

or findings, and the City’s GIS contractor makes updates. Division staff has access to both hard copy maps and computerized maps. Division vehicles have hard copy maps, and in field laptops that display utility layers and CMMS programs. The vehicles also have copies of the City storm water system maps for determination of possible storm water inlets and facilities. This information is utilized and available for SSO response.

IV-2 Preventive Operation and Maintenance

The elements of the City’s sewer system O&M program include:

- Proactive, preventive, and corrective maintenance of gravity sewers;
- Ongoing CCTV inspection program to determine the condition of the gravity sewers;
- Rehabilitation and replacement of sewers that are in poor condition; and
- Periodic inspection and preventive maintenance for the pump stations and force mains.

The collection system organization chart for implementing the City’s O&M program is shown below in **Figure IV - 1: San Bruno Public Works Department Organization Chart**.

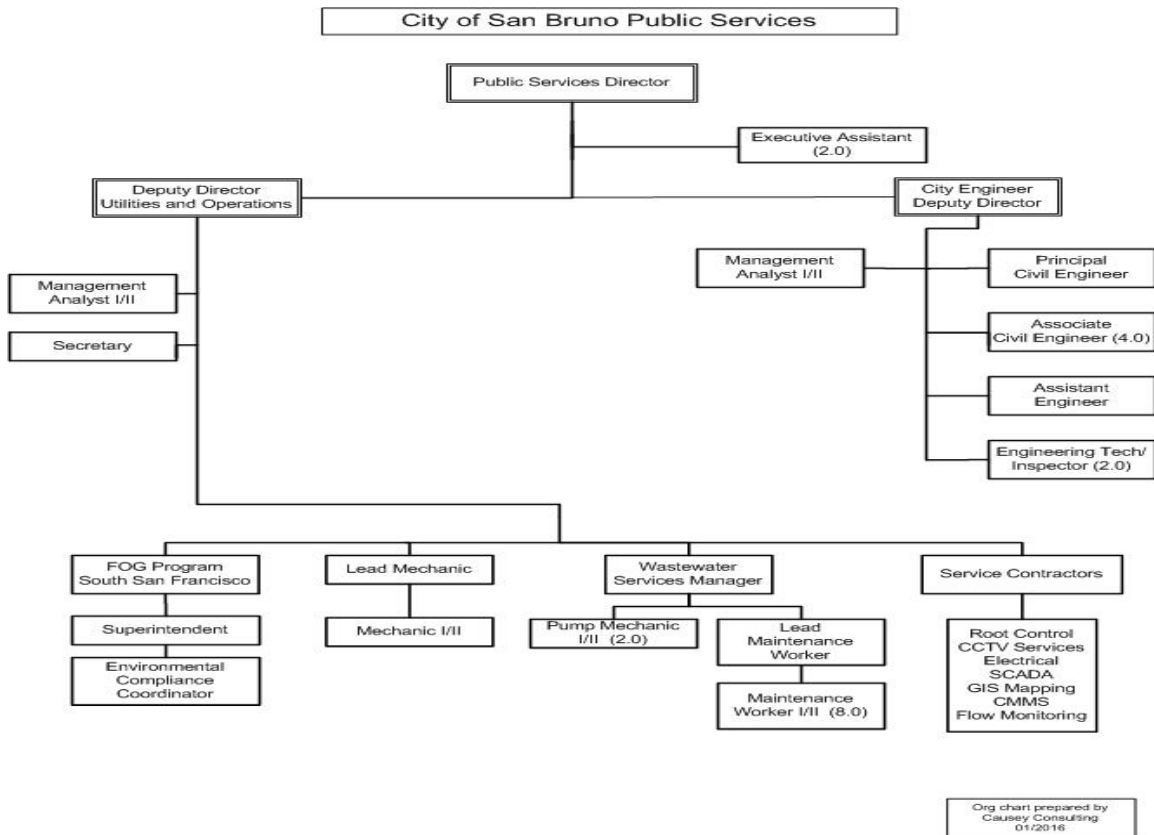


Figure IV - 1: San Bruno Public Works Department Organization Chart

IV-2.1 Gravity Sewers

The City proactively cleans its entire Sanitary Sewer System at least every three (3) years, and it preventively cleans sewers with a history of problems (hot spots) every two (2) weeks, one (1) month, three (3) six (6) and twelve (12) months.

The Wastewater Division consists of 12 Employees - (1) Manager, (1) Lead Worker, (2) Pump Mechanics, and (8) collection system maintenance workers. The Lead Worker and Maintenance Workers are responsible for all maintenance/cleaning/repair of the gravity collection system. The Pump Mechanics are responsible for all pump station maintenance. When necessary, contractors are used to enhance ongoing programs such as CCTV, repairs, or large pump station repairs.

The newly created programmable maintenance system of cleaning every sewer main within the City at a minimum of once every two years was initiated in March 2012. The schedule was installed in the Divisions CMMS system, and runs to date. As a result, City SSOs went down over the next several years from approximately 30 to 12 a year.



The preventative cleaning maintenance program consists of 6 cleaning cycles for mains. Mains are either Hydro jetted, mechanical rodded, or chemical root treated. The cleaning cycles are bi-weekly, monthly, 3-month, 6-month, 1-year, and 36-month. The Division considers bi-weekly cleaning to be “frequent/Hot spots”. Cleaning frequencies are adjusted from what the crew notices when they clean. Changes in cleaning frequency are adjusted within the CMMS system. All lines regardless of diameter are on a preventative cleaning cycle and are due from the date of last being cleaned. The City is broken up into 36 Zones. And into cleaning cycles of 36 months, 1 year, 6 months, 3 months, 1 month, and Bi-weekly.

The line cleaning crew evaluates cleaning results based upon the Standard Sewer Cleaning Results derived from the City’s **Standard Operating Procedures** shown in **Appendix IV-1**. Staff places line segments on the hot spot schedules based upon past cleaning results, history of SSO events, history of cleaning results, video inspections and professional judgment.

Summary statistics for the high frequency lines are shown in **Table IV - 1: Hot Spot Cleaning Lines** below. The City added an additional cleaning crew(s) to assure continued support for the collection system operations.

The historical line cleaning results are shown in

Table IV - 2: Historical Line Cleaning Results below. Large diameter pipes 16 inch in diameter or greater are cleaned using service contractors rather than City staff. City

collection system staff maintains not only the sewer system but also many other public services infrastructure assets in the City Public Works operations.

Table IV - 1: Hot Spot Cleaning Lines

Frequency	Number of Segments	Linear Feet	Annual Cleaning, Linear Feet
1 month	2	497	5,959
3 months	52	10,749	42,994
6 months	198	39,706	79,412
12 months	443	90,689	90,689
TOTAL	695	141,641	219,054

All numbers supplied by CMMS, 12/18

Table IV - 2: Historical Line Cleaning Results

Calendar Year	Line Cleaning Results, linear feet	Line Cleaning Results, miles	Percent of System
2018	375,220	71.1	76.5
2017	420,323	79.6	85.7
2016	439,492	83.2	89.6
2015	468,194	88.7	95.5
2014	440,411	83.4	89.8
2013	460,190	87.2	93.9
2012	238,216	45.1	48.6
2011	40,192	7.6	8.2
2010	110,666	21.0	22.6
Total	2,992,904	566	610.4
Average per Year	332,545	63.0	67.8

All numbers supplied by CMMS, 12/18

The manhole cleaning and inspection program is conducted at manhole locations that are checked weekly due to having hardly any flow. Crews have to help push sewage around turns in manholes with long shovels and then introduce water to those manholes so that there is enough flow to carry solids downstream. This is a separate program from the once every 5 year manhole inspection and assessment program.

Mainlines are added to the chemical root treatment program from operator assessment and decision. Once an operator notes that a line has a low to moderate amount of roots in a line or identifies a location that has a probability to cause a root blockage in the future. The line is placed on the chemical root program within the CMMS system. If the

status of a specific main line changes and there is no more threat from root intrusion the line can be removed from the root program within the CMMS at any time.

The City CCTVed all but 1.3 miles of the sanitary sewer system from 2009 to 2012. These last remaining lines were not inspected due to restricted access or surcharged conditions. These last few lines were assessed in 2014. From those earlier assessments major point repairs, sewer main lining, and sewer main line repairs and replacements were evaluated and included in the 2013 San Bruno Sewer Master Plan. All pipeline inspections have now been rated for condition according to the NASSCO PACP rating system for structural and maintenance defects.

The historical results of the City CCTV efforts are shown below in

Table IV- 3: Historical Results of Closed Circuit Television and the final PACP ratings of pipelines from the Sewer Master Plan are shown in **Figure IV-2**.

The future CCTV program will be based upon a condition-based approach with return frequencies determined according to the flow chart **Figure IV - 2: PACP Pipeline Sewer Ratings** , starting with pipes that are 20 years old or older.

Table IV- 3: Historical Results of Closed Circuit Television

Calendar Year	CCTV Inspection, linear feet	CCTV Inspection, miles	Percent of System
2018	110,859	21.0	22.6
2017	63,145	12.0	12.9
2016	5,792	1.1	1.2
2015	5,548	1.1	1.1
2014	2,972	0.6	0.6
2013	1,258	0.2	0.3
2012	3,231	0.6	0.7
2011	3,881	0.7	0.8
2010	6,190	1.2	1.3
2009	283	0.1	0.1
Total	203,159	38.6	41.6
Average per Year	20,316	3.8	4.1

All numbers supplied by CMMS, 12/18

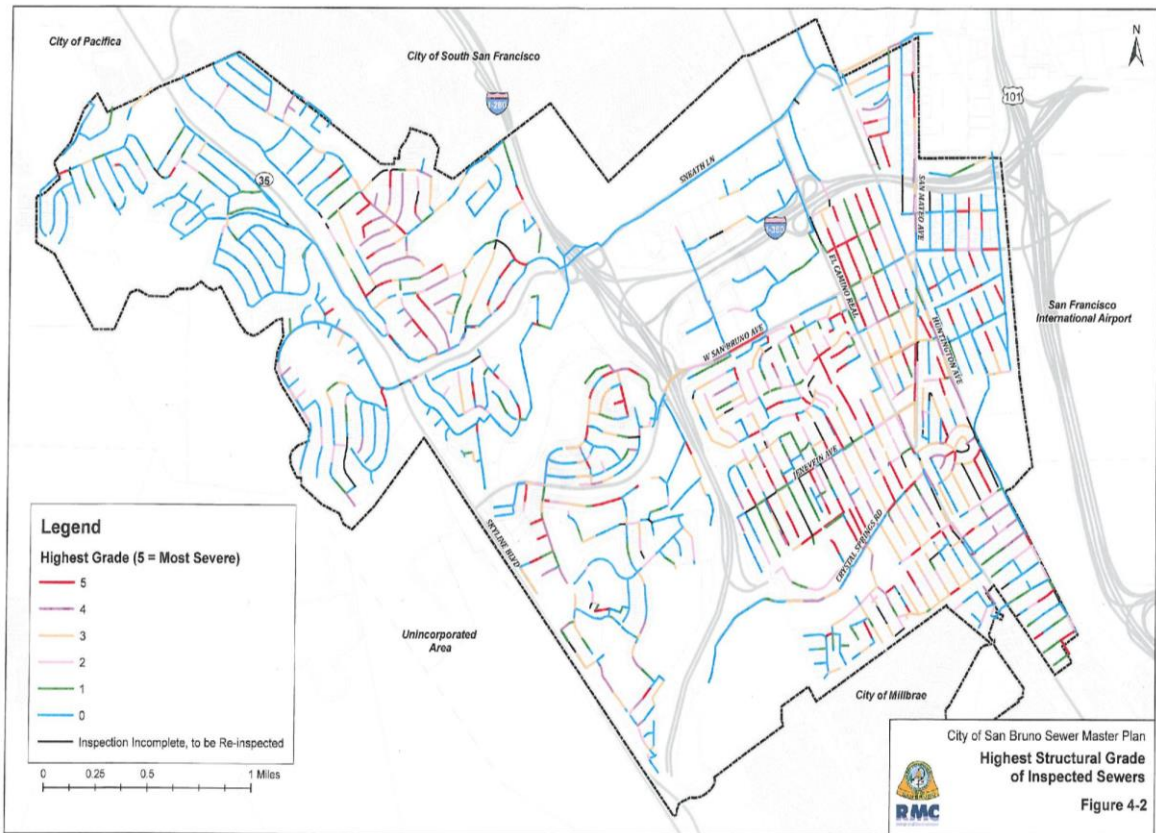


Figure IV - 2: PACP Pipeline Sewer Ratings

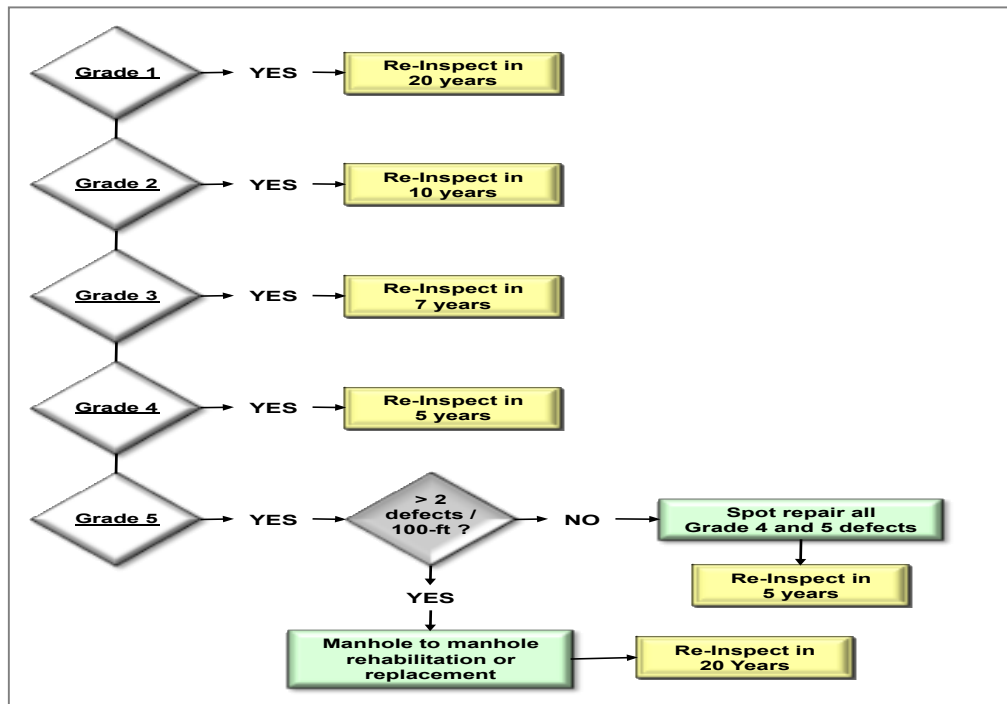


Figure IV - 3 CCTV Return Frequency based upon PACP Ratings

The wastewater collection system staff maintains a list of known structural deficiencies determined from the CCTV results conducted during pipeline assessments. This list is maintained in priority order by structural rating. High priority structural deficiencies, PACP rating 5, if found to exist, will be repaired as soon as possible by outside contractors.

Gravity sewer maintenance is currently scheduled using work orders generated by the City's Maintstar CMMS. Completed gravity sewer maintenance is recorded using work orders. The Wastewater Division CMMS system is used for many programs, maintenance control, historical information, and cost recording. The Manager, Lead Maintenance Worker, and all Maintenance Workers utilize the system. The following programs or tasks are housed or maintained within the CMMS:

- Programmed preventative maintenance cleaning program for hydro flushing
- Programmed preventative maintenance cleaning program for mechanical rodding
- Programmed preventative maintenance cleaning program for lower lateral maintenance
- Manhole inspection program
- Root Foaming program
- Pump station maintenance program
- All calls for service
- All work orders
- Manhole repair
- All sewer repairs
- (Future CCTV Inspection information)
- (Future force main inspections)
- (Future manhole at force main "daylight" gravity location point inspection)

The Wastewater Division Manager is responsible for the coordination of the CMMS and GIS systems. The Division Manager, City IT Department, and CMMS Provider maintain the CMMS system. At times, the Division will hire outside computer program contractors to create new programs or tasks within the CMMS system to enhance collection system maintenance. The City IT Department, City GIS contractors, and Department Managers maintain the City GIS system.

Because of recent increased odor complaints, the City has increased its public education on odors, increased line cleaning in those areas and added oxygen injection at two of the largest pump stations. The City has spent approximately one million dollars to date attempting to resolve these issues and is committed to exploring all options and opportunities to reduce or eliminate odor issues from the collection system and pump stations.

IV-2.2 Pump Stations

The City operates and maintains 6 pump stations, as shown below in **Figure IV - 4: Pump Station Location Map**. The City conducts regular operational inspections of its pump stations. All sanitary sewer pump stations are inspected on a daily basis. The wet wells are cleaned monthly and the mechanical and electrical equipment preventive maintenance is scheduled annually for cleaning.

The City has developed contingency plans for each of the pump stations and these are referenced at the end of this Element.

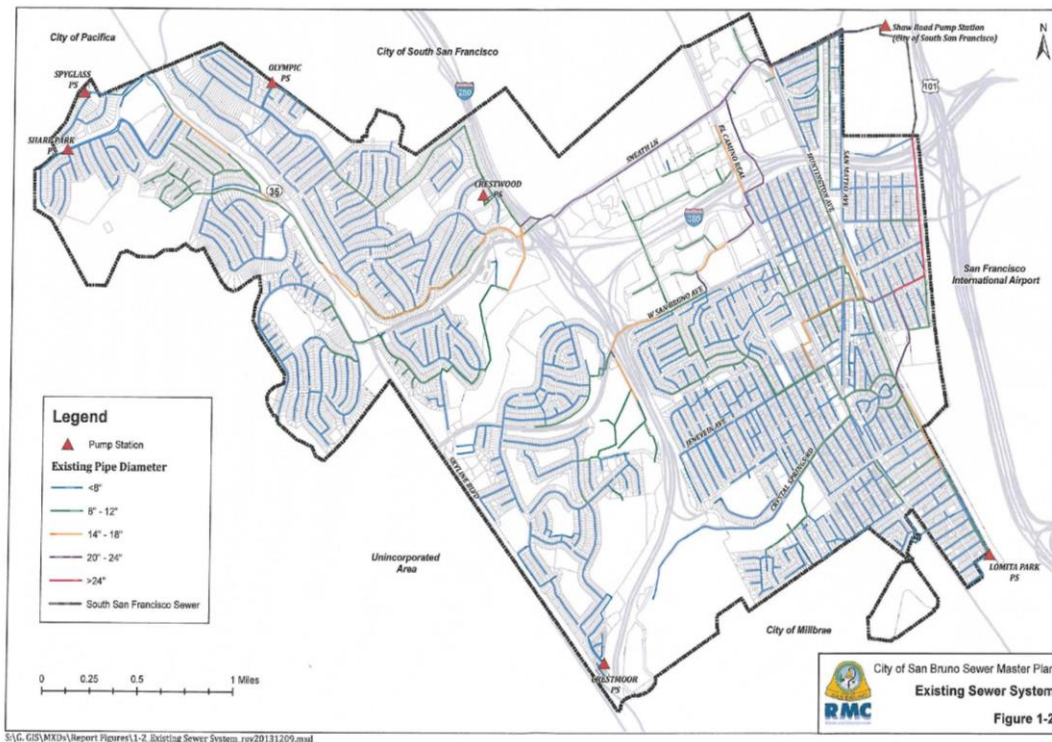


Figure IV - 4: Pump Station Location Map

All pump stations and force mains have been identified to be rehabilitated and or replaced per the 2014 San Bruno Sewer Master Plan. All force mains are either cast iron or AC pipe. No inspections have historically been done due the fear of damaging the pipes and causing an overflow. Also due to their locations in deep valleys, there was no possible way to drain the force mains or bypass pump for inspection. Crews have historically visually inspected the areas above force mains for leaks. But there is no documentation of those inspections. As part of the ongoing manhole inspection program, the Division will make a separate inspection program of inspecting manholes for effect where force mains discharge to gravity mains.

Each of the pump stations discharge to force mains that are identified and described in the

Table IV - 4: Pump Station Locations and Descriptions, shown below.

IV-2.3 Force Mains

The Wastewater Division currently conducts no maintenance on force mains at this time. This is due to recent rehabilitation, new HDPE pipe material, and no known maintenance needs. The City has identified all force mains for rehabilitation and replacement. To date, five of the six force mains have been replaced. Future maintenance practices are being identified. The City is in current design to rehabilitate the Crestwood pump station and force main.

Force main alignments will be inspected on an annual basis, and discharge locations will be surveyed for possible damage and corrosion from the release of hydrogen sulfide when the force mains discharge to the gravity collection system.

Table IV - 5: Force Main Locations and Descriptions shown below lists the force main asset information.

Table IV - 4: Pump Station Locations and Descriptions

Pump Station Name/ Installed	Location	No. Pumps	Pump GPM	Pump Manufacturer	Pump HP	Standby Generation - KW
Lomita Park 1960-2003 (Under Rehab.) 2018	1049 San Antonio Ave.	2	350 & 500	Pacific/Paco	15 20	50
Crestmoor Dr. 1963-2003 (Under Rehab.) 2018	2641 Crestmoor Dr.	2	250	Gorman-Rupp	25	80
Crestwood Dr. 1960-1992	1495 Crestwood Dr.	4	225 & 840	Flygt	2-5 2-20	40
Olympic Dr. 2017	2540 Olympic Dr.	2	300	Flygt	25	100
Sharp Park Dr. 2002-2018	3496 Highland Dr.	2	1000	Flygt	105	230
Spyglass Dr. 2018	2091 Spyglass Dr.	2	200	Flygt	10	50

Totals	-	14	-	-	-	-
Source: Sewer Master Plan, January 2014, Updated December 2018						

Table IV - 5: Force Main Locations and Descriptions

Name of Pump Station Associated with Force Main	Force Main Asset Information		
	Length (linear feet)	Size (inches)	Material Type
Lomita Park	2,310	10	HDPE
Crestmoor Dr.	500	4	HDPE
Crestwood Dr.	765	8	AC
Olympic Dr.	2,668	6	HDPE
Sharp Park Dr.	3,270	12	HDPE
Spyglass Dr.	1,150	6	HDPE
Total	10,663	-	-
Source: City GIS, December 2018			

IV-2.4 Private Sewer Laterals

The City will provide maintenance for some lower laterals within the service area if a City approved cleanout has been installed at the property line. The City has a cleaning program for these City lower laterals. The maintenance frequencies are 3-month, 6-month, and 1-year based upon the condition of the lower lateral. As with sewer mains, cleaning frequencies are adjusted within the CMMS system based upon the historical results of each cleaning. In addition, the City will only provide lower lateral maintenance as long as the lower lateral does not require repair or replacement. If either of these situations appears, the property owner is notified and required to make the appropriate corrections. Once the work is completed and approved by the City if maintenance is required then the lower lateral will again be placed in this program. The private property owner has the full responsibility for the entire lateral if there is no approved cleanout and for the upper lateral if the approved cleanout has been installed.

The City reports all private sewer lateral SSOs as they become aware of a private lateral overflow.

IV-2.5 Chemical Root Treatment Program

The City annually utilizes a service contractor to chemical root foam between 3,000 and 6,000 linear feet of sewer lines as determined by field crews based upon cleaning results, SSOs and other available maintenance data from collection system operations. Some line segments are treated each year while other are treated every other year.

IV-2.6 Rehabilitation and Replacement Program

The City's Capital Improvement Plan for the next five (5) years was developed from the CCTV inspection and condition assessment program. All lines inspected were evaluated by the Master Plan consultant that evaluated the condition of all gravity sewers using the PACP structural and maintenance condition rating system for each line segment. The information gathered during the condition assessment was used to prioritize gravity sewers for repair/rehabilitation/replacement. The results were then placed into the five-year capital replacement program budget for pipelines, manholes, lower laterals, pump stations and force mains. The goal of the sewer capital program is to improve and/or replace existing facilities in an effort to extend the useful life of these valuable assets.¹ The CIP program is updated annually for projects that are completed and for changes resulting from fieldwork by the collection system crews. The sewer system capital projects are further described in detail in the City's Annual Capital Improvement Program Budget. The projects that are included in the **City's Capital Improvement Program are listed in Appendix IV-2**. The funds that support the Capital Improvement Program come from the City's sewer service charges that are based upon regular sewer service charge rate analyses. The City has developed a set of Wastewater Capital Improvement Program Guiding Principles that were developed during the preparation of the 2013 Sewer Master Plan. Those policies are as follows:

Wastewater Capital Improvement Program Guiding Policies

The Wastewater Enterprise Fund provides for the maintenance and implementation of capital improvements related to the safe and reliable collection and conveyance of sewage from San Bruno residents and businesses to the Water Quality Control Plant, jointly owned by San Bruno and South San Francisco and operated by South San Francisco. The San Bruno wastewater system consists of 85 miles of sewer mains, 2 miles of force mains, and six pumping stations. All wastewater is conveyed to the City of South San Francisco's Shaw Road Pump Station, from where it is pumped to the Water Quality Control Plant for treatment. Implementation of the Wastewater Capital Improvement Program is designed to protect, preserve, and enhance wastewater facilities and to eliminate sanitary sewer overflows that impact public and environmental health. The overall goal is to improve and/or replace existing facilities to ensure wastewater system integrity and the continued safe transport and treatment of wastewater.

Capital investments in the wastewater system are driven by several City Council approved policies and plans, including:

¹ San Bruno Sewer System Management Plan, August 2013, page 4-7

- **Sewer System Master Plan** - A comprehensive planning document that evaluates the state of the City's wastewater infrastructure, and includes a 10-Year Work Plan to maintain, expand, and invest in the collection of mains and pump stations, and recommends specific infrastructure projects. Recommended projects are then considered for incorporation into the Capital Improvement Program. The Master Plan was updated and adopted in 2014.
- **Settlement Agreements** - In 2011, the San Francisco Regional Water Quality Control Board imposed a Cease and Desist order mandating certain improvements to the City's wastewater system and the City negotiated settlement of a lawsuit by San Francisco Baykeeper regarding sanitary sewer overflows (SSOs). Both have significant impacts on day-to-day maintenance requirements and capital investment. The Regional Board Cease and Desist Order include specific sewer system performance requirements and implementation of supplemental environmental programs. The agreement with San Francisco Baykeeper also addresses a range of programs to improve sewer system performance. The City is required to achieve significant reductions in sanitary sewer overflows by 2019 - limiting maximum SSOs to eight under the Regional Board agreement and a maximum of three under the Baykeeper agreement. Reducing SSOs to these levels requires aggressive capital investment to rehabilitate aging pumping stations and collection mains.
- **Wastewater Rate Study** – A financial model that calculates the rates required to maintain and operate the wastewater system according to the Master Plan and adopted Capital Improvement Program. The current rates are based on a 2012 rate study. An updated rate study will be completed during fiscal year 2015-16. The updated rate study will address sewer main repair and replacement requirements of the San Francisco Baykeeper Consent Decree along with project priorities identified in the adopted 2014 Sewer Master Plan.
- **Transit Corridors Plan** - A comprehensive plan for improvement of the downtown, and the areas immediately surrounding the Caltrain and BART stations. The Plan identifies improvements within the sewer collection system necessary to accommodate future development in the Transit Corridors area.

IV-2.7 Training

The WW Division has SOPs for sewer system response and mitigation, sewer cleaning (Vactor and rodder) equipment, mainline repair, pump station emergency response plans, confined space entry, Class B license requirement (standby duty), cell phone/two way radio use, and locating and marking USA.

Employee safety:

- Hold weekly meetings that usually include safety tailgate meetings on subjects that impact field working conditions and procedures and maintain sign-in logs.
- Present safe practice reminder at all meetings.
- Maintain compliance of OSHA safety rules.
- Review Material Safety Data Sheets (MSDS) for new chemical use.

Employee certifications and training:

- Employees receive and renew job specific certification for DMV, CPR, and First Aid, as required.
- Employees receive yearly training for the environmental and safety programs and others on a timeline required by OSHA found **Figure IV-5**. In addition, the Corp Yard provides competent person training on trenching, shoring, excavation, and SSO response/bypass pumping training.
- 10 to 12 employees are trained or provided refresher training in Confined Space Safety, Traffic Control, and Trenching/Shoring/Excavation at the competent person training level every two to three years.

Finally, the City will provide annual training on this SSMP and the OERP and will regularly conduct field exercises on emergency response procedures including SSO start times, volume estimation and recovery estimation. This training will also include presentation of issues from previous field inspections by the State and Regional Board especially the list of questions that they expect employees to be able to address regarding sewer system operation, maintenance and emergency response. Finally, the sewer staff regularly conducts tailgate sessions with the field crews.

Figure IV – 5: City of San Bruno Public Works Training Matrix

Annual (Cal/OSHA)

Blood-borne Pathogens
HAZMAT - Regulatory Compliance; Classification & Labeling of Chemicals (GHS)
Hazard Communication
Hearing Conservation / Testing
Respirator Fit Testing
Trenching / Shoring / Soil Excavation Awareness

Bi-Annual (Cal/OSHA)

Confined Space Certification
CPR / First Aid
Harassment Prevention - Supervisors Only
Traffic Zone Safety (Cones Class / Flagger Training)

Tri-Annual (Cal/OSHA)

Asbestos Awareness
Backhoe Operations
Competent Trenching / Shoring / Soil Class
Cranes & Other Hoisting Equipment
Fall Protection
Fire Extinguisher Operations
Forklift / Lift Truck Operations
Heat Illness Prevention
Locator Training
Lockout / Blockout / Tagout

Division-Specific Training

American Management Association & Management Training
California Water and Environment Association (CWEA) Conference & Training
Bay Area Clean Water Agency (BACWA) Training
Sewer cleaning efficiency enhancement
Various equipment and mechanical operations training as needed

IV-2.8 Equipment and Replacement Parts

The City's fleet maintenance department maintains high velocity jettors, rodder vehicles, mechanical rodding equipment, pumps, generators and the video inspection vehicle. Critical pipeline and pump station parts and spare equipment inventory are maintained by the Collection System Section. Critical equipment and miscellaneous spare parts inventory are included in the listing presented in Table IV – 9 below.

The list of the major equipment that City uses in the operation and maintenance of its sewer system is included in **Appendix IV-3: Major Sewer System Equipment Inventory**.

The City has developed a Critical Replacement Parts List. It has also developed a Replacement Parts Inventory procedure that is included in **Appendix IV-4: Critical Sewer System Replacement Parts Inventory**.

IV-2.9 Outreach to Sewer Service Contractors

The Building Division offers a comprehensive list of brochures that can be downloaded and printed out from the City's website (http://www.sanbruno.ca.gov/comdev_bldgBrochures.html). These brochures are also available at the Community Development Department in San Bruno City Hall located at 567 El Camino Real, San Bruno, CA 94066. The following are examples and copies are included in appendix 4-9.

- Re-pipe
- Sewer Repairs and cleanout installation
- Shower and tub installations
- Water heaters

The Engineering Division serves as the homeowners' and contractors' primary contact for construction activities within public right-of-ways such as sidewalk, streets and other city- owned property.

The City will be developing training guidance for all contractors and construction firms working in or near sanitary sewer facilities. In addition, the City will also develop standard specification language in all purchase orders and construction contracts that assure that service contractor employees working in the field are properly training and are aware of the City emergency response procedures for the sewer system. Finally, pre-construction conference agendas and construction progress meeting will include discussion of emergency response procedures for sewer system overflows.

IV-3 Element IV Appendices

Appendix IV-1: Sewer Cleaning Results Matrix

Table IV - 6: Sewer Cleaning results Matrix

Type of Debris	Clear	Light	Moderate	Heavy
Debris	No observable debris	Minor amount of debris 1 pass	Moderate amounts of debris 2-3 passes	Significant amounts of debris more than 4 passes. Operators concern for future stoppages.
Grease	No observable grease	Minor amounts of grease – 15 minutes or less to clean – 1 pass	Small “chunks” No logs – 15 – 30 minutes to clean – 2-3 passes	Big “chunks” or “logs”. More than 4 passes. Operator concern for future stoppages.
Roots	No observable roots	Minor amounts of roots – 1 pass	Thin, stringy roots. No “clumps” – 2-3 passes	Thick roots. Large clumps. More than 4 passes. Operator concern for future stoppages.
Debris: structural pipe fragments, soil, rocks, etc.	No observable debris	Specify material (if possible) minor amounts of material	Specify material (if possible) moderate amounts of material	Specify material (if possible) significant amounts of material per line segment. Operator concern for future stoppage.
Action	Decrease frequency to next lower frequency after 3 consecutive results (e.g. 6 months to 12 months)	Continue current maintenance frequency.	Increase current maintenance frequency to next higher frequency (e.g. 6 months to 3 months or more frequently if necessary)	Increase current maintenance frequency to next higher frequency (e.g. 6 months to 3 months or more frequently if necessary)

Appendix IV-2: Renewal & Replacement Program Budget in \$1,000's

Table IV - 7: Renewal & replacement Program Budget in \$1,000's

Project	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20
Sewer Main Improvement and Replacement*	5,505	7,663	6,245	7,100	4,490
Wastewater Pump Station Improvement and Replacement**	1,100	900	4,800	0	0
Totals	6,605	8,563	11,045	7,100	4,490

***Sewer Main Improvement and Replacement Program**

Undertake the repair of sewer manholes and segments of pipelines in need of rehabilitation with current work efforts focused on Trenton Drive, Jenevein Avenue, San Mateo Avenue, Crystal Springs Avenue, Crestmoor Canyon, Avenues Project 1-1 and Avenues Project 1-2. Sewer pipe repairs and replacement will also occur along 1st Avenue as part of the completion of the Caltrain Grade Separation Project.

****Wastewater Pump Station Improvement and Replacement Program**

Replacement/Rehabilitation of the sewer pump stations throughout the City.

Appendix IV-3: Major Sewer System Equipment Inventory

Table IV - 8: Major Sewer System Equipment Inventory

Major Equipment Type	Year Purchased
Vactor 2100 Plus	2014
Vactor 2100	2013
Mechanical Rodder	2018
Lateral Response Maintenance Truck	2013
3 each – Honda field generators	2011
2 each – Lateral CCTV cameras	2014
Service Body Repair Truck	2009
5 yard dump truck	1995
Emergency Light Tower	2008
6” Emergency mobile pump	2011
2 each – 3” trash pumps	2010
Hose reel trailer	2011
Pump maintenance truck	2010
Arrow board truck	2003
4 each – Toughbook laptops	2010
Top kick mechanical snake	2013

* Equipment Inventory as of May 2015

Appendix IV-4: Critical Sewer System Replacement Parts Inventory

Table IV - 9: Critical Sewer System Replacement Parts Inventory

Part Description	Number in Inventory	Location
Trailer Mount Bypass Pump – 6 inch	2	Corporation Yard
Flow Through Sewer Plugs	2	Corporation Yard
Sewer Plugs	4	Corporation Yard
Lift Station Pumps	4	Corporation Yard
Portable Trash Pump – 3 Inch	4	Corporation Yard
Lay Flat Bypass Hose – 3 Inch	2,000 feet	Corporation Yard
Lay Flat Bypass Hose – 6 Inch	300 feet	Corporation Yard
Portable Generators	4	Corporation Yard
Containment Waddles	3 Pallets	Corporation Yard
Station Generator Control Boards	6	Corporation Yard

Last Inventory Date: 12/1/15

IV-4 References

- San Bruno Sewer Master Plan, RMC Environmental and Water, January 2014
- City of San Bruno Adopted 2015-2016 and 2015-2020 Five-Year Capital Improvement Program Budget
- Pump Station Emergency Response Plans (6 each)
- Code Enforcement Strategy Guide

Element V: Design and Performance Provisions

SWRCB Waste Discharge Requirement:

- a) Design and construction standards and specifications for the installation of new sanitary sewer systems, lift stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems; and
- b) Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

V-1 Sanitary Sewer Design Standards and Specifications

Chapter 12.44.080 of the Municipal Code, addresses design criteria for vitrified clay pipe, slopes of collector lines, laterals, minimum size for mains and other miscellaneous requirements.

Chapter 10.12.100 "Sewer connection permits", paragraph (d) of the Municipal Code requires that all new sewers and connections to new and existing sewers shall be designed and constructed in accordance with the requirements of applicable city ordinances, the city standard plans and specifications and the California Building Code (SBMC Chapter 11.04) then in effect.

The Standard Specifications and Drawings of the Public Works Department of the City of San Bruno, August 2011, is the current version of the city standard plans and specifications. Part 1 includes Standard Requirements for all public projects undertaken within the City. Part 2 defines General Requirements. Part 3 details Technical Specifications and Part 4 includes Standard Drawings that individual components are to adhere to. Division 33 of the Technical Specifications covers the technical requirements for projects to construct utility projects. Section 33 30 00 covers the requirements for sanitary sewerage utilities. This section includes specifications for the design and construction for new sanitary sewer pipelines. Section 3.14 specifies requirements for the construction of new pumping facilities. This section also includes specifications for slip lining and pipe bursting that are used for the rehabilitation of existing sanitary sewer pipelines.

V-2 Procedures and Standards for Inspection and Testing of New and Rehabilitated Facilities

Section 33 30 00 states, "Any and all work to be performed on the Collection System shall be inspected and approved by City Staff." Section 33 3000 also include testing and acceptance requirements for individual elements of projects and testing requirements for newly constructed or rehabilitated pipelines including hydrostatic testing, mandrel testing, air testing and closed circuit television inspection of sewer lines.

V-3 References- Design and Performance Provision

- Standard Specifications and Drawings of the Public Works Department of the City of San Bruno, August 2011
- California Building Code, San Bruno Municipal Code Chapter 11.04

Element VI: Overflow Emergency Response Plan

SWRCB Waste Discharge Requirement:

Each Enrollee shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan must include the following:

- a) Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;
- b) A program to ensure an appropriate response to all overflows;
- c) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, Regional Water Boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the MRP. All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDRs or NPDES permit requirements. The Sewer System Management Plan (SSMP) should identify the officials who will receive immediate notification;
- d) Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;
- e) Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and
- f) A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

(Ref. SWRCB Order No. 2006-0003-DWQ D.13.)

VI-1 Purpose

The purpose of the City of San Bruno's Overflow Emergency Response Plan (OERP) is to support an orderly and effective response to Sanitary Sewer Overflows (SSOs). The OERP provides guidelines for City personnel to follow in responding to, cleaning up, and reporting SSOs that may occur within the City's service area. This OERP satisfies the

SWRCB Statewide General Waste Discharge Requirements (GWDR), which require wastewater collection agencies to have an Overflow Emergency Response Plan. All appendices references in this Element refer to the Appendices attached to the Sanitary Sewer Overflow and Backup Response Field Guide, 2013 by DKF Solutions, LLC.

VI-2 Policy

The City's employees are required to report all wastewater overflows found and to take the appropriate action to secure the wastewater overflow area, properly report to the appropriate regulatory agencies, relieve the cause of the overflow, and ensure that the affected area is cleaned as soon as possible to minimize health hazards to the public and protect the environment. The City's goal is to respond to sewer system overflows as soon as possible following notification. The City will follow reporting procedures in regards to sewer spills as set forth by the San Francisco Regional Water Quality Control Board (*SFRWQCB*) and the California State Water Resources Control Board (*SWRCB*).

VI-3 Goals

The City's goals with respect to responding to SSOs are:

- Work safely;
- Respond quickly to minimize the volume of the SSO with any needed resources;
- Eliminate the cause of the SSO;
- Prevent sewage system overflows or leaks from entering the storm drain system or receiving waters to the maximum extent practicable;
- Contain the spilled wastewater to the extent feasible;
- Minimize public contact with the spilled wastewater;
- Mitigate the impact of the SSO;
- Meet the regulatory reporting requirements;
- Evaluate the causes of failure related to certain SSOs; and
- Revise response procedures resulting from the debrief and failure analysis of certain SSOs.

VI-4 SSO Detection and Notification

Ref. SWRCB Order No. 2006-0003-DWQ D13. iv(a)

The processes that are employed to notify the City of the occurrence of an SSO include: observation by the public, receipt of an alarm, or observation by City staff during the normal course of their work.

The City operates six wastewater pump stations. In the event of any pump failure, the high level sensor activates the SCADA alarm system and the City is contacted. To prevent overflow, wastewater from the wet well can either be pumped into a vacuum truck for disposal to a nearby sanitary sewer manhole, or bypassed around the station into the sanitary sewer system.

VI-4.1 Public Observation

Public observation is the most common way that the City is notified of blockages and spills. Contact numbers and information for reporting sewer spills and backups are in the phone book and on the City's website: <https://sanbruno.ca.gov/>. The City's telephone number for reporting sewer problems is (650) 616-7160.

Normal Work Hours

When a report of a sewer spill or backup is made during normal work hours, Public Works administrative staff receives the call and collects information from the caller (e.g., name, location, telephone, etc.) and enters it into the Mainstar Computerized Maintenance Management System (CMMS). They then forward the service request to the Lateral Service Truck Crew or vactor crew who will respond.

After Hours

After hours calls roll over to a private answering service, and they will contact the Standby Personnel for the Wastewater Division who will respond with the vactor truck (s). They will also generate the work order in the CMMS and enter the results of the service request.

When calls are received, either during normal work hours or after hours, the individual receiving the call will collect the following information:

- Time and date of call
- Specific location of potential problem
- Nature of call
- In case of SSO, estimated start time of overflow
- Caller's name and telephone number
- Caller's observation (e.g., odor, duration, location on property, known impacts, indication if surface water impacted, appearance at cleanout or manhole)

- Other relevant information

Figure VI – 1 is an overview of receiving a sewage overflow or backup report.

VI-4.2 City Staff Observation

City staff conducts periodic inspections of its sewer system facilities as part of their routine activities. Any problems noted with the sewer system facilities are reported to appropriate City staff that, in turn, responds to emergency situations. Work orders are issued to correct non-emergency conditions.

VI-4.3 Contractor Observation

The following procedures are to be followed in the event that a contractor/plumber causes or witnesses a Sanitary Sewer Overflow. If the contractor/plumber causes or witnesses an SSO they should:

1. Immediately notify the City
2. Protect storm drains
3. Protect the public
4. Provide information to the City Maintenance Workers such as start time, appearance point, suspected cause, weather conditions, etc.
5. Direct ALL media and public relations requests to the City Manager

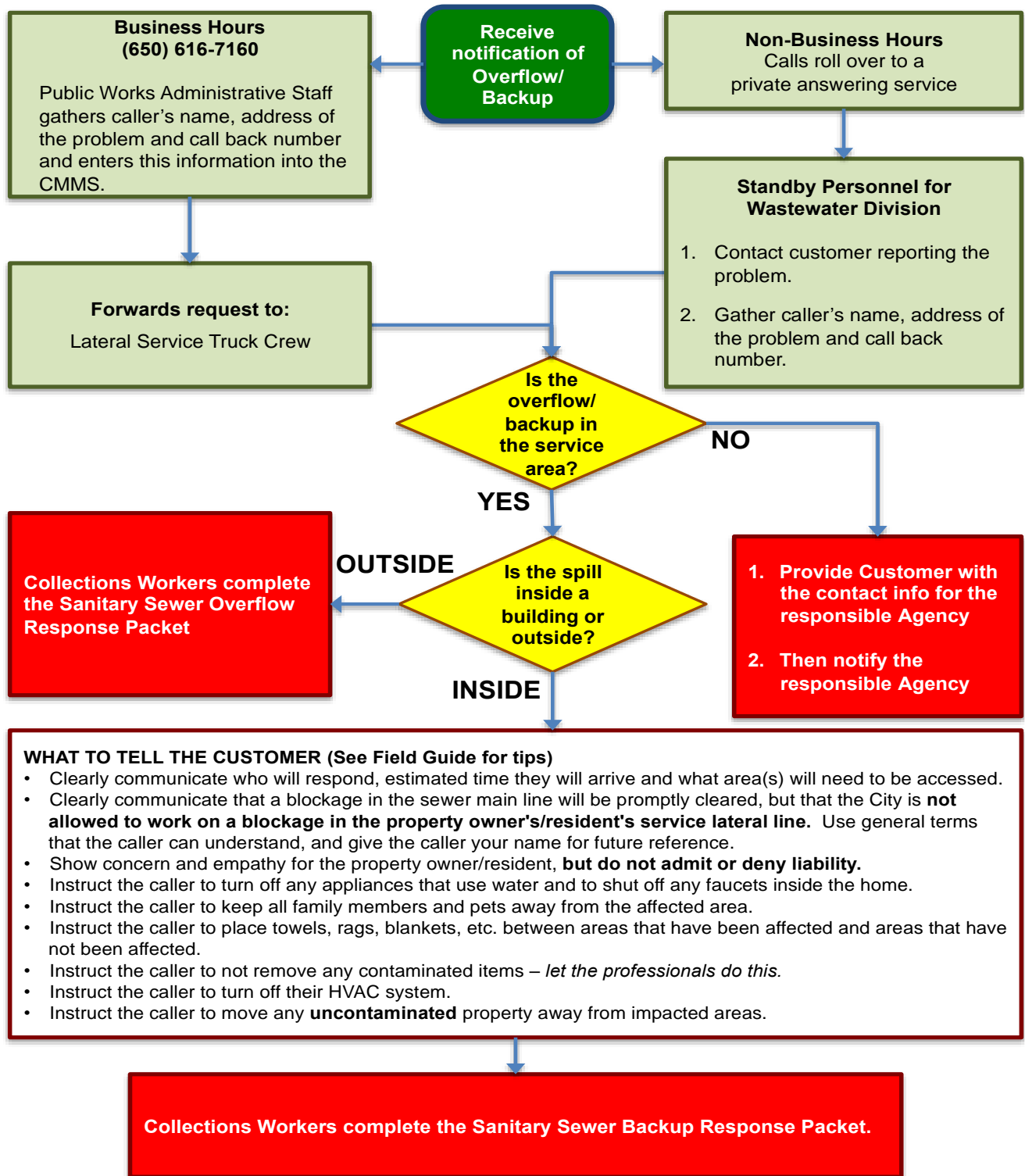


Figure VI – 1: Overview of Receiving a Sewage Overflow or Backup Report Procedure

VI-5 SSO Response Procedures

Ref. SWRCB Order No. 2006-0003-DWQ D13. (vi)(b)

VI-5.1 Sewer Overflow/Backup Response Summary

The City will respond to SSOs as soon as feasible following notification of an overflow/backup or unauthorized discharge. **Figure VI - 2** is an overview of the response activities.

VI-5.2 First Responder Priorities

The first responder's priorities are:

- To follow safe work practices.
- To respond promptly with the appropriate and necessary equipment.
- To contain the spill wherever feasible.
- To restore the flow as soon as practicable.
- To minimize public access to and/or contact with the spilled sewage.
- To promptly notify the Wastewater Division Lead Worker or Wastewater Division Manager in event of major SSO.
- To return the spilled sewage to the sewer system.
- To restore the area to its original condition (or as close as possible).

VI-5.3 Safety

The first responder is responsible for following safety procedures at all times. Special safety precautions must be observed when performing sewer work. There may be times when City personnel responding to a sewer system event are not familiar with potential safety hazards peculiar to sewer work. In such cases it is appropriate to take the time to discuss safety issues, consider the order of work, and check safety equipment before starting the job.

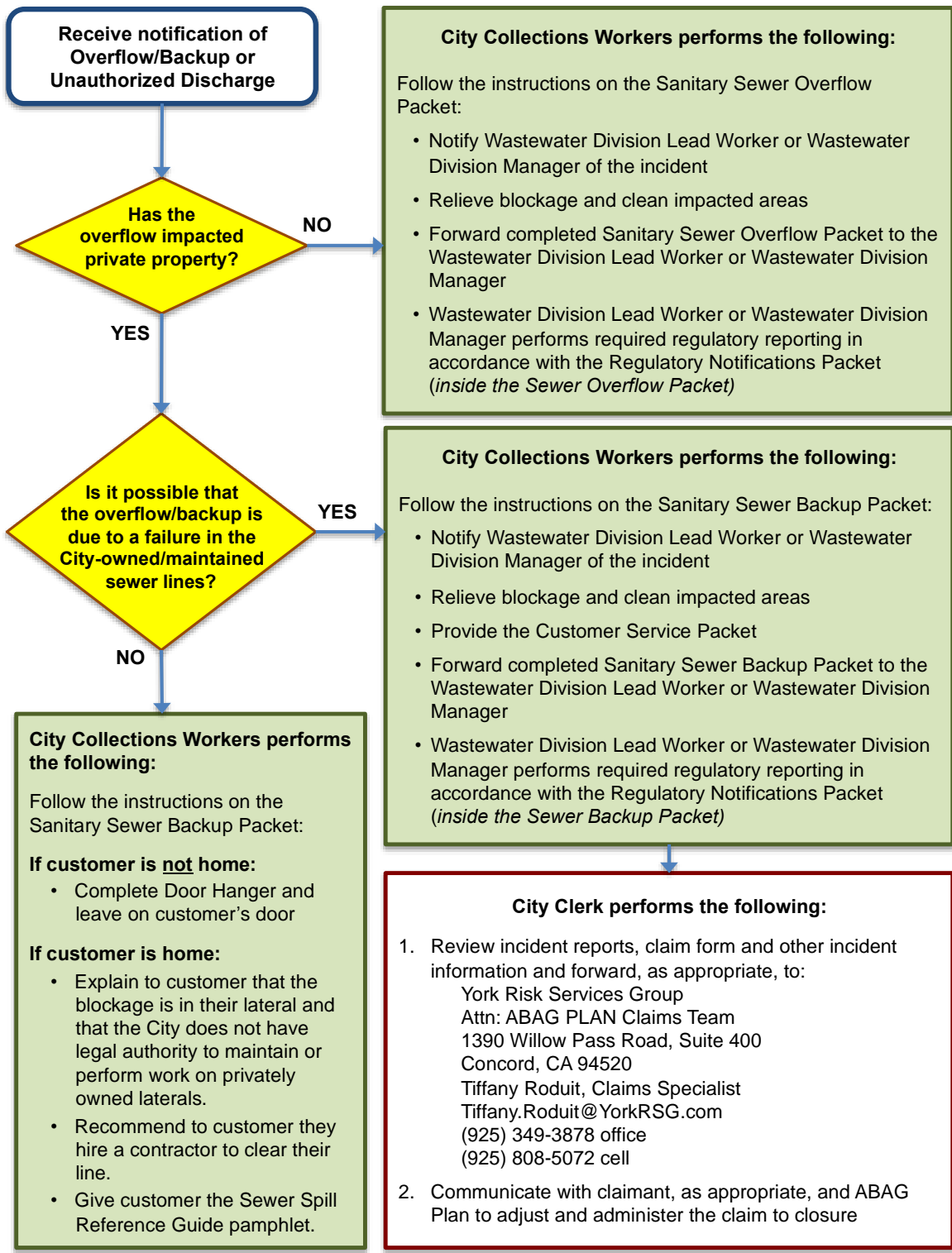


Figure VI - 2: Overview of the response activities

VI-5.4 Initial Response

The first responder must respond to the reporting party/problem site and visually check for potential sewer stoppages or overflows.

The first responder will:

- Note arrival time at the site of the overflow/backup.
- Verify the existence of a public sewer system spill or backup.
- Determine if the overflow or blockage is from a public or private sewer.
- Identify and assess the affected area and extent of spill.
- Contact caller if time permits.
- If the spill is large or in a sensitive area, document conditions upon arrival with photographs. Decide whether to proceed with clearing the blockage to restore the flow or to initiate containment measures. The guidance for this decision is:
 - Small spills (i.e., spills that are easily contained) – proceed with clearing the blockage.
 - Moderate or large spill where containment is anticipated to be simple – proceed with the containment measures.
 - Moderate or large spills where containment is anticipated to be difficult – proceed with clearing the blockage; however, whenever deemed necessary, call for additional assistance and implement containment measures.
- Take steps to contain the SSO. For detailed procedures refer to Appendix B: Sanitary Sewer Backup Procedures, and Appendix C: Sanitary Sewer Overflow Packet.

VI-5.5 Initiate Spill Containment Measures

The first responder will attempt to contain as much of the spilled sewage as possible using the following steps:

- Determine the immediate destination of the overflowing sewage.
- Plug storm drains using air plugs, sandbags, and/or plastic mats to contain the spill, whenever appropriate. If spilled sewage has made contact with the storm

drainage system, attempt to contain the spilled sewage by plugging downstream storm drainage facilities.

- Contain/direct the spilled sewage using dike/dam or sandbags.
- Pump around the blockage/pipe failure.

For detailed procedures refer to Appendix C: Sanitary Sewer Overflow Packet.

VI-5.6 Restore Flow

Using the appropriate cleaning equipment, set up downstream of the blockage and hydro-clean upstream from a clear manhole. Attempt to remove the blockage from the system and observe the flows to ensure that the blockage does not reoccur downstream. If the blockage cannot be cleared within a reasonable time from arrival, or sewer requires construction repairs to restore flow, then initiate containment and/or bypass pumping. For detailed procedures refer to Appendix C: Sanitary Sewer Overflow Packet.

VI-5.7 Equipment

This section provides a list of specialized equipment that may be used to support this Overflow Emergency Response Plan.

- *Closed Circuit Television (CCTV) Inspection Unit* – A CCTV Inspection Unit is required to determine the root cause for all SSOs from gravity sewers.
- *Camera* -- A digital or disposable camera is required to record the conditions upon arrival, during clean up, and upon departure.
- *Emergency Response Trucks* -- A utility body pickup truck, or open bed is required to store and transport the equipment needed to effectively respond to sewer emergencies. The equipment and tools will include containment and clean up materials.
- *Portable Generators, Portable Pumps, Piping, and Hoses* – Equipment used to bypass pump, divert, or power equipment to mitigate an SSO.
- *Combination Sewer Cleaning Trucks* -- Combination high velocity sewer cleaning trucks with vacuum tanks are required to clear blockages in gravity sewers, vacuum spilled sewage, and wash down the impacted area following the SSO event.
- *Air plugs, sandbags and plastic mats*
- *Portable Lights*
- *6" portable pump and hose reel trailer*

Standard operating procedures for equipment that may be necessary in the event of a sanitary sewer overflow or backup can be found in the Wastewater Division offices and vehicles.

VI-6 Recovery and Cleanup

Ref. SWRCB Order No. 2006-0003-DWQ D13.(vi)(e)

The recovery and cleanup phase begins immediately after the flow has been restored and the spilled sewage has been contained to the extent possible. The SSO recovery and cleanup procedures are:

VI-6.1 Estimate the Volume of Spilled Sewage

Use the methods outlined in the Sanitary Sewer Backup Packet (Appendix B), Sanitary Sewer Overflow Packet (Appendix C), and/or the Field Guide to estimate the volume of the spilled sewage. Wherever possible, document the estimate using photos and/or video of the SSO site before and during the recovery operation.

VI-6.2 Recovery of Spilled Sewage

Vacuum up and/or pump the spilled sewage and rinse water, and discharge it back into the sanitary sewer system.

VI-6.3 Clean-up and Disinfection

Clean up and disinfection procedures will be implemented to reduce the potential for human health issues and adverse environmental impacts that are associated with an SSO event. The procedures described are for dry weather conditions and will be modified as required for wet weather conditions. Where cleanup is beyond the capabilities of the City Maintenance Workers, a cleanup contractor will be used.

Private Property

City crews are responsible for the cleanup when the property damage is minor in nature and is outside of private building dwellings, such as in front, side and backyards, easements, etc. In all other cases, affected property owners can call a water damage restoration contractor to complete the cleanup and restoration. If the overflow into property is the definite cause of City system failure, the property owner can call out a water damage restoration contractor to complete the cleanup and restoration. In both cases, property owners may obtain a City claim form from the City Clerk.

Hard Surface Areas

Collect all signs of sewage solids and sewage-related material either by protected hand or with the use of rakes and brooms. Wash down the affected area with clean water and/or deozyme or similar non-toxic biodegradable surface disinfectant until the water runs clear. The flushing volume will be approximately three times the estimated volume of the spill. Take reasonable steps to contain and vacuum up the wastewater. Allow area to dry. Repeat the process if additional cleaning is required.

Landscaped and Unimproved Natural Vegetation

Collect all signs of sewage solids and sewage-related material either by protected hand or with the use of rakes and brooms. Wash down the affected area with clean water until the water runs clear. The flushing volume will be approximately three times the estimated volume of the spill. Either contain or vacuum up the wash water so that none is released. Allow the area to dry. Repeat the process if additional cleaning is required.

Natural Waterways

The Department of Fish and Wildlife will be notified by CalOES for SSOs greater than or equal to 1,000 gallons.

Wet Weather Modifications

Omit flushing and sampling during heavy storm events (i.e., sheet of rainwater across paved surfaces) with heavy runoff where flushing is not required and sampling would not provide meaningful results.

VI-6.4 Public Notification

Signs will be posted and barricades put in place to keep vehicles and pedestrians away from contact with spilled sewage. The Wastewater Division Manager will use his/her best judgment regarding sign placement in order to protect the public and local environment. Signs will not be removed until directed by the Wastewater Division Manager.

Creeks, streams and beaches that have been contaminated as a result of an SSO will be posted at visible access locations until the risk of contamination has subsided to acceptable background bacteria levels. The area and warning signs, once posted, will be checked every day to ensure that they are still in place. Photographs of sign placement will be taken.

In the event that an overflow occurs at night, the location will be inspected first thing the following day. The field crew will look for any signs of sewage solids and sewage-related material that may warrant additional cleanup activities.

When contact with the local media is deemed necessary, the City Manager or their designee will provide the media with all relevant information.

VI-7 Water Quality

Ref. SWRCB Order No. 2006-0003-DWQ D13.(vi)(f)

VI-7.1 Waters of the State

The following Waters of the State are in the City of San Bruno's service area:

- San Francisco Bay
- Pacific Ocean
- San Bruno Creek

VI-7.2 Water Quality Sampling and Testing

Water quality sampling and testing is required for Category 1 SSOs of 50,000 gallons or greater to determine the extent and impact of the SSO. The water quality sampling procedures must be implemented within 48 hours and include the following:

- The first responders will contact Alpha Labs to collect samples as soon as possible after the discovery and mitigation of the SSO event.
- The water quality samples will be collected from upstream of the spill, from the spill area, and downstream of the spill in flowing water (e.g. creeks). The water quality samples will be collected near the point of entry of the spilled sewage.
- The samples shall then be brought to Alpha Labs for analysis.

VI-7.3 Water Quality Monitoring Plan

The City Water Quality Monitoring Plan will be implemented immediately upon discovery of any Category 1 SSO of 50,000 gallons or more in order to assess impacts from SSOs to surface waters. The SSO Water Quality Monitoring Program will:

1. Contain protocols for water quality monitoring.
2. Account for spill travel time in the surface water and scenarios where monitoring may not be possible (e.g. safety, access restrictions, etc.)
3. Require water quality analyses for ammonia and bacterial indicators to be performed by an accredited or certified laboratory.

4. Require monitoring instruments and devices used to implement the SSO Water Quality Monitoring Program to be properly maintained and calibrated, including any records to document maintenance and calibration, as necessary, to ensure their continued accuracy.
5. Within 48 hours of the City becoming aware of the SSO, require water quality sampling for ammonia and total and fecal coliform.
6. Observe proper chain of custody procedures.

VI-7.4 SSO Technical Report

The City will submit and certify an SSO Technical Report to the CIWQS Online SSO Database within 45 calendar days of the SSO end date for any SSO in which 50,000 gallons or greater are spilled to surface waters. The Wastewater Division Manager will supervise the preparation of this report and will certify this report. This report, which does not preclude the Water Boards from requiring more detailed analyses if requested, shall include at a minimum, the following:

Causes and Circumstances of the SSO:

- Complete and detailed explanation of how and when the SSO was discovered.
- Diagram showing the SSO failure point, appearance point(s), and final destination(s).
- Detailed description of the methodology employed and available data used to calculate the volume of the SSO and, if applicable, the SSO volume recovered.
- Detailed description of the cause(s) of the SSO.
- Copies of original field crew records used to document the SSO.
- Historical maintenance records for the failure location.

City's Response to SSO:

- Chronological narrative description of all actions taken by the City to terminate the spill.
- Explanation of how the SSMP Overflow Emergency Response Plan was implemented to respond to and mitigate the SSO.
- Final corrective action(s) completed and/or planned to be completed, including a schedule for actions not yet completed.

Water Quality Monitoring:

- Description of all water quality sampling activities conducted including analytical results and evaluation of the results.
- Detailed location map illustrating all water quality-sampling points.

VI.8 Sewer Backup Into/Onto Private Property Claims Handling Policy

It is the policy of the City that a claims form shall be offered to anyone wishing to file a claim. The following procedures will be observed for all sewer overflows/backups into/onto private property:

- City Maintenance Workers will offer a City claim form irrespective of fault whenever it is possible that the sanitary sewer backup may have resulted from an apparent blockage in the City-owned sewer lines or whenever a City customer requests a claim form. The claim may later be rejected if subsequent investigations into the cause of the loss indicate the City was not at fault.
- It is the responsibility of the Maintenance Workers to gather information regarding the incident and notify the Wastewater Division Lead Worker or Wastewater Division Manager.
- It is the responsibility of the City Clerk to review all claims and to oversee the adjustment and administration of the claim to closure.

VI-9 Notification, Reporting, Monitoring and Recordkeeping Requirements

Ref. SWRCB Order No. 2006-0003-DWQ D13.(vi)(c)

In accordance with the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (SSS GWDRs), the City of San Bruno maintains records for each sanitary sewer overflow. Records include:

- Documentation of response steps and/or remedial actions
- Photographic evidence to document the extent of the SSO, field crew response operations, and site conditions after field crew SSO response operations have been completed. The date, time, location, and direction of photographs taken will be documented.

- Documentation of how any estimations of the volume of discharged and/or recovered volumes were calculated including all assumptions made.

Regulator required notifications are outlined in Section VI-9.1 and Table VI – 1 on the following page.

VI-9.1 Regulator Required Notifications

For reporting purposes, if one SSO event of whatever category results in multiple appearance points in a sewer system, a single SSO report is required in CIWQS that includes the GPS coordinates for the location of the SSO appearance point closest to the failure point, blockage or location of the flow condition that cause the SSO, and descriptions of the locations of all other discharge points associated with the single SSO event.

Table VI - 1: Regulator required notifications

ELEMENT	REQUIREMENT	METHOD
NOTIFICATION	Within two hours of becoming aware of any Category 1 SSO greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water, the City will notify the California Office of Emergency Services (CalOES) and obtain a notification control number.	Call Cal OES at: (800) 852-7550
REPORTING	<ul style="list-style-type: none"> • Category 1 SSO: The City will submit draft report within three business days of becoming aware of the SSO and certify within 15 calendar days of SSO end date. • Category 2 SSO: The City will submit draft report within 3 business days of becoming aware of the SSO and certify within 15 calendar days of the SSO end date. • Category 3 SSO: The City will submit certified report within 30 calendar days of the end of month in which SSO the occurred. • SSO Technical Report: The City will submit within 45 calendar days after the end date of any Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters. • “No Spill” Certification: The City will certify that no SSOs occurred within 30 calendar days of the end of the month or, if reporting quarterly, the quarter in which no SSOs occurred. <p>Collection System Questionnaire: The City will update and certify every 12 months.</p>	Enter data into the CIWQS Online SSO Database (http://ciwqs.waterboards.ca.gov/) certified by the Legally responsible Official(s). All information required by CIWQS will be captured in the Sanitary Sewer Overflow Report. Certified SSO reports may be updated by amending the report or adding an attachment to the SSO report within 120 calendar days after the SSO end date. After 120 days, the State SSO Program Manager must be contacted to request to amend an SSO report along with a justification for why the additional information was not available prior to the end of the 120 days.
WATER QUALITY MONITORING	The City will conduct water quality sampling within 48 hours after initial SSO notification for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.	Water quality results will be uploaded into CIWQS for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.
RECORD KEEPING	<p>The City will maintain the following records:</p> <ul style="list-style-type: none"> • SSO event records. • Records documenting Sanitary Sewer Management Plan (SSMP) implementation and changes/updates to the SSMP. • Records to document Water Quality Monitoring for SSOs of 50,000 gallons or greater spilled to surface waters. <p>Collection system telemetry records if relied upon to document and/or estimate SSO Volume.</p>	Self-maintained records shall be available during inspections or upon request.

¹ In the event that the CIWQS online SSO database is not available, the Wastewater Division Lead Worker or Wastewater Division Manager will notify SWRCB by phone and will fax or e-mail all required information to the RWQCB office at (510) 622-2460 in accordance with the time schedules identified above. In such an event, the City will submit the appropriate reports using the CIWQS online SSO database when the database becomes available. A copy of all documents that certify the submittal in fulfillment of this section shall be retained in the SSO file.

² The City always has at least one LRO. Any change in the LRO(s) including deactivation or a change to contact information, will be submitted to the SWRCB within 30 days of the change by calling (866) 792-4977 or emailing help@ciwqs.waterboards.ca.gov.

VI-9.2 Complaint Records

The City maintains records of all complaints received whether or not they result in sanitary sewer overflows. These complaint records include:

- Date, time, and method of notification
- Date and time the complainant or informant first noticed the SSO or occurrence related to the call
- Narrative description describing the complaint
- A statement from the complainant or informant, if they know, of whether or not the potential SSO may have reached waters of the state
- Name, address, and contact telephone number of the complainant or informant reporting the potential SSO (if not reported anonymously)
- Follow-up return contact information for each complaint received (if not reported anonymously)
- Final resolution of the complaint with the original complainant
- Work service request information used to document all feasible and remedial actions taken

All service requests are entered into the City's Maintstar Computerized Maintenance Management System (CMMS). This information will be maintained for a minimum of five years whether or not they result in an SSO unless required to be kept longer by the Water Boards or City litigation.

VI-10 Post SSO Event Debriefing

Ref. SWRCB Order No. 2006-0003-DWQ D13.(vi)(d)

Every SSO event is an opportunity to evaluate the City response and reporting procedures. Each overflow event is unique, with its own elements and challenges including volume, cause, location, terrain, climate, and other parameters.

As soon as possible after Category 1 and Category 2 SSO events all of the participants, from the person who received the call to the last person to leave the site, will meet to review the procedures used and to discuss what worked and where improvements could be made in preventing or responding to and mitigating future SSO events. The results of the debriefing will be documented and tracked to ensure the action items are completed as scheduled.

VI-11 Failure Analysis Investigation

Ref. SWRCB Order No. 2006-0003-DWQ D13.(vi)(d)

The objective of the failure analysis investigation is to determine the “root cause” of the SSO and to identify corrective action(s) needed that will reduce or eliminate future potential for the SSO to recur or for other SSOs to occur.

The investigation will include reviewing all relevant data to determine appropriate corrective action(s) for the line segment. The investigation will include:

- Reviewing and completing the Sanitary Sewer Overflow Report (in Appendix B and Appendix C) and any other documents related to the incident
- Reviewing the incident timeline and other documentation regarding the incident
- Reviewing communications with the reporting party and witness
- Reviewing volume estimate, volume recovered estimate, volume estimation assumptions and associated drawings
- Reviewing available photographs
- Interviewing staff that responded to the spill
- Reviewing past maintenance records
- Reviewing past CCTV records,
- Conducting a CCTV inspection to determine the condition of all line segments immediately following the SSO and reviewing the video and logs,
- Reviewing any Fats, Roots, Oils, and Grease (FROG) related information or results
- Post SSO debrief records
- Interviews with the public at the SSO location

The product of the failure analysis investigation will be the determination of the root cause and the identification and scheduling of the corrective actions. The Collection System Failure Analysis Form (in Appendix B and Appendix C) will be used to document the investigation.

VI-12 SSO Response Training

Ref. SWRCB Order No. 2006-0003-DWQ D13.(vi)(d)

This section provides information on the training that is required to support this Overflow Emergency Response Plan.

VI-12.1 Initial and Annual Refresher Training

All City personnel who may have a role in responding to, reporting, and/or mitigating a sewer system overflow will receive training on the contents of this OERP. All new employees will receive training before they are placed in a position where they may have to respond. Current employees will receive annual refresher training on this plan and the procedures to be followed. The City will document all training.

Affected employees will receive annual training on the following topics by knowledgeable trainers:

- The City's Overflow Emergency Response Plan and Sanitary Sewer Management Plan
- Sanitary Sewer Overflow Volume Estimation Techniques
- Researching and documenting Sanitary Sewer Overflow Start Times
- Impacted Surface Waters: Response Procedures
- State Water Resources Control Board Employee Knowledge Expectations
- Employee Core Competency Evaluations on Sanitary Sewer Operations
- Water Quality Sampling Plan

The City will verify that annual safety training requirements are current for each employee, and that employees are competent in the performance of all core competencies. This will be verified through electronic testing, interviews and observations. The City will address, through additional training/instruction, any identified gaps in required core competencies.

Through SWRCB Employee Knowledge Expectations training the employee will be able to answer the following:

1. Please briefly describe your name and job title.
2. Please describe for us approximately when you started in this field and how long you have worked for your agency.

3. Please expand on your current position duties and role in responding in the field to any SSO complaints.
4. Please describe your SOPs used to respond/mitigate SSOs when they occur.
5. Describe any training your agency provides or sends you to for conducting spill volume estimates.
6. We are interested in learning more about how your historical SSO response activities have worked in the field. We understand from discussions with management earlier that you use the OERP from the SSMP. Please elaborate on how you implement and utilize the procedures in the plan.
7. Historically, before any recent changes, can you please walk us through how you would typically receive and respond to any SSO complaints in the field?
8. Can you tell us who is responsible for estimating SSO volumes discharged? If it is you, please describe how you go about estimating the SSO volume that you record on the work order/service request forms?
9. What other information do you collect or record other than what is written on the work order form?
10. Describe if and when you ever talk with people that call in SSOs (either onsite or via telephone) to further check out when the SSO might have occurred based on what they or others know? If you do this, can you tell us where this information is recorded?
11. We understand you may be instructed to take pictures of some sewer spills/backups into structures. Other than these SSOs, when else would you typically take any pictures of an SSO?
12. Please walk us through anything else you'd like to add to help us better understand how your field crews respond and mitigate SSO complaints.

VI-12.2 SSO Response Drills

Periodic training drills or field exercises will be held to ensure that employees are up to date on these procedures, equipment is in working order, and the required materials are readily available. The training drills will cover scenarios typically observed during sewer related emergencies (e.g. mainline blockage, mainline failure, and lateral blockage). The results and the observations during the drills will be recorded and action items will be tracked to ensure completion.

VI-12.3 SSO Training Record Keeping

Records will be kept of all training that is provided in support of this plan. The records for all scheduled training courses and for each overflow emergency response training event and will include date, time, place, content, name of trainer(s), and names and titles of attendees.

VI-12.4 Contractors Working On City Sewer Facilities

All construction contractors working on City sewer facilities will be required to develop a project-specific OERP, will provide project personnel with training regarding the content of the contractor's OERP and their role in the event of an SSO, and to follow that OERP in the event that they cause or observe an SSO. Emergency response procedures shall be discussed at project pre-construction meetings, regular project meetings and after any contractor involved incidents.

All service contractors will be provided, and required to observe contractor procedures. See Appendix D: Contractor Orientation.

VI-13 Authority

- Health & Safety Code Sections 5410-5416
- CA Water Code Section 13271
- Fish & Wildlife Code Sections 5650-5656
- State Water Resources Control Board Order No. 2006-0003-DWQ
- State Water Resources Control Board Order 2013-009-DWQ effective September 9, 2013

VI-14 References

- Sanitary Sewer Overflow and Backup Response Field Guide, 2013, DKF Solutions Group, LLC
 - Appendix A: Regulatory Notifications Packet
 - Appendix B: Sanitary Sewer Backup Packet
 - Appendix C: Sanitary Sewer Overflow Packet
 - Appendix D: Contractor Orientation

Element VII: Fats, Oils, and Grease (FOG) Control Program

SWRCB Waste Discharge Requirement:

Each Enrollee shall evaluate its service area to determine whether a FOG control program is needed. If an Enrollee determines that a FOG program is not needed, the Enrollee must provide justification for why it is not needed. If FOG is found to be a problem, the Enrollee must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. This plan shall include the following as appropriate:

- a) An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;
- b) A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;
- c) The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;
- d) Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;
- e) Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;
- f) An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and
- g) Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified in (f) above.

VII-1 Nature and Extent of FOG Problem

The City of San Bruno has approximately one hundred and fifty (150) food service establishments (FSE) currently discharging to the City sewer system. Each of these FSEs has been issued permits to discharge outlining the roles and requirements for these dischargers and to be responsible for the proper handling and disposal of all FOG related wastes. Each of these FSEs is inspected on a regular basis to assure compliance with the FOG requirements.

Prior to the Baykeeper consent decree approximately 50% of all SSOs were related to FOG challenges. The consent decree required the City to work closely with South San Francisco to further develop and improve the FOG Control Program including residential and commercial outreach, education of FSEs on best management practices (BMP), enhanced inspection and enforcement of FSEs that do not comply with the FOG requirements. The final FOG Program was required to be at least equivalent to the program required of South San Francisco. A result of the implementation of this Program shows significant reductions in SSOs from FOG.

The City of San Bruno FOG Control Program is a shared responsibility between San Bruno and South San Francisco Water Quality Control Plant. The responsibility of each agency is shown in **Table VII-1 Fog Control Program Roles and Responsibilities**. In addition, the two agencies have developed a Food Service Establishments Enforcement Response Plan. In general, the Superintendent or his/her designee of the South San Francisco Water Quality Control Plant is the authorized representative for all interactions with FSEs while San Bruno is responsible for final FSE enforcement actions and the cleaning and maintenance of all main line cleaning and FOG related pipeline activities. The two agencies jointly handle outreach and public communications through brochures and bulletins available at both agencies counters. South San Francisco provides FOG related information on their website for the public and commercial and industrial customers.

Table VII - 1 FOG Control Program Roles and Responsibilities

Focus Area	Activity	Responsible Agency	
		San Bruno	South SF
Commercial Sources	Focused FSE Program (permits, inspections)		X
	Inspect GRD maintenance		X
	Develop common standards for GRD	X	X
	Require installation of GRD	X	X
	Inspection GRD installation	X	
	Identify FOG disposal sites and distribute to grease haulers		X
	Outreach to business	X	X
	Provide information re: FOG problems to City inspectors	X	
	Enforcement Actions		
	Admin letter, NOV, monetary penalties		X
	Administrative Orders, water meter shut-off	X	

Residential Sources	Optimize sewer cleaning	X	
	Repair/replace problem sewers	X	
	Prepare outreach materials		X
	Enforcement action	X	
Gather Information	Gather information for next SSMP audit/update	X	X

VII-2 FOG Public Education Outreach

San Bruno in conjunction with SSF has developed and support the following outreach programs pursued in the San Bruno service area.

(1) Commercial And Industrial Component

A significant component of the FOG program involves educating sewer users about the importance of managing grease waste. Food Service Establishments (FSEs) are provided with informational pamphlets upon renewal of their wastewater discharge permits. Multi-lingual BMP posters demonstrating proper grease waste management techniques are distributed during annual inspections. The SSF Environmental Compliance Program maintains a list of grease waste haulers, **Table VII -1** and cooking oil recyclers **Table VII – 2** that is provided to FSEs upon request. In 2011, FOG management pamphlets were distributed to the owners of all commercial and industrial property within South San Francisco with their sewer service charge notifications. The City may, at its discretion promote proper FOG management through partnerships with the Chamber of Commerce and other business organizations.

(2) Residential Component

A variety of FOG management outreach materials are available to the general public. Grease scrapers and biodegradable waste containers are distributed to residents at community events and in public buildings throughout the service area, free of charge. These items are printed with FOG control BMPs for households. Advertising was purchased at the Tanforan Movie Theater in San Bruno in 2013 and will continue to run in 2014. Around the winter holidays, posters and stickers describing proper oil disposal are handed out to retailers of turkey fryers. Multi-lingual door hangers are delivered to large, multi-unit dwellings and residences in areas where grease blockages have occurred. Materials and FOG information was distributed to eight local elementary schools in 2013. The City will provide BMPs and other FOG related information in the FOG section of the City of South San Francisco’s website (www.ssf.net/2119/Outreach=Activities), Face Book, and Twitter.

Additionally, the City commits to:

- Publish an article in the garbage collection service newsletters
- Purchase additional screen time at local movie theaters
- Perform outreach at City sponsored events
- Distribute brochures to residential customers
- Distribute grease receptacles
- Continue to distribute educational materials to public schools.

These residential outreach commitments were initiated in the spring of 2012 and continue as needed.

VII-3 FOG Disposal Plan

The SSF Superintendent has developed plans for the proper disposal of all FOG related wastes and has developed a list of Grease Waste and Used Oil Haulers shown in Appendix VII-1. The SSF Environmental Compliance Inspectors through the FSE permitting program inspect and evaluate FSEs best management practices, waste disposal programs and proper equipment operations and maintenance during their regular inspection.

VII-4 Legal Authority for FOG Discharges

The San Bruno Municipal Code conveys the responsibilities for the FOG Control Program to the Superintendent of the SSF Water Quality Control Plant and the specific FSE discharge requirements established in the joint NPDES permit. All FOG discharge requirements are contained in the SSF municipal code Chapter 14.08 Sections .030, .210(b) and (c) and 15.12.060 including preliminary enforcement actions by SSF. Final formal enforcement actions are the responsibility of the City of San Bruno.

SSFs Environmental Compliance Program maintains a master listing of all FSEs in the San Bruno Service Area that is used to prioritize inspections, coordinate follow-up actions and maintain permit compliance. Permits are issued for a period of three years and Environmental Compliance staff coordinates renewals. New FSEs are identified using the business license applications at the City of San Bruno. As a new FSE is identified, the Environmental Compliance section will review and require the business to submit a permit application that will then be reviewed against the FOG Program requirements prior to issuing a discharge permit.

VII-5 Grease Disposal Devices, BMPs, Recordkeeping and Reporting Requirements

San Bruno requires all new FSEs to obtain discharge permits from SSF prior to discharging to the City sewer system. SSF reviews these permit applications for the need for grease disposal

devices or other grease limiting devices and will include necessary permit conditions on the FSE for equipment, BMPs and recordkeeping and reporting requirement. SSF has adopted the following BMPs for the FOG Control Program:

- A properly sized grease removal device should be in use.
- Grease removal device maintenance should be performed at regular intervals by trained operators and verified by management.
- Used cooking oil should be collected for recycling by a licensed hauler.
- Dry cleanup methods should be used for dish pre-washing as well as equipment and floor cleaning.
- A spill control plan should be in place. Absorbent materials should be available to aid in spill cleanup.
- Food grinders should be removed or kept out of service.
- Greasy waste should not be poured down any drain.
- Mats, filters and floors should be cleaned such that all wash water drains through a grease removal device.
- Employees should be trained on FOG handling BMPs.

VII-6 FOG Inspection and Enforcement Authority

(1) Applicability

Regulated FSEs include food production facilities not covered under the Pretreatment Program, institutional food-service establishments, full-service restaurants, fast food outlets, coffee shops and concessions associated with other businesses where food is prepared. Each is subject to periodic inspection. Whether or not a specific business qualifies as an FSE is ultimately up to the discretion of Environmental Compliance Inspectors.

(2) Program Standards

In prior years, inspections were performed on a three-year cycle. Beginning with calendar year 2011, FSEs are inspected every year. Where violations are discovered, remediation is required within 30 days. Violations include failure to implement applicable BMPs, failure to keep records of grease removal device cleaning, utilization of enzymes or emulsifiers in grease removal devices, operating without a valid wastewater discharge permit, and being shown to be the cause of an SSO.

(3) Enforcement

The City of South San Francisco follows the written FSE Enforcement Response Plan when addressing non-compliant FSEs. In case an SSO can be shown to have been caused by an FSE, depending on the severity and the underlying cause of the SSO, the City will, at a

minimum send the business owner a warning letter, a Notice of Violation or an Administrative Citation (with or without monetary penalties) describing the cause of the SSO that has been attributed to the FSE, the pertinent parts of the City's FOG Ordinance, and required remediation methods and corrective actions to comply. An FSE must acknowledge receipt of such a document within 30 days of its postmark. If the City determines that it is more appropriate, a Show Cause Hearing may be conducted or a case may be referred to the San Bruno City Attorney in lieu of the letter, NOV or citation previously described.

VII-7 FOG Cleaning Program Requirements – Hot Spot Cleaning

The City has established a hot spot cleaning program for pipeline segments that evidence cleaning problems that could result in SSO or system failures. The pipes included in the hot spot program are identified from results of the regular line cleaning and from the knowledge of the field crews. The results of line cleaning are rated according to the PACP maintenance grading system and from those ratings a determination of the frequency of the hot spot cleaning is made. The current hot spot frequencies are 2-week, one (1) month, three (3) month, six (6) months and one year. Pipeline segments are placed on or removed from the hot spot program based upon the results of the cleaning. A line segment is not removed from the hot spot program until at least three (3) consecutive cleaning results show the line is clear.

VII-8 FOG Characterization Assessment

The City utilizing its Maintstar maintenance management system, mapping systems and the results of system cleaning, to identify pipe segments that are experiencing FOG and/or maintenance problems. The pipe segments once identified are referred to the Engineering Division for evaluation and consideration for repairs, future improvement or modification if the problems are structural or operational. The line segments will be included in the CCTV condition assessment program for further internal observation and evaluation. If it is determined that repairs are required, they will be completed in priority order or added to the capital improvement program.

VII-9 References

- Food Service Establishments Enforcement Response Plan
- Consent Decree, Baykeeper, Inc. vs. City of San Bruno, United States District Court, Northern District of California, San Francisco Division Civil Case No. CV 10-00753 SC, Filed 9/27/11
- South San Francisco website

Appendix VII - 1: List of Grease Waste and Used Oil Haulers

Table VII - 2: Grease Waste Haulers

A-1 Septic tank Service	(510) 697-8083
Able Septic	(408) 377-9990
Ameriguard Maintenance Services	(800) 347-7876
Bay Pumping	(831) 320-5229
Blue Sky Bio-Fuels	(510) 868-9229
Burr Plumbing & Pumping	(408) 287-2877
Darling International, Inc.	(800) 473-4890
Got Grease	(415) 728-8766
Liquid Environmental Solutions	(866) 694-7327
Pioneer Liquid Transport	(800) 804-7327
R&D Grease Trap Cleaning	(707) 632-5827
Sacramento Rendering Co.	(800) 339-6493
Salinas Tallow	(800) 621-9000
San Jose Tallow	(408) 452-8777
Trap Recyclers Inc.	(408) 892-3824

Table VII - 3: Used Cooking Oil Haulers

Ameriguard Maintenance Services	(800) 347-7876
Blue Sky Bio-Fuels	(510) 868-9229
Darling International, Inc.	(800) 473-4890
Got Grease	(415) 728-8766
One More Time	(800) 624-5504
Salinas Tallow	(800) 621-9000

** This partial list is distributed only as a convenience. The City of South San Francisco does not endorse or promote any companies listed and will not be responsible for services rendered.*

Element VIII: System Evaluation and Capacity Assurance Plan

SWRCB Waste Discharge Requirement:

The Enrollee shall prepare and implement a capital improvement plan (CIP) that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum, the plan must include:

- a. **Evaluation:** Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events;
- b. **Design Criteria:** Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria; and
- c. **Capacity Enhancement Measures:** The steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.
- d. **Schedule:** The Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in (a)-(c) above. This schedule shall be reviewed and updated consistent with the Sewer System Management Plan (SSMP) review and update requirements as described in Section D. 14.

VIII-1 System Evaluation - Collection System Master Plan

The City completed a revision of the San Bruno Sewer Master Plan by RMC Water and Environment (RMC) in January 2014 that updated the 2000 Sewer Master Plan and Infiltration/Inflow Study. The objective of this effort was to update the 2000 study and to comply with the requirements in the WDR for capacity assurance and the development of capital improvement needs for the short and long term in the collection system based upon pipeline condition assessments and capacity enhancements. Further the Sewer Master Plan

satisfies the requirements of the 2011 Cease and Desist Order by the San Francisco Regional Water Quality Control Board and the consent decree with the San Francisco Baykeeper. The Master Plan fulfills the requirements for condition assessment, development of a Capacity Assurance Plan and a long-range sewer system Capital Improvement.³

The Master Plan utilized the InfoWorks CS, fully dynamic hydraulic model supported by a GIS based modeling interface. The model included pipes ten inches and larger and a few smaller pipes considered to be trunk sewers. The model included approximately 20 miles of City lines or about 23% of the entire sewer system and two of the six City pump stations (Crestwood and Lomita Park). The model discharges at two locations to the South San Francisco trunk system on the way to that WQCP for treatment and effluent discharge. The City was divided into several sewer sheds from which existing and future sewage flows were added to the model and then routed through the collection system to determine both current and future capacity of the system. Additionally, the consultant conducted flow monitoring at 12 temporary locations in the City from January to March 2011 used to calibrate the model and to

From the hydraulic model the consultant was able to define areas that require current or future long range improvements to be able to handle the all projected flows for both dry and wet weather conditions according to certain design parameters identified here and in the Master Plan.

VIII-2 Design Criteria

The capacity-related design criteria in the Master Plan utilized a design rainfall event defined as a 10-year reoccurrence frequency, 24 hour duration storm with temporal rainfall distribution based upon guidelines established in the U.S. Department of Agriculture National Conservation Services publication Technical Release Number 55 “Urban Hydrology for Small Watersheds”. The design storm is comparable to the most notable large rainfall events that have occurred in the San Francisco Bay Area over the past several years including the storms of December 11, 2005 and January 25, 2008.⁴

The Master Plan identified several areas where model flows either caused overflows or surcharged to within four feet of the manhole rim under peak wet weather flows for the above defined design storm.

³ City of San Bruno Sewer Master Plan, January 2014, RMC Water and Environment, Page 1.

⁴ IBID, Page 2

VIII-3 Capacity Enhancement Measures – Capital Improvement Program

Upon completion of the hydraulic model runs, the consultant prepared long range plans for both renewal and replacement and capacity enhancements of the City sewer system. The renewal and replacement program was previously defined in Element 4, Appendix IV – 2, Table IV -7. In addition, they prepared a 20-year capacity improvements plan to address significant structural and maintenance issues and aging infrastructure and pump station upgrades necessary to meet the current and future improvement needs. The 20-year plan was divided into three phases reflecting relative priorities for construction as follows:

- Phase I – years 1 to 5
- Phase II – years 6 to 10
- Phase III – year 11 to 20

The recommended projects for all three phases are included below in Figure VIII-1. Column 1 of the Table provides the status of each of the Phase I projects as of the date of these SSMP revisions. In addition, the last column of the Table also identifies the type of project as capacity related, rehabilitation or replacement for these first phase projects. Several of the Phase I projects have now been completed and are noted in the Table.

The Master Plan included estimates of all of the recommended improvements based upon bids for similar types of projects in 2013. All projects have been indexed to the ENR Construction Cost Index to allow the City to be able to update and evaluate project costs during the term of the long-range program. The City will be funding the capacity assurance program utilizing Sewer Enterprise Fund revenues principally from sewer services charges. The City conducts regular evaluation of rates and charges.

VIII-4 Schedule

The schedule for the current and future four years of the City’s capacity enhancement projects is included in **Appendix IV-2**. The recommended list of projects from the three priority phases will be reviewed and revised annually as part of the City Annual Capital Improvement Program preparation and prioritization. All capital program projects are prepared according to the Wastewater Capital Improvement Program Guiding Policies described in Section IV – 2.6.

**Table VIII - 1: Recommended Sewer System Capital Improvement Program, 2014
Sewer System Master Plan**

Project ID ^a	Project Name	Est. Capital Cost	Avg. Annual CIP Budget/Project Type
Years 1-5			
C-1 – Done	Crestmoor Canyon	\$ 520,000	Capacity
C-4 – Done	Jenevein Avenue Bypass	\$ 770,000	Capacity
C-5B - Done	Kains Avenue Improvement	\$ 1,700,000	Capacity
C-6– In progress	Crystal Springs Avenue	\$ 2,190,000	Capacity
C-7 – Done	San Mateo Avenue Bypass	\$ 1,490,000	Capacity
R-1 – Done	Trenton Easement Improvement	\$ 2,360,000	Rehabilitation
P-1 – Done	Olympic PS Renovation & Force Main replacement	\$ 3,100,000	Rehabilitation
P-2 – Done	Spyglass PS Improvement	\$ 1,000,000	Rehabilitation
Done	Sewer Rehabilitation Based on Condition Assessment ^b	\$ 11,000,000	Rehabilitation
Done	Sewer Spot Repair	\$ 1,250,000	Rehabilitation
Done	Equipment Purchase	\$ 600,000	Replacement
	Subtotal – Years 1-5	\$ 26,000,000	\$ 5,200,000
Years 6-10			
C-2 – In progress	Crestwood Drive	\$ 1,070,000	Rehabilitation
C-3 – In progress	Crestwood PS Influent Sewer	\$ 280,000	Capacity
C-8 – In progress	San Antonio Avenue	\$ 810,000	Capacity
C-9 – In progress	Crestwood PS Capacity Upgrade	\$ 460,000	Capacity
	Other Pump Station Improvement	\$ 2,000,000	Rehabilitation
	Sewer Rehabilitation Based on Condition Assessment ^b	\$ 30,000,000	Rehabilitation
	Sewer Spot Repair	\$ 650,000	Rehabilitation
	Equipment Purchase	\$ 600,000	Replacement
	Subtotal – Years 6-10	\$ 36,000,000	\$ 7,200,000
Years 11-20			
	Sewer Rehabilitation Based on Condition Assessment	\$ 26,000,000	Rehabilitation
	Additional Rehabilitation of Older Sewers	\$ 44,000,000	Rehabilitation
	Sewer Spot Repair	\$ 500,000	Rehabilitation
	Equipment Purchase	\$ 1,000,000	Replacement
	Subtotal – Years 11-20	\$ 71,500,000	\$ 7,200,000
Total CIP		\$ 133,500,000	\$ 6,700,000

a. Projects within each phase are not prioritized.

b. Includes portions of the Avenues sewer replacement project (R-2).

VIII-5 References

- City of San Bruno Sewer Master Plan, RMC Water and Environment, January 2014
- City of San Bruno Adopted 2015-2016 and 2015-2020 Five-Year Capital Improvement Program Budget

Element IX: Monitoring, Measurement, and Program Modifications

SWRCB Waste Discharge Requirement:

The Enrollee shall:

- a. Maintain relevant information that can be used to establish and prioritize appropriate Sewer System Management Plan (SSMP) activities;
- b. Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;
- c. Assess the success of the preventive maintenance program;
- d. Update program elements, as appropriate, based on monitoring or performance evaluations; and
- e. Identify and illustrate SSO trends, including: frequency, location, and volume.

IX-1 Performance Measures

The City has established three categories of metrics to monitor and measure the effectiveness of the various elements of this SSMP and its success in terms of meeting its goals. Those metrics include the following categories of metric information:

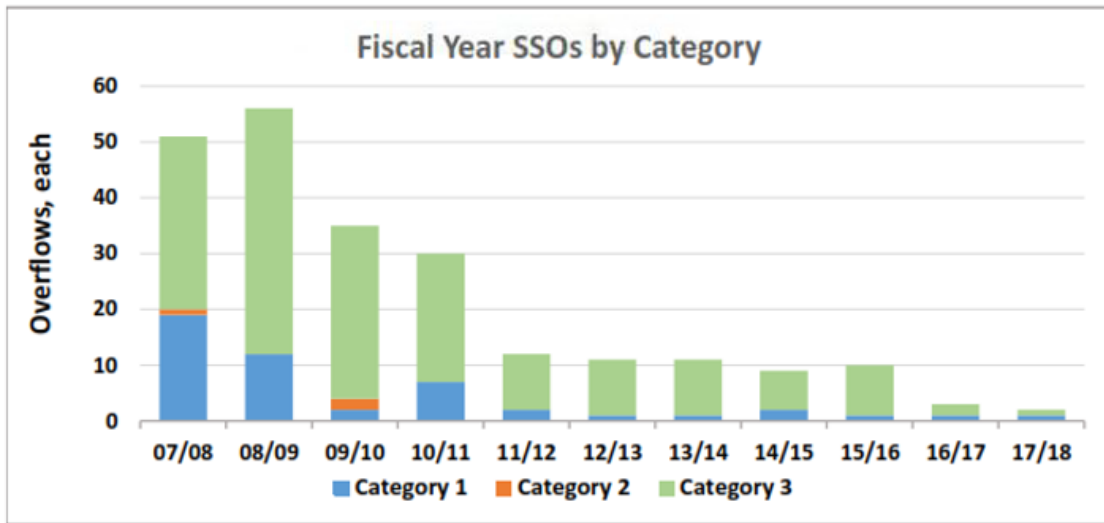
- Sewer Information
- Sewer Maintenance
- SSMP Performance Measures

The Sewer Information will be used from field crew activities; results of field inspections of FOG by SSF, engineering analysis of sewer system needs and prioritizes, industry information, and technology developments in the water sector. This type of information will inform future reviews of the effectiveness of the implementation of the SSMP and will be used along with the other two categories.

The indicators that the City will use to measure the performance of its sewer maintenance and the effectiveness of its SSMP are:

- | | |
|---|-----------------|
| • Total miles cleaned per year (Regular and Hot Spot) | Feet/Miles |
| • Total miles CCTV inspected per year | Feet/Miles |
| • Total miles chemical root treatment | Miles per year |
| • Total miles of sewer | Update annually |
| • Avg. high velocity cleaning per crew per day | Feet |

Figure IX - 1: Trend in SSO's by Category per Fiscal Year



IX-2 Baseline Performance

The City has performance measures in place and it will evaluate its performance annually following the end of the fiscal year. The historical, or baseline, performance is shown separately for gravity mains/pump stations/force mains and lower laterals.

Table IX - 2: Gravity Sewer, Pump Station, and Force Main SSOs by Fiscal Year

FY	Gravity Sewer SSOs	Pump Station SSOs	Force Main SSOs
08/09	30	1	0
09/10	29	0	0
10/11	16	0	0
11/12	6	0	0
12/13	7	0	0
13/14	19	1	1
14/15	7	0	1
15/16	7	0	3
16/17	3	0	0
17/18	2	0	0

Table IX - 3: FY Totals for SSOs by Cause

FY	FOG	Roots	Debris	Capacity	Vandals	Pipe Failure	PS Failure	Other	Total
07/08	20	14	6	8	1	1	0	2	52
08/09	14	7	30	1	0	1	1	2	56
09/10	12	5	10	1	1	2	2	4	35
10/11	5	5	13	3	0	3	3	1	33
11/12	2	3	8	0	0	0	0	0	13
12/13	1	3	3	0	1	3	3	0	14
13/14	0	1	5	0	1	0	0	3	11
14/15	0	1	5	1	0	1	1	1	10
15/16	0	1	3	1	0	4	4	1	14
16/17	0	0	1	0	0	0	0	2	3
17/18	0	0	2	0	0	0	0	0	2
Totals	54	40	86	15	4	15	14	16	244

Figure IX - 3: Trend in Gravity Sewer, Pump Station and Force Main SSOs by Cause

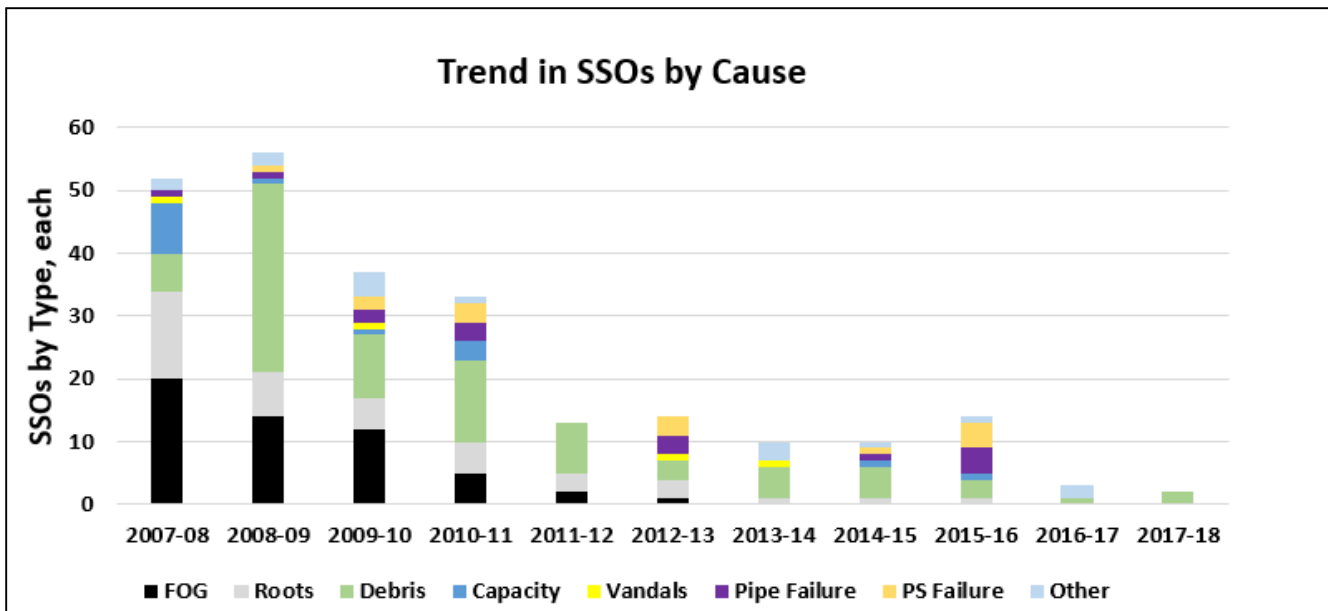
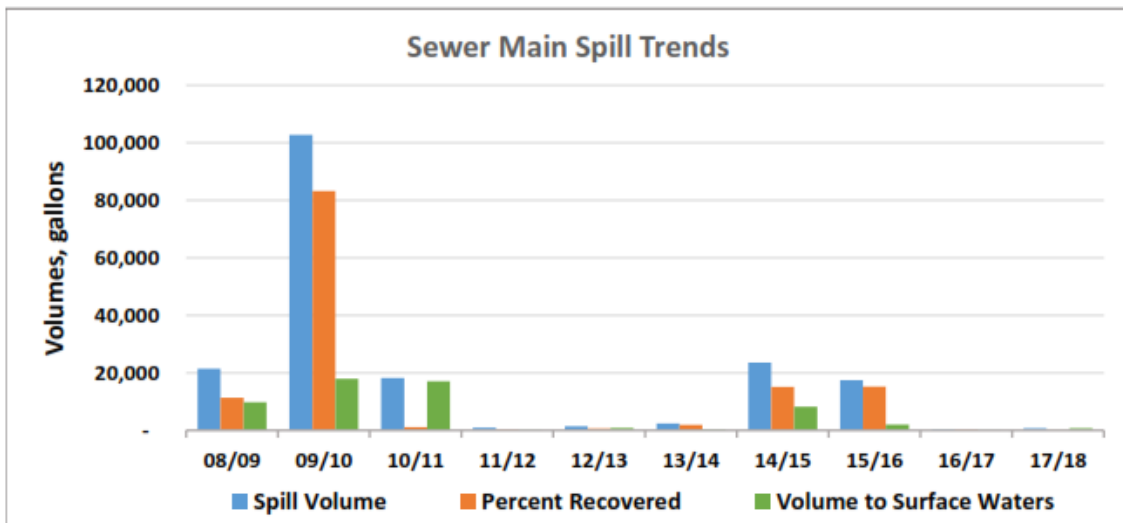


Table IX - 4: FY Totals for Sewer Mains (Volume Spilled, Portion Contained, and Volume to Surface Waters)

FY	Total Volume Spilled, gallons	Portion Contained and Returned to Sewers, %	Total Volume Entering Surface Waters, gallons
07/08	1,592,388	0	1,586,825
08/09	21,408	53	9,802
09/10	102,749	81	17,915
10/11	18,222	6	17,050
11/12	892	43	20
12/13	1,397	45	800
13/14	2,355	80	360
14/15	23,605	64	8,250
15/16	17,452	87	2,000
16/17	448	77	100
17/18	775	10	700

Figure IX - 4: Trend in Volume of Sewer Main Spills, Volume Reaching Surface Waters and Volume Recovered



IX-2.1 Lower Laterals

The baseline performance and trends in the performance measures of lower laterals is shown below.

Table IX - 5: Lower Lateral SSOs by Fiscal Year

FY	SSOs
08/09	25
09/10	5
10/11	14
11/12	7
12/13	4
13/14	0
14/15	1
15/16	0
16/17	0
17/18	0

Figure IX -5: Trend in Private Sewer Lateral SSO's

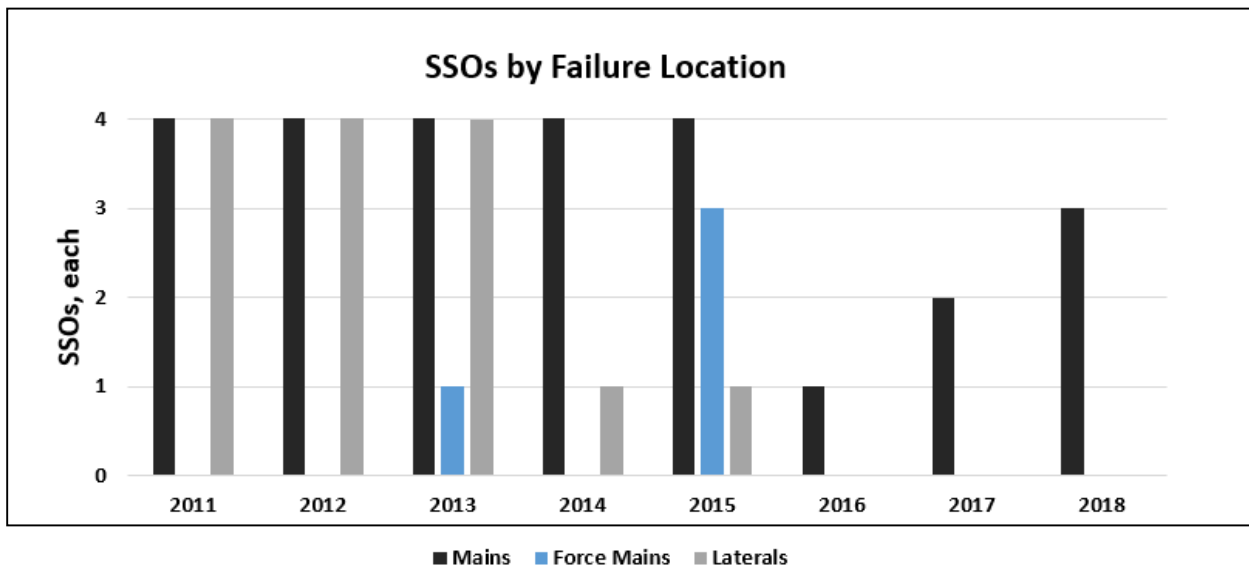


Figure IX - 6: Comparison of Consent Decree SSO Allowance to Actual

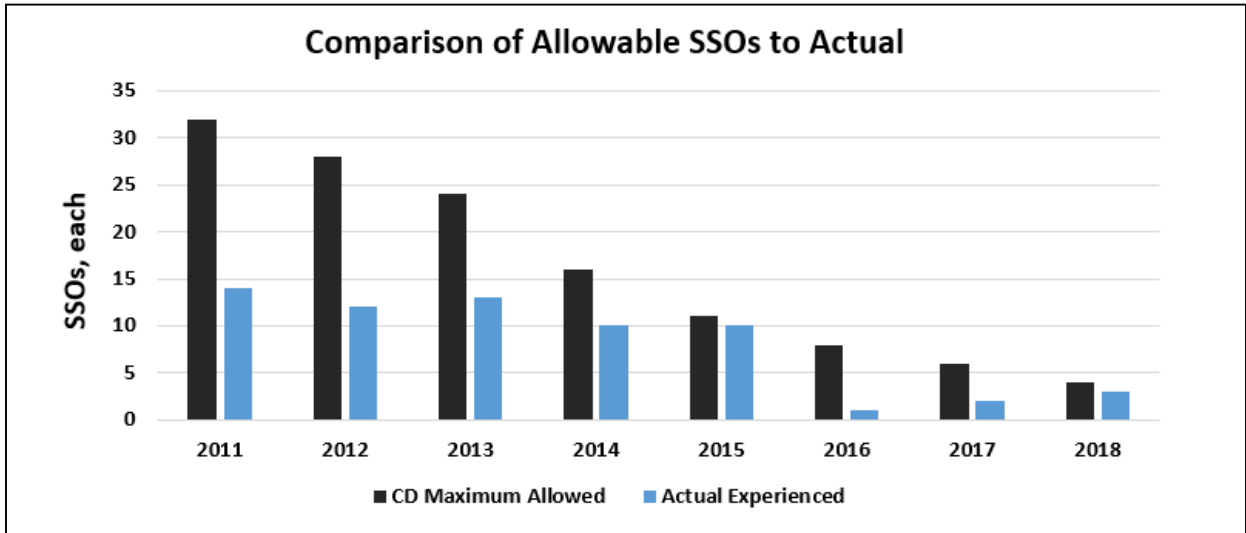
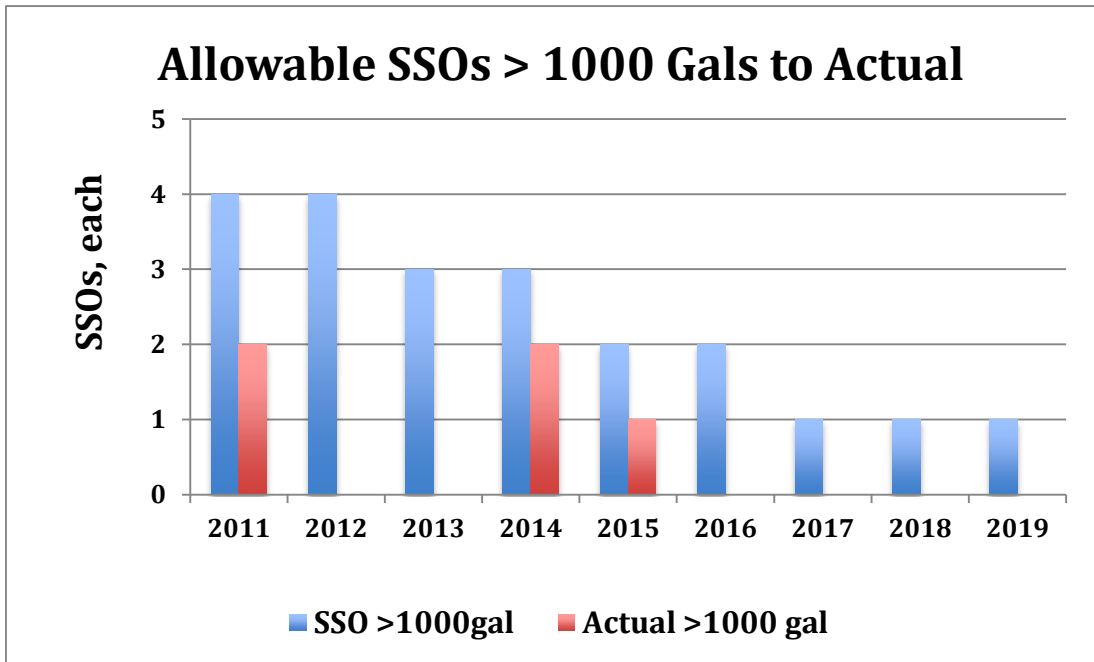


Figure IX - 7: Comparison of Consent Decree SSOs Greater than 1000 Gallons to Actual



IX-3 Performance Monitoring and Program Changes

The City will evaluate the performance of its wastewater collection system at least annually using the performance measures identified in this Element. The City will update the data and analysis at the time of the evaluation and will place the annual performance report in Appendix A of the SSMP.

The City may use other performance measures in its evaluation. The City will prioritize its actions and initiate changes to this SSMP, its operations and maintenance practices, and any related programs based on the results of the evaluation. This will be done as part of the self-audits (see Element X).

IX-1 References

The data used in this section were taken from the references:

- City records
- CIWQS SSO data as of October 26, 2015
- Settlement Agreement and Stipulation for Entry of Order, Order Number R2-2011-0044, Administrative Civil Liability Complaint No. R2-2010-0004
- California Regional Water Quality Control Board San Francisco Bay Region, Cease and Desist Order No. R2-2011-0051.

Element X: SSMP Program Audits

SWRCB Waste Discharge Requirement:

As part of the Sewer System Management Plan (SSMP), the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the Enrollee's compliance with the SSMP requirements identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them.

X-1 Audits Procedures, Roles and Responsibilities

The Deputy Director for Utilities and Operations will perform periodic internal audits to determine the effectiveness of each element of the SSMP.

The Wastewater Services Manager will generate the following information and system metrics on annual bases for the purpose of tracking, monitoring and adjusting the performance of the SSMP activities.

- System Information
- Sewer Maintenance
- Performance Measures

The primary focus in the evaluation of the system metrics will be the elimination of preventable SSOs and reduction of the impacts of those SSOs that occur.

The City's audit and recertification schedule for the SWRCB is as follows:

- Every two years from the original adoption and approval date by the San Bruno City Council of the SSMP.
- Every five years from the original adoption and approval date by the San Bruno City Council and whenever significant program changes have occurred following the last Council certification.

The Sewer System Management Plan Audit Checklist (Table X-1) is used to guide the audit process and includes the GWDR requirements for each SSMP element. The results of the audit, including the identification of any deficiencies and the steps taken or planned to correct them will be included in a formal Audit Report. Upon completion of the audit, the City will include a copy of the report in Appendix A, Sewer System Annual

Audit Reports of this SSMP. Modifications and changes to the SSMP will be identified and tracked in Appendix B, SSMP Change Log.

The audit can contain information about successes in implementing the most recent version of the SSMP, and identify revisions that may be needed for a more effective program. Information collected can be used in preparing the audit. Tables and figures or charts similar to those in Element IX can be used to summarize information about these indicators. An explanation of the SSMP development, and accomplishments in improving the sewer system, should be included in the audit, including:

- How the sewer system implemented SSMP elements in the past year;
- The effectiveness of implementing SSMP elements;
- A description of the additions and improvements made to the sanitary sewer collection system in the past reporting period; and
- A description of the additions and improvements planned for the upcoming reporting period with an estimated schedule for implementation.

The City is also required by its consent decree to prepare and submit an Annual Report on stipulated activity during the preceding year to Baykeeper and to the Regional Board. These reports will be made available by hyperlink on the City website in the future.

X-2 SSMP Program Modification/Updates Process

The Wastewater Services Manager will monitor and review sewer performance metrics on an annual basis.

The Deputy Director will review the status of each of the elements of the SSMP on an annual basis. Formal SSMP audits will be conducted every two years following original adoption of the SSMP by the City Council.

The Public Works Director will initiate/direct corrective action to be taken when and if SSMP deficiencies are identified during periodic internal audits as part of the review and evaluation of SSO events and system performance results.

When significant changes are made to the SSMP that requires re-certification, the Legally Responsible Official (LRO) or his or her designee will enter the data in the online database and the LRO will certify the information to the State Water Board.

Table X - 1: SSMP Audit Checklist

The purpose of the SSMP Audit is to evaluate the effectiveness of the City of San Bruno SSMP and to identify any needed for improvement.				
Directions: Please check YES or NO for each question. If NO is answered for any question, describe the updates/changes needed and the timeline to complete those changes.				
			YES	NO
ELEMENT I - GOALS				
A.	Are the goals stated in the SSMP still appropriate and accurate?	<input type="checkbox"/>	<input type="checkbox"/>	
Discussion:				
ELEMENT II - ORGANIZATION				
A.	Is the List of City Staff Responsible for SSMP current?	<input type="checkbox"/>	<input type="checkbox"/>	
B.	Is the Sanitary Sewer Overflow Responder List current?	<input type="checkbox"/>	<input type="checkbox"/>	
C.	Is Figure 2-1 of the SSMP, the City Organization Chart, current?	<input type="checkbox"/>	<input type="checkbox"/>	
D.	Are the position descriptions an accurate portrayal of staff responsibilities?	<input type="checkbox"/>	<input type="checkbox"/>	
E.	Is Table 2-2 in the Chain of Communication for Reporting and Responding to SSOs section accurate and up-to-date?	<input type="checkbox"/>	<input type="checkbox"/>	
Discussion:				
ELEMENT III – LEGAL AUTHORITY				
Does the SSMP contain current references to the City of San Bruno Municipal Code documenting the City’s legal authority to:				
A.	Prevent illicit discharges?	<input type="checkbox"/>	<input type="checkbox"/>	
B.	Require proper design and construction of sewers and connections	<input type="checkbox"/>	<input type="checkbox"/>	
C.	Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the City?	<input type="checkbox"/>	<input type="checkbox"/>	
D.	Limit discharges of fats, oils and grease?	<input type="checkbox"/>	<input type="checkbox"/>	
E.	Enforce any violation of its sewer ordinances?	<input type="checkbox"/>	<input type="checkbox"/>	
F.	Were any changes or modifications made in the past year to City Sewer Ordinances, Regulations or standards?	<input type="checkbox"/>	<input type="checkbox"/>	
Discussion:				

ELEMENT IV – OPERATIONS AND MAINTENANCE			
Collection System Maps			
A.	Does the SSMP reference the current process and procedures for maintaining the City’s wastewater collection system maps?	<input type="checkbox"/>	<input type="checkbox"/>
B.	Are the City’s wastewater collection system maps complete, current and sufficiently detailed?	<input type="checkbox"/>	<input type="checkbox"/>
C.	Are storm drainage facilities identified on the collection system maps? If not, are SSO responders able to determine locations of storm drainage inlets and pipes for possible discharge to waters of the state?	<input type="checkbox"/>	<input type="checkbox"/>
Prioritized Preventive Maintenance			
D.	Does the SSMP describe current preventive maintenance activities and the system for prioritizing the cleaning of sewers?	<input type="checkbox"/>	<input type="checkbox"/>
E.	Based upon information in the Annual SSO Report, are the City’s preventive maintenance activities sufficient and effective in minimizing SSOs and blockages?	<input type="checkbox"/>	<input type="checkbox"/>
Scheduled Inspections and Condition Assessments			
F.	Is there an ongoing condition assessment program sufficient to develop a capital improvement plan addressing the proper management and protection of infrastructure assets? Are the current components of this program documented in the SSMP?	<input type="checkbox"/>	<input type="checkbox"/>
Contingency Equipment and Replacement Inventory			
G.	Does the SSMP list the major equipment currently used in the operation and maintenance of the collection system and documents the procedures of inventory management?	<input type="checkbox"/>	<input type="checkbox"/>
H.	Are contingency and replacement parts sufficient to respond to emergencies and properly conduct regular maintenance?	<input type="checkbox"/>	<input type="checkbox"/>
Training			
I.	Does the SSMP document current training expectations and programs?	<input type="checkbox"/>	<input type="checkbox"/>
Outreach to Plumbers and Building Contractors			
J.	Does the SSMP document currently outreach efforts to plumbers and building contractors?	<input type="checkbox"/>	<input type="checkbox"/>
Discussion:			
ELEMENT V- DESIGN AND PERFORMANCE STANDARDS			

A.	Does the SSMP reference current design and construction standards for the installation for new sanitary sewer systems, pump stations and other appurtenances and for the rehabilitation and repair of existing sanitary sewer systems?	<input type="checkbox"/>	<input type="checkbox"/>
B.	Does the SSMP document current procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and the rehabilitation and repair of existing sewer lines?	<input type="checkbox"/>	<input type="checkbox"/>
Discussion:			
ELEMENT VI – OVERFLOW AND EMERGENCY RESPONSE PLAN			
A.	Does the City’s Sanitary Sewer Overflow Emergency Response Plan establish procedures for the emergency response, notification, and reporting of SSOs?	<input type="checkbox"/>	<input type="checkbox"/>
B.	Is City staff and contractor personnel appropriately trained on the procedures of the Sanitary Sewer Overflow Emergency Response Plan?	<input type="checkbox"/>	<input type="checkbox"/>
C.	Considering SSO performance data, is the Sanitary Sewer Overflow Emergency Response Plan effective in handling SSOs in order to safeguard public health and the environment?	<input type="checkbox"/>	<input type="checkbox"/>
D.	Are all SSO and claims reporting forms current or do they require revisions or additions?	<input type="checkbox"/>	<input type="checkbox"/>
E.	Does all SSO event recordkeeping meet the SSS GWDR requirements? Are all SSO event files complete and certified in the CIWQS system?	<input type="checkbox"/>	<input type="checkbox"/>
F.	Is all information in the CIWQS system current and correct? Have periodic reviews of the data been made during the year to assure compliance with SSS GWDR? Have all Technical Report and Water Quality Sampling requirements been met and uploaded to the CIWQS data management system?	<input type="checkbox"/>	<input type="checkbox"/>
G.	Was required training on SSMP and OERP completed and documented? Were field exercises with field staff on SSO volume estimation conducted and documented?	<input type="checkbox"/>	<input type="checkbox"/>

H.	Did all public improvement plans and specifications that could impact collection system operations include requirements for OERP training or were contractor OERP programs at least as stringent as the City OERP? Were regular items included in project meeting agendas to discuss emergency response procedures and communications?	<input type="checkbox"/>	<input type="checkbox"/>
Discussion:			
ELEMENT VII – FATS, OILS AND GREASE (FOG) CONTROL PROGRAM			
A.	Does the FOG Control Program include efforts to educate the public on proper handling and disposal of FOG?	<input type="checkbox"/>	<input type="checkbox"/>
B.	Does the FOG Control Program identify sections of the collection system subject to FOG blockages, establish a cleaning schedule and address source control measures to minimize these blockages?	<input type="checkbox"/>	<input type="checkbox"/>
C.	Are requirements for grease removal devices, best management practices (BMP), record keeping and reporting established in the City’s FOG Control Program?	<input type="checkbox"/>	<input type="checkbox"/>
D.	Does the City have sufficient legal authority to implement and enforce the FOG Control Program?	<input type="checkbox"/>	<input type="checkbox"/>
E.	Is the current FOG program effective in minimizing blockages of sewer lines resulting from discharges of FOG to the system	<input type="checkbox"/>	<input type="checkbox"/>
Discussion:			
ELEMENT VIII- SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN			
A.	Does the Sanitary Sewer Strategic Plan evaluate hydraulic deficiencies in the system, establish sufficient design criteria and recommend both short and long term capacity enhancement and improvement projects?	<input type="checkbox"/>	<input type="checkbox"/>
B.	Does the City’s Capital Improvement Plan (CIP) establish a schedule of approximate completion dates for both short and long-term improvements and is the schedule reviewed and updated to reflect current budgetary capabilities and activity accomplishment?	<input type="checkbox"/>	<input type="checkbox"/>
Discussion:			

ELEMENT IX- MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS			
A.	Does the SSMP accurately portray the methods of tracking and reporting selected performance indicators?	<input type="checkbox"/>	<input type="checkbox"/>
B.	Is the City able to sufficiently evaluate the effectiveness of the SSMP elements based on relevant information?	<input type="checkbox"/>	<input type="checkbox"/>
C.	Were the consent decree and CDO performance metrics met?	<input type="checkbox"/>	<input type="checkbox"/>
Discussion:			
ELEMENT X – SSMP AUDITS			
A.	Will the SSMP Audit be completed, reviewed and filed in Appendix A?	<input type="checkbox"/>	<input type="checkbox"/>
Discussion:			
ELEMENT XI – COMMUNICATION PROGRAM			
A.	Does the City effectively communicate with the public and other agencies about the implementation of the SSMP and continue to address any feedback?	<input type="checkbox"/>	<input type="checkbox"/>
B.	Did the City Council receive and review the Annual Sewer System Report? Was the annual report uploaded to the City Sewer Section website and added to Appendix A?	<input type="checkbox"/>	<input type="checkbox"/>
C.	Did City staff conduct and document meetings with satellite collection systems? Are all agreements with satellite systems current or are changes necessary to these agreements?	<input type="checkbox"/>	<input type="checkbox"/>
Discussion:			
Change Log			
A.	Is the SSMP Change Log, current and up to date?	<input type="checkbox"/>	<input type="checkbox"/>
Discussion:			

Audit Team: _____	Date: _____
Prepared By: _____	Date: _____
Reviewed By: _____	Date: _____
Approved for Filing on: _____	

X-3 References - None

Element XI: Communication Program

SWRCB Waste Discharge Requirement:

The Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its Sewer System Management Plan (SSMP). The communication system shall provide the public the opportunity to provide input to the Enrollee as the program is developed and implemented.

The Enrollee shall also create a plan of communication with systems that are tributary and/or satellite to the Enrollee's sanitary sewer system.

XI-1 Communication during SSMP Development and Implementation

The City has developed a formal SSMP Communication Program that is included below in Appendix XI – 1. The Communication Plan outlines objectives for the messages for all stakeholders associated with or interested in the implementation and effectiveness of the sanitary sewer system. The objectives of the Communications Plan are:

- To develop a systematic approach for communicating SSMP requirements, progress, and performance
- To provide a channel for public input as the SSMP is developed and implemented.
- To communicate with enough frequency and information so that the SSMP is supported by the City Council, internal staff, the ratepayers, and other agencies.
- To inform internal and external stakeholders of the SSMP requirements and strategies to reduce sanitary sewer overflows (SSOs).
- To inform the City Council and the ratepayers of the SSMP successes in terms of City of San Bruno's SSO Reduction Program.
- To provide outreach to the community to inform them of the work the City is doing to reduce SSOs.

All emergency situations that require public notification and/or environmental protection with the media are handled directly by the City Manager or his/her designee.

The City, at least annually, communicates with the City Council at public meetings that allow

for input from the public with regard to the implementation and results of the collection system operations and effectiveness of the SSMP.

The City will also have brochures and information on collection system programs at various department counters in the City as well as available on the San Bruno and South San Francisco websites. Finally, the City provides information for property owners on their responsibilities for private sewer laterals operations, maintenance and replacement as well as time of sale requirements on the City website.

The City provides information for customers regarding plumbers available to assist with the maintenance of the private sewer facilities. In addition, the City had developed a Plumbers Hot Line that allows plumbers to contact the City prior to the maintenance of a private sewer lateral to assist with the disposal of all debris, roots and grease from the lateral cleaning operation at the next closest manhole downstream of the private lateral. This program protects the main line sewer system from the disposal of lateral debris that could cause blockages or overflows in the collection system downstream of the lateral maintenance.

XI-2 Availability of the SSMP and All Reference Documents

The City will make the SSMP and all reference documents identified in the SSMP available on the City website at <https://sanbruno.ca.gov/>. Any bid updates to the SSMP will be available on the City website within thirty (30) days of City Council approval and adoption or modification or significant change added to the SSMP Change Log, Appendix B. At that time all references shall be check and any changes or updates will also be appended to the webpage above.

XI-3 Communication with Satellite Wastewater Collection Systems

The City has no tributary or satellite systems and therefore has no communication program. The do however send all sewage to the San Bruno-South San Francisco Wastewater Quality Control Plant and rely on that agency for much of the FOG control Program. City staff conducts at least annual meetings with the Superintendent and appropriate staff of the treatment plant and both agencies coordinate directly on all necessary enforcement activities. See Element VII for a more in depth discussion of the roles and responsibilities of each of the agencies for the FOG Control Program.

XI-4 References - None

Appendix XI-1: City of San Bruno's SSMP Communication Program

Introduction

The overall goal of San Bruno's communications plan and its objectives are to deliver key messages to the various stakeholders regarding the City's Sewer System Management Plan (SSMP) and status of its implementation.

Goal

Communicate key messages about the City's Sewer System Management Plan (SSMP) to the following stakeholders:

- City Council
- Internal staff
- City's rate payers
- Regulatory agencies and Non-Governmental Organizations (NGOs) as needed

Objectives

Communications objectives are:

- To develop a systematic approach for communicating SSMP requirements, progress, and performance.
- To provide a channel for public input as the SSMP is developed and implemented.
- To communicate with enough frequency and information so that the SSMP is supported by the City Council, internal staff, the ratepayers, and other agencies.
- To inform internal and external stakeholders of the SSMP requirements and strategies to reduce sanitary sewer overflows (SSOs).
- To inform the City Council and the ratepayers of the SSMP successes in terms of City of San Bruno's SSO Reduction Program.
- To provide outreach to the community to inform them of the work the City is doing to reduce SSOs.

Key Messages

Key messages will focus on the City's SSMP requirements and actions being taken by the City to protect the public health, the environment.

The following key messages will be considered:

- Purpose of SSMP, requirements and status of City's program
- Protection of public health.
- Protection of the environment and the water quality.
- Status of City's SSOs.
- Channel for public input.
- Best Management Practices (BMPs) for residential and commercial customers.
- Wastewater collection system improvements such as replacement of existing pipeline and pumping station infrastructure and construction of new infrastructure.
- Maintenance and operation activities that led to reductions in the number and volume of SSOs.
- Potential rate impacts

Communication Strategies

Strategies that may be used for communication will include some or all of the following:

- Create Public Works news letter
- Post information on the City's website
- Public outreach meetings
- Use of local radio station and news paper
- Informational brochures and flyers
- Bill stuffers
- City Council SSMP status reports
- Link to State Water Resources Control Board (SWRCB) Sanitary Sewer Overflow Program web-site and
- Power Point presentations, written and verbal reports to City Council, customers and the public

Stakeholders and Communications Strategy

1. City Council - Strategy

Staff will provide reports to the City Council in terms of SSMP requirements, resources needed, and completed activities and reduction of SSOs.

These reports will include the following as appropriate:

- Purpose of SSMP
- Status of City's overall program.

- Progress of the Operations and Maintenance staff on meeting performance metrics related to the SSMP requirements and reduction of SSOs.
- FOG control measures in terms of residential and commercial BMPs and source control.
- Customer service in terms of: 1) response time to mitigate SSOs, 2) reduction in the number and quantity of SSO spills, and 3) improved customer satisfaction.
- Capital improvement projects.
- Proposed rate increases.

2. Internal Staff - Strategy

City management will educate staff on the GWDR SSMP requirements and their role and respective responsibilities in implementing various elements of the SSMP.

The internal staff training should include the following:

- Overall understanding GWDR purpose.
- Specific understanding of each of the eleven SSMP elements.
- Roles and responsibilities for SSMP elements addressed in their work classification/assignments.
- Periodic reports on the progress in reducing SSOs

3. Ratepayers - Strategy

City staff will provide relevant information about the SSMP and SSO Reduction Program to rate payers and provide a channel for public input.

The ratepayer/public information may include the following:

- Purpose of SSMP
- Status of Agency's overall program.
- FOG control measures in terms of residential and commercial BMPs and source control.
- Capital improvement projects (CIP).
- Possible rate impacts and any proposed rate increases.

4. Regulators and NGOs - strategy

Staff will communicate with Regulatory Agencies as required. The following tools can be used to achieve this requirement:

- Joint Power Agreement
- Inter-Agency Agreement
- Mutual Aid Agreement
- Periodic meetings to review the City' s program, progress in reducing SSOs, compliance issues related to the satellite system, and possible rate impacts
- The City's will communicate the status of their SSMP to SWRCB by certifying each completed element of their SSMP in the California Integrated Water Quality System (CIWQS).
- The City will report the number and size of SSOs, causes for each SSO, and steps that are being taken to reduce those SSOs to the State's CIWQS database.
- The same SSO information will also be communicated to San Francisco Regional Water Quality Control Board (RWQCB).

Table XI -1 provides a summary stakeholder communication strategies. What their areas of interest are and who may be best to communicate the specific message. It identifies the appropriate communication timeline and types of actions to best communicate with specific stakeholders:

Table XI - 1: SSMP Communications Strategies

Stakeholder	Areas of Interest	Strategy	Who	Timeline	Actions
City Council	Environmental Stewardship	Council information updates	Management	Annually	Power-point Presentation
	Rates and fees	Briefings with Council	Management	Annually	Workshop
	SSO Performance Targets	Briefings and reports	Operations Staff	Semi-Annually	Web Site and Annual Report
Internal Staff	Policies, Ordinances, Overview of WDR and SSMP Requirements	Council Meetings, SSO Reduction, Progress Reports and Staff meetings	Management & Legal Staff, Industrial Pretreatment Staff Management	Quarterly Semi-Annually and Annually	Web Site, News Letter, and Power-point Presentation
	SSMP elements and employee Roles and Responsibilities	Training Sessions	Management, Supervisory staff And Consultants	As Needed	Informal and Formal training
Ratepayers And NGOs	SSMP Status SSOs/100 Mi	City Web Site News letter	Management Communications Staff,	Continually Semi-Annually	Web Site, News Letter, Brochures, door hangers and Billing Inserts
	FOG control	Brochure/bill stuffers	Industrial Pretreatment Staff	As Needed	BMP
	CIP Rates and fees Capacity limits Restrictions and/or requirements	News Letter Bill stuffers, Newsletter and Web Site Agreements	Engineering Public Information Staff Industrial Pretreatment Staff	As Needed and required Annually	Articles Public outreach meetings and annual report Meetings
Regulatory Agencies	SSMP Compliance, SSO status and Catastrophic events	CIWQS, Reports and Audits	Management and Legally Responsible Official (LRO)	As Needed and Annually	Electronic and Written reporting, Telephone Communication and Meetings

Appendices

Appendix A: Sewer System Management Plan Audit Reports

SSMP Audit Checklist Example

Audit Date: March 12, 2010

Audit Team Members: Robert Howard, Dennis Bosch

Section	Title	Requirement	SSMP Implemented? Y or N Comments
1	Goals	Reduce, prevent, and mitigate SSOs	Public Works Department mission as related to its Wastewater Division is to meet requirements and reduce, prevent, and mitigate SSOs.
2	Organization	Names of Agency staff responsible for development, implementation, and maintenance of SSMP	1.) Klara Fabry 2.) Robert Howard 3.) Dennis Bosch
		Names and phone numbers for key Agency staff	On record at facility.
		Chain of communication for reporting SSOs	Chain of communication is in place and understood.
		Designate LRO(s)	1.) Dennis Bosch 2.) Robert Howard
		Chain of communication for reporting SSOs	Chain of communication is in place and understood.
3	Legal Authority	Ability to prevent illicit discharges to sanitary sewer system	Ordinances are in place.
		Ability to require sewers and connections be properly designed and constructed	Resolution 1986 is in place.

Section	Title	Requirement	SSMP Implemented? Y or N Comments
		Ability to ensure access for inspection, maintenance, and repairs (includes public portion of lateral)	Emergency access is assured by existing police ordinance code.
		Ability to limit discharge of FOG and debris that may cause blockages	Joint owned POTW completes FOG program for the City.
		Ability to require the installation of grease removal devices	Fog rules and ordinances are in place. If compliance issues present problems 1) an updated ordinance with minor modification can be implemented and 2) a much stronger ordinance is in Final Draft form.
		Ability to inspect FOG producing facilities	Joint owned POTW does inspections within our City.
		Ability to enforce violations of the City's sewer ordinances	Ordinances are in place.
4	O&M Program	Maintain up-to-date maps of the sanitary sewer system	Maps are current and constantly updated. All sewer related maps are in a GIS format
		Describe routine preventive maintenance program	1.) Hydraulic Jetting 2.) Vactor cleaning 3.) Mechanical Rodding 4.) Chemical root treatment

Section	Title	Requirement	SSMP Implemented? Y or N Comments
		Document completed preventive maintenance using work order system	New CMMS system is in final stages with the major elements being GIS maps and CMMS data downloaded into system. Collections system information inputted and work orders generated.
		Rehabilitation and replacement plan that identifies and prioritizes sanitary sewer system facilities	Plan is documented in the City's CIP program and wastewater rate analysis. All assets in the collection system have been identified and provided an identification number. Renewal and replacement data is completed for all sanitary pumping stations and a study of the collections system including underground assets is complete providing a total current replacement value. CCTV provides more information about the sanitary sewer system.
		CIP showing the schedule for rehabilitation and replacement projects	Schedule is documented in CIP Program and levels of services approved by City Council during wastewater rate presentations and hearings

Section	Title	Requirement	SSMP Implemented? Y or N Comments
		Provide regular technical training for City sanitary sewer system staff	Technical training is provided.
		Require contractors to provide training for their employees who work in the City's sanitary sewer system facilities	Will need to ensure this is being done by all Public Works staff when contractors are working in the City's sanitary sewer system facilities
		Maintain equipment inventory	Yes.
		Maintain critical spare part inventory	Division does maintain a small spare parts inventory. Has contact with vendors for just in time parts inventory
5	Design and Performance Provisions	Design and construction standards for new sanitary sewer system facilities	Buried Pipe Design with new standards from ASTM, AWWA, AASHTO and TRB; Excavation & Grading Handbook Revised; Uniform Plumbing Code; and 2007 California Plumbing Code texts are next to the SSMP binders.
		Design and construction standards for repair and rehabilitation of existing sanitary sewer system facilities	Buried Pipe Design with new standards from ASTM, AWWA, AASHTO and TRB; Excavation & Grading Handbook Revised; Uniform Plumbing Code; and 2007 California Plumbing Code are next to the SSMP binders.
		Procedures for the inspection and acceptance of sanitary sewer system facilities	Inspectors, Engineers and Divisional staff complete inspections.

Section	Title	Requirement	SSMP Implemented? Y or N Comments
6	OERP	Procedures for the notification of primary responders	Procedures are in place.
		Procedures for the notification of regulatory agencies	Procedures are in place.
		Program to ensure appropriate response to all SSOs	Procedures are in place
		Proper reporting of all SSOs	Proper reporting is done.
		Procedure to ensure Agency staff are aware of, are trained, and follow OERP	Procedures are discussed at weekly meetings.
		Procedure to ensure contractor personnel are aware of, are trained, and follow OERP	Will need to ensure this is being done by all Public Works staff when contractors are working in the City's sanitary sewer system facilities
		Procedures to address emergency operations such as traffic and crowd control	Standard safety procedures are in place.
		Program to prevent the discharge of sewage to surface waters	Preventative maintenance and response procedures are in place.
		Program to minimize or correct the impacts of any SSOs that occur	Procedures and response equipment are in place.

Section	Title	Requirement	SSMP Implemented? Y or N Comments
		Program of accelerated monitoring to determine the impacts of any SSOs that occur	The City has CCTV, CMMS, asset analysis, sanitary pumping station audit, smoke testing and planned more aggressive O&M and pipe replacement program. For 2009 there was sampling and testing of the City's stormwater's discharge channel, called Cupids Row Canal. In early 2010 background sampling of Cupids Row Canal at three locations twice per month began along with staff training on sampling.
7	FOG Control Program	Public outreach program that promotes the proper disposal of FOG	Joint owned POTW completes FOG program for the City.
		Plan for the disposal of FOG generated within the Agency's service area	Joint owned POTW completes FOG program for the City.
		Demonstrate that the Agency has allocated adequate resources for FOG control program	Joint owned POTW completes FOG program for the City.
		Identification of sanitary sewer system facilities that have FOG-related problems	Joint owned POTW completes FOG program for the City. City has supplied POTW with trouble spots and POTW staff have responded
		Program of preventive maintenance for sanitary sewer system facilities that have FOG-related problems	Joint owned POTW completes FOG program for the City.

Section	Title	Requirement	SSMP Implemented? Y or N Comments
8	System Evaluation and Capacity Assurance Plan	Identification of elements of the sanitary sewer system that experience or contribute to SSOs caused by hydraulic deficiencies	Areas identified through a Wastewater Master Plan required under a C&D. Completing last phase of the last project identified. The total project cost before this last phase was \$13.5 million. An update to the the City's wastewater Master Plan is planned to be completed in 2010.
		Established design criteria that provide adequate capacity	Criteria in place but not formalized within the City established criteria, though sewer projects done in the last ten years have adhered to best and current practices.
		Short and long term CIP that includes schedules for projects to addresses known hydraulic deficiencies	Schedules and projects are present within the CIP program.
		Procedures that provide for the analysis, evaluation, and prioritization of hydraulic deficiencies	Provided by Wastewater Master Plan done in 1999 and currently being updated and Master Plan planned to updated in 2010.
9	Monitoring, Measurement, and Program Modifications	Maintain relevant information to establish, evaluate, and prioritize SSMP activities	Yes, on-going
		Monitor implementation of the SSMP	Yes, on-going

Section	Title	Requirement	SSMP Implemented? Y or N Comments
		Measure, where appropriate, the performance of the elements of the SSMP	Yes on record in City files and SSO reports held at the State and Regional level
		Assess success of the preventive maintenance program	Enhanced level and more equipment are directly connected to rate increases as approved by City Council and the City's ten year CIP program.
		Update SSMP program elements based on monitoring or performance	Responded to SSMP elements and actual field experience.
		Identify and illustrate SSO trends	Currently done through annual reports on SSOs to the Regional Board
10	SSMP Program Audits	Conduct audits at least every 2 years	Yes
		Record the results of the audit in a report	Yes by March 15th
		Record the changes made and/or corrective actions taken	Yes by March 15th
11	Communications Program	Communicate with the public regarding the preparation of the SSMP	A report and Resolution detailing the components of that SSMP was considered and accepted by City Council in open session that can viewed by citizens in person or on cable television.

Section	Title	Requirement	SSMP Implemented? Y or N Comments
		Communicate with the public regarding the performance of the SSMP	Indirectly through budget documents, reports and resolutions before City Council, and wastewater rate public hearings all available through local cable television and/or City of San Bruno web site
		Communicate with tributary or satellite sewer systems	N/A

San Francisco Bay Regional Water Quality Control Board

Sanitary Sewer Overflow Annual Report - 2009

January 5, 2009

Bruce H. Wolfe, Executive Officer
California Regional Water Quality Control Board, San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612
ATTN: Michael Chee

Dear Mr. Wolfe,

Subject: Annual Report of Sanitary Sewer System Overflows for Calendar Year 2009

The purpose of this letter is to report the Sanitary Sewer System Overflows (SSOs) that occurred in the City of San Bruno sanitary sewer system during the period December 31, 2008 through December 31, 2009. This report is submitted pursuant to the requirements included in the San Francisco Bay Regional Water Quality Control Board Letter, New Requirements for Reporting Sanitary Sewer Overflows, dated November 15, 2004.

Number and Size of SSOs

The total number of SSOs for the reporting period was fifty-two [52]. All of the SSOs were associated with gravity sewers, and two [2] were associated with sanitary sewer pump stations. There was forty-nine [49] SSOs associated with dry weather conditions and three [3] SSOs associated with wet weather conditions. The sizes of SSOs are summarized as shown on Table 1.

Table 1. Number of SSOs

Size of SSO (gallons)	Number	Percent of Total by Number
Greater than or equal to 1,000	4	7.7
From 100 to 999	17	32.7
From 10 to 99	28	53.8
Less than 10 [can include in line above]	3	5.8
[Public portion of lateral (if applicable)]		
Total	52	100

The volume of spills contained and returned to the sewer system, as well as the volume reaching waters of the State is shown in Table 2.

Table 2. Volume of SSOs

	Volume (gallons)	Percent of Total by Volume
Total volume contained and returned to sewer system for treatment	95,407	96.3
Total volume reaching waters of the State	3,577	3.6
Total volume not contained but not reaching waters of the State (everything else)	91	.09
Total	99,075	100%

Four of the SSOs exceeded 1000 gallons or more. One SSO that exceeded 1000 gallons was due to Inflow and Infiltration during a large storm event, and exceeded the pumping capacity of the Sharp Park Sewer Lift station. The station was rehabilitated the following summer as part of a CIP project. The station was upgraded with larger pumps and a new force main. To date, the station now has the ability to pump all incoming flow. Another SSO that exceeded 1000 gallons was due to a broken private lateral. A portion of a private lateral had collapsed and was leaking sewage into an AT&T communications conduit. Initially, the City could not find the source of the leak and initiated an Emergency Proclamation to replace the entire sewer main and lower laterals within one City block. The work was completed and the severed lateral was found as the cause of the leak. Per City ordinance, the entire sewer lateral and connection to the main is the jurisdictional responsibility of the homeowner. If there is a proper cleanout installed or present at the property line, the City will then accept jurisdictional responsibility of the lower lateral to the main. The collapsed lateral had no cleanout and therefore was the responsibility of the property owner. The City views this incident as a private property responsibility SSO, but has added its numerical effects to this report. This individual SSO accounts for 83,000 gallons of the total volume contained and returned to sewer system for treatment. Several CIP projects have since been completed, or are in progress to remedy and accommodate high Inflow and Infiltration flows. This report does not include SSOs that occurred from privately owned service laterals within the City of San Bruno jurisdiction. The City maintains and is responsible for the portion of the sewer lateral from the private property owner's property line to the City sewer mains. The City did report [13] private lateral spills to the State.

Cause of SSOs

The predominant cause[s] of SSOs during the period of this report was grease and debris. The distribution of SSOs by cause is shown on Table 3.

Table 3. Causes of SSOs

Cause of SSO	Number	Percent of Total
Blockage:		
Roots	7	13.5
Grease	14	26.9
Debris	14	26.9
Debris from Laterals	10	19.2
Vandalism	1	1.9
Animal Carcass		
Construction Debris		
Multiple Causes		
Subtotal for Blockage	46	74%
Infrastructure Failure	4	7.7
Inflow & Infiltration	1	1.9
Electrical Power Failure	1	1.9
Flow Capacity Deficiency		
Natural Disaster		
Bypass		
Cause Unknown		
Total	52	100%

Location of SSOs

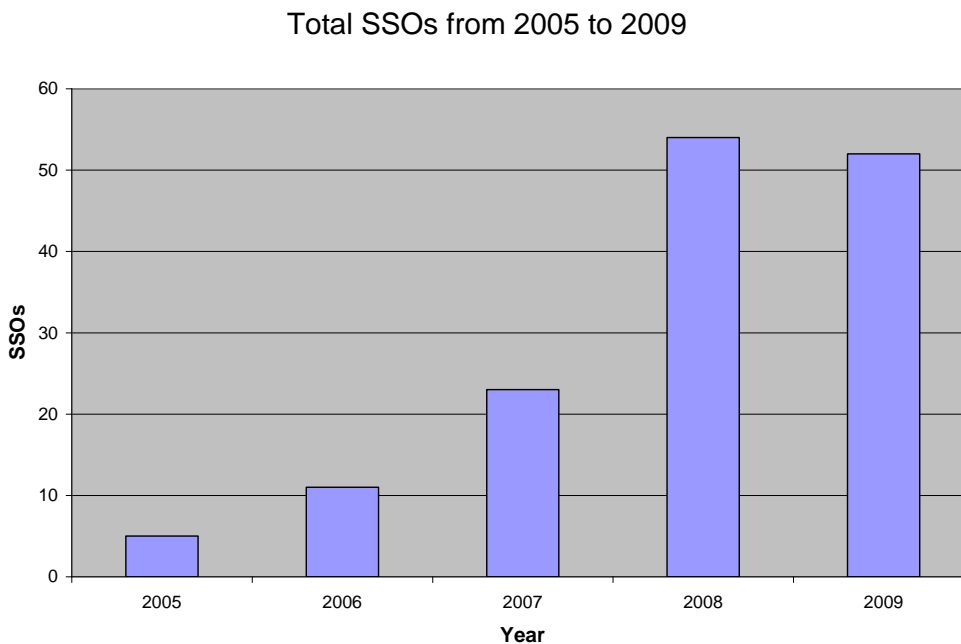
Twelve of the Fifty-two SSOs were in the hillside areas of San Bruno. The other forty SSOs were in the flatter and older areas of San Bruno.

SSO Trends

The bar chart below shows a comparison of data for the current reporting period with the previous reporting period. **Note:** The City began reporting SSOs from City owned, and privately owned laterals per State regulations on May 1st, 2007.

Example:

Figure 1. Total SSOs for 2006 – 2009



Status of Development of Sewer System Management Plan (SSMP)

The City has met and completed all of the elements of the SSMP that were required by the August 31, 2007 deadline. The City as well is at the end of completing \$13.5 million dollars of capital improvement projects in meeting the requirements of the Cease and Desist order issued to the Cities of South San Francisco and San Bruno in 1997. The wastewater (and water) rates were approved by City Council in 2009 and provides the funding currently and increasing over time sewer infrastructure replacement program in addition to appropriate CIPs to meet other deficiencies as well as possible expansions. A new wastewater master plan update is planned for 2010. City of San Bruno staff initiated a FOG control program with regular inspection, especially the hotspots, with the South San Francisco/San Bruno POTW environmental compliance staff in addition to an existing contract with the County of San Mateo that has

indirect impact on FOG via their stormwater compliance inspections. The computerized maintenance management system (CMMS) for the collections system as well as other operations at the Public Works Corporation Yard is including GIS information and CMMS is currently available on individual supervisor's computers and will be made available in portable laptops to locate needed information, such as GIS locations. The City does have a mature hot spot sanitary sewer collection system program. A SCADA system for the sanitary sewer pumping stations is in a biddable format and will be bid in 2010. The five-year closed circuit televising of all the City's collection system over that time period was approved by City Council in December 2007 and in 2009 completed two fifths of the City, with three fifths done in early 2010. The City is working on a new storm drainage system master plan that as a tool related to SSOs will improve the City's knowledge of the system so that it may be possible to better contain or reroute SSOs within the storm drain system and later recovery of those wastewater spills. The City purchased a portable pump and pipe reel system allowing more effective pumping of SSOs that reach storm drains to be returned to the sanitary sewers. Collection system goals have been imbedded within the capital improvement program as well as the programmed renewal and replacement program.

Other Information

The Deputy Director of Public Works/Maintenance and Operations, and the Wastewater Division Services Manager both hold Grade IV certification in Collection System Maintenance. Other certification includes the Wastewater Division Lead Worker and one Maintenance Worker, who both hold a Grade II certification in Collection System Maintenance.

Certification

I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signed,

Robert Howard
City of San Bruno
Deputy Public Works Director – Utilities and Operations
Public Works Department

Appendix C: Sewer System Management Plan Council Adoption Documents

RESOLUTION NO. 2016 - 33

CERTIFIED COPY

ADOPTING THE UPDATED SANITARY SEWER MANAGEMENT PLAN

WHEREAS, in 2006, the State of California Water Resources Control Board adopted the Statewide General Waste Discharge Requirement (WDR), (Order No. 2006-0003-DWQ), for Sanitary Sewer Systems; and

WHEREAS, the City of San Bruno, as an Operator of a Sanitary Sewer System, developed the first Sanitary Sewer Management Plan in 2008 and a five-year update in 2013; and

WHEREAS, in 2013 the California Water Resources Control Board updated the 2006 Waste Discharge Requirement (Order No. WQ 2013-0058-Exec), requiring sanitary sewer system operators to revise and resubmit a Sanitary Sewer Management Plan to incorporate the new elements of the 2013 Waste Discharge Requirement; and

WHEREAS, the City contracted with Causey Consulting, Inc. to update the Sanitary Sewer Management Plan in order to be in compliance with the 2013 State Waste Discharge Requirement; and

WHEREAS, the purpose of the Sanitary Sewer Management Plan is to provide a comprehensive sewer operations elements including the applicable Sewer Master Plan, Capital Improvement Program goals, legal authority, and operational goals and standards for operating a sanitary sewer system in a responsible order; and

WHEREAS, the updated Sanitary Sewer Management Plan is in compliance with the 2013 State Waste Discharge Requirement and designed to satisfy the requirements of the Cease and Desist Order with the San Francisco Bay Regional Water Quality Control Board and the Consent Decree with San Francisco Baykeeper; and

WHEREAS, the cost to prepare the Sanitary Sewer Management Plan was approximately \$14,500, funded through the 2015-16 Wastewater Operating Budget.

NOW, THEREFORE, BE IT RESOLVED: that the City Council adopts the Updated Sanitary Sewer Management Plan.

---oOo---

I hereby certify that foregoing **Resolution No. 2016 - 33** was introduced and adopted by the San Bruno City Council at a regular meeting on April 12, 2016, by the following vote:

AYES: Councilmembers: Ibarra, M. Medina, R. Medina, O'Connell, Mayor Ruane

NOES: Councilmembers: None

ABSENT: Councilmembers: None

I hereby certify this to be a full, true and correct copy of the document it purports to be, the original of which is on file in my office.

Date: April 19, 2016

Victoria S. Anusha
City Clerk of the City of San Bruno

Carol Bonner
Carol Bonner, City Clerk





City Council Agenda Item Staff Report

CITY OF SAN BRUNO

DATE: October 22, 2019

TO: Honorable Mayor and Members of the City Council

FROM: Jovan D. Grogan, City Manager

PREPARED BY: Jimmy Tan, Public Works Director

SUBJECT: Adopt a Resolution Approving Updates to the Policy for Establishing Special Parking Restrictions on Public Streets for On-Street Accessible Parking Stalls, Time Limit Parking Zones, Short Term Parking Zones, and Red Curb No Parking Zones Excluding Residential Permit Parking Program

BACKGROUND:

In December 2009, the Traffic Safety and Parking Committee (TSPC) developed the Policy for Establishment of Special Parking Restrictions on Public Streets (SPR Policy) which was approved by the City Council on July 27, 2010. The SPR Policy describes procedures for establishing special parking restrictions such as on-street accessible parking stalls, time limit parking zones, short term parking zones (typically referred to as “loading zones”), and red curb no parking zones. Staff now desires to update the SPR Policy to reflect various current practices and clarify certain parts of the policy.

DISCUSSION:

A brief summary of the changes to the SPR Policy as part of this update follows.

1. Update the SPR Policy to replace the use of the word “handicapped” with more current and sensitive language referring to “persons with disabilities.” The proposed language is consistent with what is used in the California Vehicle Code.
2. Revise the section currently titled “Red Curb No Parking Zone” in the following ways:
 - a. Revise the section so that it applies to all no parking zones whether the parking restriction is indicated by red curb or by signs.
 - b. Clarify that no parking zones should be considered for promoting the safe and efficient flow of traffic.
 - c. Clarify that the need for no parking zones should be determined by an engineering study and exercise of engineering judgment.
3. Add a new section to the SPR Policy stating that the City will not consider parking restriction signs or curb markings adjacent to fire hydrants.

4. Add a new section to the SPR Policy for red curb bus zones. The SPR Policy has a section that applies to various types of loading zones but does not have a section that applies to red curb bus zones, which are a form of loading zone. The proposed new section will include two parts, one that pertains to red curb bus zones that are used for applications such as corporate shuttle stops, and one that pertains to transit bus stops.
5. Add a new section to the SPR Policy that addresses parking restrictions at intersections. The proposed section will state that parking restriction signs and curb markings will not be considered for the interior of intersections unless staff determines that the interior of the intersection should be painted red to avoid confusion due to nearby red curb outside of the intersection. The section will also include a provision that parking may be restricted near an intersection to improve safety as determined by an engineering study and the exercise of engineering judgment.
6. Various non-substantive organizational changes are proposed.
7. Revise the SPR Policy's procedure flow chart to reflect current practice, which is that the initial review step is only being used to determine if additional fees are required. The flow chart is also being updated so it is a little easier to understand.

Detailed background information about the proposed changes to the SPR Policy are included in Attachment 2. The current SPR Policy documents are in Attachment 3. The proposed updated version of the SPR Policy documents are in Attachment 4.

FISCAL IMPACTS:

There are no fiscal impacts associated directly with adopting the resolution to update the SPR Policy.

ALTERNATIVES:

1. Do not update the SPR Policy.
2. Request additional information or staff analysis before considering the proposed policy.

RECOMMENDATION:

Adopt a resolution approving updates to the Policy for Establishing Special Parking Restrictions on public streets for on-street accessible parking stalls, time limit parking zones, short term parking zones, and red curb no parking zones excluding residential permit parking program.

ATTACHMENTS:

1. Resolution
2. SPR Policy Update Notes
3. Existing SPR Policy Documents
4. Proposed Updated SPR Policy Documents

DATE PREPARED:

September 26, 2019

DISTRIBUTION:

None

RESOLUTION NO. 2019 - ____

RESOLUTION APPROVING UPDATES TO THE POLICY FOR ESTABLISHING SPECIAL PARKING RESTRICTIONS ON PUBLIC STREETS FOR ON-STREET ACCESSIBLE PARKING STALLS, TIME LIMIT PARKING ZONES, SHORT TERM PARKING ZONES, AND RED CURB NO PARKING ZONES EXCLUDING RESIDENTIAL PERMIT PARKING PROGRAM

WHEREAS, pursuant to Title VII, Section 7.08.050, of the San Bruno Municipal Code, any action of the City Council following a recommendation from the Department of Public Works and the Traffic Safety and Parking Committee (TSPC) shall be taken by resolution; and

WHEREAS, the Policy for Establishing Special Parking Restrictions on Public Streets was developed by the TSPC in December of 2009 and approved by the City Council on July 27, 2019; and

WHEREAS, the Public Works Department desires to update the policy to reflect current practices and clarify parts of the policy; and

WHEREAS, the Traffic Safety and Parking Committee reviewed this matter and voted 4-0-0 in favor of updating the policy.

NOW, THEREFORE, BE IT RESOLVED that the City Council hereby adopts a resolution approving updates to the policy for establishing special parking restrictions on public streets for on-street accessible parking stalls, time limit parking zones, short term parking zones, and red curb no parking zones excluding residential permit parking program, as reflected in Exhibit A.

Dated: October 22, 2019

ATTEST:

Melissa Thurman, City Clerk

-o0o-

I, Melissa Thurman, City Clerk, do hereby certify that the foregoing Resolution was duly and regularly passed and adopted by the City Council of the City of San Bruno this 22nd day of October, 2019 by the following vote:

AYES: Councilmembers: _____

NOES: Councilmembers _____

ABSENT: Councilmembers: _____

Attachment 2

September 26, 2019

Detailed Policy Update Notes

San Bruno Policy for Establishing Special Parking Restrictions on Public Streets

This document contains detailed notes providing background information supporting the proposed updates to the City of San Bruno's Policy for Establishing Special Parking Restrictions on Public Street. These notes are generally organized so that each section of the notes pertains to proposed changes to a specific section in the existing policy. Each section in the notes includes the existing policy, background information that provides the rationale for the proposed changes, and a list of proposed changes to the policy.

A Blue Curb: Handicapped Parking/Accessible Path of Travel Zone

Existing Policy:

1. There is no on-site ability to provide handicapped parking
2. Other considerations:
 - Is existing on-street parking congested (>85% of existing parking capacity occupied at peak parking demand time)
 - Does requesting party possess Handicapped Parking Placard?
 - Have abutting property owners/tenants provided written concurrence regarding proposed parking restriction?
 - Parking to be evaluated to peak demand times for that land use, street and/or neighborhood, within proximity of the congested affected area
 - Would the proposed parking restriction be in compliance with ADA requirements?

Background:

1. As of 2008 the CVC uses the term "person with a disability" or similar language instead of "handicapped" or "disabled person".
2. CVC Section 22507.8 restricts parking in a stall or space that is designated for use by persons with disabilities unless the vehicle has a special license plate or placard issued in accordance with the requirements contained in other sections of the CVC. The City's policy should use the same language as the CVC to require that the applicant possesses either a special license plate or placard.

Proposal:

1. In the title of the policy section change "Handicapped Parking" to "Parking for Persons with Disabilities".
2. In Paragraph 1, change "handicapped parking" to "parking for persons with disabilities".
3. In Paragraph 2, 2nd bullet, change "Handicapped Parking Placard" to "a special identification license plate issued pursuant to Section 5007 of the CVC or a distinguishing placard issued pursuant to Section 22511.55 or 22511.59 of the CVC."

D Red Curb No Parking Zone

Existing Policy:

1. Only considered for ARTERIAL and COLLECTOR streets, and;
2. Locations with speed limit over 25MPH, and;
3. Safety sight distance deficiency or collision history showing pattern that could be corrected with No Parking designation

Background:

1. Prevents use of red curb zones on local residential roadways with 25 mph speed limits.
2. Limits application of engineering judgment.
3. Applies only to No Parking Zones designated by red curb. No Parking Zones may also be designated by signs. The policy for establishing No Parking Zones should be consistent regardless of how the parking restriction is indicated at the site.

Proposal:

1. Change the title of the policy section to “No Parking Zones”
2. Delete all three of the current policy paragraphs and replace them with the following two paragraphs:
 1. *Only considered for the purpose of promoting the safe and efficient flow of traffic.*
 2. *The need for the parking restriction should be determined by an engineering study and the exercise of engineering judgment.*

No Parking Adjacent to Fire Hydrant

Existing Policy: None

Background:

1. California Vehicle Code Section 22514 states the following:

No person shall stop, park, or leave standing any vehicle within 15 feet of a fire hydrant except as follows:

 - (a) If the vehicle is attended by a licensed driver who is seated in the front seat and who can immediately move such vehicle in case of necessity.*
 - (b) If the local authority adopts an ordinance or resolution reducing that distance. If the distance is less than 10 feet total length when measured along the curb or edge of the street, the distance shall be indicated by signs or markings.*
 - (c) If the vehicle is owned or operated by a fire department and is clearly marked as a fire department vehicle.*
2. The San Bruno Municipal Code does not alter the restriction contained in the CVC.
3. The Department of Public Works has a default stance that signs and curb markings are not installed to demarcate no parking restrictions near fire hydrants because they are not required by the CVC for the restriction to be enforceable.
4. Public Works would like to formalize this position by incorporating it into the parking restriction policy.

Proposal:

1. Add a new subsection to Section D to be numbered D.2. with the title “No Parking Adjacent to Fire Hydrant” and with the policy paragraph to read, “1. Signs and markings, including red curb, are not considered. CVC 22514 restricts parking within 15 feet of a fire hydrant and no signs or markings are required for enforcement.”

Red Curb Bus Zone

Existing Policy: None.

Background:

1. Municipal Code Section 7.16.020 A. allows buses to stop in a red curb zone that is marked or signed as a bus zone.
2. The parking restriction policy does not address the establishment of red curb bus zones.
3. Businesses such as Walmart.com and YouTube operate a significant number of corporate shuttles and have previously asked the City to establish loading areas for their shuttles. Yellow loading zones are sometimes not appropriate solutions.
4. In the past Public Works has used the criteria for short term parking to evaluate requests for red curb bus zones.
5. Public Works would like to formalize this approach by including it in the parking restriction policy.
6. City Councilmember Marty Medina has previously inquired about whether SamTrans bus stops in San Bruno should be in red curb zones.
7. The need for red curb bus zones for transit stops should be determined by the City with input from the operating transit agency.

Proposal:

1. Add a new subsection to Section D to be numbered D.3. and titled “Red Curb Bus Zones”.
2. Add the policy paragraphs for the new subsection as follows:
 1. *A public transit stop may be designated as a red curb bus zone for safety or access reasons. Staff should consult with the operating transit agency to determine the need for a red curb bus zone.*
 2. *Red curb bus zones for corporate shuttles or other private transit uses may be established using the criteria for establishing short term parking that is contained in Section C.*

Red Curb at Intersections

Existing Policy: None.

Background:

1. CVC 22500 prohibits parking within an intersection or on a crosswalk.
2. According to CVC 275 a crosswalk may be designated by pavement markings or, if no markings are used, the crosswalk is the extension of the sidewalks through the intersection.
3. Signs and markings, including red curb, are not required to designate parking restrictions on crosswalks or in intersections.
4. The Department of Public Works has a default position that signs and markings will not be installed to indicate parking restrictions on crosswalks or in intersections. Public Works would like to formalize this position by including it in the parking restriction policy.
5. Staff has received and expects to continue to receive requests to restrict parking near intersections to improve sight distance. Staff previously believed it was necessary to provide full intersection sight distance as recommended by the AASHTO design guide or the Caltrans Highway Design Manual whenever a concern was raised. Staff has since determined that an engineering study and engineering judgment may be used to determine how much parking, if any, should be restricted near intersections.
6. Staff has been contacted by residents about intersections where parking is restricted by red curb on approach to the intersection but the red curb does not extend into the unmarked crosswalk or into the intersection. This appears to be confusing some residents who avoid parking in the red zone but instead park on the unmarked crosswalk or in the intersection. In situations like this it would be better to extend the red curb into the crosswalk and intersection to avoid confusion.

Proposal:

1. Add a new subsection D.4. titled "No Parking at Intersections".
 2. Add policy paragraphs for subsection D.4. as follows:
 1. *Signs and markings, including red curb, for parking restrictions within intersections and on top of crosswalks are not considered. CVC 22500 prohibits parking in these areas and signs and markings are not required for enforcement.*
 2. *Parking may be restricted near intersections, beyond the areas covered by CVC 22500 to improve safety. The need for additional restrictions should be determined by an engineering study and the exercise of engineering judgment.*
 3. *If red curb is used to indicate additional parking restrictions near an intersection, beyond the areas covered by CVC 22500, the curb within the intersection and crosswalk may also be painted red to avoid confusion.*
-

E No Parking Adjacent to Driveway

Existing Policy:

1. Generally not considered
2. Driveway widening, as an alternative, instead of red curb to improve access to driveway when it is in compliance with applicable City Municipal Codes

Background:

1. Due to reorganization of the policy this should be a subsection of D.

Proposal:

1. Renumber this section from E to D.1.
-

F Tall/Larger Vehicle No Parking Zone

Existing Policy:

1. Not considered. This is covered through City Municipal Code Section 7.24.010 and 7.24.050
2. Not necessary to establish a new restriction category. Utilize existing design criteria to address sight distance issues

Background:

1. Due to reorganization of the policy this should now be a subsection of D.

Proposal:

1. Renumber this section from F to D.5.
2. Delete "No Parking Zone" from the section title.

Exhibit A

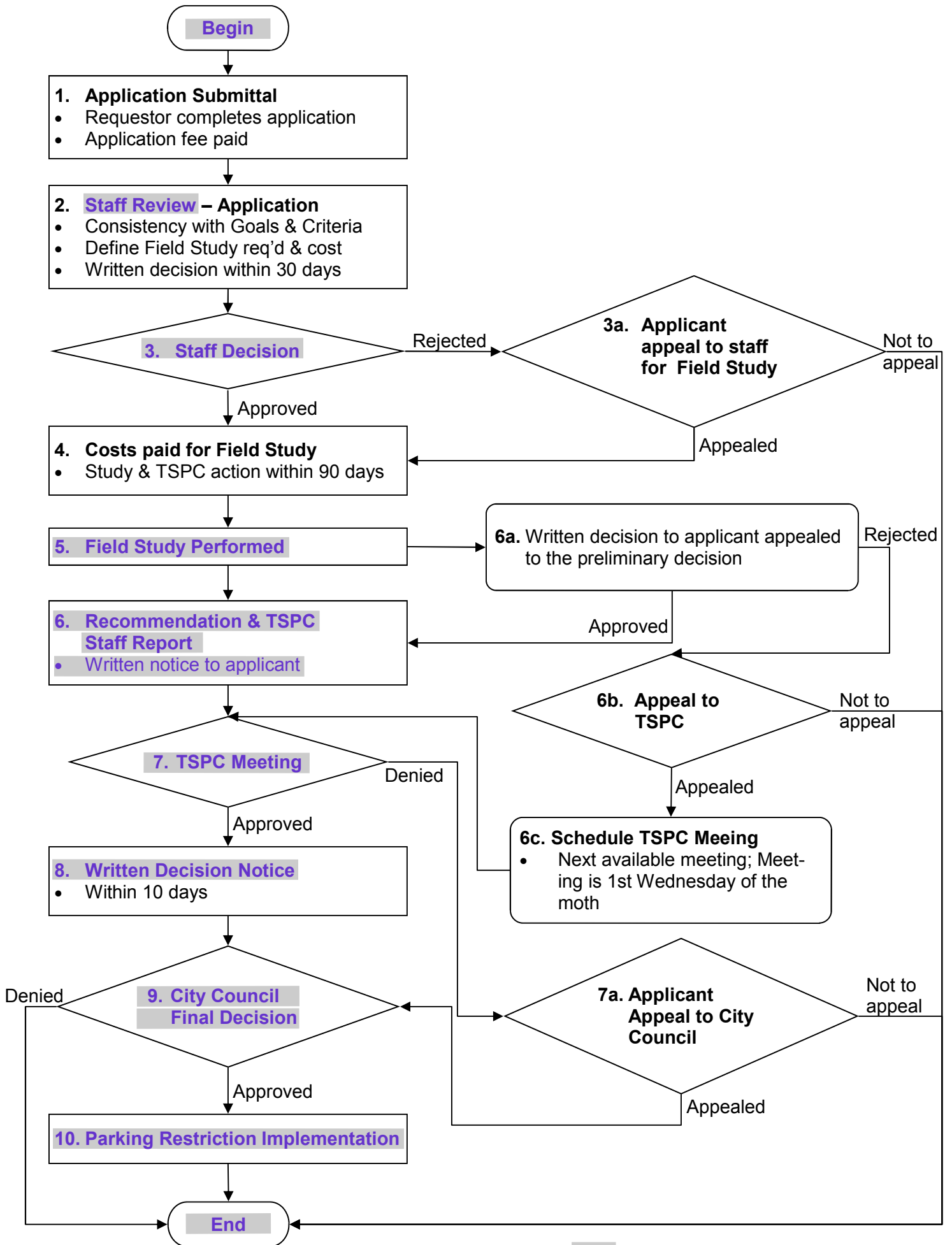
Policy for Establishment of Special Parking Restriction

Parking Restriction Category		Policy
A	Blue Curb Handicapped Parking/Accessible Path of Travel Zone	<ol style="list-style-type: none"> 1. There is no on-site ability to provide handicapped parking 2. Other considerations: <ul style="list-style-type: none"> ▪ Is existing on-street parking congested (>85% of existing parking capacity occupied at peak parking demand time) ▪ Does requesting party possess Handicapped Parking Placard? ▪ Have abutting property owners/tenants provided written concurrence regarding proposed parking restriction? ▪ Parking to be evaluated to peak demand times for that land use, street and/or neighborhood, within proximity of the congested affected area ▪ Would the proposed parking restriction be in compliance with ADA requirements?
B	Time-Limited Parking Establishment of new time limit or zone, or Change in existing time limit or zone <ul style="list-style-type: none"> ◆ 1-Hour ◆ 2-Hour ◆ 6-Hour ◆ Etc. 	<ol style="list-style-type: none"> 1. Only considered in areas of commercial land use designation 2. Time-limited parking will be based on demand established through study (parking survey, parking demand and occupancy data) 3. Evaluation should also consider associated impacts from change in parking time limit <ul style="list-style-type: none"> ▪ Consideration should also be given for unique and isolated locations 4. If applicable, parking restriction requests shall be consistent with the Transit Corridor Plan, latest General Plan, and existing residential permit parking policy (City Municipal Code Chapter 7.18)
C	Short Term Parking <ul style="list-style-type: none"> ◆ Green Curb: 20-Minute Zone ◆ Yellow Curb: Loading Zone ◆ White Curb: Passenger Loading Zone 	<ol style="list-style-type: none"> 1. Only considered in areas of commercial land use designation 2. There is no on-site ability to provide requested short term parking 3. Existing on-street parking is congested (>85% of existing parking capacity occupied) 4. If applicable, parking restriction requests shall be consistent with the Transit Corridor Plan and latest General Plan 5. Prefer written concurrence from abutting property owners & tenants
D	Red Curb No Parking Zone	<ol style="list-style-type: none"> 1. Only considered for ARTERIAL and COLLECTOR streets, and; 2. Locations with speed limit over 25MPH, and; 3. Safety sight distance deficiency or collision history showing pattern that could be corrected with No Parking designation

Policy for Establishment of Special Parking Restriction

Parking Restriction Category		Policy
E	No Parking Adjacent to Driveway	<ol style="list-style-type: none"> 1. Generally not considered 2. Driveway widening, as an alternative, instead of red curb to improve access to driveway when it is in compliance with applicable City Municipal Codes
F	Tall/Large Vehicle No Parking Zone	<ol style="list-style-type: none"> 1. Not considered. This is covered through City Municipal Code Sections 7.24.010 and 7.24.050 2. Not necessary to establish a new restriction category. Utilize existing design criteria to address sight distance issues
<p>Fiscal Impact</p> <ul style="list-style-type: none"> • Initial application fee of \$247; subject to change pending on master fee schedule • If staff determines the requested parking restriction benefits the impacted community, then City may assume responsibility for costs associated with establishment and maintenance of parking restriction • If staff determines the requested parking restriction only benefits the requesting party, then requesting party agrees to be responsible for the costs associated with establishment, maintenance, annual renewal, and removal of parking restriction 		

Procedure for Establishment of Special Parking Restrictions



TEXT = existing process (ends if TSPC denies the request)

Exhibit A

Policy for Establishment of Special Parking Restriction

Parking Restriction Category	Policy
<p>A</p> <p>Blue Curb Parking for Persons with Disabilities/Accessible Path of Travel Zone</p>	<ol style="list-style-type: none"> 1. There is no on-site ability to provide parking for persons with disabilities 2. Other considerations: <ul style="list-style-type: none"> ▪ Is existing on-street parking congested (>85% of existing parking capacity occupied at peak parking demand time) ▪ Does requesting party possess a special identification license plate issued pursuant to Section 5007 of the CVC or a distinguishing placard issued pursuant to Section 22511.55 or 22511.59 of the CVC? ▪ Have abutting property owners/tenants provided written concurrence regarding proposed parking restriction? ▪ Parking to be evaluated to peak demand times for that land use, street and/or neighborhood, within proximity of the congested affected area ▪ Would the proposed parking restriction be in compliance with ADA requirements?
<p>B</p> <p>Time-Limited Parking Establishment of new time limit or zone, or Change in existing time limit or zone</p> <ul style="list-style-type: none"> ◆ 1-Hour ◆ 2-Hour ◆ 6-Hour ◆ Etc. 	<ol style="list-style-type: none"> 1. Only considered in areas of commercial land use designation 2. Time-limited parking will be based on demand established through study (parking survey, parking demand and occupancy data) 3. Evaluation should also consider associated impacts from change in parking time limit <ul style="list-style-type: none"> ▪ Consideration should also be given for unique and isolated locations 4. If applicable, parking restriction requests shall be consistent with the Transit Corridor Plan, latest General Plan, and existing residential permit parking policy (City Municipal Code Chapter 7.18)
<p>C</p> <p>Short Term Parking</p> <ul style="list-style-type: none"> ◆ Green Curb: 20-Minute Zone ◆ Yellow Curb: Loading Zone ◆ White Curb: Passenger Loading Zone 	<ol style="list-style-type: none"> 1. Only considered in areas of commercial land use designation 2. There is no on-site ability to provide requested short term parking 3. Existing on-street parking is congested (>85% of existing parking capacity occupied) 4. If applicable, parking restriction requests shall be consistent with the Transit Corridor Plan and latest General Plan 5. Prefer written concurrence from abutting property owners & tenants

Policy for Establishment of Special Parking Restriction

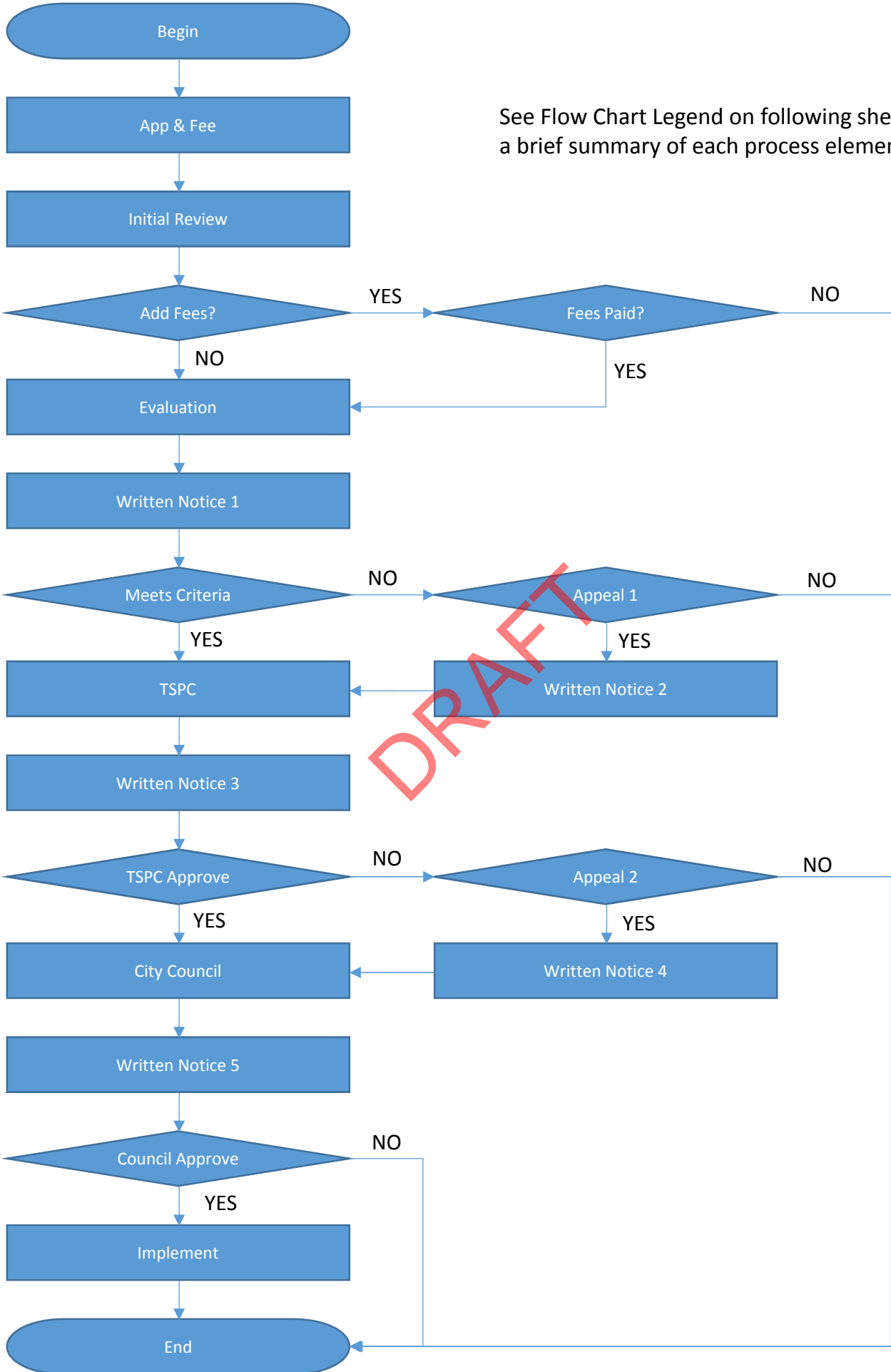
Parking Restriction Category		Policy
D	No Parking Zones	<ol style="list-style-type: none"> 1. Only considered for the purpose of promoting the safe and efficient flow of traffic. 2. The need for the parking restriction should be determined by an engineering study and the exercise of engineering judgment.
D.1.	No Parking Adjacent to Driveway	<ol style="list-style-type: none"> 1. Generally not considered 2. Driveway widening, as an alternative, instead of red curb to improve access to driveway when it is in compliance with applicable City Municipal Codes
D.2.	No Parking Adjacent to Fire Hydrant	<ol style="list-style-type: none"> 1. Signs and markings, including red curb, are not considered. CVC 22514 restricts parking within 15 feet of a fire hydrant and no signs or markings are required for enforcement.
D.3.	Red Curb Bus Zones	<ol style="list-style-type: none"> 1. A public transit stop may be designated as a red curb bus zone for safety or access reasons. Staff should consult with the operating transit agency to determine the need for a red curb bus zone. 2. Red curb bus zones for corporate shuttles or other private transit uses may be established using the criteria for establishing short term parking that is contained in Section C.
D.4.	No Parking at Intersections	<ol style="list-style-type: none"> 1. Signs and markings, including red curb, for parking within an intersection are generally not considered. CVC 22500 prohibits parking in intersections and on top of crosswalks and signs and markings are not required for enforcement. 2. Parking may be restricted near intersections, beyond the areas covered by CVC 22500, to improve safety. The need for additional restrictions should be determined by an engineering study and the exercise of engineering judgment. 3. If red curb is used to indicate additional parking restrictions near an intersection, beyond the areas covered by CVC 22500, the curb within the intersection and crosswalks may also be painted red to avoid confusion.
D.5.	Tall/Large Vehicle	<ol style="list-style-type: none"> 1. Not considered. This is covered through City Municipal Code Sections 7.24.010 and 7.24.050 2. Not necessary to establish a new restriction category. Utilize existing design criteria to address sight distance issues

Policy for Establishment of Special Parking Restriction

Parking Restriction Category	Policy
Fiscal Impact	<ul style="list-style-type: none">• Initial application fee of \$247; subject to change pending on master fee schedule• If staff determines the requested parking restriction benefits the impacted community, then City may assume responsibility for costs associated with establishment and maintenance of parking restriction• If staff determines the requested parking restriction only benefits the requesting party, then requesting party agrees to be responsible for the costs associated with establishment, maintenance, annual renewal, and removal of parking restriction

DRAFT

Special Parking Restriction Policy Application Process Flow Chart



See Flow Chart Legend on following sheets for a brief summary of each process element.

DRAFT

Flow Chart Legend

App & Fee	Applicant begins the process by submitting an application and the initial application fee.
Initial Review	Staff performs initial review of application and determines if additional fees are required.
Add Fees?	Additional fees are required if staff determines that the requested parking restriction only benefits the requesting party.
Fees Paid?	Did the applicant pay the additional fees?
Evaluation	Staff completes evaluation and determines if the parking restriction meets the criteria set forth by the parking restriction policy.
Written Notice 1	Staff sends written notice informing the applicant of the results of the field study. If the request is being denied the applicant shall be notified that they are allowed to appeal the decision to the TSPC. If the request is being forwarded to the TSPC the applicant shall be notified of the date and time of the TSPC meeting.
Meets Criteria	Does the request meet the criteria set forth by the policy?
Appeal 1	Is the applicant appealing a negative decision by staff?
Written Notice 2	Staff sends written notice of the date and time at which the TSPC will hear the appeal.
TSPC	Staff presents request to the TSPC.
Written Notice 3	Staff sends written notice informing the applicant of the decision by the TSPC. If the TSPC denied the request the applicant shall be notified that they are allowed to appeal the TSPC's decision to the City Council. If the TSPC approved the request the applicant shall be notified of the date and time of the Council Meeting.

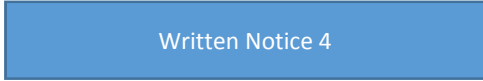
Flow Chart Legend (Cont.)



Did the TSPC approve the request?



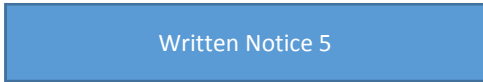
Is the applicant appealing a negative decision by the TSPC?



Staff sends written notice of the date and time at which the City Council will hear the appeal.



Staff presents request to the City Council.



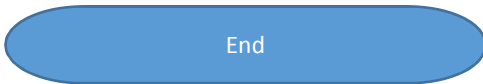
Staff sends written notice informing the applicant of the decision by the City Council.



Did the City Council approve the request?



Staff takes steps to implement the request.



DRAFT



City Council Agenda Item Staff Report

CITY OF SAN BRUNO

DATE: October 22, 2019

TO: Honorable Mayor and Members of the City Council

FROM: Jovan D. Grogan, City Manager

PREPARED BY: Jimmy Tan, Public Works Director

SUBJECT: Adopt Resolution Approving the Installation of Stop Signs at the Western Intersection of Parkview Drive and Santa Lucia Avenue on Parkview Drive at the East and West Sides of the Intersection

BACKGROUND:

The Department of Public Works was contacted by a resident who expressed concern about the lack of stop signs at the western intersection of Santa Lucia Avenue and Parkview Drive. Santa Lucia Avenue and Parkview Drive intersect twice. The western intersection is a four-way intersection near the City's southern border with Millbrae. The intersection currently has no stop signs on any of the approaches. The resident reported that a vertical crest in the road to the east of the intersection causes some drivers to have difficulty seeing as they approach the intersection. The residents requested stop signs in order to improve safety at the intersection. Attachment 2 is the Location Map.

The purpose of this staff report is to present to the City Council the results of the engineering study prepared by staff and recommendation of the Traffic Safety and Parking Committee (TSPC). Section 7.08.050 of the San Bruno Municipal Code requires that any action by the City Council on a TSPC recommendation for a stop sign shall be taken by resolution.

DISCUSSION:

For purposes of this staff report staff will consider Santa Lucia Avenue to nominally be the north-south roadway and Parkview Drive to nominally be the east-west roadway. Attachment 2 is a location map. Both roadways have a speed limit of 25 miles per hour. To the east of the intersection, Parkview Drive slopes upwards until it reaches a crest approximately 130 feet away measured from the center of the intersection.

Staff performed a sight distance evaluation for the east leg of the intersection and determined that a driver approaching the intersection from the east may not be able to see the intersection from a far enough distance to avoid a potential collision because of the crest. As a result of the limited sight distance staff recommends installation of stop signs on Parkview Drive in both directions at its intersection with Santa Lucia Avenue. Staff also recommends installation of a "Stop Ahead" warning sign near the crest of the road on Parkview Drive. Attachment 3 is a diagram showing the proposed signs and markings.

To help alert residents to the new stop signs, the City will install portable barricades with flashing lights next to the new stop signs and new "Stop Ahead" sign to help draw driver's attention to the signs. The City will also install a temporary "Stop Ahead" sign mounted on a portable barricade with a flashing light on the west leg of the intersection facing eastbound traffic on Parkview Drive. The barricades will remain in place for a minimum of two weeks.

Section 21354 of the California Vehicle Code authorizes local authorities to erect stop signs at intersections within their jurisdiction. Section 7.08.040 of the San Bruno Municipal Code makes it the duty of the Traffic Safety and Parking Committee (TSPC) to recommend to the City Council intersections where stop controls are to be established. Staff prepared an engineering analysis which the TSPC reviewed on May 1, 2019. The TSPC voted to recommend that Council approve staff's recommendation.

FISCAL IMPACTS:

The cost of installing the signs and markings is estimated to be \$3,592.87 which will be paid from the FY 2019-20 Streets Operations Budget. The cost of maintaining the signs is estimated to be \$320 every ten years. The cost of maintaining the markings is estimated to be \$420 every five years.

ALTERNATIVES:

1. Do not establish stop controls on Parkview Drive at Santa Lucia Avenue.

RECOMMENDATION:

Adopt resolution approving the installation of stop signs at the western intersection of Parkview Drive and Santa Lucia Avenue on Parkview Drive at the east and west sides of the intersection.

DISTRIBUTION:

None

ATTACHMENTS:

1. Resolution
2. Location Map
3. Proposed Signs and Markings

DATE PREPARED:

October 1, 2019

RESOLUTION NO. 2019 - ____

RESOLUTION APPROVING THE INSTALLATION OF STOP SIGNS AT THE WESTERN INTERSECTION OF PARKVIEW DRIVE AND SANTA LUCIA AVENUE ON PARKVIEW DRIVE AT THE EAST AND WEST SIDES OF THE INTERSECTION

WHEREAS, pursuant to Title VII, Section 7.08.050, of the San Bruno Municipal Code, any action of the City Council following a recommendation from the Department of Public Works and the Traffic Safety and Parking Committee shall be taken by resolution; and

WHEREAS, the western intersection of Santa Lucia and Parkview Drive is currently an uncontrolled 4-way intersection; and

WHEREAS, Section 21354 of the California Vehicle Code authorizes local authorities to erect stop signs at intersections under their jurisdiction; and

WHEREAS, an engineering study has determined that adding stop signs to Parkview Drive will enhance safety by addressing insufficient sight distance caused by a crest in the road; and

WHEREAS, on May 1, 2019 the Traffic Safety and Parking Committee reviewed this matter and voted in favor of recommending installation of the stop signs.

NOW, THEREFORE, BE IT RESOLVED that the City Council hereby adopts a resolution approving the installation of stop signs at the western intersection of Parkview Drive and Santa Lucia Avenue on Parkview Drive at the east and west sides of the intersection

Dated: October 22, 2019

ATTEST:

Melissa Thurman, CMC
City Clerk

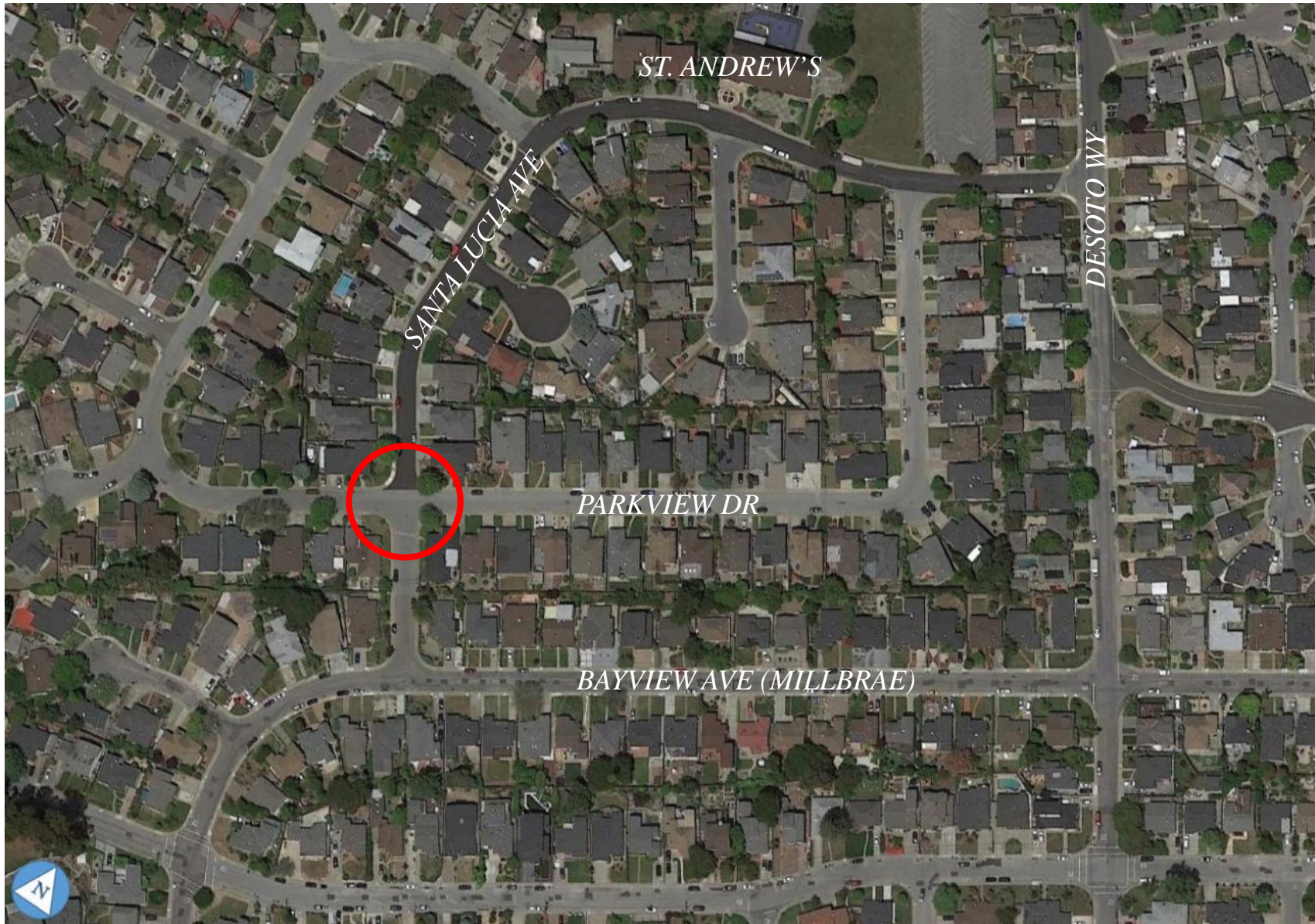
-o0o-

I, Melissa Thurman, City Clerk, do hereby certify that the foregoing Resolution was duly and regularly passed and adopted by the City Council of the City of San Bruno this 22nd day of October 2019 by the following vote:

AYES: Councilmembers: _____

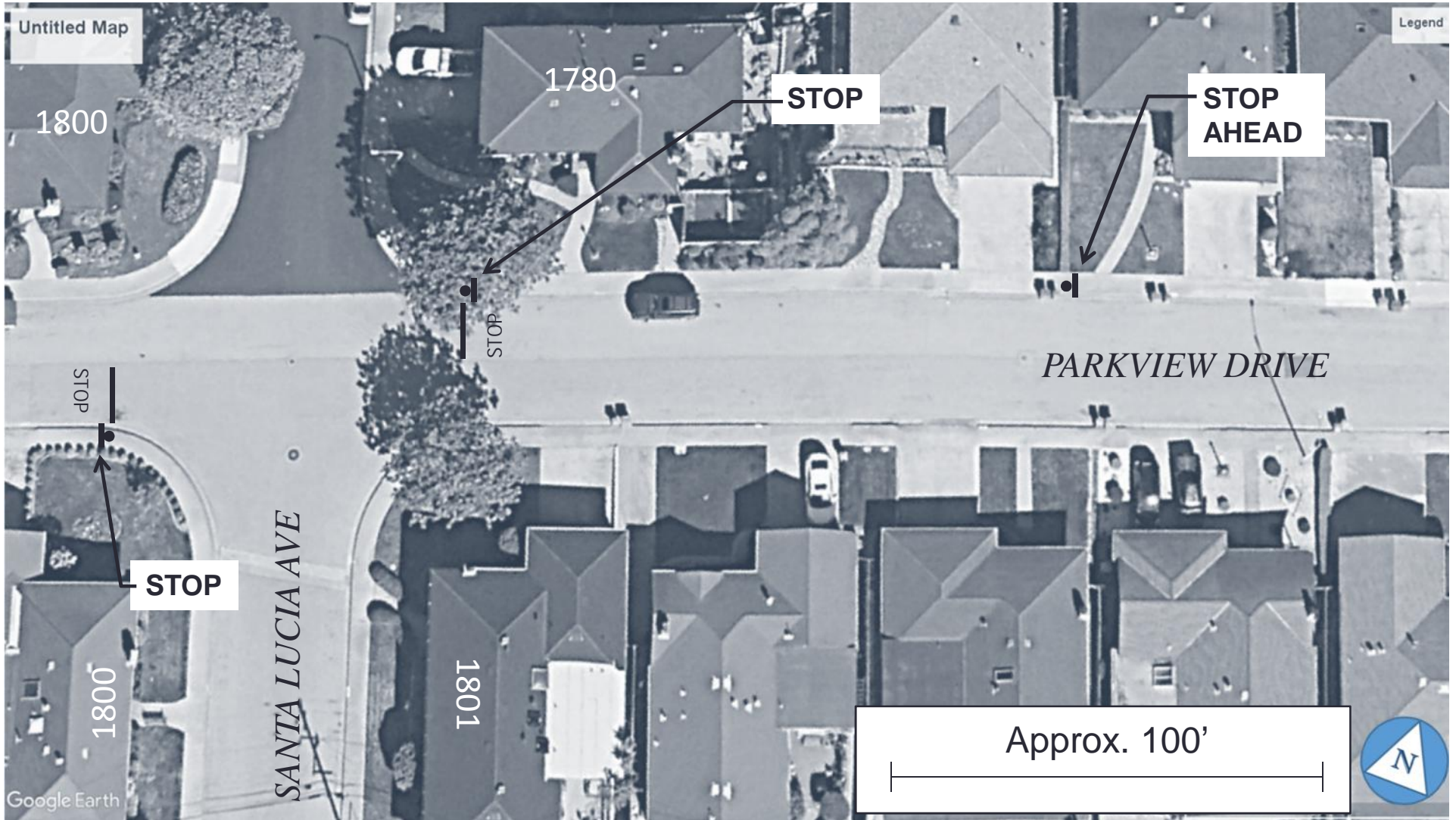
NOES: Councilmembers _____

ABSENT: Councilmembers: _____



LOCATION MAP: PARKVIEW DR & SANTA LUCIA AVE

ATTACHMENT 3



PROPOSED SIGNS AND MARKINGS



City Council Agenda Item Staff Report

CITY OF SAN BRUNO

DATE: October 22, 2019

TO: Honorable Mayor and Members of the City Council

FROM: Jovan D. Grogan, City Manager

PREPARED BY: Jimmy Tan, Public Works Director

SUBJECT: Adopt a Resolution Waiving the Encroachment Permit Fees, Staff Labor Reimbursement Fees, and Insurance Rider Premium Cost for the Encroachment Permit Application for a Halloween Road Closure on Park Avenue and Appropriating \$412 from the General Fund

BACKGROUND:

The City has received a request to close Park Avenue between its western end and Oak Avenue, and Chestnut Avenue between Park Avenue and Williams Avenue on the evening of October 31, 2019 for Halloween. The City is processing an Encroachment Permit application to permit the road closure. As part of the process for issuing the Encroachment Permit, the City has asked the Applicant to pay an application fee, reimburse the City for the labor costs the City incurs while providing the barricades for the road closure, and pay for the insurance premium for a rider on the City's insurance policy. The Applicant has requested that the City waive all of the costs. The waiver of City fees requires City Council action. The purpose of this staff report is to seek City Council's action to waive all the costs because staff does not have this authority.

DISCUSSION:

The following is a breakdown of the various amounts the Applicant has been asked to pay for the requested road closure.

Encroachment Permit Application Filing Fee	\$109
Reimbursement for labor for dropping off and picking up barricades	\$138
<u>Premium for rider on City's insurance policy</u>	<u>\$165</u>
TOTAL	\$412

The description of the fees are as follows:

- The Encroachment Permit Application filing fee is the standard fee from the City's Master Fee Schedule.
- The reimbursement for labor is the cost for City forces to drop off and pick up the barricades that the City provides for the road closure.

- The insurance premium is to pay for a rider on the City's insurance policy to provide coverage for the block party. The rider, which is recommended by the City's risk pool and is routinely required for similar events, covers non-City events occurring on City property when the event sponsor does not have available private insurance for the additional risks associated with the event.

Waiving the requested payments by the Applicant means those costs will be paid by the City. The Public Works Department requests that additional General Funds be appropriated to pay the waived amounts because these costs were not accounted for in the department's operating budget.

FISCAL IMPACTS:

The total cost for the Encroachment Permit fee, labor to drop off and pick up the barricades, and the insurance rider premium is \$412. The applicant has requested City Council's consideration to waive all fees associated with the encroachment permit. If the City Council approves of the waiver request, \$412 of available General Fund Balance will be appropriated to the Streets Division of the Public Works Department to cover expenses related to the Encroachment Permit.

ALTERNATIVES:

1. Do not approve the requested waiver.
2. Approve a partial waiver.

RECOMMENDATION:

Adopt a resolution waiving the Encroachment Permit fees, staff labor reimbursement fees, and insurance rider premium cost for the Encroachment Permit application for a Halloween road closure on Park Avenue and appropriating \$412 from the General Fund.

ATTACHMENTS:

1. Resolution

DATE PREPARED:

September 26, 2019

DISTRIBUTION:

None

RESOLUTION NO. 2019 - ____

ADOPT A RESOLUTION WAIVING THE ENCROACHMENT PERMIT FEES, STAFF LABOR REIMBURSEMENT FEES, AND INSURANCE RIDER PREMIUM COST FOR THE ENCROACHMENT PERMIT APPLICATION FOR A HALLOWEEN ROAD CLOSURE ON PARK AVENUE AND APPROPRIATING \$412 FROM THE GENERAL FUND

WHEREAS, a resident of San Bruno (the Applicant) has requested the closure of Park Avenue between its western end and Oak Avenue, and Chestnut Avenue between Park Avenue and Williams Avenue on the night of October 31, 2019 for Halloween; and

WHEREAS, the City is processing an Encroachment Permit as the means by which the City will permit the road closure; and

WHEREAS, the City has requested the Applicant pay a filing fee for the Encroachment Permit application; and

WHEREAS, the City has requested the Applicant reimburse the City for labor costs associated with providing barricades for the road closure; and

WHEREAS, the City has requested the Applicant make an insurance premium payment for a rider on the City's insurance policy to provide insurance coverage for the block party; and

WHEREAS, the Applicant has requested that all of the costs associated with the issuance of the Encroachment Permit Application be waived, and

WHEREAS, \$412 of available General Fund Balance will be appropriated to the Streets Division of the Public Works Department to cover expenses related to the Encroachment Permit.

NOW, THEREFORE, BE IT RESOLVED that the City Council hereby adopts a resolution waiving the Encroachment Permit fees, staff labor reimbursement fees, and insurance rider premium cost for the Encroachment Permit application for a Halloween road closure on Park Avenue and appropriating \$412 from the General Fund.

Dated: October 22, 2019

ATTEST:

Melissa Thurman, City Clerk

-o0o-

I, Melissa Thurman, City Clerk, do hereby certify that the foregoing Resolution was duly and regularly passed and adopted by the City Council of the City of San Bruno this 22nd day of October, 2019 by the following vote:

AYES: Councilmembers: _____

NOES: Councilmembers _____

ABSENT: Councilmembers: _____



City Council Agenda Item Staff Report

CITY OF SAN BRUNO

DATE: October 22, 2019

TO: Honorable Mayor and Members of the City Council

FROM: Melissa Thurman, City Clerk

SUBJECT: Appoint Citizen to Fill One Vacancy on San Bruno's Planning Commission

BACKGROUND:

On July 23, 2019 at its regular meeting, the City Council accepted the resignation of one Planning Commissioner creating a vacancy on the Planning Commission. The City Council instructed the City Clerk to advertise a Notice of Vacancy to obtain new applications from eligible residents of San Bruno.

A Notice of Vacancy was posted on July 24, 2019 and an advertisement for the Planning Commission recruitment was posted to the city website, on San Bruno Cable T.V Channel 1, sent to residents in the City Clerk's Public Meetings Agenda Notification email distribution list and the Community Services Department eNewsletter. The deadline to submit applications was on Friday, September 13, 2019.

The City Clerk's office received applications, as well as supplemental questionnaires from the following residents of San Bruno, and they are eligible to serve:

- Marco Durazo
- Tom Gardner
- Auros Ansbergs Harman
- James Mahon
- Matthew Sum

Residents may apply to be considered for appointment on one of San Bruno's Citizens Advisory Commissions, Boards and Committees any time, whether there is a recruitment in place or not. Applications are kept on file for two years and invitations to interview are extended to current applicants when vacancies occur.

At the time of the deadline for this recruitment, there were two current applications for the Planning Commission on file, complete with the required supplemental questionnaires. Those applicants were contacted and notified of the vacancy and upcoming interviews to fill the vacancy. One applicant declined the invitation and withdrew his application and the other applicant did not respond to voicemail or email outreach.

On October 15, 2019, the City Council held a Special Meeting to conduct an interview session with the applicants listed above. All five applicants were in attendance.

FISCAL IMPACT:

There is no direct or anticipated fiscal impact of the proposed action to appoint a citizen to fill the vacancies on San Bruno's Planning Commission.

ALTERNATIVE:

Do not appoint any of the applicants and direct the City Clerk to re-advertise a Notice of Vacancy and extend the deadline to apply for the Planning Commission.

RECOMMENDATION:

Appoint Citizen to Fill One Vacancies on San Bruno's Planning Commission

DATE PREPARED:

October 17, 2019



City Council Agenda Item Staff Report

CITY OF SAN BRUNO

DATE: October 22, 2019

TO: Honorable Mayor and Members of the City Council

FROM: Jovan D. Grogan, City Manager

PREPARED BY: Darcy Smith, Community and Economic Development Director

SUBJECT: Adopt Resolution Adopting the San Mateo Avenue Conceptual Streetscape Plan

BACKGROUND:

Preparation of the San Mateo Avenue Conceptual Streetscape Plan (Plan) has been underway since City Council authorized the service contract with Wallace, Robert, & Todd (WRT) in January 2019. The final Plan is included within the report (see Attachment 2). After eight months of preparation, the final draft Plan was completed in September 2019 and it includes a conceptual design guideline for the San Mateo Avenue. On September 24, 2019, the City Council held a study session to provide feedback and comments on the draft Plan. The City Council received public testimonies, accepted the report and provided comments regarding various elements of the draft Plan. The City Council supported completion of the draft Plan for final adoption. The comments and input from the City Council study session meeting are included in Attachment 3.

The Plan serves as a design guideline to create an inviting and cohesive downtown atmosphere for pedestrians, bicyclists, and motorists. The Plan also provides design recommendation and elements that beautify and enhance the San Mateo Avenue public realm.

The 2009 General Plan envisions and promotes the San Mateo Avenue downtown area as “*the symbolic heart of the city.*” Specific design and implementation policies were set in place to “*provide the residents with a pleasant and economically vital commercial and entertaining destination.*” Such policies include improving the visibility of the downtown, expanding the streetscape amenities and upgrading and enhancing the downtown appearance.

Further, building upon the implementation policies of the *General Plan*, the 2013 Transit Corridors Plan (TCP) focuses on articulating the community's vision for revitalized commercial corridors in proximity to the San Bruno Avenue Caltrain Station. The vision includes fostering dynamic architecture and welcoming gateways, convenient transportation connections, pedestrian-oriented “green” streets, and additional housing, jobs, retail, and restaurants, while maintaining a sense of the City's history. The TCP identifies San Mateo Avenue - the Central Business District/Downtown, as one of the five character areas for public realm improvements. The other character areas are Station Area, El Camino Real, Huntington Avenue and Civic Center as designated in the Transit Corridors Plan. The TCP also identifies San Mateo Avenue Streetscape improvements as a short-term implementation project to enhance San Mateo Avenue - the Central Business District.

In recognition of these policies set in the General Plan and TCP, at its January 8, 2019 meeting, the City Council adopted Resolution 2019-09 authorizing the City Manager to execute a consultant services agreement with Wallace, Robert, & Todd (WRT) in the amount of \$125,000 from the City's General Fund balance to prepare the San Mateo Avenue Conceptual Streetscape Plan. The draft Plan preparation process which included various community outreach sessions, took approximately eight months, from January through October 2019, to complete.

Community Engagement

In the early stage of the draft Plan preparation, staff underwent a thorough community engagement effort that intended to solicit ideas for the Conceptual Streetscape Plan. Collectively, community input was gathered that mapped downtown's assets and challenges, prioritized design guidance and principles, and outlined desired activities for downtown's future. Through the process, it was evident that the community envisions a unique and elegant design character for the downtown area. The community has a high interest in further activating San Mateo Avenue through linking existing paseos, Posy Park and Centennial Plaza. Additional vegetation and landscaping to provide a welcoming atmosphere for San Mateo Avenue is also of high interest. In addition, the community expressed interest in pedestrian safety and to better promote the downtown area by installing wayfinding signage and gateways. This input has been carefully incorporated into the final draft Plan.

Planning Commission Input

Staff first introduced the conceptual design to Planning Commission on May 7, 2019 where the Commission was not provided the draft Plan for review at the time. On August 20, 2019, staff presented the actual draft Plan for review and received feedback from the Planning Commission. The Planning Commission accepted the report and forwarded favorable recommendation to City Council.

City Council Study Session

After receiving feedback from the Planning Commission, staff presented the draft Plan to City Council at a study session on September 24, 2019. During the meeting, City Council provided input and feedback in addition to minor edits. Specifically, City Council expressed interest in adding a vehicle loading zone near Posy Park to serve the San Bruno Caltrain Station and the need to eliminate hanging exterior lights because of concerns about wind. Final revisions to the plan were made in response to these comments. Some comments will be addressed in separate City efforts, such as adding loading zones and amending the Zoning Code to address issues on private property (for example, screening requirements for garbage and recycling containers on private property and lighting requirements for businesses with awnings). Additionally, an acknowledgements page has been added as page two in the plan. Overall, the City Council was in support of the conceptual design and favors the "simple and elegant" design theme. Detailed comments and f provided by the City Council and staff responses can be found in Attachment 3.

DISCUSSION:

Project Boundary

The project location and limits are within the public right-of-way of San Mateo Avenue between Huntington Avenue at the Caltrain Station to the north and the intersection with El Camino Real to the south. The area encompasses approximately 0.65 miles section of San Mateo Avenue in the downtown area. The planning area comprises all publicly-owned property and does not include any private property.

The San Mateo Avenue Conceptual Streetscape Plan Objective and Goals

The proposed conceptual streetscape design will maintain the existing layout of the street and most of the existing curb-line. The proposed improvements will be limited to the public right of way and are focused on the sidewalk and planting areas from the back-of-curb to the property line. The scope of this draft Plan does not include improvements to building facades or private properties. The draft Plan will further the vision and goals as set in the implementing policies of the General Plan and TCP. The draft Plan aims to improve the existing downtown aesthetic appearance and to create a more inviting environment for the community and visitors alike. The objective is to provide design guidance for the public right-of-way and to support the City's goal of beautifying the public realm, supporting local business, spurring investment within the downtown core, enhancing the downtown's character, and increasing the attractiveness of the downtown as a destination.

Six distinct goals and their purposes are identified in the draft Plan. Each goal is described in detail supported by graphics in the final Plan.

- Activation:** To institute non-physical improvement to the San Mateo Avenue corridor through social programs such as farmer's market, street fair or music concerts in addition to linking existing paseos (alleys), Posy Park and Centennial Plaza area.
- Greening:** To beautify San Mateo Avenue with the assistance of installing additional vegetation and landscaping that create a welcoming atmosphere and are native to San Bruno.
- Beautification:** To create a unified, and updated image through a unique and elegant design element for the downtown.
- Safety:** To enhance and promote pedestrian safety along San Mateo Avenue corridor through the implementation of additional lighting.
- Way finding:** To better direct traffic to the downtown area and to the nearby existing parking lots by installing wayfinding and gateway signs.
- Identity:** To achieve a cohesive design character for the downtown

Consistency with Adopted Planning Documents

General Plan

The Plan is consistent with *General Plan* policies related to improving the image of downtown as a welcoming business district to shop, dine and entertain.

Transit Corridors Plan (TCP)

The TCP identifies San Mateo Avenue Streetscape improvements as a short-term implementation project to enhance the Central Business District and as one of the five character areas for public realm improvements. The Plan proposes several infrastructure improvements that are consistent with the public realm design guidelines policies in the TCP.

San Bruno Walk'n Bike Plan

The *Walk'n Bike Plan* identifies San Mateo Avenue as needing additional streetscape improvements to improve the pedestrian network, encourage safer sidewalks with better lights, tree planting at grade that improves pedestrian comfort, more signage, better pavements and more seating areas.

Downtown Parking Management Plan (PMP)

The *Downtown Parking Management Plan* recommends efficient parking strategies in the downtown. The Plan would help implement the PMP by providing way finding and directional sign.

Green Infrastructure Plan (GI Plan)

The City's GI Plan was recently adopted by City Council on August 27, 2019 and the draft Plan has incorporated design features that will improve the water quality of San Francisco Bay, augment local water supplies, reduce flooding and increase green space. Specifically, the Plan will incorporate green and sustainable design elements, plant street trees in tree wells, install naturally drained landscape and encourage the use of native and drought-tolerate vegetation.

Conclusion

As a design guideline, the San Mateo Avenue Conceptual Streetscape Plan will guide the next steps of the design process, while leaving flexibility for future implementation. The final implementation will depend on project budget once funding is identified and on potential technical constraints that were beyond the scope of this study.

FISCAL IMPACT:

The cost of the Plan preparation has been fully funded by the City's General Fund, as authorized by the City Council. At this time, the City has not identified a funding source to implement the Conceptual Streetscape Plan at an estimated cost of \$9.333 million for the streetscape improvements and an additional \$3.478 million for the Centennial Plaza improvements and \$6.291 million for the Posy Park improvements. The total cost is estimated at \$19.102 million. A detailed cost estimate with priority ranking from one to four is included in Appendix E of the Plan. This project was identified as a potential project in the City's Development Impact Fee Nexus Study, and future sources of funding could include Development Impact Fees, as well as grants or community benefit payments from development projects. Further, a ranking and rough-order of-magnitude cost estimates of the proposed improvements were calculated and included to guide budgeting decisions for future consideration.

ENVIRONMENTAL REVIEW:

The Plan provides a design guideline that includes minor improvement to area within the public right-of-way such as crosswalk stripping, tree planting, landscape, wayfinding signs and light poles installation. Therefore, the project qualifies for a Categorical Exemption under CEQA guidelines Section 15301 (c) for minor alteration to existing streets and sidewalks.

ALTERNATIVE:

1. Do not adopt the San Mateo Avenue Conceptual Streetscape Plan.
2. Request additional information and direct staff to revise the Final Plan.

RECOMMENDATION:

Adopt resolution adopting the San Mateo Avenue Conceptual Streetscape Plan.

DISTRIBUTION:

None

ATTACHMENTS:

1. Resolution
2. Proposed San Mateo Avenue Conceptual Streetscape Plan
3. City Council Study Session Comments

DATE PREPARED:

October 11, 2019

RESOLUTION NO. 2019- ____

ADOPTING THE SAN MATEO AVENUE CONCEPTUAL STREETScape PLAN

WHEREAS, In 2009, the City adopted the *General Plan* which envisions to promote San Mateo Avenue as a symbolic heart of the city through implementation policies to improve the visibility and appearance of the downtown, expand the streetscape amenities, place clearly marked crosswalks and upgrade the appearance of the downtown with combined efforts of the City, merchants and property owners;

WHEREAS, In 2013, the City adopted the Transit Corridors Plan (TCP) which identifies San Mateo Avenue - the Central Business District, one of the five character areas for public realm improvements;

WHEREAS, The TCP articulates the community's vision for revitalized commercial corridors and identified San Mateo Avenue Streetscape improvements as a short-term implementation project;

WHEREAS, to complete the Conceptual Streetscape Plan the City Council appropriated funds in the adopted FY2018-19 budget in the amount of \$125,000 from the City's General Fund balance to fund the consultant costs to prepare the San Mateo Avenue Streetscape Plan;

WHEREAS, the City retained consultant services with Wallace, Roberts and Todd (WRT) in January 2019 to prepare the Plan; and

WHEREAS, key community engagement consisted of an online survey, walking tour, drop-in community workshop, formal community meeting, and two stakeholder meetings held from March 2019 to May 2019 during the plan development stage;

WHEREAS, presentations on the plan during the plan development process were made before the City Planning Commission, Culture and Arts Commission, Parks and Recreation Commission, and Bicycle and Pedestrian Advisory Committee with input provided;

WHEREAS, The San Mateo Avenue Streetscape Plan develops innovative design standards for all the street features to become an economically positive destination downtown supporting the needs of the community;

WHEREAS, The San Mateo Avenue Streetscape Plan is consistent with the General Plan, Transit Corridor Plan, Walk 'n Bike Plan and Downtown Parking Management Plan policies;

WHEREAS, this Resolution will serve as City approval of the Conceptual Plan. It will not include any action related to implementation, funding, or physical construction. When actual implementation or construction is proposed in the future as part of a City-initiated project, more detailed analysis, funding identification, and environmental review will be conducted at that time;

WHEREAS, the project qualifies for a Categorical Exemption under CEQA Guidelines Section 15301 (c) for minor alteration to existing streets and sidewalks

NOW, THEREFORE, BE IT RESOLVED: that the City Council adopts the San Mateo Avenue Conceptual Streetscape Plan.

Dated: October 22, 2019

ATTEST:

Melissa
City Clerk

Thurman,

CMC

-o0o-

I, Melissa Thurman, City Clerk, do hereby certify that the foregoing Resolution was duly and regularly passed and adopted by the City Council of the City of San Bruno this 22nd day of October 2019 by the following vote:

AYES: Councilmembers: _____
NOES: Councilmembers _____
ABSENT: Councilmembers: _____

SAN MATEO AVENUE

CONCEPTUAL STREETScape PLAN



ACKNOWLEDGEMENTS

CITY COUNCIL

Rico E. Medina, Mayor
Irene O'Connell, Vice Mayor
Laura Davis
Marty Medina
Michael Salazar

PLANNING COMMISSION

Linda Mason, Chair
Kelly Lethin, Vice Chair
Rick Biasotti
Tom Hamilton
Mary Lou Johnson
Valentine Morgan

CITY STAFF

Jovan D. Grogan	City Manager
Darcy Smith	Community and Economic Development Director
Jimmy Tan	Public Works Director
Pamela Wu	Planning and Housing Manager
Michael Smith	Senior Planner
Rucha Dande	Associate Planner (Project Manager)
Michael Kato	Associate Civil Engineer
David Wong	Principal Civil Engineer

CONSULTANTS

WRT Urban Design and Landscape Architecture
CSW/Stuber-Stroeh Engineering Group, Inc
Parisi Transportation Consultants

The City would like to thank and acknowledge members of the Bicycle and Pedestrian Advisory Committee, Culture and Arts Commission, Parks and Recreation Commission, and all members of the public for their active participation in the successful completion of this collaborative effort.



TABLE OF CONTENTS

Chapter 1: Introduction page 1

- a. Context..... page 2
- b. Project Background page 2
- c. Project Overview page 2
- d. Scope and Purpose of the San Mateo Ave. Streetscape Plan page 3
- e. Planning Context page 4
- f. CEQA Compliance page 6
- g. Process page 6
- h. Goals page 7

Chapter 2: Existing Conditions page 9

- a. Land Use page 10
- b. Character page 10
- c. Streetscape Condition page 12
- d. Parking page 16

Chapter 3: Recommendations page 19

- a. Design Overview page 20
- b. Baseline Furnishings and Hardscape page 34
- c. Opportunities for Unique and Artistic Expression page 36
- d. Greening and Stormwater Management..... page 38
- e. Mobility and Parking page 42
- f. Lighting page 46
- g. Special Places page 50
- h. Wayfinding and Gateways page 56
- i. Activation..... page 65
- j. Prioritization and Cost Estimate page 66

Chapter 4: Appendix page 71

- a. Utility Assessment page 72
- b. Photometric Assessment page 89
- c. Accessibility Assessment page 93
- d. Hydrology Assessment page 100
- e. Cost Estimate page 118
- f. Transportation Assessment and Recommendations page 122
- g. Angled Parking Evaluation page 138
- h. Notes from Community Engagement and Stakeholder Meetings..... page 143

CHAPTER 1: INTRODUCTION

- A. CONTEXT
- B. PROJECT BACKGROUND
- C. PROJECT OVERVIEW
- D. SCOPE AND PURPOSE OF THE SAN MATEO AVENUE STREETScape PLAN
- E. PLANNING CONTEXT
- F. CEQA COMPLIANCE
- G. PROCESS
- H. GOALS

A. CONTEXT

The City of San Bruno, an ethnically and culturally diverse city, maintains a small-town atmosphere within a large metropolitan area. It is uniquely located on the San Francisco Peninsula in San Mateo County, about twelve miles south of San Francisco. Located along Highway 101 and Interstate 280, accessible by Bay Area Rapid Transit (BART), Caltrain and the San Mateo Transit (SamTrans) bus system, San Bruno is a transit hub for the bay area. Adjacent to the San Francisco International Airport, the City has easy accessibility to the vast cultural, educational, and recreational opportunities within the San Francisco Bay Area.

San Mateo Avenue, from Huntington Avenue to El Camino Real, serves as San Bruno's downtown central business district. A two-lane, low-speed roadway lined with shops, restaurants and services, it functions as a pedestrian-oriented shopping district, where visitors may park once and visit multiple destinations.

One of the most striking and valuable assets of San Mateo Avenue is the diverse community that is served by businesses along the corridor. In a region where cultural diversity is not uncommon, San Mateo Avenue stands out because of the varied mix of restaurants, shops and services that line the street. There are very few vacancies, the existing business seem to be thriving. Many businesses have been in their locations for some time, while several new businesses are finding success. Not only are these shops

and restaurants ethnically diverse, but a range of ages and stages of life are served, from toddlers at daycares to children learning to swim, newlyweds at the wedding chapel and wedding photo shop, to new parents. The range of businesses and services is striking, including restaurants; fitness, yoga, martial arts and dance classes; the Volunteer Firemen's Hall; grocery stores; hair salons; dry cleaners; laundromats; a leather supply store; a notary; an auto parts store; banks; bakeries; and more. A surprisingly large number of these businesses are sole-proprietor, locally owned businesses.

B. PROJECT BACKGROUND

In 2013, the City adopted the Transit Corridors Plan which articulates the community's vision for revitalized commercial corridors in proximity to the San Bruno Caltrain Station. The vision includes fostering dynamic architecture and welcoming gateways, convenient transportation connections, pedestrian-oriented "green" streets, and additional housing, jobs, retail, and restaurants, while maintaining a sense of the City's history. The Transit Corridors Plan identifies five character areas for public realm improvements: Station Area, El Camino real, Central Business District, Huntington Avenue and Civic Center. San Mateo Avenue is the main corridor of the Central Business District area. The San Mateo Avenue Streetscape Plan represents the further development of recommendations from the Transit Corridors Plan.

C. PROJECT OVERVIEW

The project location and limits are within the public right-of-way on San Mateo Avenue between Huntington Avenue at the Caltrain Station to the north and the intersection with El Camino Real to the south. San Mateo Avenue is downtown San Bruno's main street. It has a 60-foot right-of-way, with sidewalks approximately eight to ten feet wide, eight foot wide bulb outs at intersections, parallel parking on both sides of the street, and 12-foot vehicle travel lanes. Extending from Huntington Avenue to the north to El Camino Real to the south, San Mateo Avenue stretches approximately 0.65 miles. At the northern entrance to downtown is the Caltrain Station and adjacent, newly renovated Posy Park. Both of these entrances to Downtown San Bruno offer opportunities to be designed as prominent and inviting gateways.

The objective of this plan is to provide design guidance for the public right-of-way to support the City's goals of beautifying the public realm, supporting local businesses, spurring investment within the downtown core, enhancing the downtown's character, and increasing the attractiveness of the downtown as a destination.

D. SCOPE AND PURPOSE OF THE SAN MATEO AVENUE STREETScape PLAN

The San Mateo Avenue Streetscape Plan describes the concept-level design intent that was developed through a community-engagement process. It describes the following:

- Project Vision and Goals: purpose and intent
- Design Character: aesthetic theme, comparable precedents, materials
- Project Scope: area of the project, elements of the design, quantities of the elements, locations of the elements
- Prioritization of Elements: provides a guide for decision-making once a project budget is identified, as the entire scope described may not be funded

As a concept plan, this document will guide the next steps of the design process, while leaving flexibility for future implementation. The ultimate design will depend on the project budget once funding is identified, and on potential technical constraints that were beyond the scope of this study to identify. For example, constraints may be found after a full topographic analysis, dependent on a topographic survey, is complete. The design process subsequent to adoption of this plan and determination of the project funding would typically include the following steps:

- Schematic Design: Define the scope of the project including limit-of-work, included elements, quantities, and basic layout

PROJECT AREA CONTEXT MAP



- Design Development: Selection of materials based on the project budget, and refined layout based on technical factors
- Construction Documentation: Development of contract documents that precisely describe the design to a contractor and are the basis for bidding and procurement

E. PLANNING CONTEXT

This plan is informed by two prior planning studies, the Transit Corridors Plan and the San Bruno Downtown Parking Study. Key recommendations from these plans are described below.

Transit Corridors Plan

Adopted in February 2013, the Transit Corridors Plan defines the San Mateo Avenue study area from the Caltrain overpass to El Camino Real as the city's "Central Business District." It articulates a vision for the corridor as a "pedestrian-oriented and green" street that provides a "pleasant outdoor shopping experience" and a "one-of-a-kind mix of ethnic markets and goods." The future character of the street is described as an "artistic place" with a "whimsical yet handsome combination of old and new characteristics." Beyond serving as a shopping district, the vision for the corridor includes supporting cultural programming, such as a "diverse range of performers and musicians [who] fill up the streets and restaurants." The vision also includes future upkeep of the street, describing it as "well maintained, clean and inviting." And the vision includes the

development of "new urban plazas and pocket parks" beyond the street right-of-way.

"Vision Elements" described in the Transit Corridors Plan that are further developed by the San Mateo Avenue Streetscape Plan include:

Downtown as a Day and Night

Destination

- Make San Mateo Avenue into an exciting destination for visitors, workers and residents alike.
- Invigorate existing businesses and program activities to support an economically vibrant Downtown that is busy with business and community life.

Local Character and Distinctive Identity

- Cultivate a more distinctive identity for San Bruno while building upon its local character in future growth.
- Integrate San Bruno history into public art and streetscape designs while also developing new themes and motifs for a contemporary identity.
- Install exciting and attractive new gateways to direct visitors and patrons to destinations while creating a welcoming atmosphere.

Sustainable, Mixed-Use Development

- Explore opportunities for "sustainable" infrastructure that beautifies the urban environment with ecological technologies such as "green streets" and drought-tolerant plantings.

Safe and Inviting Pedestrian Realm

- Develop circulation and streetscape

improvements that provide highly visible crosswalks, sidewalk plantings, engaging sidewalk design and traffic calming strategies to support a safe and inviting pedestrian realm.

The San Mateo Avenue Streetscape Plan adheres to the Public Realm Design Guidelines described in the Transit Corridors Plan. Specifically, the San Mateo Avenue Streetscape Plan incorporates the following:

- A1-1: Reduce crossing distance at crossing locations by utilizing pedestrian safety features such as bulb-outs.
- A2-3: Explore using special paving materials, colors, and/or patterns for crosswalks to heighten visibility and lend identity to the area while creating an attractive pedestrian environment.
- A3-3: Ensure that planters and tree wells are at least four feet wide.
- A3-8: Promote outdoor dining and display of selected goods on sidewalks.
- A3-9: Ensure at least a 12-foot tree canopy clearance.
- A3-10: Place new street trees in appropriate locations to avoid blocking views and access to building entrances or signage.
- A3-11: Ensure that trees do not obstruct ADA access, or infringe on pedestrian and/or bicycle circulation.
- A4-1: Provide both pedestrian-oriented and

automobile- oriented street lighting within the whole Transit Corridors Plan area, with first priority to the Pedestrian Emphasis Zones designed to meet established lighting standards to provide safe and comfortable pedestrian environment.

- A4-2: Provide pedestrian-friendly streetscape amenities.
- A4-3: Provide bicycle racks.
- A4-4: Explore opportunities for artistic design of street furnishings.
- A4-5: Install public art pieces.
- A4-7 to A4-9:

Provide shelters at bus stops where possible; provide a minimum six-foot sidewalk clearance; design visually iconic bus shelters.

- A5-1: Develop consistent thematically branded wayfinding and signage.
- A5-3: Design and install gateway amenities.
- A5-7: Provide visually attractive, easy-to-read and well-located signage to direct vehicles to Downtown parking areas.
- A6-1&2: Install stormwater planters where possible.
- A6-3: Encourage the use of permeable pavers around tree wells.
- A6-5: Explore the use of permeable paving materials along parking lanes.

- B4-4: Retain bulb-outs at street crossings.
- B4-5: Plant street trees in tree wells with grates rather than in pots.
- B4-6: Install raised crosswalks at all key intersections.
- B4-7: Install attractive and creative pavement materials.

Three recommendations from the Transit Corridors Plan were studied and excluded from the scope of the San Mateo Avenue Streetscape Plan:

- Provide, where feasible, angled parking (Guideline B4-3)

Angled parking was studied as part of the San Mateo Avenue Streetscape Plan process and found to be unfeasible due to the limited width of the street (see Appendix).

- Raised Crosswalks at all Key Intersections (Guideline B4-6)

The potential to include raised crosswalks was discussed during stakeholder meetings and was determined not to be a priority for further study. Raised crosswalks could conflict with stormwater drainage and are generally not desired by transit agencies.

- Reconfiguration of the intersection of San Mateo Avenue and El Camino Real (Guideline B4-8)

City staff determined that the reconfiguration of the intersection of San Mateo Avenue and El Camino Real should be considered outside the

scope of the San Mateo Avenue Streetscape Plan because it is likely to be a longer-term implementation project than the rest of the streetscape plan (requiring property acquisition), and because it would trigger CEQA analysis by altering the traffic operations of both streets. The San Mateo Avenue streetscape design allows for the potential future reconfiguration of the intersection by keeping furnishings, trees and the southern gateway monument outside of the realignment footprint described in the Transit Corridors Plan.



El Camino Real Reconfiguration from Transit Corridors Plan

Downtown Parking Management Plan:

Adopted in January 2019, the Downtown Parking Management Plan provides a set of phased parking management recommendations to manage the high afternoon and evening parking demand in the study area (including San Mateo Avenue), help users find and use available parking, improve parking availability for residents, and potentially increase the parking supply. Specifically, the Downtown Parking Management Plan recommends that the city:

- Adjust enforcement hours to better manage the heavy-use evening period
- Adjust time restrictions, primarily to convert 5-hour spaces to 10-hour spaces for employee use
- Install improved signage to help drivers locate available parking
- Improve parking lot maintenance and security
- Explore temporary use of the Sylvan Avenue Caltrain Station as additional public parking
- Explore converting parallel parking on San Mateo Avenue to diagonal parking to increase capacity
- Install parking meters on San Mateo Avenue to encourage short-term parking and direct long-term parkers into lots
- Formalize overnight parking arrangements in public lots to increase supply available to residents
- Begin process of planning and securing funds for a parking garage

The San Mateo Avenue Streetscape Plan supports these recommendations by including:

- Wayfinding signage to off-street parking
- Improved security and wayfinding through the alleyways (or “paseos”) that lead from the street to the off-street parking
- Locations and quantity of parking meter kiosks

The San Mateo Avenue Streetscape Plan planning process included the analysis of the potential to install diagonal parking on San Mateo Avenue. Parallel parking was determined not to be feasible due to the limited width of the street. (See Appendix.)

F. CEQA COMPLIANCE

The Transit Corridors Plan completed a program-level EIR that illustrates relevant environmental resources along San Mateo Avenue that would apply to the recommendations described in the San Mateo Avenue Streetscape Plan. The proposed improvements should fall within the classes of projects as defined in the Public Resources Code to have been determined not to have a significant effect on the environment and are thus exempt from CEQA. As this project will make modifications to existing infrastructure but make negligible or no expansion of the existing use, it should qualify for a Categorical Exemption under Section 15301 of the CEQA Guidelines, which applies to minor alterations of existing infrastructure within the public’s right-of-way. The City of San Bruno can further support this finding by imposing standard conditions

of approval on the project. (See Appendix for further explanation of CEQA compliance.)

G. PROCESS

This plan is the outcome of a public-engagement process that included the following meetings and workshops:

- March 12, 2019 - ‘Walk’shop – a walking tour, Community Workshop #1
- March 28, 2019 - Stakeholder Meeting #1
- March 30, 2019 - Drop-in Community Workshop #2
- March 11 - April 10, 2019 – On-line Survey
- May 7, 2019 - Planning Commission Meeting #1
- May 8, 2019 - Stakeholder Meeting #2
- May 15, 2019 - Parks and Recreation Meeting
- May 16, 2019- Arts Commission Meeting
- May 22, 2019 - Community Meeting #3
- August 20, 2019 - Planning Commission Meeting #2

PUBLIC ENGAGEMENT PROCESS



March 12th 'Walk'shop



March 30th Community Meeting



H. GOALS

Goals for the streetscape improvements were developed during the community engagement process by categorizing the community and stakeholders' comments collected during the 'Walk'shop, first stakeholder meeting and from the on-line survey. Draft goals were presented for review and comment at the subsequent community and stakeholders workshops, and Planning Commission, Parks and Recreation Commission, and Arts Commission meetings.

PROJECT GOALS

ACTIVATION

Activate the corridor, alleys (or "paseos"), Posy Park and Centennial Plaza day and night

GREENING

Plant trees, increase vegetation

BEAUTIFICATION

Provide an updated and unified corridor aesthetic, including additional seating opportunities and new paving

SAFETY

Ensure pedestrian safety

WAYFINDING

Provide wayfinding signage to San Mateo Avenue and parking lots and design gateways

IDENTITY

San Mateo Avenue's character should be simple, elegant and unique.

CHAPTER 2: EXISTING CONDITIONS

- A. LAND USE
- B. CHARACTER
- C. STREETScape CONDITION
- D. PARKING

A. LAND USE

The land use along the corridor is primarily commercial with a large diversity of business types. Retail stores and restaurants are the primary business types. Service-oriented businesses, such as hair and beauty salons, a laundromat, two banks, an auto-repair shop, a gas station and a yoga studio, also line the street. Several institutional, educational and community-serving businesses also occupy buildings along the corridor, including the Bay Area Entrepreneur Center, the Teamsters Union, and La Petite Baleen Swim School.

At the southern end of the corridor, The Aperture, a new multi-unit mixed-use building, was recently completed. Toward the north end, Artichoke Joe's Casino is a regional draw, and further north is access to the Caltrain Station. Just north of the study area, on Huntington Ave., a new multi-unit residential development is planned.

Open spaces along the corridor are Posy Park on the north end of the study area, the plaza to the north of Chase Bank and Centennial Park across from the Jenevein Ave. intersection.












Behind the buildings, many of the blocks contain surface parking lots, which are connected to the San Mateo Avenue sidewalks via alleyways, referred to as "paseos" throughout this document.

B. CHARACTER

San Mateo Avenue is a small-scale corridor, with one travel lane in each direction, parallel parking on both sides of the street, and 10-foot to 12-foot-wide sidewalks. Bulb-outs at the corner and mid-block crossings serve to further reduce the perceived scale of the street.

The buildings are primarily one and two stories in height, with an eclectic mix of architectural styles ranging from various historical styles to Art-Deco and Modernist. The eclecticism of the buildings is matched by the diversity of uses and ethnicities and cultures represented by the restaurants, shops and services along the street. This lends the street a fascinating and rich character, and not a sense of consistency or unity.

EXISTING ZONING MAP

-  Markets
-  Restaurants
-  Goods/Services
-  Community
-  Open Space
-  Trees
-  Paseos
-  Bulb Outs
-  Architecture of Interest
-  Exist. Active Sidewalk
-  Artwork/Distinctive



Rotary Centennial Clock



Exist. Low use Open Space



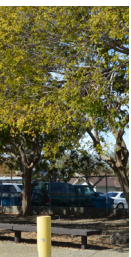
460 San Mateo Ave
Art Moderne, 1940



Fountain



Artwork Viewing



Open space



495 San Mateo



Active sidewalk seating



601-605 San Mateo Ave
Mediterranean Revival, 1930



609-617 San Mateo Ave
Mission Revival, 1909



757 San Mateo Ave
Art Moderne, 1935



Plaza, Jenevein Ave



Active sidewalk seating



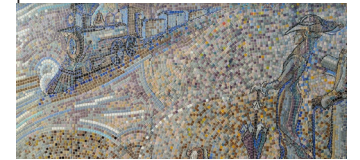
588 San Mateo Ave
Mission Revival/Art Moderne 1925



598 San Mateo Ave
Art Moderne, 1932



Active sidewalk seating



Artwork: Posy Park Mosaics

C. STREETScape CONDITION

Despite its assets, the San Mateo Avenue streetscape is considered widely by the San Bruno community to be “run down.”

Pedestrian Realm

The existing street design includes many pedestrian-friendly features, including bulb-outs with code-compliant curb-ramps (in most, but not all cases), high-visibility crosswalk striping, mid-street pedestrian-crossing signs and pedestrian-activated flashing beacons.

Street furnishings include precast-concrete trash receptacles that are unsightly and do not provide for recycling, as well as several mismatched trash receptacles, newspaper racks that are in disrepair, a few raised planters with overgrown shrubs that prohibit sitting on the integrated benches. There are no existing bike racks and no city-owned benches along the sidewalk. Public benches are located at Centennial Park, the Citibank plaza and Posy Park.



Pedestrian friendly crosswalk



Unsightly trash cans with no room for recycling



Newsracks in disrepair



Paving patchwork



Newly replaced asphalt



Existing Light Poles



Uneven Surfaces



Double parked vehicle off-loading



Wide Light Pole Spacing

Sidewalk Conditions

The sidewalk is continuous along both sides of the street, with adequate width for pedestrian access, however the pavement is a patchwork of concrete that has been repaired over time and there are many locations with uneven surfaces that exceed the CBC maximum unevenness for accessibility. There are code-compliance shortcomings at building entrances and sidewalk cross-slopes exceeding 2%.

Vehicular Roadway

The asphalt pavement in the roadway is in excellent condition, having been replaced recently after a water-line and sewer-line replacement project. Because there are no loading or drop-off zones, deliveries and patron drop-offs depend on double parking. While there is enough roadway width to allow vehicles to pass, curbside-management and roadway striping improvements would improve the street's vehicular function.

Lighting

Pole-mounted lights are widely spaced and do not provide adequate light levels.

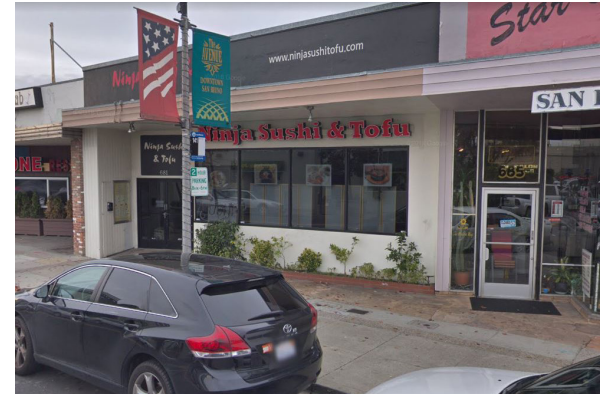


Bus connecting to San Bruno BART

Transit

There are four bus stops along the corridor. These are not constructed per SamTrans standards and they do not provide adequate accessibility for bus riders with disabilities.

San Bruno Station is located at the northern end of the corridor.



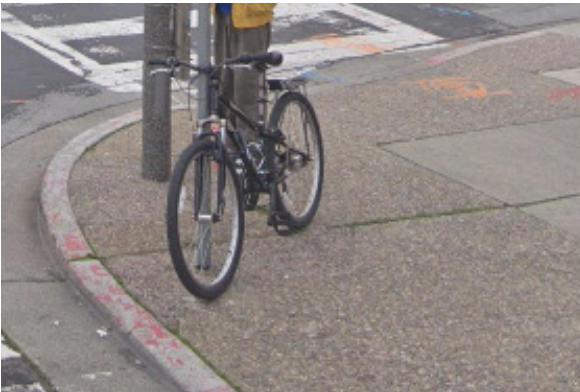
Non-compliant bus stops



San Bruno Station



Bicycle Racks at Posey Park



Bicycle locked up at Sylvan Ave and San Mateo Ave

Bicycle Facilities

There are no bicycle facilities (bike lanes, “sharrows” or signage) in the roadway, and there are no existing bike racks along the street, with the exception of two bike racks and bike lockers at Posy Park.



Trees limited in growth due to pot planting

Planting

Greenery is limited along the street, due primarily to the small size and number of street trees, most of which were planted in raised pots which have limited their growth. Most of the shrubs that are planted at grade or in raised planters are in poor condition or are at the end of their expected life-spans.



Curb Buildout with Planting



Raised planter with overgrown planting

D. PARKING

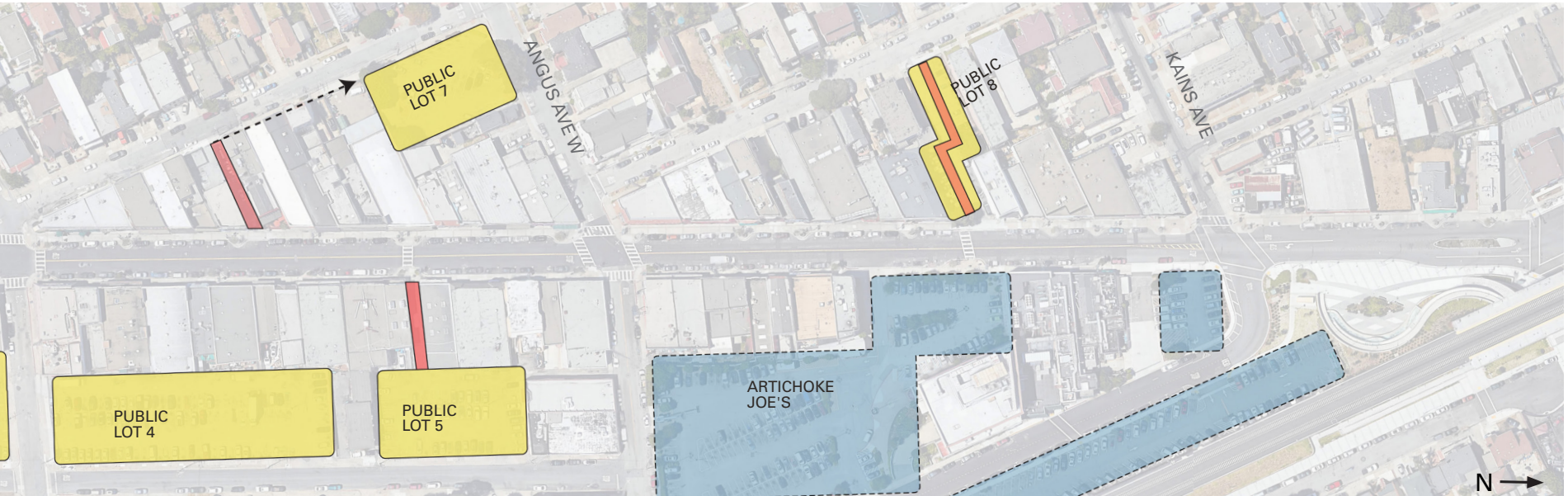
It is clear from the Downtown Parking Management Plan and from community input that parking is of great value along the corridor. Weekend and weekday peak-hour (8:00 p.m. and 6:00 p.m., respectively) on-street parking occupancy on San Mateo Ave. is 91%. Off-street parking occupancy for these times is 81% and 84%, respectively. Partly because of the relative availability of off-street parking, the Downtown Parking Management Plan recommends other means of managing parking demand instead of increasing on-street parking. These recommendations include pricing and enforcement, and increasing the use of off-street parking resources through better signage, connectivity, and lighting improvements.

The San Mateo Avenue Streetscape Plan follows the Downtown Parking Management Plan's recommendations by including:

- Wayfinding signage to direct drivers and pedestrians to and from the on-street parking lots
- Safety and character improvements in the paseos, which provide critical connections to the on-street parking resources
- Locations for parking-meter kiosks

PASEO CONNECTIONS TO EXISTING OFF-SITE PARKING LOTS





- EXISTING PASEOS
- PUBLIC PARKING LOT
- PRIVATE PARKING LOT

CHAPTER 3: RECOMMENDATIONS

- A. DESIGN OVERVIEW
- B. BASELINE FURNISHINGS AND HARDSCAPE
- C. OPPORTUNITIES FOR UNIQUE AND ARTISTIC EXPRESSION
- D. GREENING AND STORMWATER MANAGEMENT
- E. MOBILITY AND PARKING
- F. LIGHTING
- G. SPECIAL PLACES
- H. WAYFINDING AND GATEWAYS
- I. ACTIVATION
- J. PRIORITIZATION AND COST ESTIMATE

A. DESIGN OVERVIEW

Project Scope

The proposed streetscape design maintains the existing layout of the street and most of the existing curb-line. The proposed improvements will be limited to the public right of way and are focused on the sidewalk and planting areas from the back-of-curb to the property line. The scope of this study does not include improvements to building facades, private properties, or land-use.

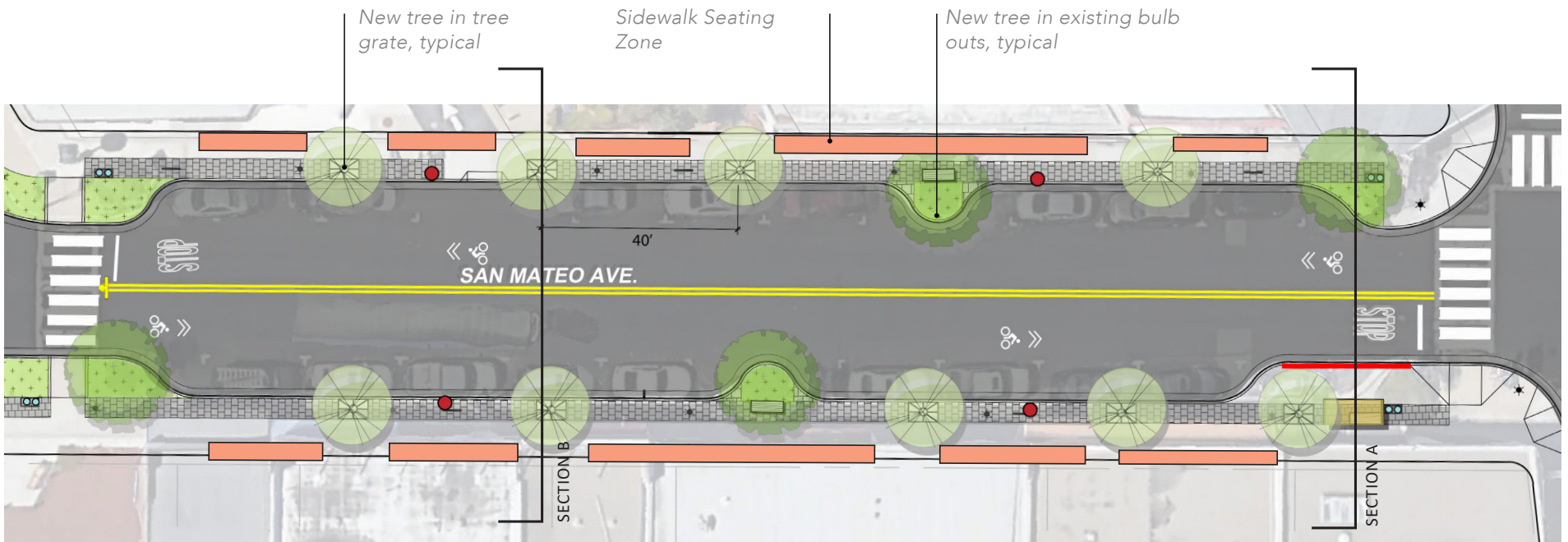
The proposed improvements include:

- Furnishings including benches, bike racks, trash and recycling receptacles
- New sidewalk paving
- Accessibility improvements to bring the public right of way into conformance with current California building code.
- Opportunities for unique and artistic expression, including public art, custom furnishings and special paving
- Improved Planting and Greening
- Stormwater-management features including permeable paving, suspended pavement, and bioretention planting areas
- Mobility and parking improvements including changes to the street and curb striping, improved bus stops, sharrows, and directional signage and lighting to improve access to off-street surface parking
- Lighting improvements, including new streetlights and decorative lighting
- Improvements to special places including Posy Park, Centennial Park, and paseos
- Wayfinding signage and gateways

Design Character

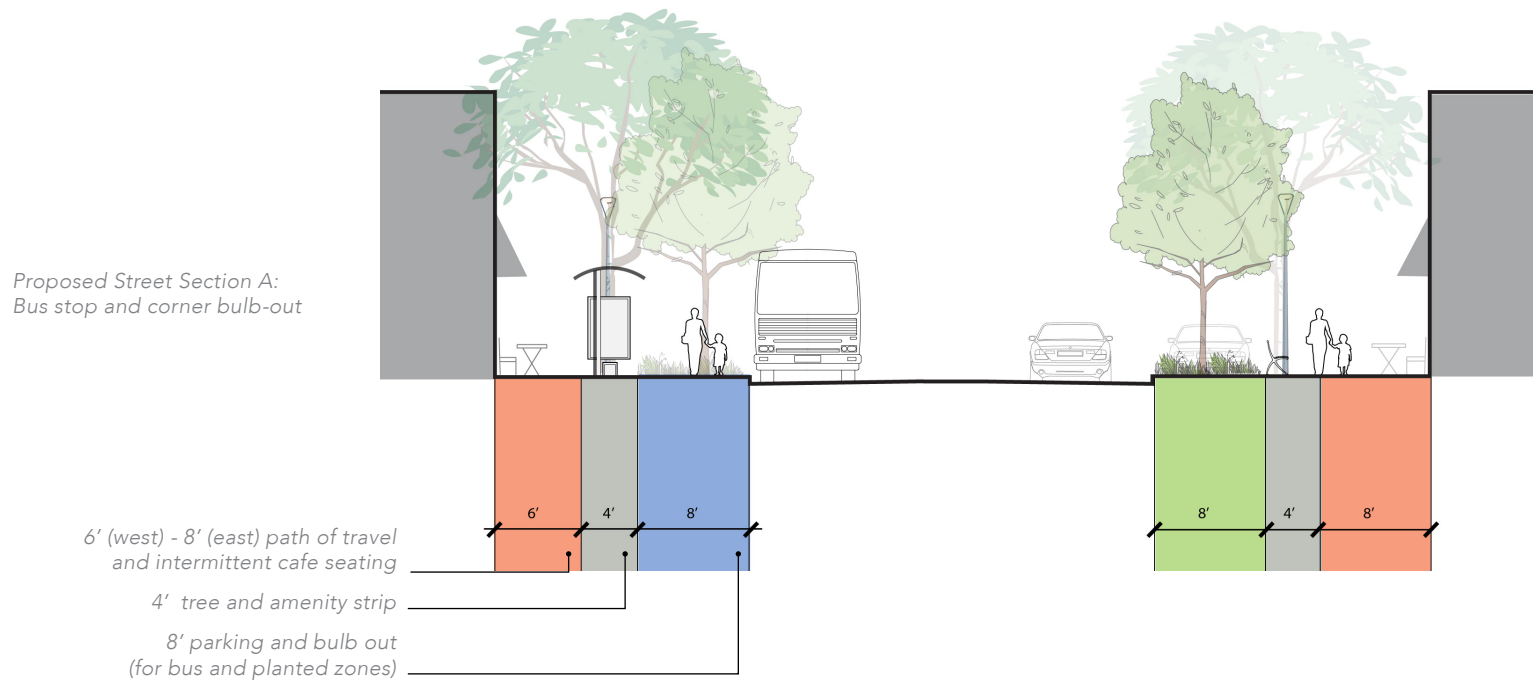
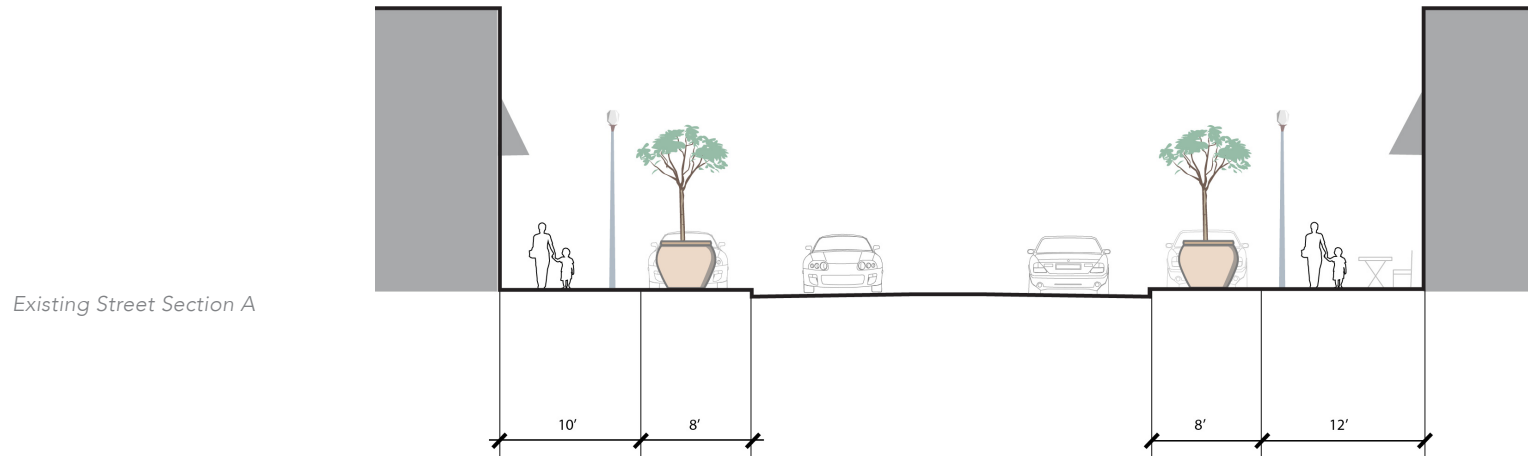
The proposed design character was developed through the community-engagement process. The key words that emerged to describe the preferred character were “simple,” “elegant,” and “unique.” Because the street environment is already diverse and visually complex, the proposed design is intended to be distinguished from its context by being refined, consistent, and simple. At the same time, the design is meant to convey a unique sense of place through the selection of furnishings and materials that are not found on many other streetscapes, and through the implementation of select custom elements and artistic expression in focused locations. The design is meant to be forward-looking and contemporary, while the forms of the furnishings convey a sense of movement related to the city’s connection to transportation.

TYPICAL SIDEWALK USE ZONES

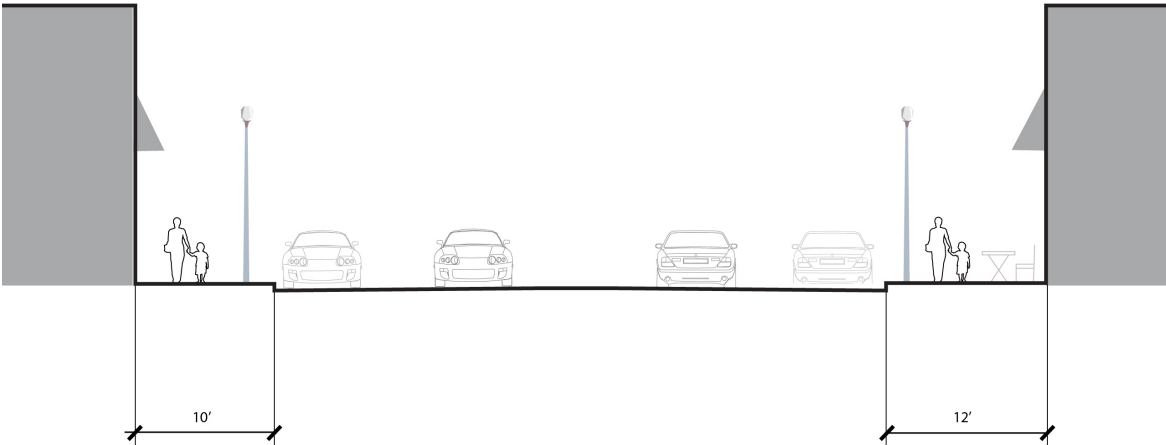


Typical sidewalk use zones plan

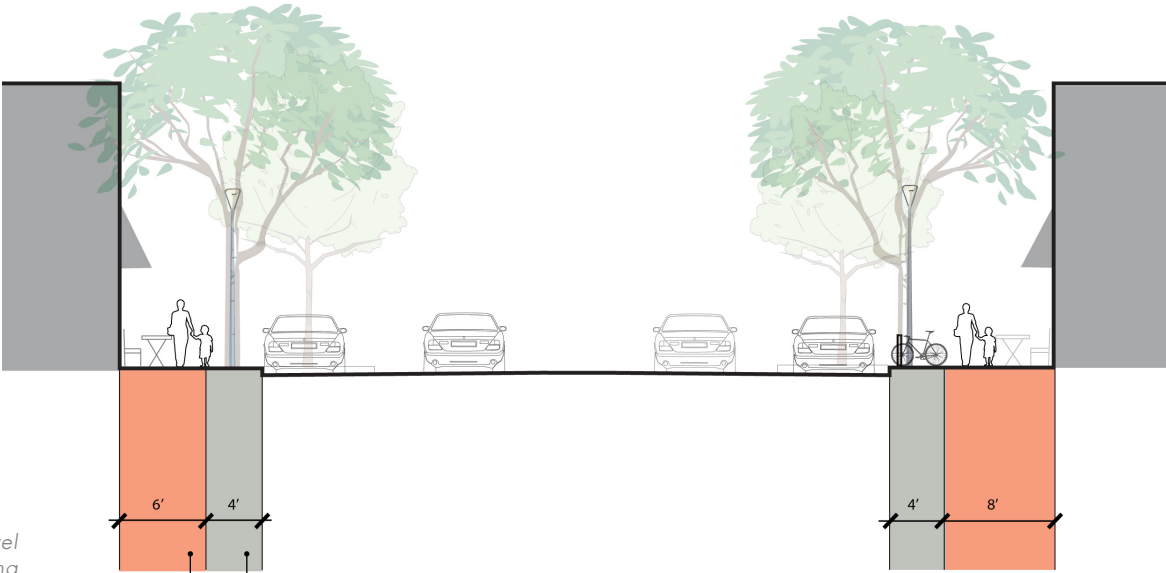
TYPICAL STREET SECTIONS



Existing Street Section B

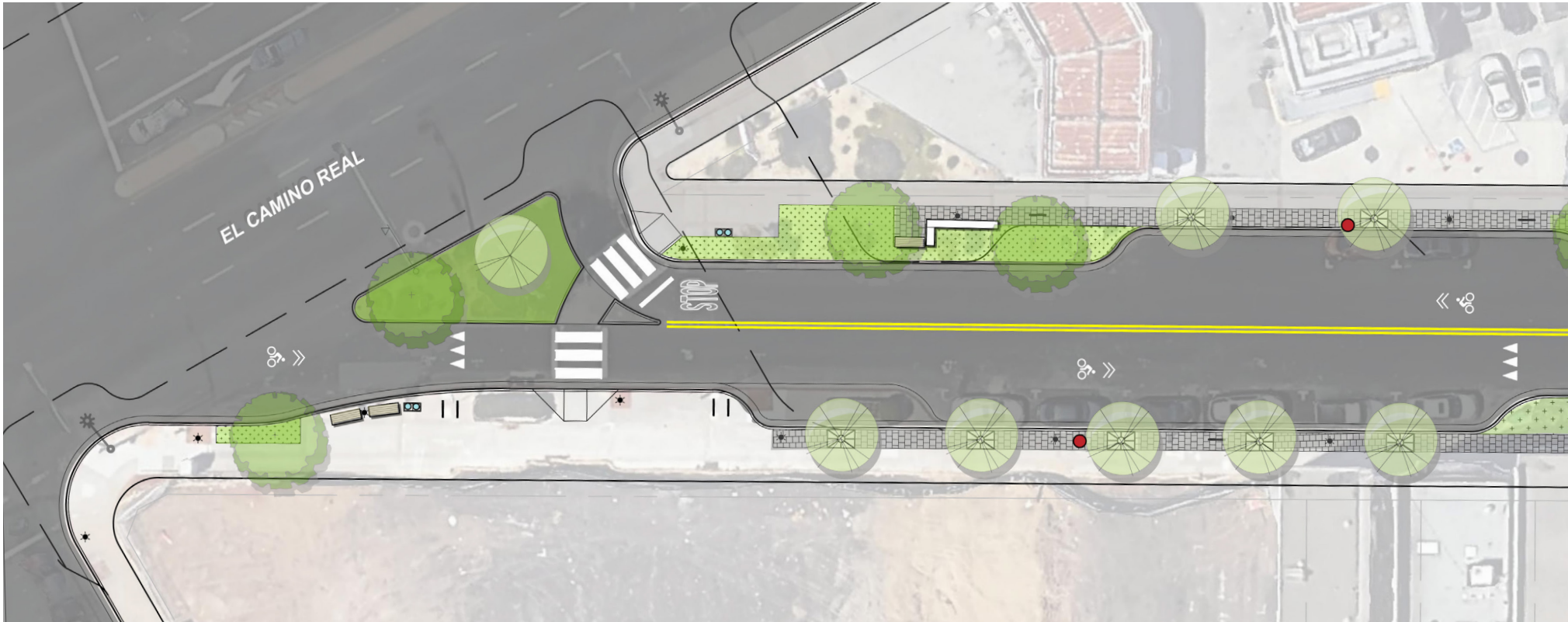


Proposed Street Section B: Midblock



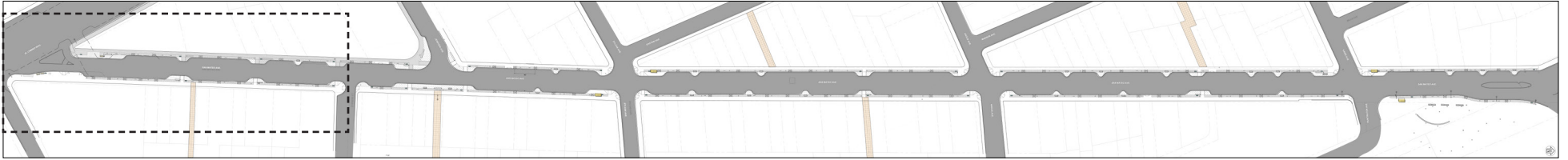
6' (west) - 8' (east) path of travel and intermittent cafe seating
4' tree and amenity strip

DESIGN OVERVIEW: ILLUSTRATIVE PLAN

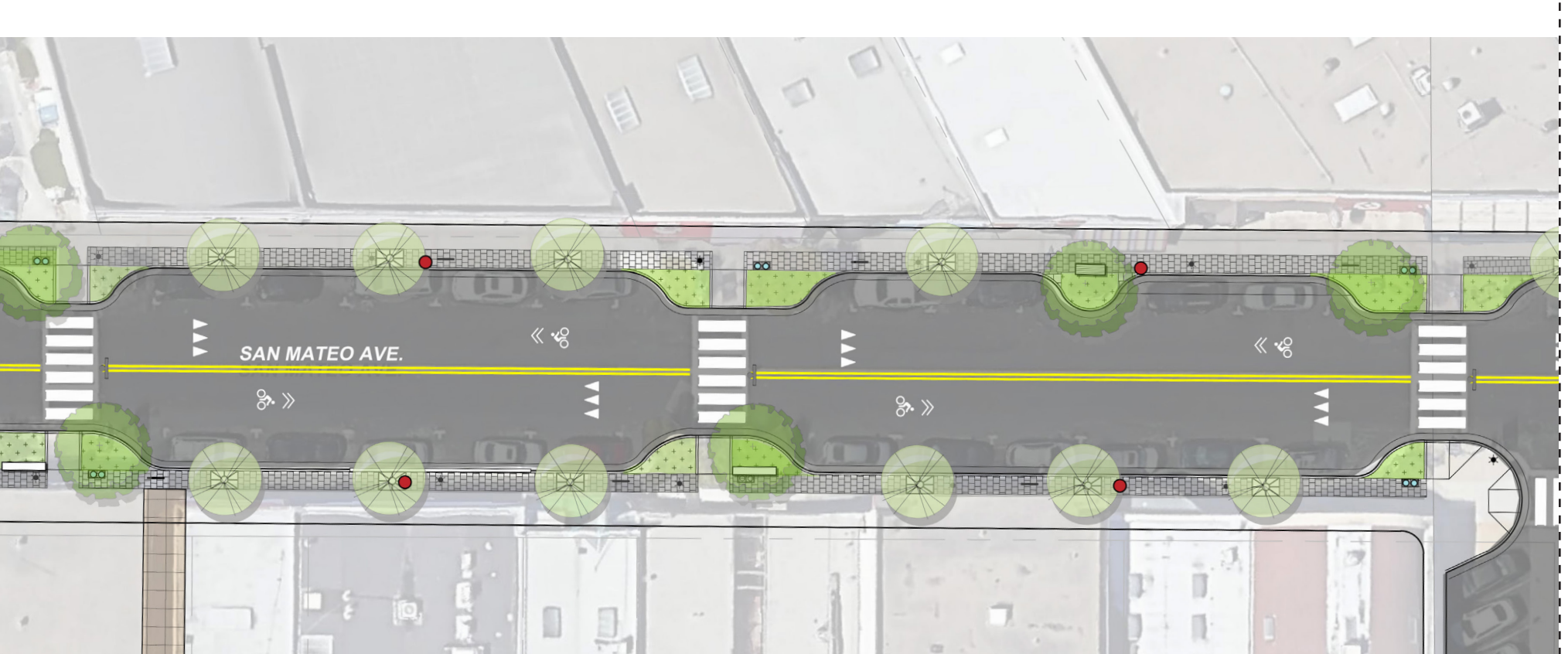


LEGEND

- | | | |
|-----------------|---------------------|------------------------|
| * LIGHTPOLE | SEATWALL | ULMUS PARVIFLORA |
| — BIKE RACK | TRASH AND RECYCLING | KOELREUTERIA BIPINNATA |
| ● PARKING METER | BUS SHELTER | PLANTING |
| BENCH | PASEO | |



KEY PLAN



MATCHLINE, SEE PAGES 30-31



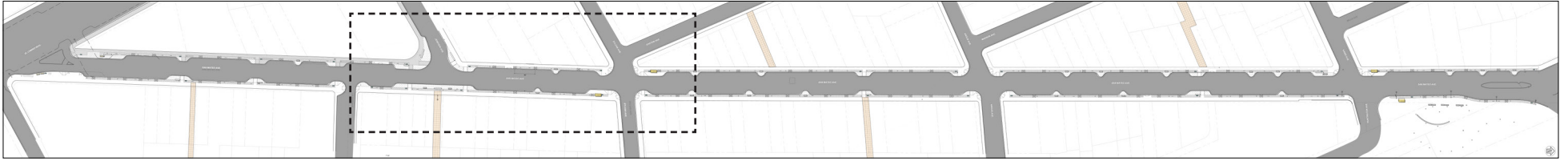
DESIGN OVERVIEW: ILLUSTRATIVE PLAN



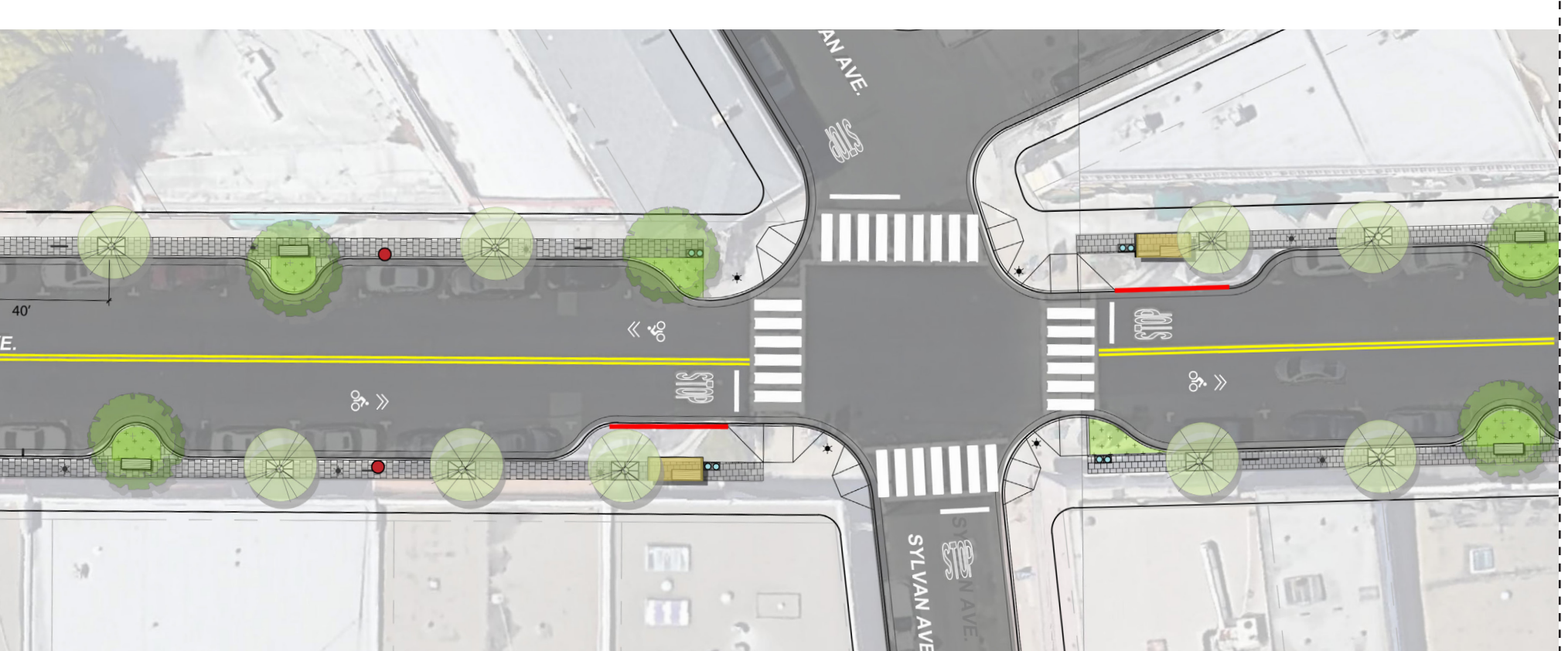
MATCHLINE, SEE PAGES 28-29

LEGEND

- | | | |
|---------------|---------------------|------------------------|
| * LIGHTPOLE | SEATWALL | ULMUS PARVIFLORA |
| BIKE RACK | TRASH AND RECYCLING | KOELREUTERIA BIPINNATA |
| PARKING METER | BUS SHELTER | PLANTING |
| BENCH | PASEO | |



KEY PLAN



MATCHLINE, SEE PAGES 32-33



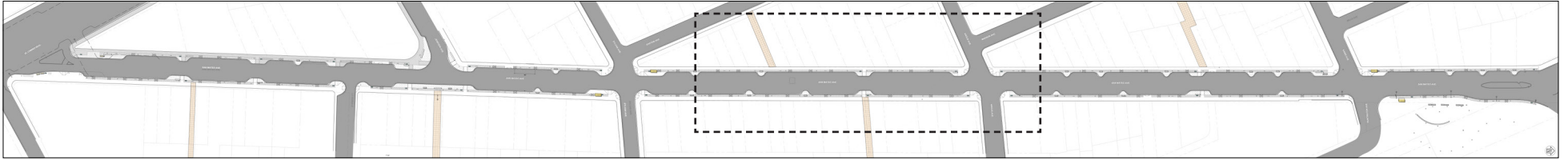
DESIGN OVERVIEW: ILLUSTRATIVE PLAN

MATCHLINE, SEE PAGES 30-31

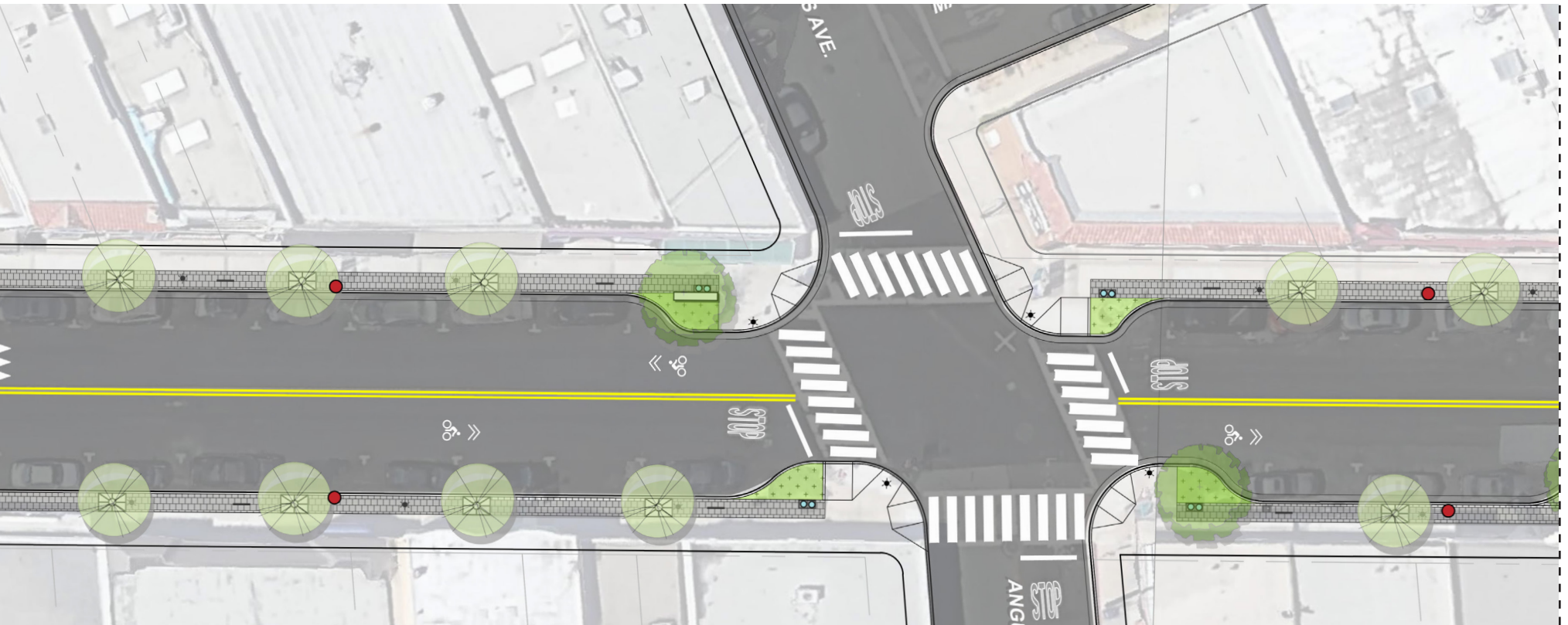


LEGEND

- | | | |
|-----------------|---------------------|------------------------|
| * LIGHTPOLE | SEATWALL | ULMUS PARVIFLORA |
| — BIKE RACK | TRASH AND RECYCLING | KOELREUTERIA BIPINNATA |
| ● PARKING METER | BUS SHELTER | PLANTING |
| BENCH | PASEO | |



KEY PLAN



MATCHLINE, SEE PAGES 34-35

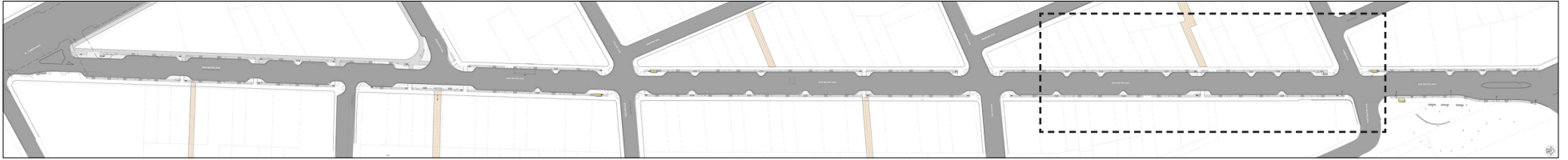


DESIGN OVERVIEW: ILLUSTRATIVE PLAN

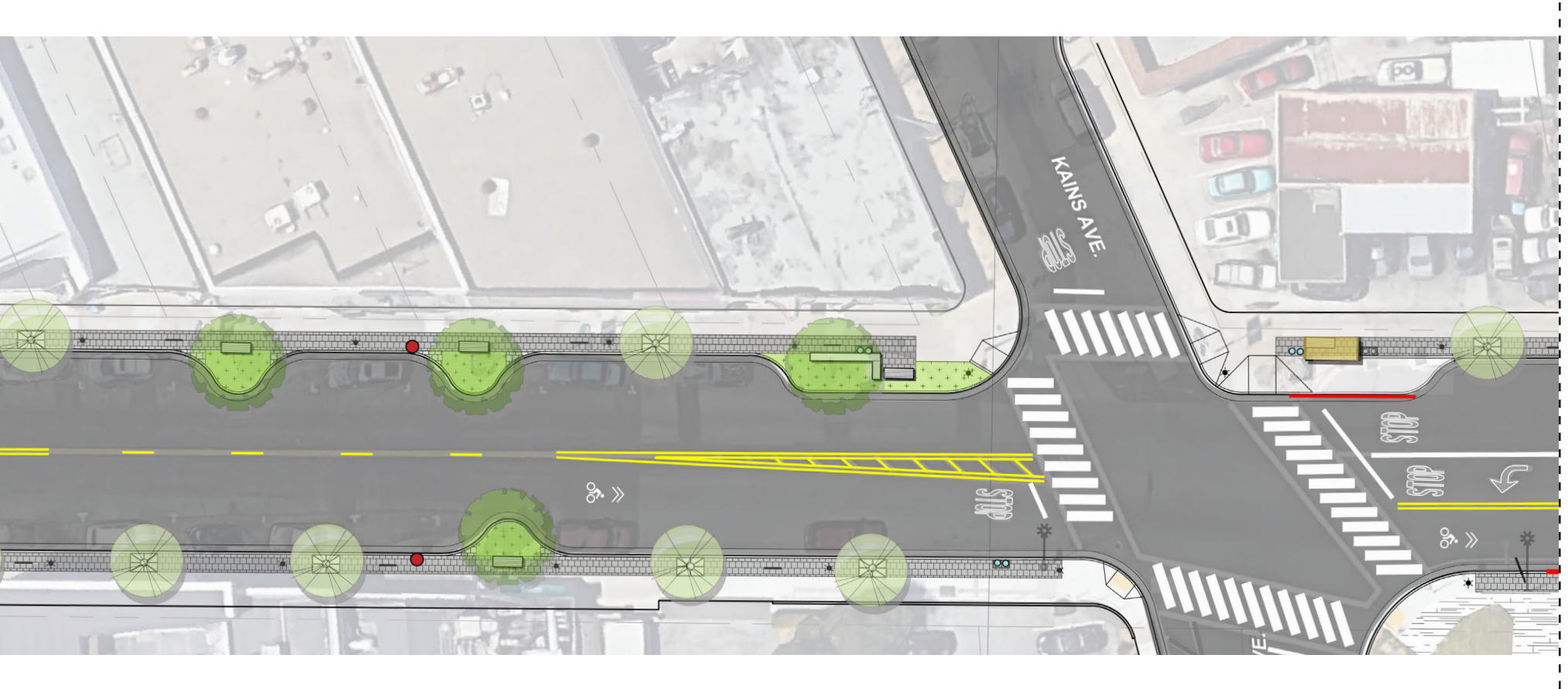


LEGEND

- | | | |
|-----------------|---------------------|------------------------|
| * LIGHTPOLE | SEATWALL | ULMUS PARVIFLORA |
| — BIKE RACK | TRASH AND RECYCLING | KOELREUTERIA BIPINNATA |
| ● PARKING METER | BUS SHELTER | PLANTING |
| BENCH | PASEO | |



KEY PLAN

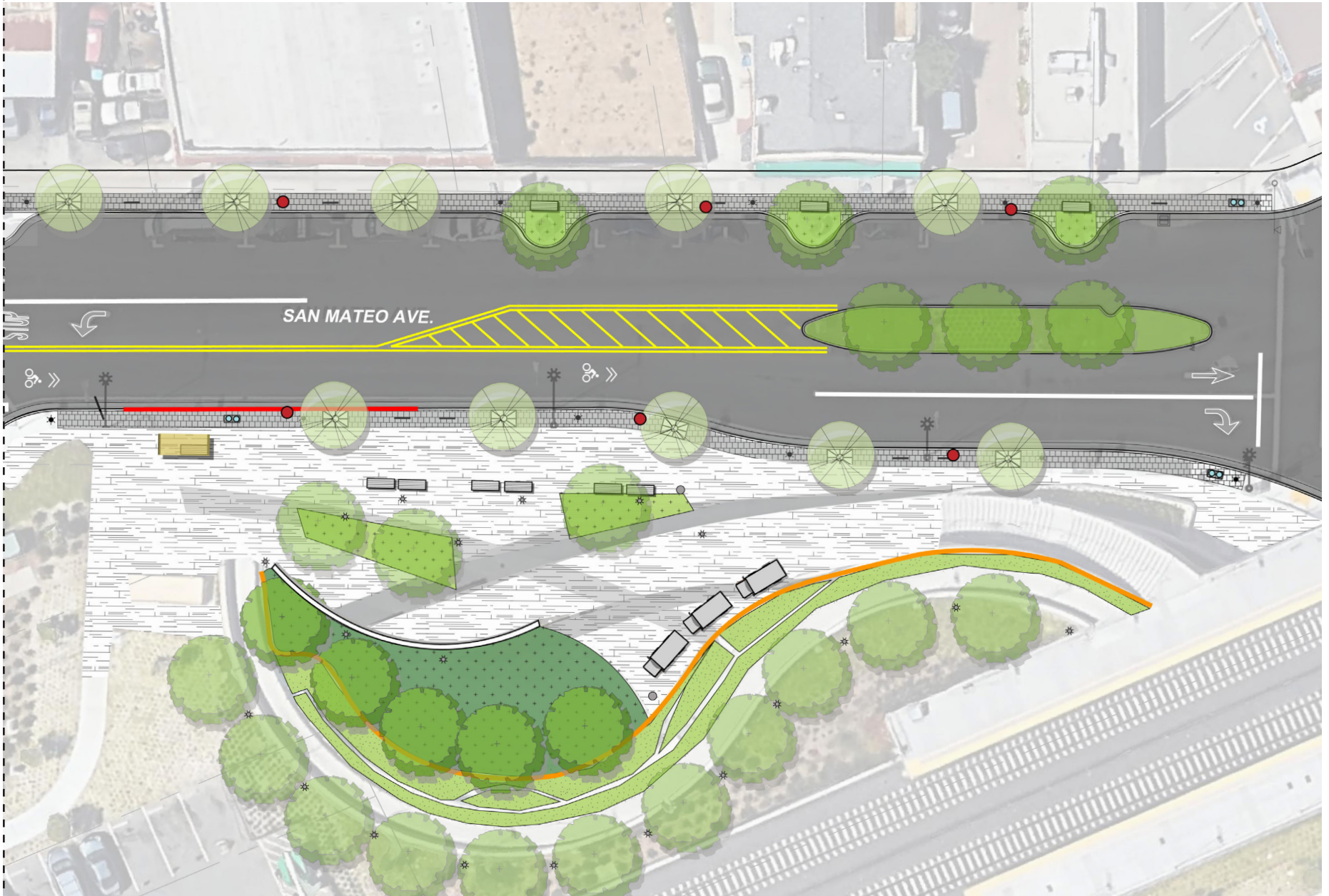


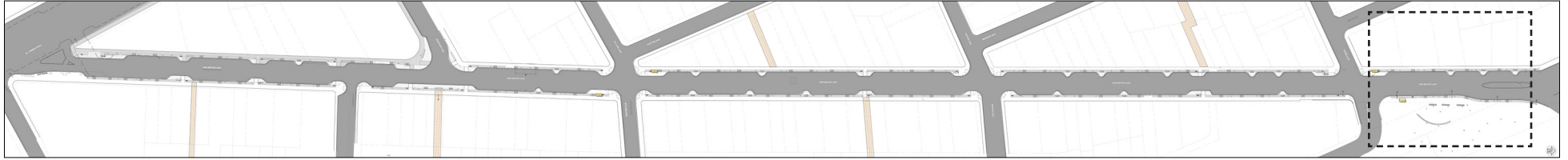
MATCHLINE, SEE PAGES 36-37



DESIGN OVERVIEW: ILLUSTRATIVE PLAN

MATCHLINE, SEE PAGES 34-35





KEY PLAN

LEGEND

- * LIGHTPOLE
- BIKE RACK
- PARKING METER
- ▭ BENCH

- ▭ SEATWALL
- ⊙ TRASH AND RECYCLING
- ▭ BUS SHELTER
- ▭ PASEO

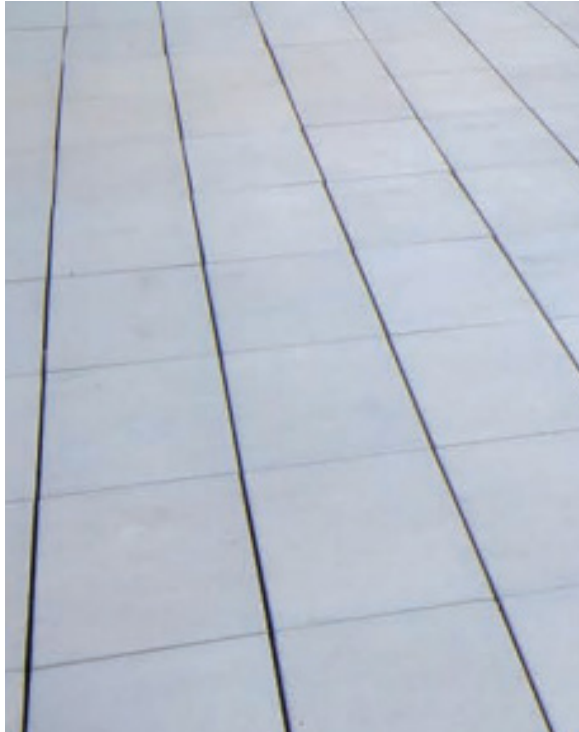
- ⊙ ULMUS PARVIFLORA
- ⊙ KOELREUTERIA BIPINNATA
- ▭ PLANTING

B. BASELINE FURNISHINGS AND HARDSCAPE

Baseline palette

The baseline furnishings and hardscape palette creates the “simple and elegant” backdrop for both the existing character of the street and the proposed opportunities for unique and artistic expression. Key features of the proposed palette are described below.

Because the final selection of materials and furnishings will occur during future design and construction documentation phases and are dependent on the project budget, this plan provides some alternatives that express the design intent. The exception to this is the trash and recycling bins, which have been vetted with City staff and Recology (the waste-management company providing trash and recycling collection services) for their suitability. Trash receptacle replacement may be a near-term project that is completed prior to the overall streetscape implementation.



Cast-in-place Concrete



Unit Paving

Paving

- Simple cast-in-place concrete pavement with a broom finish and a rectangular grid of scorelines in the walkway zone. Though cast-in-place concrete is a common material, the pavement should be finished and scored with attention to craftsmanship and detail. The finish and color should be consistent throughout the site, and the scorelines should be deep, straight and crisp.
- Permeable unit pavers of a consistent gray color aligned with the tree-planting zone, in a running-bond pattern. The unit pavers should be rectangular or square, with a crisp edge.



Lightpole: (top) Lunaria Light, Sternberg Lighting; (bottom) FGP Area Light, Lily bench, Victor Stanley. Bike Rack: (top) Ring Bike Rack, Landscape Forms, (bottom) U Bike Rack, Conceptual Site Furnishings. Tree Grate: (top) Rain Tree grate, Iron Age Designs, (bottom) Cascade Tree Grate, Urban Accessories. Trash and Recycling: Universal Litter and Recycling Receptacle, Forms + Surfaces.

Lightpole

Bench

Bike Rack

Tree Grate

Trash and Recycling Receptacles

Furnishings and Light Fixtures

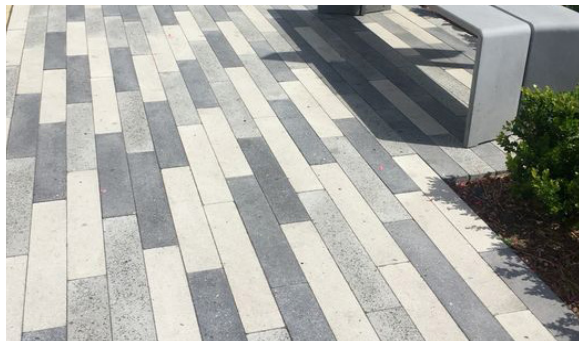
- Modern/contemporary furnishings and light fixtures with a motif of curving forms expressive of movement and flight.
- Stainless-steel or silver-colored metal (e.g., aluminum or powder coated steel) is the primary material for the furnishings and light fixtures.

C. OPPORTUNITIES FOR UNIQUE AND ARTISTIC EXPRESSION

Within the simple and elegant framework, the plan proposes select locations and features for artistic expression. Because the existing streetscape environment is so varied and visually complex, it is important that the locations and quantities of artistic elements don't conflict with their context. An overall theme for these elements should be adhered to, such as one artistic paving pattern applied to all of the paseos and potentially at Posy Park and Centennial Park as well. Similarly, one artistic or custom seatwall design or bench should be implemented throughout the corridor, and one unique crosswalk design. If the crosswalks are constructed of unit pavers, the pattern and material could be the same as in the paseos to further unify these artistic elements throughout the streetscape.

The images included in this section are examples of similar elements that illustrate some of the possibilities; they are not meant to represent the final design concept for San Mateo Avenue. Refinement of the overall design would occur during the Design Development process, during which stage the materials and patterns of all of these elements would be selected.

Through the community-engagement process, the following opportunities for unique and artistic expression were identified:



Paving

Paving at Paseos, Parks and Plazas

Paving at the paseos (or alleyways), parks and plazas. This would ideally be a type of unit paving similar to the "baseline" permeable pavers, but in different colors and/or sizes, arranged in a custom-design pattern. Alternatively, cast in place concrete with special colors, finishes and scoring patterns could be utilized.



Artistic Crosswalks

Artistic Crosswalks

Artistic crosswalk striping or crosswalk materials. Crosswalks can be simply painted in creative ways (given they conform to the functional safety requirements of standard crosswalks), or they can be constructed out of unit paving or cast-in-place concrete.



Custom Seatwall and Lighted Bench

Seatwalls and planter walls

Custom cast-in-place concrete or custom precast concrete seatwalls and planter walls could be located in certain locations throughout the streetscape, as indicated on the overall plan. Alternatively, there is a range of prefabricated precast seatwall products that would fit with the overall design theme.

Custom, artistic benches could be located in the parks, plazas and paseos to emphasize the uniqueness of those spaces. Alternatively,



Seasonal Lighting

budget permitting, a custom bench could be designed and fabricated for use along the entire corridor.

Custom Lighting

Custom designed lighting features or uncommon lighting products could be incorporated throughout the design. Opportunities include:

- Lighting incorporated into benches and seatwalls. (These should be durable LED fixtures, recessed such that they are difficult to tamper with.)



Paseo Lighting

- Lighting at the paseos
- Seasonal lighting
- Gateway elements (see below)
- All custom lighting elements should be designed and engineered to withstand wind-loads. Further study would be required to determine the suitability of cable-suspended lighting fixtures, for example.

D. GREENING AND STORMWATER MANAGEMENT

Greening

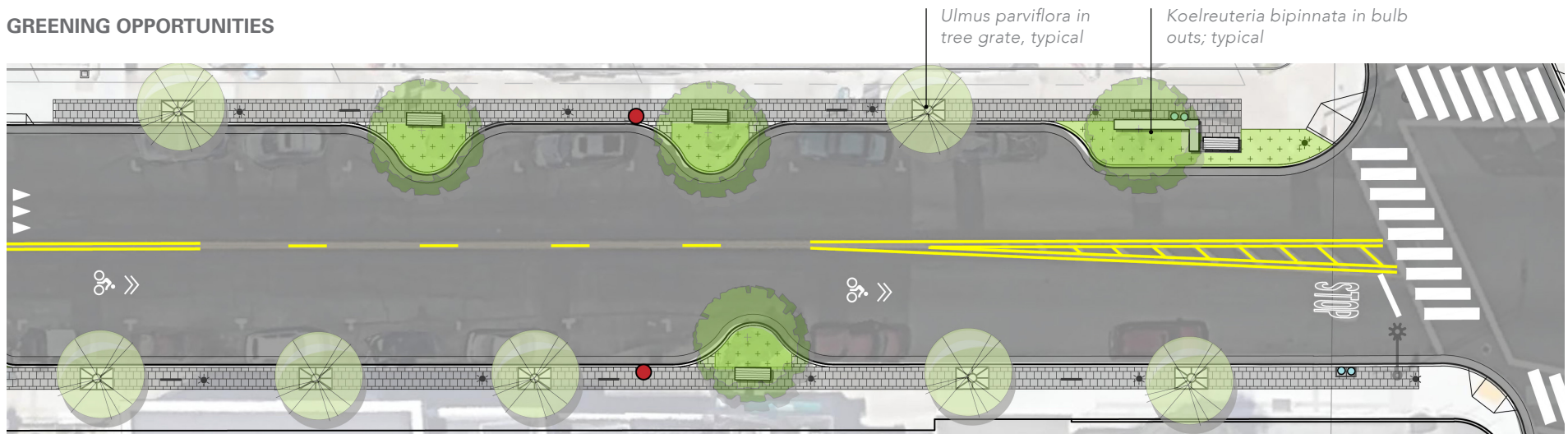
One of the principle recommendations of this plan, as well as the Transit Corridors Plan, is to plant regularly spaced street trees in at-grade tree wells. This plan recommends trees in tree wells with tree grates at approximately 40-foot on-center spacing. (Final tree spacing will need to be coordinated with underground utilities and other potential conflicts.) Trees should also be planted in the existing mid-block and corner bulb-outs (where sight-lines would not be blocked), which provide the opportunity to remove the pavement from the bulb-outs to provide a larger soil volume. Currently, there are 45 trees in pots, and 11 trees planted in-grade. This plan recommends 118 trees planted in-grade, and 7739 square feet of planting area.

Soils and Pavement - Planting Construction Considerations

In order to prevent sidewalk damage as well as promote tree health, it is critical that the tree wells are large. The majority of sidewalk damage is due to the pavement being placed too close to the root-flare of the tree. This plan recommends 4' x 6' tree wells; this should be considered a minimum. This plan recommends additional improvements to the soil under the sidewalks, such as structural soil or suspended pavement, which also help to prevent sidewalk damage and are beneficial to the trees.

Suspended pavement is the best option, and it can be cost-competitive with structural soil if considered on the basis of planting-soil volume (as opposed to total volume).

GREENING OPPORTUNITIES





Ulmus parvifolia

Trees

Two tree species are recommended. The trees planted in new tree wells along the corridor (i.e., not in the bulb-outs) should be *Ulmus parvifolia* (Chinese elm), while the summer-flowering *Koelreuteria bipinnata* (Chinese flame tree) is indicated in the existing bulb-outs.

Ulmus parvifolia is a large-scale shade tree with a relatively open branching habit that will provide ample dappled shade and will be an appropriate scale for the street. At maturity, the branches will be high enough to provide visibility to shop signs for pedestrians and from vehicles. *Koelreuteria bipinnata* will be a contrasting, smaller ornamental tree which flowers in the



Koelreuteria bipinnata

summer. Both species are climate-appropriate for San Bruno; the *Ulmus parvifolia* was recently planted at The Aperture development, at the south end of the project area.

Understory

All planting and irrigation will be required to meet MWELo water-use requirements. Shrubs and groundcovers should be drought-tolerant and low-water-use.



Mid-block bulb-out opportunity



Corner bulb-out opportunity

Stormwater Management

SMCWPPP C.3 stormwater treatment requirements provide an exclusion for projects that are limited to “sidewalk replacement.” If this streetscape project is determined to fall under that category, no stormwater management features would be required.

If additional elements of the project are implemented such that the project is determined not to fall under the “sidewalk replacement category,” then the use of a permeable pavement strip in the sidewalk, sized to act as self-retaining areas, combined with the proposed new trees planted along the corridor, meets the SMCWPPP C.3 stormwater-treatment requirements to manage runoff from the replaced sidewalks within the project area (assuming that the roadway pavement itself is not replaced).

Budget permitting, this plan recommends additional stormwater-management features including:

- Suspended pavement under the parking lane and sidewalks to treat stormwater and provide additional planting soil to support healthy, large and long-lived trees. (Where necessary, underground utilities can be routed through the suspended pavement structure.)
- Permeable pavement in the parking lane
- Creating bioretention planting areas or flow-through planters in existing bulb-outs where existing drain inlets and/or grades allow. There is not enough potential planting area within existing bulb-outs to treat stormwater

for the entire project area watershed to comply with C.3 requirements, however this recommendation is based on the principal of providing as much stormwater treatment as possible. (In order to treat the stormwater from the entire project area to meet C.3 requirements, approximately 3,300 additional square feet of bioretention area would be required – however this would require the removal of on-street parking spaces, which the plan does not recommend.)

- Creating a bioretention planting area at the southwest corner of Jenevein Ave. and San Mateo Ave. (This would treat stormwater flowing from Jenevein Ave., not San Mateo Ave.)

Potential Constraints to greening and stormwater management

Three underground utilities are potential constraints to planting trees and constructing sub-grade stormwater-management features such as bioretention planters and suspended pavement. They are:

- A 44-inch steel storm-drain pipe that runs along the east side of the street from El Camino Real to mid-block between Sylvan and Angus Avenues. The top of this pipe is approximately 3-4 feet below grade. This plan recommends planting trees above this pipe, as the steel material is not likely to leak or need replacement in the foreseeable future. The depth to the top of the pipe is more than adequate to allow for the trees’ roots.
- A 20-foot-wide concrete box culvert that runs from midblock between Syvan and

Angus Avenues to the southeast corner of Angus Ave. with its eastern edge under the sidewalk. The exact depth from finish grade to the top of the box culvert is unknown, but it is likely to be between 1 foot and 3 feet deep. If it is equal to or greater than 2 feet below grade, this plan recommends planting trees on top of the structure. If it is less than 2 feet below grade, it may be possible to provide planting in raised planters.

- An 8-inch water line on the east side of the street from Sylvan Ave. to Angus Ave. (The water line continues north, past Angus, but at this point, it jogs away from proposed amenity and planting areas.) This plan recommends moving this water line to the back-of-sidewalk in order to make more room for tree planting in this area.



Green infrastructure

Jenevein Greening Opportunity

At-grade planting opportunities are shown throughout the plan. These include primarily the existing mid-block and corner bulb-outs. In addition to these, the intersection of Jenevein Ave. and San Mateo Ave. represents a significant opportunity to increase planting by shortening the corner radii as shown. The proposed layout accommodates a 40-ft bus to make a right turn from southbound San Mateo Ave. onto Jenevein Ave. completely within its lane, and a 30-ft box truck to make a right turn from Jenevein Ave. onto San Mateo Ave. while encroaching slightly into the opposite lane. (These 30-foot box truck types use this street only occasionally.) It also accommodates street sweepers. At the southwest corner (in front of the Bank of America), there is an existing drain inlet such that the planting area is an opportunity for a significant stormwater-management feature (see pages 50-51).

JENEVEIN AVENUE RAIN GARDEN OPPORTUNITY



E. MOBILITY AND PARKING

While this plan essentially retains the existing mobility design for all transportation modes, the following modifications are recommended:

Curbside Management and Business

Loading

- Convert the center stripe from “no passing” (double solid yellow line) to “passing allowed” (single dashed yellow line) where possible.
- Provide a white-curb loading zone in front of La Petite Baleen Swim School. Community input indicated that this business requires pick-up and drop-off of children, which is currently done unsafely from double-parked vehicles. This would require the removal of two on-street parking spaces.
- Provide three loading zones (yellow curbs) in widely-spaced locations along the street. This would require the removal of six on-street parking spaces. City Council can adjust the loading-only schedule from the times specified in the Municipal Code to provide customer parking during peak hours.

Public Transit

- Improve the existing bus stops along the project area by extending three bulb-outs 20 feet (two at Sylvan Ave and one at Kains Ave). This would bring these bus stops into compliance with SamTrans and accessibility requirements, and it would remove three parking spaces from the project area. (Bulb-out extensions shall be designed to accommodate street sweepers.) Additionally, SamTrans requested that bus shelters be installed at all four bus stops.

Pedestrian Safety and Accessibility

- Improve and maintain sightlines at crosswalks for pedestrian safety. For this reason, trees are not proposed in the bulb-outs on the approach sides of the crosswalks.
- Where sidewalk cross-slopes are in excess of 2% from the property line to the back-of-curb, provide a 2% maximum cross-slope in the path of travel and a slope greater than 2% in the furnishings zone.
- At a minimum, reconstruct non-compliant curb ramps as necessary to provide code-compliant curb-ramps. (All of the curb-ramps in the project area may be replaced to match the adjacent new paving.)
- Install high-visibility continental crosswalk striping and yield striping (“sharks teeth”). If artistic or unique crosswalk markings or paving are installed, they should comply with crosswalk striping safety standards.

Bicycle Facilities

- Paint “sharrows” in the travel lanes along the project area.
- Provide bike racks along the sidewalk at approximately 100-foot spacing. Regularly spacing bike racks along the sidewalk, rather than grouping them in limited locations allows cyclists to lock their bikes closer to their destinations.

Parking

- Provide wayfinding signage, including signage directing drivers to the off-street surface lots.
- Improve the paseos that lead to off-street surface parking lots, especially with additional lighting and wayfinding signage.
- Install parking meters, as recommended by the Downtown Parking Management Plan.
- Provide on-street accessible parking as recommended by the Accessibility Transition Plan, which is being developed concurrently with the San Mateo Avenue Streetscape Plan. There are two potential options for on-street accessible parking. If on-street accessible parking is to be provided on San Mateo Ave., then additional curb-ramps will be required, either at the inside of the bulb-outs closest to the parked car, or mid-block (see example photographs to the right). This would require the deletion of recommended planting areas, trees, seatwalls, benches, and other amenities where they conflict with the curb-ramp. A potential alternative would be to provide accessible parking stalls on the side streets, at the parking stalls closest to San Mateo Ave. In that case, the existing corner curb-ramps could serve those parking stalls, since the bulb-outs do not extend into the side streets. There are five parking stalls on side streets that might serve this purpose. Further study is required to determine if

ACCESSIBLE CURB-RAMP DESIGNS FOR ON-STREET ACCESSIBLE PARKING

these locations could meet the need for accessible parking stalls given accessibility standards and guidelines.

- Maintain the existing on-street parking, with the exception of the removal of eleven spaces total: one at each of the three bus stops, as required per SamTrans and accessibility code; two at La Petite Baleen Swim School, to provide a safe loading zone for children using that facility; and two at each of the three yellow-curb loading zones.

Striping Plan

The Proposed Striping Plan on the following pages illustrates the street and curb markings described above, with the exception of the yellow loading zones which will be determined through a separate engagement process.



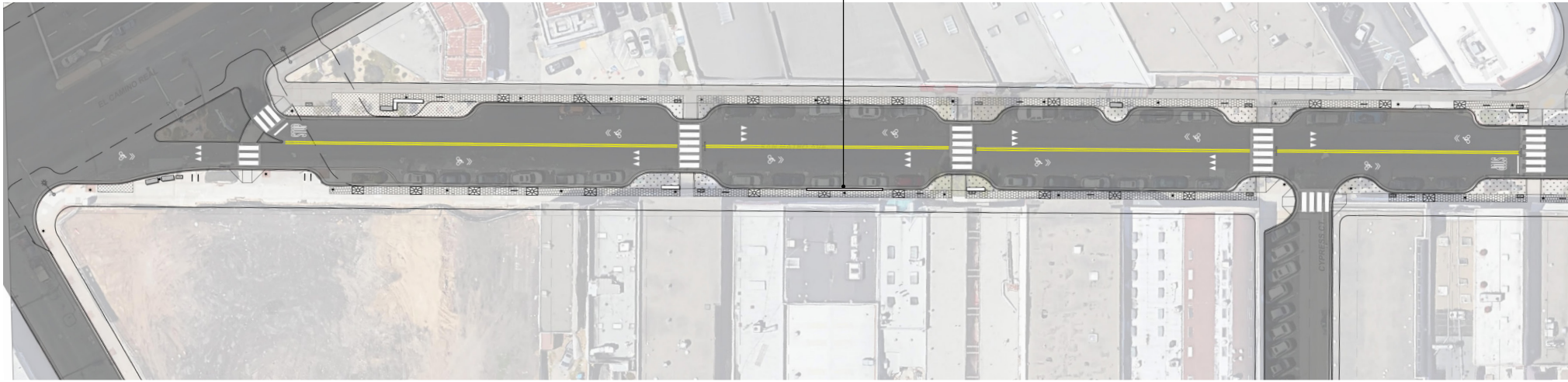
Curb ramp at bulb-out



Mid-block curb ramp

PROPOSED STRIPING PLAN

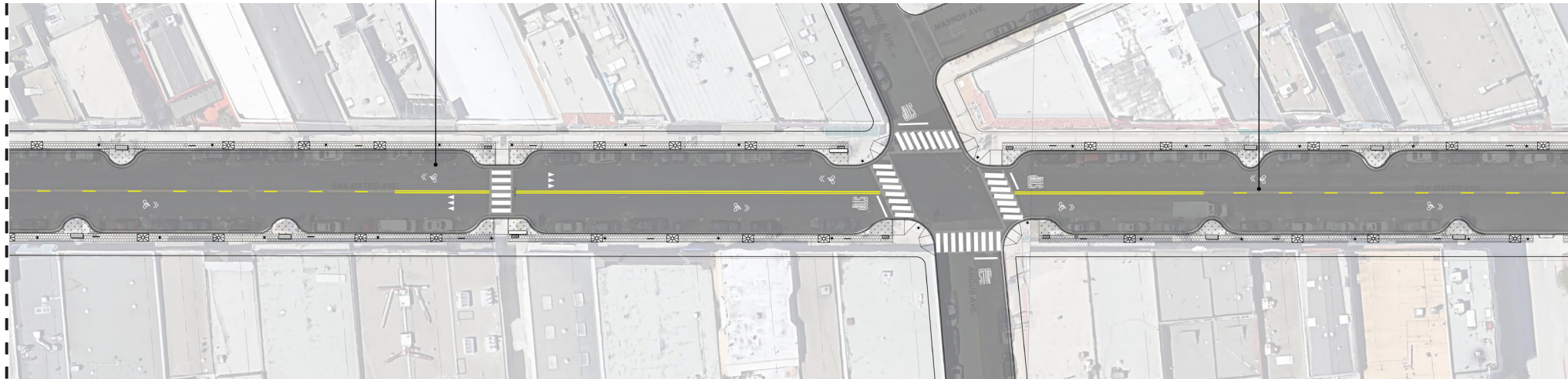
Proposed white painted 'passenger loading only' curb zone

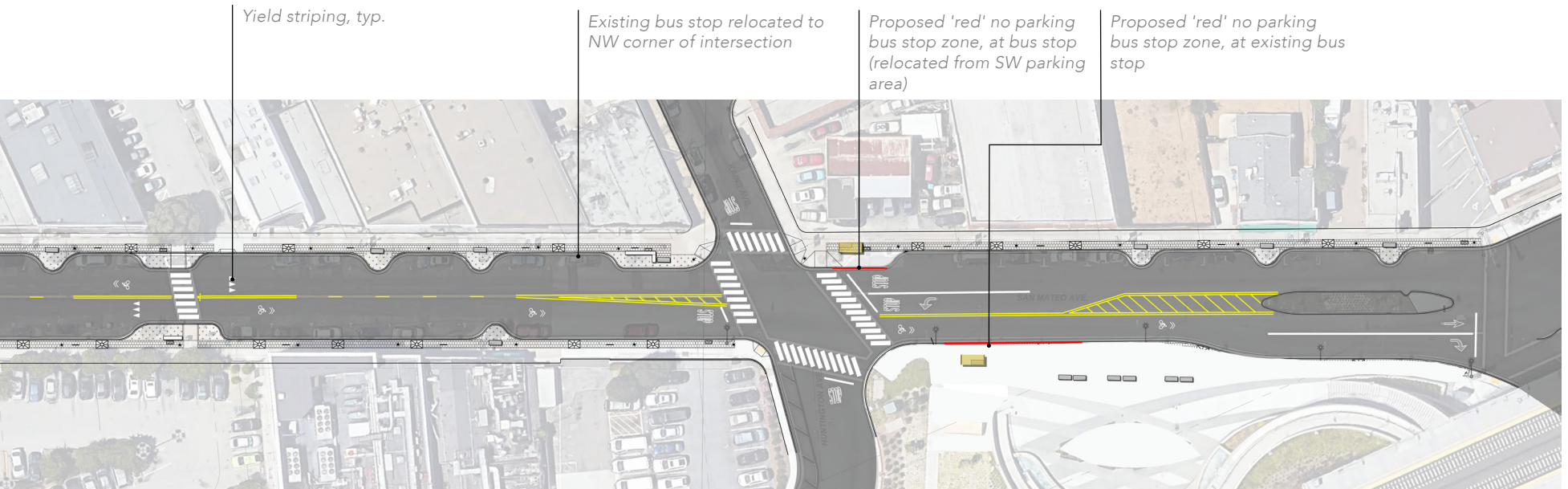
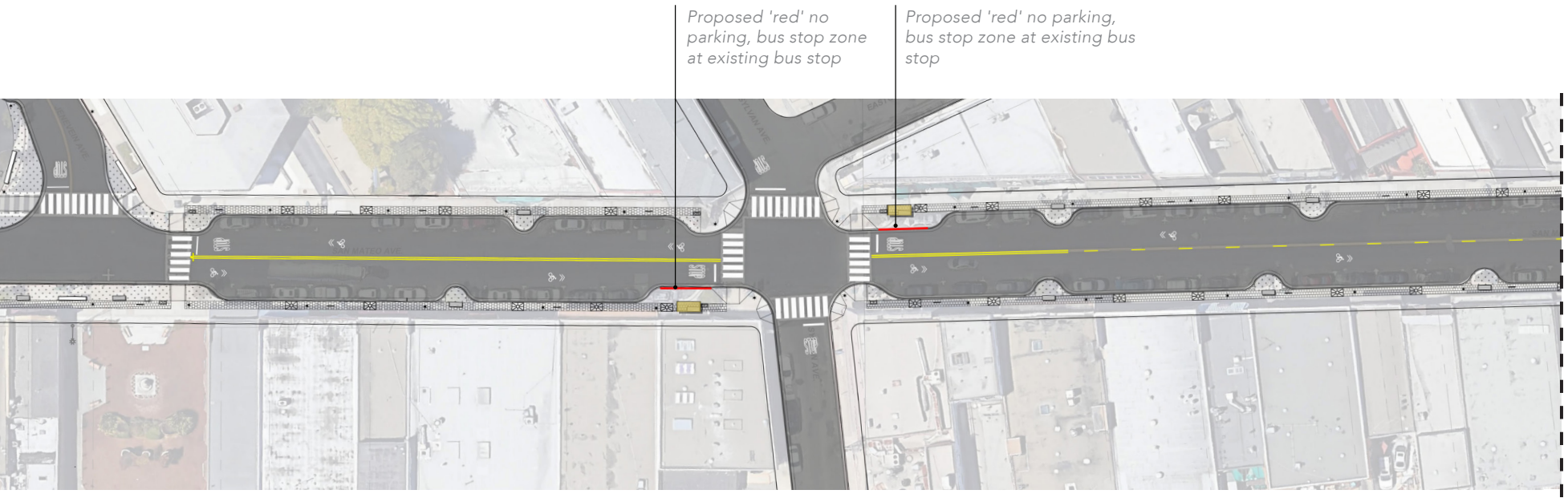


Sharrows, typ.

'Passing allowed' dashed yellow striping, typ.

MATCHLINE, SEE ABOVE





F. LIGHTING

A broad consensus emerged through the community-engagement process that improved lighting should be a priority of the design. A photometric analysis confirms that the existing streetlights do not provide adequate light levels or uniformity. Improved lighting will help activate the street at night, when many community members feel the street is under-utilized. The proposed lighting design serves two functions: First, pedestrian-level pole-mounted light fixtures and lighting in the paseos will provide safety and overall illumination. Second, accent lighting will provide visual interest at night, enhancing the unique character and attractiveness of the street.

Pole-Mounted Streetlights

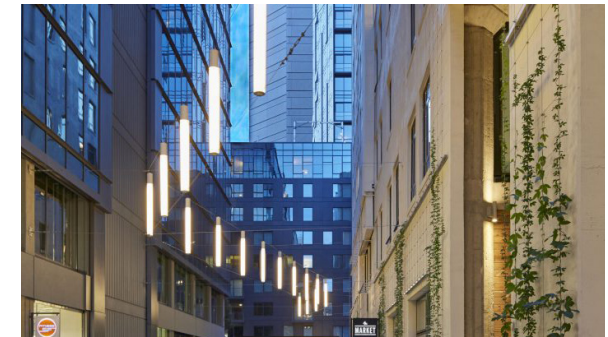
All of the existing streetlights along the corridor are recommended to be removed, and new pole-mounted streetlights are proposed at approximately 60-feet on-center. The streetlights should be approximately 16 feet high. This mounting height provides a pedestrian scale, while the spacing provides adequate light for vehicular as well as pedestrian safety. Taller fixtures at wider spacing tend to create a sense of a vehicular-scaled rather than pedestrian-scaled streetscape and are therefore not recommended. The light fixtures and poles should be metallic silver in color, and should be contemporary in style, with forms that convey the motif of movement. The IESNA standard of 1.2 average foot-candles and a uniformity

LIGHTING TREATMENT CONCEPTS



Pole-mounted streetlights

ratio within 2.0 of the 4.0 IESNA standard is recommended. (The wattage and optics of the light fixtures would be determined during the Design Development stage of the design process, and final fixture layout would depend of photometric analysis.)



Paseo lighting

Paseo Lighting

At a minimum, the paseos should be lighted to provide for safety and wayfinding to and from the off-street parking lots. As discussed earlier (see “Opportunities for Unique and Artistic Expression”), the lighting scheme for the paseos could also be unique and artistic.



Accent lighting

Accent Lighting

To provide an additional lighting element along the streetscape, the plan recommends incorporating lighting into the benches and seatwalls throughout the corridor. This accent lighting should be consistent and visible as a series of elements that “flows” along the sidewalk. These lighting elements should be durable, long-lasting LED fixtures; and they should be recessed into the seatwalls and benches to prevent tampering.



Seasonal lighting

Seasonal Lighting

Seasonal lighting should be accommodated with electrical outlets and planting of deciduous trees with an open branching structure (*Ulmus parvifolia* is recommended, see “Greening”). Seasonal lighting during the winter can encourage shopping and brighten the evenings during the short days.



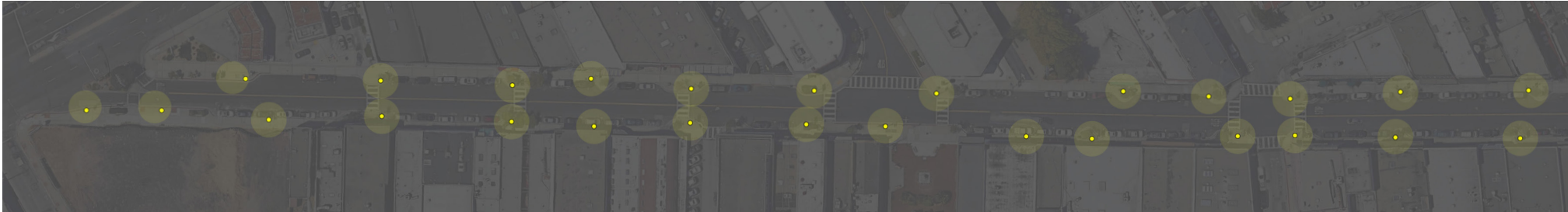
Gateways lighting

Gateways Lighting

The gateways should be considered part of the overall lighting scheme, with lighted elements an integral part of their design. See “Wayfinding and Gateways” below.

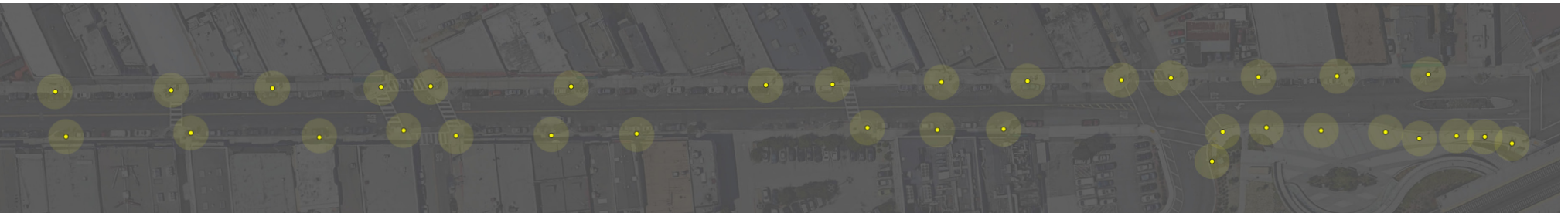
Note: all custom lighting elements should be designed and engineered to withstand wind-loads. Further study would be required to determine the suitability of cable-suspended lighting fixtures, for example.

EXISTING LIGHTING LAYOUT



PROPOSED LIGHTING LAYOUT





Accent lighting, typ.

Pole mounted streetlights, typ.

Paseo lighting, typ.

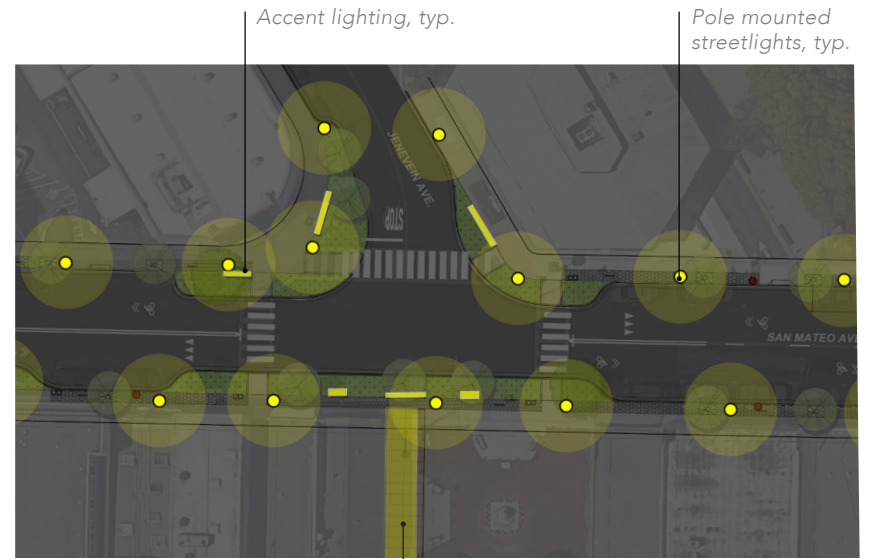
Gateway lighting, typ.



ENLARGEMENT PLANS



Existing lighting layout



Accent lighting, typ.

Pole mounted streetlights, typ.

Proposed lighting layout

Paseo lighting, typ.

G. SPECIAL PLACES

This plan recommends improvements to the following “special places”: Posy Park, Centennial Park and the paseos (alleyways) that connect the sidewalk to surface parking lots behind the buildings. Of these, the paseo improvements should be considered a priority, as they are integral to the parking demand-management strategy by increasing the visibility and safety associated with using the off-street parking lots. Depending on funding and the broader citywide priorities for park improvements, Posy Park and Centennial Park improvements may be incorporated into the streetscape construction

project, or they may be considered separate projects.

Paseos: Artistic Expression

In addition to their essential role in providing access to the off-street parking lots, the paseos are an opportunity for unique artistic expression along the corridor. During the community-engagement process, excitement emerged for the possibility that the paseos could be sites for artists’ installations. Artists could be selected through a competition, potentially with a preference for local artists. Because the paseos

can be a refuge from the wind, seating should be incorporated. The paseos are also opportunities for special paving, potentially designed as part of the art installations. So that they serve as connections to the off-street parking lots, lighting and signage are essential components of the paseo improvements.

Note: all custom lighting elements should be designed and engineered to withstand wind-loads. Further study would be required to determine the suitability of cable-suspended lighting fixtures, for example.

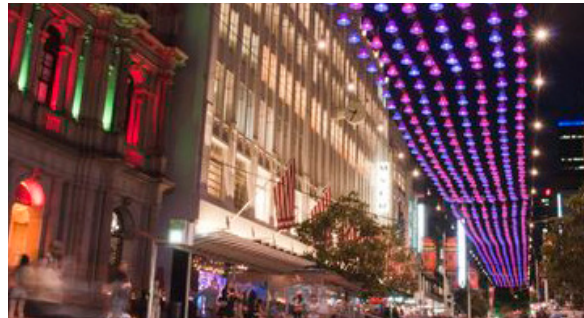
PASEO ACTIVATION OPPORTUNITY



PASEO CONNECTIONS TO EXISTING OFF-SITE PARKING LOTS



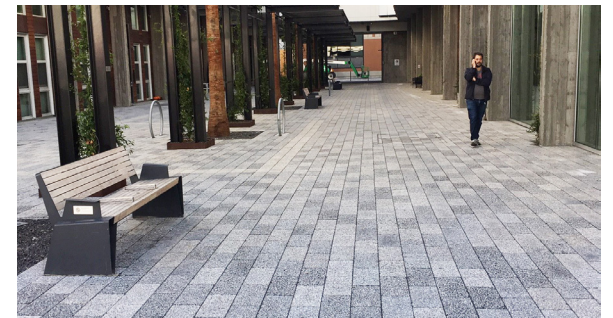
PASEO ACTIVATION CONCEPTS



Artistic Lighting



Shade Structure and Overhead Treatments



Murals and Distinctive Paving

Posy Park: A Green Gateway

Posy Park is part of the gateway experience for visitors approaching the corridor from the north. Currently, the park does not serve either as a visual gateway or as a well-functioning open space. Constructed as part of the Caltrain station and grade separation, the park is dominated by large, gray retaining walls. There is little shade. The central water feature has been turned off because it never served its intended purpose. The seating area is hidden from view, doesn't feel safe. The recommendations of this plan are intended to create a visual gateway feature and a more usable space, primarily by increasing the planting area and adding large trees. The sense

CONCEPT VIEW



of safety would be increased by moving the usable seating area closer to the street. And the retaining walls that dominate the space would be re-painted with a beautiful color or pattern, and partially covered with plants. Amenities and programming would activate the space, as will increased foot-traffic as people walk from new residential developments to and from the Caltrain station.

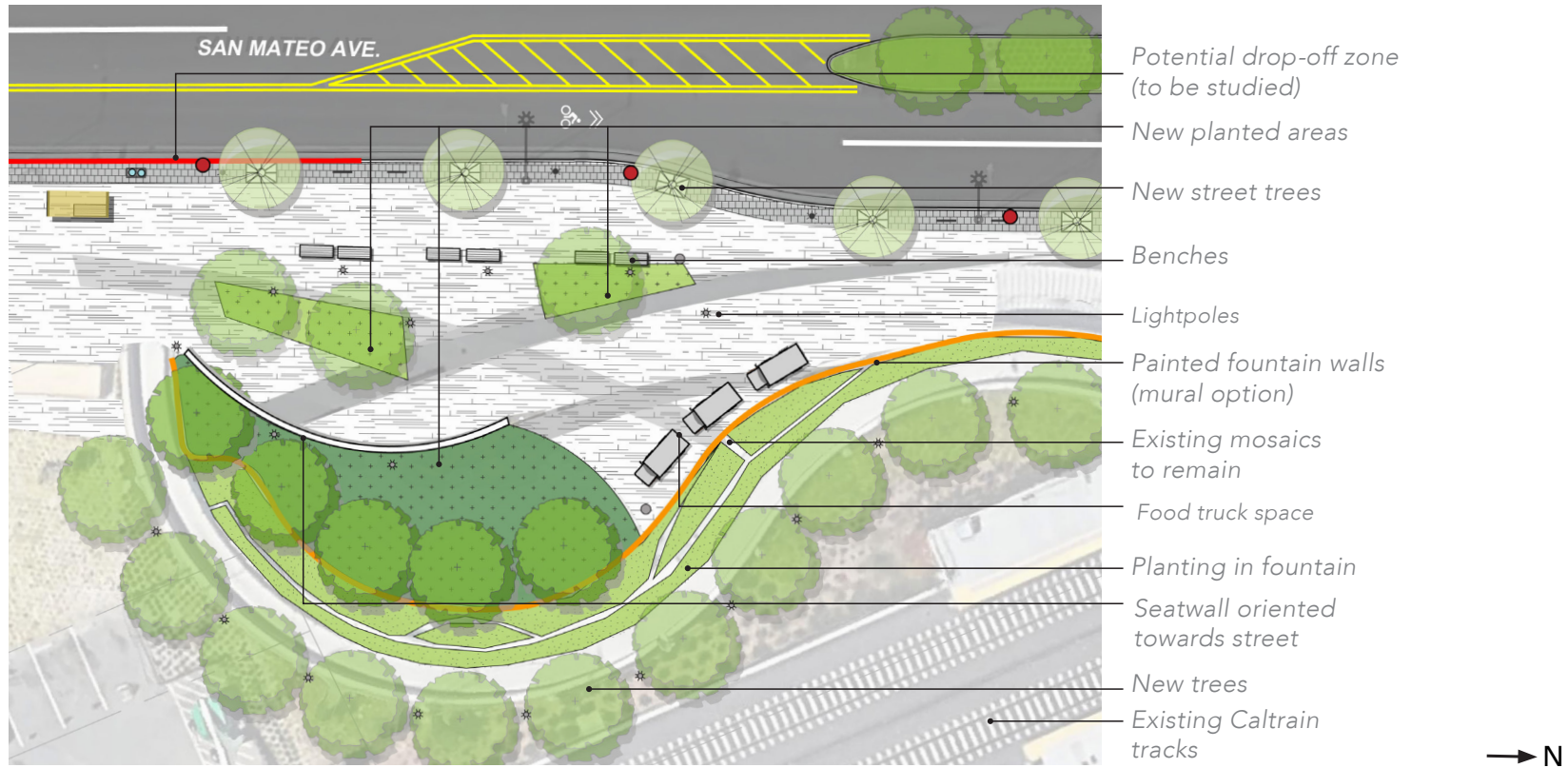
The key recommendations for Posy Park are:

- Reduce the amount of paving to provide more planting area.
- Plant very large shade trees.
- Convert the fountain to planters.
- Paint the existing walls with a bright color or

artistic pattern.

- Move the seating zone closer to the street.
- Provide an area for food trucks, carts or kiosks.
- Maintain sightlines by keeping groundcovers and shrubs low and tree canopies high and orient furnishings so that they don't block views.
- Movable tables and chairs should be studied as an option to activate the space.
- A lawn area should be studied as a potential amenity for gathering, picnicking, relaxing, etc.
- While a loading zone was not evaluated within the project scope, it may be considered in the future.

CONCEPT PLAN



PROGRAM CONCEPTS



Food Trucks / Vendors



Cafe Tables and Seating



Shaded Seating Areas



Lawn

- Small seating areas
- Play area with climbing structure

The program diagrams on the previous page indicate the amounts of space recommended for each program zone, illustrate three possible layouts with different relationships between the zones and the street, and show different circulation patterns through the park between the street and the off-street parking.

CENTENNIAL PLAZA ACTIVATION IDEAS



Nightlife/food vendors



Performance stage



Event space



Pop-up markets



Pop-up amenities



Children's play

H. WAYFINDING AND GATEWAYS

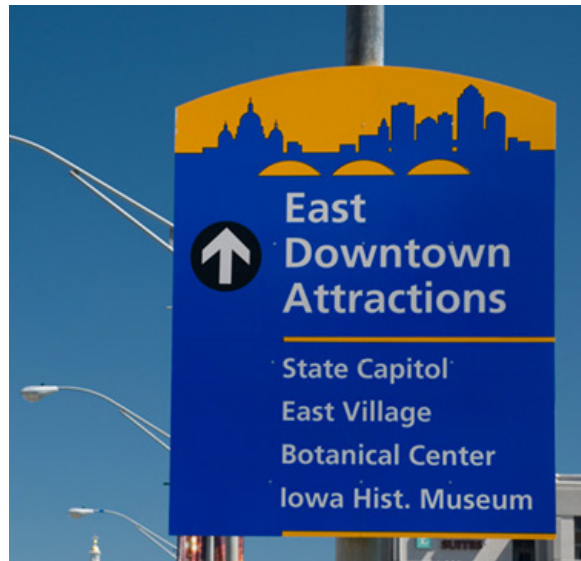
Design Intent

The design intent for the wayfinding signage is to prioritize simplicity and legibility. The color scheme is intentionally minimal: blue backgrounds with white and black lettering and symbols. The signs should be rectangular in shape. Graphic embellishments should be minimized, if not avoided altogether. The typeface should be a modern, sans-serif style. The precedent images to the right show a range of styles from the least embellished, Modernist design aesthetic, to a more graphically complex design. (See "Signage Design Considerations" below for further discussion.)

Branding

A branding exercise will be a necessary stage of the wayfinding and gateways design process. In the past, San Mateo Avenue was branded "The Avenue" on gateway signage and smaller street signs. These gateway signs are no longer in place, however there are still "The Avenue" street signs in place along the corridor. During the community-engagement process, this branding was questioned, as several participants in the process felt that most people think of Burlingame when they hear the words "The Avenue." An alternative brand could be simply "Downtown San Bruno." Other ideas that were discussed include "The Heart of San Bruno."

WAYFINDING PRECEDENTS



Top Left: Tacoma Art Museum, Washington
 Top Right: Aotea Square, Auckland New Zealand
 Bottom Left: Des Moines, Iowa

SIGNAGE AND GATEWAY LOCATIONS



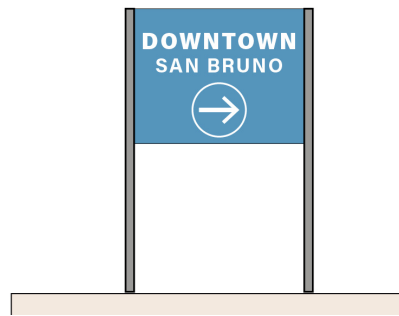
Vehicular Corridor Directional Signage

Vehicular corridor directional signs are intended to direct drivers entering downtown San Bruno from surrounding freeway exits and arterial streets to the San Mateo Avenue commercial corridor. These signs should be located off San Mateo Avenue at key locations. These signs should be positioned and oriented to be read from a vehicle, such as in the medians on San Bruno Avenue.

Parking Wayfinding Signage

To direct vehicular traffic to the off-street parking lots, these signs should be located along the San Mateo Avenue project area at key intersections as indicated. Additionally, "parking" signs should be located at the paseos to highlight these pedestrian paths from the sidewalks to the parking lots.

VEHICULAR WAYFINDING



MEDIAN WAYFINDING



PARKING WAYFINDING

LIGHTPOLE MOUNTED WAYFINDING

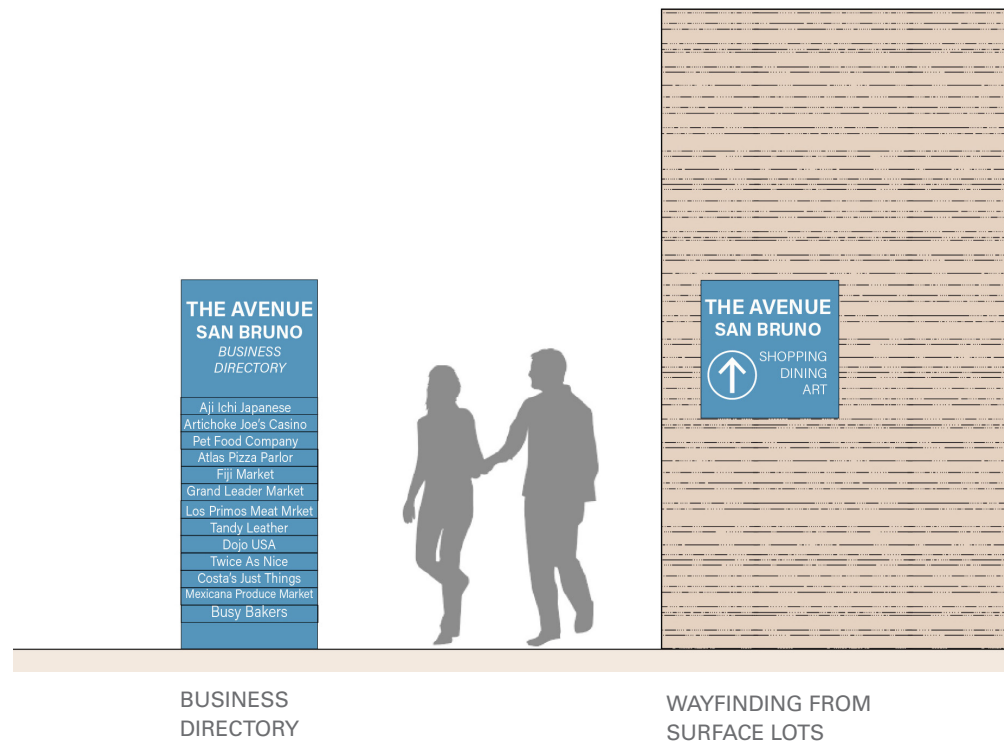
Business Directories

Business directories would indicate which businesses can be found on each block of the corridor. Business directories would be especially valuable at the paseos, as people walking from the parking lots behind the buildings might become disoriented with respect to their destinations. A funding and maintenance/management strategy would need to be developed for these signs. The funding for business directories of this type is typically provided by the businesses that advertise on these signs or by a business improvement district. It would need to be determined what entity (public or private) has responsibility for maintaining these signs, how many spaces for business names would be appropriate for each block, and how to adjust the quantity of businesses that are represented on each sign if there is more or less demand.

Pedestrian Wayfinding Signage

To direct people who have parked their cars in the off-street parking lots to the paseos and on to San Mateo Avenue, pedestrian wayfinding signage should be installed at the parking-lot ends of the paseos. At a minimum, these signs should be similar to the rest of the directional signage described in this section, however they may be replaced by paseo gateway monuments. (See "Paseo Gateway Monuments" below.)

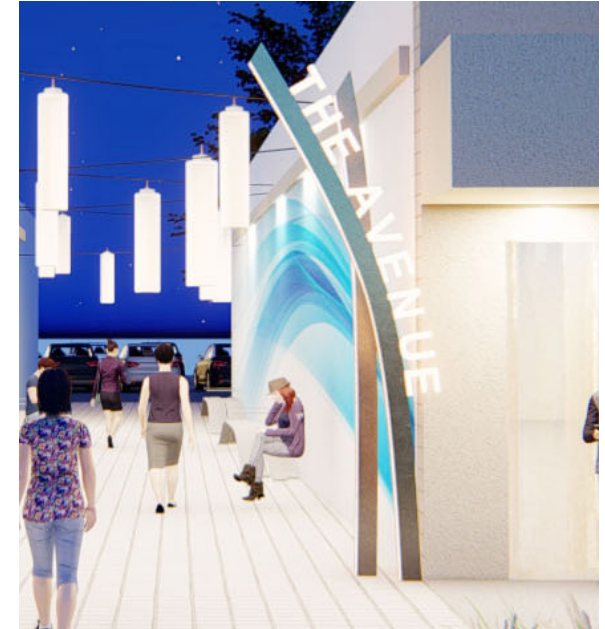
PEDESTRIAN WAYFINDING





Gateway Monuments

As markers of the north and south entrances of the San Mateo Avenue commercial district, one major gateway monument is proposed for each end of the project area. The recommended locations for these monuments are shown on the overall illustrative plan. Several conceptual design alternatives are included in this plan. The final design will depend on budget, engineering, and fabrication and constructability constraints. Lighting should be integrated into the gateway elements, so that they become a key element of the nighttime environment.



Paseo Gateway Monuments

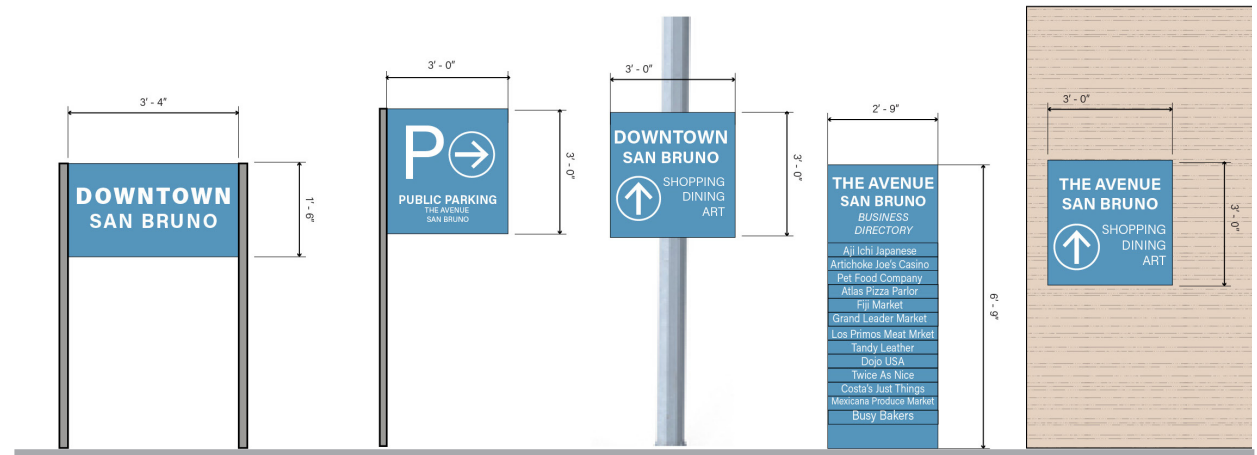
To enhance the wayfinding to the off-street parking lots and the unique place-making character of the paseos, smaller gateway elements are proposed for the entrances to the paseos from the sidewalk. These should be consistent in form and materials with the larger gateway monuments at each end of the corridor, and they should incorporate similar lighting elements. Additional paseo gateway monuments could be placed at the parking-lot ends of the paseos to provide an iconic directional beacon for people who have parked their cars in the parking lots.

Signage Design Considerations

This plan provides specific guidance for the types and locations of wayfinding signs and gateways and general guidance for the aesthetics of the signs and gateways. Further development of the sign designs should be completed with a signage-design consultant. The signage design should consider the full extent of the signage program for downtown San Mateo even if the initial implementation is limited to the San Mateo Avenue project area. Some of the considerations for further signage design development are:

- Legibility and conformance with accessibility requirements: Typeface selection and font size should be determined based on industry standards and requirements.
- Sign sizes and positions: Sizes and positions should be determined based on visibility for drivers and pedestrians as required.
- Aesthetics and design motif: Within the guideline of simple, modernist design, the level of graphic embellishment requires further study. Graphic motifs may reflect the final design for other unique aspects of the streetscape design that will be determined through the design-development process, such as the gateway elements, custom furnishings or art installations.
- Materials: The refinement and craft of the materials and construction techniques will be critical to the successful implementation of a simple, modern and elegant signage program.

SIGNAGE DIMENSIONS



POTENTIAL VARIATIONS



GATEWAY CONCEPT 1



GATEWAY CONCEPT 2



GATEWAY CONCEPT 3



I. ACTIVATION

In addition to the physical design improvements described in this Plan, the community engagement process highlighted the desire to activate the corridor with programming. Ideas that were encouraged during the community and stakeholder workshops included:

Farmers' Market

It was noted that a previous farmers' market was unsuccessful, but there is still interest in creating a better-managed farmers' market. It was noted that the farmers' market could be held in parking lots and plazas without closing the street.

Music Concerts

Music concerts could be programmed in Centennial Park for special events, regular occasions such as weekends, or lunchtimes during the week.

Games

Chess boards could be provided on public tables. A Bocce ball court could be located in Centennial Park or Posy Park. Other games that have become popular in open spaces are corn hole and large connect-four.

Art Events and Competitions

Art fairs could be supported in the plazas. Art competitions could be held to choose temporary art to decorate plazas, the paseos, or participating store fronts, similar to the San Jose Doors program, which selects student art to decorate utility doors.

Street Fairs

Regular street fairs could include a "Sunday Streets" event, which closes off the street to motor vehicles and encourages strolling and bicycling, or "First Fridays," modeled on Oakland's monthly street fair on Telegraph Avenue.

Seasonal Events

Seasonal events could include Halloween trick-or-treating, an Independence Day parade, or a back-to-school shopping promotion event. A scavenger hunt could encourage children and families to explore the street.

Special Dining Events

Dining events could be geared toward parents or senior citizens. Modeled on Oakland's Temescal Business Improvement District's annual Taste of Temescal, San Mateo Avenue's restaurants could organize a "culinary crawl," offering small portions of their food to ticket holders from sidewalk tables.

J. PRIORITIZATION AND COST ESTIMATE

At the time of this writing, a budget has not been identified for the streetscape project. The following ranking and rough-order-of-magnitude (ROM) cost estimates of the proposed improvements are provided to guide budgeting decisions in case funding for all of the recommendations is not available. These costs are for the initial project design and construction; they do not include ongoing maintenance and operations costs. The ranking is based on input during the community-engagement process.

Tier 1

The items listed under Tier 1 should be considered the bare minimum, lowest cost project that would provide the highest value.

Tier 2

The items listed under Tier 2 are the second-highest priority. These items support key goals of the project. Combined, Tiers 1 and 2 represent the “baseline” streetscape project, with each element providing a functional as well as aesthetic value.

Tiers 3 & 4

The items listed under Tiers 3 and 4 are either outside of the strict limits of the streetscape project (Centennial Park, Posy Park), are purely aesthetic in nature (artistic elements), or provide additional environmental benefit (additional stormwater management features).

The costs listed are cumulative. For example the cost to implement tiers 1, 2 & 3 would be the total of the costs listed for each tier. For items that represent add-on features, the cost listed for the add-on feature is the premium, or additional cost, for the additional feature. These are noted “premium.” For example, the cost for the custom benches listed under Tier 4 would be the total of the “basic product” bench listed under Tier 1 plus the additional cost for the “custom bench” under Tier 4. This means that subtraction of redundant items is not necessary to use the table.

PRIORITY RANKING OF PROPOSED IMPROVEMENTS

Tier	Recommended Improvement	ROM Cost
1	Sidewalk replacement, ramps	\$ 1,676,000
	Bus-stop improvements	\$ 77,000
	Street trees (with tree grates)	\$ 240,000
	Street lights (pole-mounted, 60' spacing)	\$ 396,000
	Trash and recycling receptacles	\$ 114,000
	Benches	\$ 36,000
	Seatwalls	\$ 76,000
	Bike racks	\$ 31,000
	Wayfinding signage	\$ 90,000
	Planting and Irrigation	\$ 45,000
	Water Line Relocation	\$ 225,000
	Demolition and earthwork	\$ 629,000
	General conditions (mobilization, etc.)	\$ 394,000
	Subtotal	\$ 4,633,000
Contingency (35%)	\$ 1,622,000	
Design (15% of total)	\$ 816,000	
Total Project Cost	\$ 6,254,000	
2	Permeable paving along sidewalks, additional cost (move to Tier 1 if required)	\$ 338,000
	Curb realignment and planting at Jenevien Ave.	\$ 65,000
	Suspended pavement for street trees	\$ 204,000
	Gateway monuments	\$ 750,000
	Paseo gateway monuments	\$ 100,000
	Roadway striping	\$ 15,000
	Planting and irrigation at existing bulbouts	\$ 111,000
	Paseo improvements/art installation	\$ 400,000
	Subtotal	\$ 1,983,000
	Contingency (35%)	\$ 694,000
	Design (15% of total)	\$ 402,000
Total Tier 2	\$ 3,079,000	
Total Project Cost (Tier 1 + Tier 2)	\$ 9,333,000	
3	Centennial Park improvements	\$ 524,000
	Artistic expression: Lighting at benches and seatwalls	\$ 41,000
	Additional stormwater management: suspended pavement and bioretention	\$ 1,383,000
	Soft Costs (design @ 15%)	\$ 292,000
	Subtotal	\$ 2,240,000
	Contingency (35%)	\$ 784,000
	Design (15% of total)	\$ 454,000
Total Tier 3	\$ 3,478,000	
Total Project Cost (Tier 1 + Tier 2 + Tier 3)	\$ 12,811,000	
4	Posey Park improvements	\$ 1,489,000
	Artistic expression: Crosswalks	\$ 371,000
	Artistic expression: Paving	\$ 969,000
	Artistic expression: Seatwalls	\$ 45,000
	Artistic expression: Benches	\$ 42,000
	Additional stormwater management: permeable vehicular pavement	\$ 1,136,000
	Subtotal	\$ 4,052,000
	Contingency (35%)	\$ 1,418,000
	Design (15% of total)	\$ 821,000
	Total	\$ 6,291,000
Total Project Cost (Tier 1 + Tier 2 + Tier 3 + Tier 4)	\$ 19,102,000	

APPENDIX

- A. UTILITY ASSESSMENT
- B. PHOTOMETRIC ASSESSMENT
- C. ACCESSIBILITY ASSESSMENT
- D. HYDROLOGY ASSESSMENT
- E. COST ESTIMATE
- F. TRANSPORTATION ASSESSMENT AND RECOMMENDATIONS
- G. ANGLED PARKING EVALUATION
- H. NOTES FROM COMMUNITY-ENGAGEMENT AND STAKEHOLDER MEETINGS

APPENDIX A: UTILITY ASSESSMENT

By: CSW/Stuber- Stroeh Engineering Group, Inc

A. UTILITY ASSESSMENT



45 Leveroni Court
Novato, CA 94949
www.cswst2.com

415.883.9850
Fax: 415.883.9835

Novato
Petaluma
Sacramento
Redwood City

CSW/Stuber-Stroeh Engineering Group, Inc.

Engineers | Land Planners | Surveyors

MEMORANDUM

DATE: July 30, 2019 **FILE:** 2019-20-013
TO: City of San Bruno, Community Development Department
FROM: Julia Harberson, CSW | ST2
RE: **UTILITY ASSESSMENT FOR SAN MATEO AVENUE, SAN BRUNO**

This memorandum addresses the assessment of the existing utility infrastructure within San Mateo Avenue, San Bruno. Below is a summary of the condition and capacity of the existing utilities (Water, Sanitary Sewer, Stormwater & PG&E). The area of interest for the San Mateo Avenue corridor is between El Camino Real and Huntington Avenue. Identified, as well, are suggested near term infrastructure improvements and rehabilitation that must be addressed to support future development along the corridor.

SANITARY SEWER





EXISTING CONDITIONS:

The following information on the existing sanitary sewer system within San Mateo Avenue between El Camino Real and Huntington Avenue was obtained from the *City of San Bruno Sewer Master Plan – February 2014 (SSMP)*. Inspections of the existing sanitary sewer system was performed, with closed-circuit television (CCTV), and determined the structural grade of sanitary sewer pipes and condition assessments. Inspections of the existing sanitary sewer

was performed, with closed-circuit television (CCTV), and determined the structural grade of sanitary sewer pipes and condition assessments. Inspections of the existing sanitary sewer system with CCTV provided data used to develop a statistical probability of pipe “failure” based on sewer age, and using a Weibull distribution, a probability density function was developed to determine the mean pipe lifetime of 90 years. The existing sanitary sewer system was constructed in the 1930’s. The existing sanitary sewer system is nearing the end of its 90-year lifecycle. Modeling of the sewer trunk mains identified the vicinity of the intersection of Kains and San Mateo Avenues as deficient, where overflow and surcharge may occur. The condition and capacity of the sanitary sewer line within San Mateo Avenue between El Camino Real and Angus Avenue and South of Kains Avenue to Kains Avenue were upgraded as a part of **Capacity Improvement Projects (CIPs) C-5A – Kains Avenue Bypass, C5B Kains Avenue Improvements** and **C-7^a – San Mateo Avenue Bypass** identified in the SSMP. These projects are detailed further below in Table 2.

Included in Table 1, below, are excerpts and references from the *City of San Bruno Sewer Master Plan – February 2014* that have been utilized for this assessment to identify deficiencies in the sanitary sewer system. The current infrastructure within San Mateo Avenue consists of a 24-inch main located within the street between El Camino Real and Kains Avenue. The CIPs above abandoned a 6-inch sewer main in the sidewalk on the westside of San Mateo Avenue between El Camino Real and Angus Avenue.

Table 1: Utilized Existing Conditions Excerpts from the *City of San Bruno Sewer Master Plan – February 2014*

Reference Figure/ Table ID	Reference Figure/ Table Name	Description	Description (In Vicinity of San Mateo Avenue)	Pertinence
Figure 1-2	Existing Sewer System	The sizes of the pipes in the existing sanitary sewer system are illustrated in this figure.	The existing sanitary sewer pipe within San Mateo Avenue is less than 8-inches.	These pipes may have capacity issues.
Figure 1-3	Sewer Installation Dates	This figure shows the decade in which the sanitary sewer pipes were installed.	The sanitary sewer pipes within San Mateo Avenue were installed in the 1930's.	The lifetime of these pipes were found to be about 90-years. The pipes in San Mateo Avenue are approaching the end of their lifespan.
Figure 3-2	Predicted Areas of Sewer Surcharge under Design Storm Peak Wet Weather Flow	Sanitary sewer pipes and manholes where predicted surcharge or overflow are shown. Navy blue shows the modeled sewer. Orange indicates where backwater surcharge occurs, Red indicates where throttle surcharge occurs. The teal circles indicates manholes where overflow occurs.	 Surcharging is predicted within the sanitary sewer pipes within Kains Avenue and Huntington Avenue in the vicinity of San Mateo Avenue. Sanitary sewer overflow is predicted at the manholes in the vicinity of the intersection of San Mateo and Kains Avenue.	The vicinity of the intersection of Kains Avenue and San Mateo Avenue is an area susceptible to overflow and surcharging.
Figure 4-2	Highest Structural Grade of Inspected Sewers	The figure shows the structural grade of the inspected sanitary sewers where five (5) is the most severe. Five (5) is red, four (4) is purple, three (3) is orange, two (2) is pink, one (1) is green, and zero (0) is blue.	 The structural grade of the inspected sanitary sewers within San Mateo Avenue were found to be five (5), four (4) and three (3)	This indicates that based on structural grade, replacement or rehabilitation may be necessary for the sanitary sewers within San Mateo Avenue
Figure 4-3	Sewer Renewal Decision Analysis Results	The figure show where it is suggested that the pipe be replaced (red), lined (orange), localized repair (purple), replaced or lined for roots (brown) or maintained (green). Black is used to show where the pipe inspection is incomplete and need to be re-inspected.	 Along San Mateo Avenue, the figure above shows red, purple, brown and green.	This indicates that based on the condition assessment it is advised that sections of the sanitary sewer pipe along San Mateo Avenue be replaced, repaired or lined.
Figure 3-3	Overview of Capacity Improvement Projects	The figure shows the locations and IDs of the capacity improvement projects.	 The highlighted segments in the excerpt above show where the capacity improvement projects are located and what the project ID.	These projects have been completed. See Table 2 below for project details.

IDENTIFIED INFRASTRUCTURE IMPROVEMENTS:

The condition and capacity of the Sanitary Sewer Lines on San Mateo Avenue between El Camino Real and Huntington Avenue are addressed in the *City of San Bruno Sanitary Sewer Master Plan – February 2014*. The deficiencies in the condition and capacity of the Sanitary Sewer line within San Mateo Avenue between El Camino Real and Huntington Avenue have been resolved by the CIPs identified in Table 2 above.

The San Mateo Water and Sewer Replacement project abandoned the existing 6-inch sanitary sewer line in the sidewalk on the west side of San Mateo Avenue between El Camino Real and Angus Avenue. Portions of the abandon sanitary sewer will require removal, in the event green and sustainable infrastructure streetscape improvements are implemented along the San Mateo Avenue corridor. The existing abandoned sanitary sewer is identified in Figure 1 below.

Figure 1: Existing Abandond Sanitary Sewer Location



Table 2: Completed Capacity Improvement Projects from the *City of San Bruno Sanitary Sewer Master Plan – February 2014*

CIP ID	Project Name	Location	Description	Deficiency Addressed/ Comments	Resolution
C-5A	Kains Avenue Bypass	Kains Avenue from San Mateo Avenue to Huntington Avenue	Install a new 200-foot section of 15-inch PVC bypass pipe to divert flow to the new 18-inch sewer on Huntington Avenue	Addresses capacity deficiencies in existing sewers through Artichoke Joe's parking lot and along Huntington Avenue to Cupid Row that have resulted in Sanitary Sewer Overflows (SSOs).	This project has been constructed in conjunction with the Caltrain Huntington Avenue Improvement Project.
C-5B	Kains Avenue Improvement	Kains Avenue from Hensley Avenue to San Mateo Avenue; San Mateo Avenue south of Kains Avenue	Replace approximately 1,000 feet of 10-inch pipe with 12-inch pipe in Kains Ave; replace existing sewers in San Mateo Ave south of Kains Avenue with 10-inch pipe flowing north and connecting to the new 15-inch bypass sewer (Project C-5A)	Addresses capacity deficiency in existing sewer in Kains Avenue east of Masson Avenue and allows abandonment of portion of sewer through Artichoke Joe's parking lot (the remaining portion of sewer will become a lateral servicing Artichoke Joe's)	This project has been constructed.
C-7 ^a	San Mateo Avenue Bypass	San Mateo Avenue from Taylor Avenue to Angus Avenue	Install approximately 2,000 feet of new 18-inch pipe; install a weir to divert most flow at Taylor Avenue into the new 18-inch sewer; abandon the existing 6-inch pipe along west side of San Mateo Avenue and reconnect laterals to new sewer; install new pipes to connect flow from sewers in Jenevein Avenue and Angus Avenue to new 18-inch sewer.	Addresses capacity deficiencies in sewers in the Cupid ROW area that have resulted in SSOs, and allows abandonment of existing shallow 6-inch pipes in San Mateo Avenue sidewalk. Will also allow future abandonment of existing 6-inch easement sewers between San Mateo Avenue and Mastick Avenue	This project has been constructed as a part of the San Mateo Avenue Water & Sewer Replacement Project – Project No. 84151 & 84341. A 24-inch Sanitary Sewer was installed.

WATER SYSTEM

EXISTING CONDITIONS:

The following information on the existing water system was obtained from the *City of San Bruno Water System Master Plan – November 2012 (WSMP)*. The area of concern in this utility assessment, within San Mateo Avenue between El Camino Real and Huntington Avenue, is located in pressure zone 1/4. The water supply sources for pressure zone 1/4 are San Francisco Public Utilities Commission (SFPUC) (Tanforan (C1) and Whitman (C5) Turnouts), Pump Station 6 (Well 17), and Wells 16, 18, and 20. Storage **Tank T1 – Cunningham Drive**, with a total capacity of 2.5 million gallons, is the only storage tank serving pressure zone 1/4. Generally, the water system pipelines within the City's service area are made of cast iron (CI), asbestos concrete (AC), polyvinyl chloride (PVC) or galvanized steel (2-inch pipelines). The City has standardized on ductile iron cement lined (DICL) pipe. Based on recommendations from the City's 2001 Water System Master Plan, the City's Supervisory Control and Data Acquisition (SCADA) was installed in 2001. No significant issues have been identified from the City's SCADA system.

San Mateo Avenue between El Camino Real and Huntington Avenue is a part of the transit corridor where future development is planned. The predicted water demand (FY 2029/30) is 0.42 million gallons per day (292 gallons per minute) for the Transit Corridor is larger than the likely future demand along San Mateo Avenue between El Camino Real and Huntington Avenue. Pumping capacity evaluation, storage capacity evaluation, and pressure regulating station capacity evaluation analysis were performed for the *WSMP*. The pumping capacity evaluation found the existing total and firm guaranteed) pumping capacity to be less than the required firm pumping capacity. The storage capacity evaluation determined the storage for pressure zone 1/4 is sufficient having a storage surplus of 0.06 million gallons (MG). Pressure zone 1/4 is not depended on pressure regulating stations for supply; as such, the pressure regulating station capacity evaluation is not pertinent to this assessment.

In the *WSMP*, hydraulic analysis was used to identify pipeline improvements. Using general pipeline age, material information and leak history data, a focused pipeline rehabilitation and replacement program was developed. In general, the leak history demonstrates that the number of leaks generally increases as the pipe diameter decreases, and the number of leaks increases as pipe age increases.

As shown in Figure 7-11: Recommended Existing System Rehabilitation and Replacement Improvements, *WSMP*, San Mateo Avenue between El Camino Real and Angus Avenue was identified as a pipeline rehabilitation and replacement project, **RR-3**, was completed as a part of the *San Mateo Avenue Water & Sewer Replacement Project – Project No. 84151 & 84341*. An 8-inch water line was installed within the street as a part of the project. The replacement project abandoned multiple waterlines within the sidewalks on both sides of San Mateo Avenue.

Table 4, below, identifies excerpts and references from the *City of San Bruno Water System Master Plan – November 2012* that have been utilized for this assessment, to determine the existing condition and capacity of the water system.

Table 4: Utilized Existing Conditions Excerpts from the *City of San Bruno Water System Master Plan – November 2012*

Reference Figure/ Table ID	Reference Figure/Table Name	Description	Description (In Vicinity of San Mateo Avenue)																			
Figure 2-2	Pressure Zones	Illustrates the different pressure zones in San Bruno	San Mateo Avenue between El Camino Real and Huntington Avenue are in pressure zone 1/4.																			
Table 2-1	Summary of Existing Pressure Zones	<table border="1"> <thead> <tr> <th>Pressure Zone</th> <th>Range of Service Elevations, feet msl</th> <th>HGL of Tank, Regulating Station or Turnout, feet msl</th> <th>Static Service Pressures, psi</th> <th>Water Supply Source(s)</th> </tr> </thead> <tbody> <tr> <td>Zone 1/4</td> <td>5-164</td> <td>247</td> <td>36-105</td> <td>SFPUC (Tanforan (C1) and Whitman (C5)) Turnouts^(b) Pump Station 6 (Well 17) Wells 16, 18, and 20</td> </tr> </tbody> </table>	Pressure Zone	Range of Service Elevations, feet msl	HGL of Tank, Regulating Station or Turnout, feet msl	Static Service Pressures, psi	Water Supply Source(s)	Zone 1/4	5-164	247	36-105	SFPUC (Tanforan (C1) and Whitman (C5)) Turnouts ^(b) Pump Station 6 (Well 17) Wells 16, 18, and 20										
Pressure Zone	Range of Service Elevations, feet msl	HGL of Tank, Regulating Station or Turnout, feet msl	Static Service Pressures, psi	Water Supply Source(s)																		
Zone 1/4	5-164	247	36-105	SFPUC (Tanforan (C1) and Whitman (C5)) Turnouts ^(b) Pump Station 6 (Well 17) Wells 16, 18, and 20																		
Table 2-6	Storage Tank Facilities	<table border="1"> <thead> <tr> <th rowspan="2">Storage Tank ID</th> <th rowspan="2">Pressure Zone</th> <th rowspan="2">Ground Surface Elevation, feet msl</th> <th rowspan="2">Diameter, feet</th> <th rowspan="2">Height, feet^(c)</th> <th colspan="3">Capacity, MG^(d)</th> </tr> <tr> <th>Total</th> <th>Operational Minimum</th> <th>Operational Maximum</th> </tr> </thead> <tbody> <tr> <td>T1 - Cunningham Drive</td> <td>1/4</td> <td>231</td> <td>116</td> <td>32</td> <td>2.5</td> <td>0.94</td> <td>1.95</td> </tr> </tbody> </table>	Storage Tank ID	Pressure Zone	Ground Surface Elevation, feet msl	Diameter, feet	Height, feet ^(c)	Capacity, MG ^(d)			Total	Operational Minimum	Operational Maximum	T1 - Cunningham Drive	1/4	231	116	32	2.5	0.94	1.95	
Storage Tank ID	Pressure Zone	Ground Surface Elevation, feet msl						Diameter, feet	Height, feet ^(c)	Capacity, MG ^(d)												
			Total	Operational Minimum	Operational Maximum																	
T1 - Cunningham Drive	1/4	231	116	32	2.5	0.94	1.95															
Table 3-10	Water Demand at Buildout of General Plan and Transit Corridors Plan (FY 2029/30)	Table of predicted water use for future development.	Based on water use estimated using decision support system (DSS) model as a part of Transit Corridors Plan water supply agreement (WSA) analysis, the predicted total water use for the Transit Corridors Plan is 0.42 million gallons per day (mgd) and 292 gallons per minute (gpm)																			
Figure 7-8	Leak Statistics	This figure shows two graphs. One is Leaks Per 1,000 ft by Diameter. The other is Leaks per 1,000 ft by Age.	The number of Leaks increases as the pipe diameter decreases. The number of leaks increases as the pipe age increases.																			


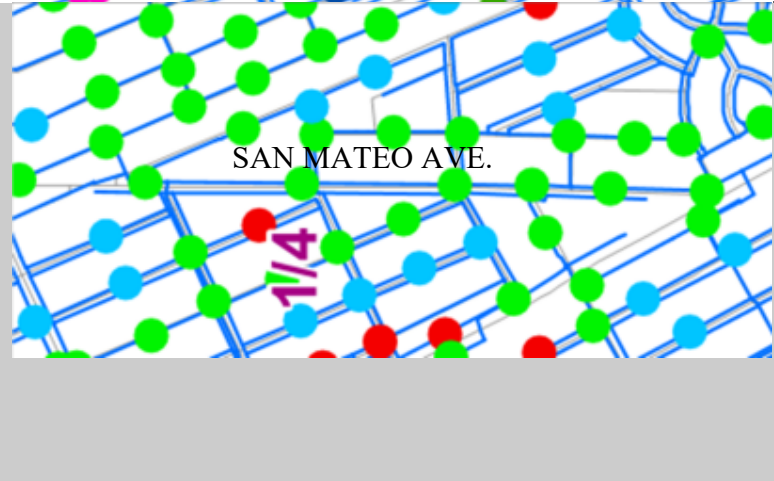


<p>Figure 7-2</p>	<p>Recommended Existing System Fire Flow Criteria</p>	<p>This figure illustrates the existing fire flow criteria where navy blue represents 1,500 gallons per minute (gpm), green is 2,000 gpm, orange is 2,500 gpm, and pink is 3,000 gpm.</p>		<p>The recommended fire flow criteria in the vicinity of San Mateo Avenue is 3,000 gpm.</p>
<p>Figure 7-4</p>	<p>Comparison of Available Fire Flow and Fire Flow Criteria – Existing System</p>	<p>The following excerpt shows the criteria shown in this figure.</p> <p>LEGEND</p> <ul style="list-style-type: none"> ● AvailableFlow < 1/3 of Fire Flow Criteria ● AvailableFlow > 1/3 of Fire Flow Criteria and < Fire Flow Criteria ● Available Flow > Fire Flow Criteria Pressure Zone Boundary — Pipeline — Street 		<p>Along San Mateo Avenue, there is sufficient available flow greater than fire flow criteria. However, in the vicinity of Angus and San Mateo Avenues, the available flow is insufficient.</p>

Figure 7-5	Recommended Water System Improvements Existing System	<p>This figure illustrates where suggested improvements such as upsizing pipelines, new pipelines, new wells, new booster pump stations, new pressure regulating stations, and new storage tanks occur.</p> <ul style="list-style-type: none"> • Orange – Proposed 8-inch Upsize 		<p>Along San Mateo Avenue between Angus Avenue and Kains Avenue, it is recommended that an 8-inch pipe line upsized occur. There is a new well proposed in the vicinity of Taylor Avenue and Mastick Avenue.</p>
Figure 7-11	Recommended Existing System Rehabilitation and Replacement Improvements	<p>Red represents RR-P1 projects. Light blue represents RR-P3 projects.</p>		<p>A portion of project RR-3 is located along San Mateo Avenue between El Camino Real and Angus Avenue. This project is detailed further below.</p>
Table 7-8	Recommended Rehabilitation and Replacement Improvement Projects	<p>Capital Improvement Project ID RR-P3. This project involves the replacement of water pipes and upsizing 6-inch pipes to 8-inch pipes.</p>	<p>A portion of this project along San Mateo Avenue between El Camino Real and Angus Avenue was completed as a part of the <i>San Mateo Avenue Water & Sewer Replacement Project – Project No. 84151 & 84341</i>. A new 8-inch water line was installed.</p>	

Identified Infrastructure Improvements:

To address the storage capacity, supply capacity and pipeline condition, the *City of San Bruno Water System Master Plan – November 2012 (WSMP)* identified the following capital improvement projects (CIP) which pertain to the area of concern for this assessment: **EXCIP-P1-7**, **RR-P1-8** and **FUTCIP-P-2**. These CIPs are located and detailed further in Table 5 and Figure 2 below. These projects are required to resolve storage capacity, supply capacity and pipeline condition issues within the corridor. Portions of the abandon water mains will require removal, in the event green and sustainable infrastructure streetscape improvements are implemented along the San Mateo Avenue corridor. An existing 8-inch water main between Sylvan Avenue and Angus Avenue will require relocation in the event green and sustainable infrastructure streetscape improvements are implemented along the San Mateo Avenue corridor.

Figure 2: Water Capital Improvement Project Locations



Table 6: Capital Improvement Project to Remain

Capital Improvement Project ID	Improvement Type	Reason for Improvement	Improvement Description	Reference Table
EXCIP-P1-7/RR-P1-8	Upsized pipeline in some areas and new pipeline in others.	Fire Flow/ Rehabilitation and Replacement	Upsize pipeline to 8-inch in San Mateo Avenue from Kains to Angus Avenues.	Table 9-2: Recommended Reliability Capital Improvement Projects Table 9-3: Recommended Rehabilitation and Replacement Capital Improvement Projects
FUTCIP-P-2	New Pipeline	Provide looping in Transit Corridors Area	New 12-inch pipeline within San Mateo Avenue between El Camino Real and Huntingtin Avenue	Table 9-1: Recommended Capacity Capital Improvement Projects and Chapter 8: Evaluation of Future Water System, Section 8.5.4: Pipelines
RR-P3	Upsize Pipeline	Rehabilitation and Replacement	Replacement of water pipes and upsizing 6-inch pipes to 8-inch pipes.	Table 9-3: Recommended Rehabilitation and Replacement Capital Improvement Projects

STORM DRAIN SYSTEM

EXISTING CONDITIONS:

The following information on the existing storm drain system was obtained from the *City of San Bruno Storm Drain Master Plan – June 2014 (SDMP)*. The area of concern in this utility assessment, within San Mateo Avenue between El Camino Real and Huntington Avenue, is located in watersheds A, B, and C, as defined in the SDMP. The storm drain system for watershed A (1415.8 acres) consists of underground pipes, boxes and channels. The storm drain system for watershed B (504.6 acres) consists of underground pipes, boxes, channels, and a detention basin. The storm drain system for watershed C (648.5 acres) consists of underground pipes and boxes. Belle Air Boxes, located between Pine Street and San Bruno Avenue, collects runoff from both watershed A and C from Huntington Avenue before discharging to San Bruno Channel. Watershed B discharges to Cupid Row Canal, Crystal Spring Channel. Hydrologic analysis performed determined the peak 25-year storm flow in cubic feet per second (cfs) to be 1154.3 cfs for watershed A and 572.3 cfs for watershed C. Hydraulic analysis was used to estimate the existing storm water collection system hydraulic capacity, identify potential deficiencies, and assess hydraulic performance of proposed improvement options.

Hydraulic analysis, in the SDMP, determined the following areas, within the vicinity of San Mateo Avenue between El Camino Real and Huntington Avenues, where potential capacity deficiencies may occur: the intersection of Huntington Avenue and San Mateo Avenue, the intersection of Angus Avenue and San Mateo Avenue, and in the vicinity of 1st Avenue and Pine Street, Belle Air Boxes. The capacity of the storm drain system at the intersection of Huntington and San Mateo Avenues is 528.1 cfs while the maximum flow is 843.8 cfs. The maximum flow at the Belle Air Boxes was determined to be 1231.9 cfs while the capacity is 387.3 cfs. The capacity of the primary existing pipe channel within San Mateo Avenue between Sylvan and Angus Avenues was determined to be sufficient.

The existing storm drain infrastructure in San Mateo Avenue consists of a series of catch basins which drain to a 44-inch steel pipe under the sidewalk on the east side of the corridor.

Below in Table 6 are excerpts and references from the City of San Bruno Storm Drain Master Plan – June 2014 that have been utilized for this assessment to identify deficiencies in the storm drain system.

Table 6: Utilized Existing Conditions Excerpts from the *City of San Bruno Storm Drain Master Plan – June 2014*

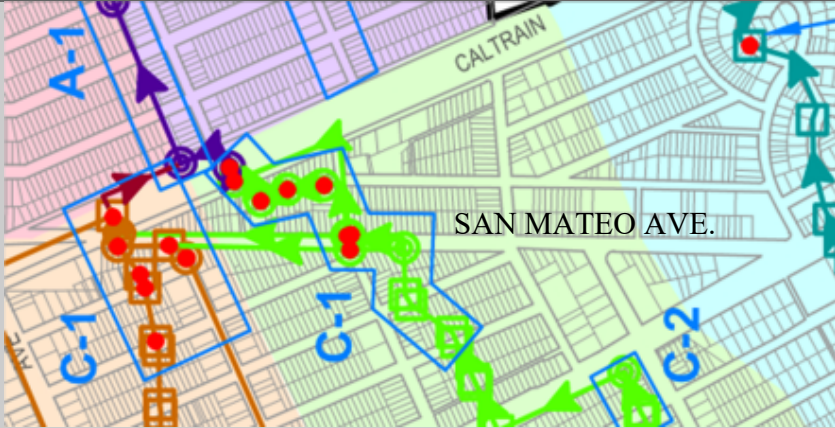
Reference Figure/ Table ID	Reference Figure/Table Name	Description	Description (In Vicinity of San Mateo Avenue)	Pertinence												
Figure ES-1	Identified Problem Areas by Watershed	This figure shows the watersheds and associated pipe structures by color and identifies the problem areas using red dots. Orange is watershed A, blue is watershed B, and green is watershed C.		San Mateo Avenue between El Camino Real and Huntington Avenue is in Watershed A, B, and C. Identified problem areas occur near the intersection of San Mateo Avenue and Angus Avenue, and the intersection of San Mateo Avenue and Kains Avenue. This area is Identified C-1.												
Table 2.1	Watershed Summary	<table border="1"> <thead> <tr> <th>Watershed</th> <th>Area (acres)</th> </tr> </thead> <tbody> <tr> <td>Watershed A</td> <td>1415.8</td> </tr> <tr> <td>Watershed B</td> <td>504.6</td> </tr> <tr> <td>Watershed C</td> <td>648.5</td> </tr> </tbody> </table>		Watershed	Area (acres)	Watershed A	1415.8	Watershed B	504.6	Watershed C	648.5					
Watershed	Area (acres)															
Watershed A	1415.8															
Watershed B	504.6															
Watershed C	648.5															
Table 2.2	Existing Storm Drain System Summary	<table border="1"> <thead> <tr> <th>Watershed</th> <th>Storm Drain System</th> <th>Discharge Location</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Underground pipes, boxes, and channels</td> <td>Belle Air Boxes to San Bruno Channel</td> </tr> <tr> <td>B</td> <td>Detention Basin, underground pipes, boxes, and channels</td> <td>Cupid Row Canal (Crystal Spring Channel)</td> </tr> <tr> <td>C</td> <td>Underground pipes and boxes</td> <td>Belle Air Boxes to San Bruno Channel</td> </tr> </tbody> </table>		Watershed	Storm Drain System	Discharge Location	A	Underground pipes, boxes, and channels	Belle Air Boxes to San Bruno Channel	B	Detention Basin, underground pipes, boxes, and channels	Cupid Row Canal (Crystal Spring Channel)	C	Underground pipes and boxes	Belle Air Boxes to San Bruno Channel	
Watershed	Storm Drain System	Discharge Location														
A	Underground pipes, boxes, and channels	Belle Air Boxes to San Bruno Channel														
B	Detention Basin, underground pipes, boxes, and channels	Cupid Row Canal (Crystal Spring Channel)														
C	Underground pipes and boxes	Belle Air Boxes to San Bruno Channel														

Table 3.2	Hydrology Analysis Summary					
		Watershed	Peak 25-Year Storm Flow (cfs)	Peak Flow per Acre	Volume (ac-ft)	Volume per acre
		A	1154.3	0.8	317	0.22
		B	450.7	0.9	130	0.26
		C	572.3	0.9	163	0.25

Table 4.1	Capacity Deficiency Summary for Watersheds A, B, C, E, and F	The capacity evaluation using hydraulic modeling determined capacity deficiencies based on a 25-year design storm.					From the excerpts, the intersection of Huntington and San Mateo Avenues is under capacity. Along Angus Avenue, in the vicinity of San Mateo Avenue, was identified as an area where capacity issues may occur.
		Watershed A		Watershed C			
			Capacity/Max Flow		Capacity/Max Flow		
		Earl Avenue at Crosby Court	25.9/301.3	Madison Avenue	39.6/58.7		
		Northeast of the intersection of Freeways 280 and 380	525.1/532.2	Whitman Way	84.7/136.4		
		Cherry Avenue	375.4/689.9	Jenevein Avenue	25.8/57.8		
		Commodore Drive	557.8/549.5	Cypress Avenue	15.4/34.5		
		Grundy Lane	336.8/539.7	Angus Avenue	N/A		
		Bayhill Drive	522.4/588.1	Casio's Parking Lot	N/A		
		El Camino Real	12.8/25.0	Huntington Avenue	528.1/843.8		
		Masson Avenue	0/369.4 (negative/0 slope)	Belle Air Boxes	387.3/1231.9		
		Mills Avenue	218.4/370.6				
		Huntington and San Mateo Avenue intersection	528.1/843.8				
		Belle Air Boxes	387.3/1231.9				

Identified Infrastructure Improvements:

To address the capacity deficiencies affecting San Mateo Avenue between El Camino Real and Huntington Avenue, the *City of San Bruno Storm Drain Master Plan – June 2014* identified the following CIP, **CD-1**. **CD-1** is located and detailed further in Figure 3 and Table 7 below. The **CD-1** capital improvement project should be completed prior to streetscape improvements, to prevent future impacts to the San Mateo Avenue corridor. A 44-inch steel storm drain is located under the sidewalk, between El Camino Real to Sylvan Avenue, which will impact green and sustainable infrastructure streetscape improvements proposed for the San Mateo Avenue corridor. An existing concrete box culvert is located beneath the parking strip and sidewalk in the 500 block of San Mateo Avenue that will impact green and sustainable infrastructure streetscape improvements proposed for the corridor. Based on information from the City, the existing concrete culvert from 555 to 715 San Mateo Avenue must be replaced due to the condition of the roof.

Figure 3: Storm Drain Capital Improvement Project Location



Table 7: Capital Improvement Project to Remain

Project ID	Description & Location	Constructed	Deficiency	Improvements	Resolution
CD-1	Bolt Manholes & Install Catch Basin Backflow Preventers in the vicinity of San Mateo, Huntington, Angus and Kains Avenues	1900s	Flat area; existing ground elevations are low; existing pipe has very shallow cover	<u>Existing:</u> Gravity main trunk collect local runoff <u>Proposed:</u> Pressurized main trunk at peak flow	This project is to remain a CIP to be completed in the near future.

PACIFIC GAS AND ELECTRIC SYSTEM:

EXISTING CONDITIONS:

Based on information provided by the Pacific Gas and Electric Company (PG&E), there is sufficient capacity for the current demand on the gas and electrical systems. PG&E identified sections of empty conduits within San Mateo Avenue between El Camino Real and Huntington Avenue intended for future use, if necessary.

IDENTIFIED INFRASTRUCTURE IMPROVEMENTS:

At this time, PG&E does not recommend additional conduits.

APPENDIX B: PHOTOMETRIC ASSESSMENT

By: CSW/Stuber- Stroeh Engineering Group, Inc

B. PHOTOMETRIC ASSESSMENT



45 Leveroni Court
Novato, CA 94949
www.cswst2.com

415.883.9850
Fax: 415.883.9835

Novato
Petaluma
Sacramento
Redwood City

CSW/Stuber-Stroeh Engineering Group, Inc.

Engineers | Land Planners | Surveyors

MEMORANDUM

DATE: July 15, 2019 **FILE:** 2019-20-013
TO: City of San Bruno, Community Development Department
FROM: Julia Harberson, CSW|ST2
RE: **PHOTOMETRIC ASSESSMENT FOR SAN MATEO AVENUE, SAN BRUNO**

This memorandum addresses our assessment of the photometric analysis along the San Mateo Avenue corridor is summarized below using standards from the American National Standards Institute (ANSI) and the Illuminating Engineering Society of North America (IESNA). The analysis specifically focuses on standards for vehicles, pedestrians and bicyclists.

FACTORS OF ANALYSIS:

- Pedestrian conflict is defined as high, medium or low over a one-hour peak night time period:
 - high pedestrian conflict will have approximately 100 or more pedestrian,
 - The road corridor of this project falls under this category
 - medium pedestrian conflict will have 11 to 99 pedestrians and
 - low pedestrian conflict will have under 10 pedestrian
- Pavement is classified as R1, R2, R3, or R4:
 - R1 = Portland-cement concrete

- R2 & R3 = Asphalt, rough textured (typical roadway)
 - The San Mateo Avenue corridor falls under this category
- R4 = Asphalt, smooth textured
- Road type shown below is defined as a Collector.
- 'Lux' is lumens per square meter
- 'FC' (foot-candles) is lumens per square foot. This is the preferred unit for California.

The table below shows an abridged Table 2 from IESNA RP-8:

Road and Pedestrian Conflict Area		Pavement Classification (Minimum Maintained Average Values)			Uniformity Ratio E_{avg}/E_{min}	Veiling Luminance Ratio L_{vmax}/L_{avg}
Road	Pedestrian Conflict Area	R1 lux/ftc	R2 & R3 lux/ftc	R4 lux/ftc		
Collector	High	8.0/0.8	12.0/1.2	10.0/1.0	4.0	0.4
	Medium	6.0/0.6	9.0/0.9	8.0/0.8	4.0	0.4
	Low	4.0/0.4	6.0/0.6	5.0/0.5	4.0	0.4

San Mateo Avenue: El Camino Real to Huntington Avenue

- Curb to curb = approximately 44 feet
- Street lights are on both side of San Mateo Avenue.
- Street lights are spaced approximately 120 feet with additional light poles at the intersections
- PHOTOMETRIC CALCULATIONS: El Camino Real to Huntington Avenue
 - Average foot-candles = 0.78
 - Max Foot Candles (FC) = 4.1
 - Min Foot Candles = 0.1
 - Minimum to Maximum FC Ratio: 0.01
 - Maximum to Minimum FC Ratio = 78.55
 - Average to Minimum FC Ratio = 15.02
- Table summary of photometric calculations comparing existing and preferred IESNA standards:

	IESNA Standard	Existing Condition	Compliance (Yes or No)
FC (average value)	1.2	0.78	No
Uniformity Ratio	4.0	15.02	No

- Conclusion: Additional light poles spaced appropriately throughout the entire corridor will increase the minimum FC Ratio and as a result lower the Uniformity Ratio closer to standard IESNA value of 4.0. Ideally the Uniformity Ratio is within 2.0 of the set IESNA Standard. Furthermore, adding additional light poles will have an adverse effect on the Average FC, but not substantial enough to increase the value so high as to be non-compliant. An additional light pole is required midblock between Angus Avenue and Kains Avenue as the foot candle levels fall below the minimum level.



Typical Street Light along San Mateo Avenue

APPENDIX C: ACCESSIBILITY ASSESSMENT

By: CSW/Stuber- Stroeh Engineering Group, Inc

C. ACCESSIBILITY ASSESSMENT



45 Leveroni Court
Novato, CA 94949
www.cswst2.com

415.883.9850
Fax: 415.883.9835

Novato
Petaluma
Sacramento
Redwood City

CSW/Stuber-Stroeh Engineering Group, Inc.

Engineers | Land Planners | Surveyors

MEMORANDUM

DATE: June 21, 2019 **FILE:** 2019-20-013
TO: City of San Bruno, Community Development Department
FROM: Julia Harberson, CSW|ST2
RE: **ACCESSIBILITY ASSESSMENT FOR SAN MATEO AVENUE, SAN BRUNO**

This memorandum addresses our assessment of accessibility analysis along the San Mateo Avenue corridor. Summarized below are the applicable standards from the Americans with Disabilities Act (ADA), Part 2 of Title 24 of the California Building Code and California Disabled Accessibility Guidebook (CalDAG) used in this analysis. The analysis specifically focuses on standards for pedestrian access and future streetscape improvements and is limited to the existing sidewalk within the public right of way. Analysis of building entries outside the public right of way are not included in this analysis.

FACTORS OF ANALYSIS:

- Accessible Routes:
 - Accessible routes shall consist of one or more of the following components
 - Walking surface with a running slope not steeper than 1:20
 - Doorways
 - Ramps
 - Curb ramps, excluding the flared sides.
 - All components of an accessible route shall comply with Title 24.
- Cross Slope:
 - Maximum = $\frac{1}{4}$ " per foot or 2.0%
 - Recommended Design = 1.75%
- Doorway Landings: all doorways shall provide a 48" level (maximum $\frac{1}{4}$ " per foot slope) landing. Note this analysis only applies when building doorways are located at the back of sidewalk (not recessed).



Typical Street Section along San Mateo Avenue

ANALYSIS OF EXISTING CONDITIONS:

General Sidewalk Accessibility Condition

- Standard City of San Bruno 6" Curb and Gutter along entire San Mateo Avenue corridor.
- Typical Sidewalk Section: sidewalk generally slopes from back of sidewalk towards the street (note: various locations along the corridor, the concrete flags have broken at the construction

joints preventing a continuous slope across section and causing warped and reverse slope sidewalk).

- Typical Section at Bulb-outs: sidewalk generally slopes from back of sidewalk towards curb line of street, then reverse slope in the bulb-out following cross slope of street.

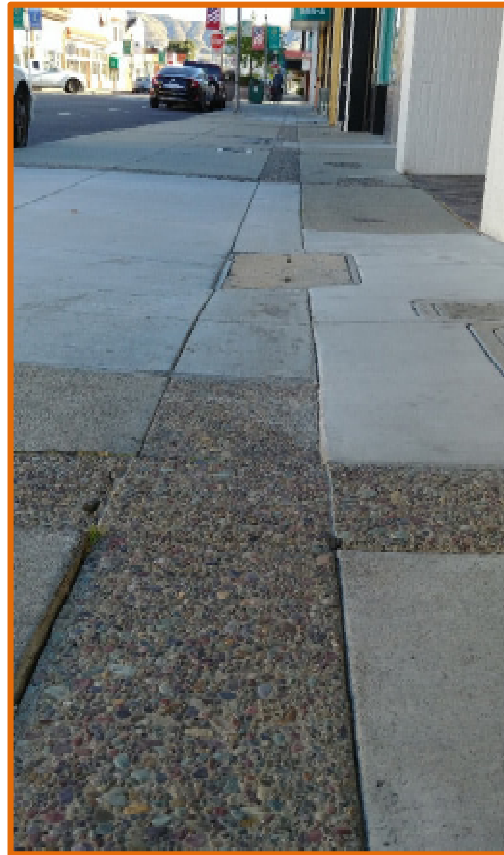
East Side of San Mateo Avenue Corridor

El Camino Real to Cypress Court:

- Average Cross Slope = approximately 0.7%
- Doorway Landings: Recessed outside of public right of way.
- Ramps: Compliant
- Conclusion: existing street and back of sidewalk elevations allow for construction of ADA compliant corridor improvements.

Cypress Court to Sylvan Avenue:

- Average Cross Slope = approximately 1.0%
- Doorway Landings: Recessed outside of public right of way.
- Ramps: Compliant
- Conclusion: existing street and back of sidewalk elevations allow for construction of ADA compliant corridor improvements.



Warped and Reversed Slope Sidewalk

Sylvan Avenue to Angus Avenue:

- Average Cross Slope = approximately 0.9%
- Doorway Landings: Recessed outside of public right of way.
- Ramps: Compliant
- Conclusion: existing street and back of sidewalk elevations allow for construction of ADA compliant corridor improvements.



Existing Ramp without Detectable Warning

Angus Avenue to Kains Avenue:

- Average Cross Slope = approximately 1.0%
- Doorway Landings: Recessed outside of public right of way.
- Ramps: Non-compliant
- Conclusion: existing street and back of sidewalk elevations allow for construction of ADA compliant corridor improvements.

West Side of San Mateo Avenue Corridor

El Camino Real to Jenevien Avenue:

- Average Cross Slope = approximately 1.8% (with segments in excess of 2%)
- Doorway Landings: Recessed outside of public right of way.
- Ramps: Compliant
- Conclusion: Sidewalk cannot be reconstructed as a continuous surface and maintain ADA compliant cross slopes. Installation of a Furniture Zone of Street Side Bioretention Area can be utilized to absorbed grade differential and create an ADA compliant Pedestrian Zone.



Sidewalk Section with Furniture Zone

Jenevien Avenue to Sylvan Avenue:

- Average Cross Slope = approximately 1.9% (with segments in excess of 2%)
- Doorway Landings: Recessed outside of public right of way.
- Ramps: Compliant
- Conclusion: Sidewalk cannot be reconstructed as a continuous surface and maintain ADA compliant cross slopes. Installation of a Furniture Zone of Street Side Bioretention Area can be utilized to absorbed grade differential and create an ADA compliant Pedestrian Zone.



Sylvan Avenue to Angus Avenue:

Street Side Bioretention (Source: City of Seattle, WA)

- Average Cross Slope = approximately 1.9% (with segments in excess of 2%)
- Doorway Landings: Recessed outside of public right of way.
- Ramps: Non-compliant
- Conclusion: Sidewalk cannot be reconstructed as a continuous surface and maintain ADA compliant cross slopes. Installation of a Furniture Zone of Street Side Bioretention Area can be utilized to absorbed grade differential and create an ADA compliant Pedestrian Zone.

Angus Avenue to Kains Avenue:

- Average Cross Slope = approximately 1.7% (with segments in excess of 2%)
- Doorway Landings: Recessed outside of public right of way.
- Ramps: Non-compliant
- Conclusion: Sidewalk cannot be reconstructed as a continuous surface and maintain ADA compliant cross slopes. Installation of a Furniture Zone of Street Side Bioretention Area can be utilized to absorbed grade differential and create an ADA compliant Pedestrian Zone.

APPENDIX D: HYDROLOGY ASSESSMENT

By: CSW/Stuber- Stroeh Engineering Group, Inc

D. HYDROLOGY ASSESSMENT



45 Leveroni Court
Novato, CA 94949
www.cswst2.com

415.883.9850
Fax: 415.883.9835

Novato
Petaluma
Sacramento
Redwood City

CSW/Stuber-Stroeh Engineering Group, Inc.

Engineers | Land Planners | Surveyors

MEMORANDUM

DATE: July 15, 2019 **FILE:** 2019-20-013
TO: City of San Bruno, Community Development Department
FROM: Julia Harberson, CSW|ST2
RE: **HYDROLOGY ASSESSMENT MEMORANDUM
FOR SAN MATEO AVENUE, SAN BRUNO**

This memorandum addresses the assessment of the existing hydrology along the San Mateo Avenue Transit Corridor between El Camino Real and Huntington Avenue. The assessment includes identification of necessary modifications to the existing drainage system, due to streetscape improvements, and recommendations for location and sizing of green infrastructure in accordance with San Mateo County's Provision C.3.

EXISTING CONDITIONS:

The existing watersheds, drainage management areas (DMAs), primarily drain surface water runoff from the adjacent buildings along San Mateo Avenue, between El Camino Real and Huntington Avenue, and sidewalks and roadways. The surface runoff is captured by catch basins and drop inlets within San Mateo Avenue and conveyed to an existing 44-inch steel storm drain main under the sidewalk on the east side of San Mateo Avenue.

Hydraulic analysis, in the *City of San Bruno Storm Drain Master Plan – June 2014*, determined the following areas, within the vicinity of San Mateo Avenue between El Camino Real and Huntington Avenues, where potential capacity deficiencies may occur: the intersection of Huntington Avenue and San Mateo Avenue and the intersection of Angus Avenue and San Mateo Avenue. The capacity of the primary existing pipe channel within San Mateo Avenue between Sylvan and Angus Avenues was determined to be sufficient.

INDENTIFIED INFRASTRUCTURE IMPROVEMENTS:

To address the capacity deficiencies affecting San Mateo Avenue between El Camino Real and Huntington Avenue, the *City of San Bruno Storm Drain Master Plan – June 2014* identified the following capital improvement project (CIP), **CD-1**, to address these deficiencies. **CIP CD-1**, which encompasses bolt manholes and the installation of catch basin backflow preventers, will need to remain a near future CIP and be completed prior to streetscape improvements. Figure 1 below, shows the location of CIP CD-1.

Figure 1: Storm Drain Improvement Project Locations



GREEN AND SUSTAINABLE INFRASTRUCTURE:

The San Mateo Countywide Water Pollution Prevention Plan (SMCWPPP) C.3 Stormwater Technical Guidance (Version 5 – June 2016) states that C.3 Regulated projects are defined to include “public and private projects that create and/or replace 10,000 square feet or more of impervious surface ...” The San Mateo Avenue Corridor has a total watershed of approximately 326,300 square feet. The project proposes to replace existing impervious sidewalk. This will result in the creation and/or replacement of 49,360 square feet and trigger the C.3 regulations. However, Table 2-1: Projects Excluded from Provision C.3 Requirements, of the SMCWPPP C.3 Stormwater Technical Guidance manual, specifically excludes sidewalks. As such, the Priority 1 scope of the project (sidewalk demolition, sidewalk construction, street trees and lighting) would result in an exempt project. However, as the scope of the project is increased to include additional Priority Items (Priority 2 to 4, identified in the San Mateo Avenue Streetscape Plan) the scope of the project expands beyond a sidewalk project and will trigger the C.3 regulations.

SMCWPPP C.3 Stormwater Technical Guidance, suggested Low Impact Development (LID) design methods applicable to the San Mateo Avenue street scape improvements include interceptor trees (Figure 2 below), bioretention areas (Figure 3 below) and pervious pavement (Figure 4 below).

Interceptor Trees

Trees perform a variety of functions that reduce runoff volumes and improve water quality. Leaf canopies intercept and hold rainwater on the leaf surface, preventing it from reaching the ground and becoming runoff. Root systems create voids in the soil that facilitate infiltration. Trees also absorb and transpire large quantities of groundwater, making the soil less saturated, which allows more stormwater to infiltrate. Through the absorption process, trees remove pollutants from stormwater and stabilize them. Finally, tree canopies shade and cool paved areas.

A project may earn stormwater treatment credits by planting new trees and preserving existing trees at the project site. For each qualifying tree that is planted or preserved, the project earns stormwater treatment credits, which reduce the surface area (measured in square feet) of the project that must receive stormwater treatment. In other words, the stormwater treatment credit can be subtracted from the amount of impervious surface area requiring treatment.

As shown in Table 1, different amounts of stormwater reduction credit are assigned to new evergreen and new deciduous trees, and existing trees receive credit for the square footage that is under the existing tree canopy.

Table 1: Stormwater Treatment Credits for Interceptor Tree

	New Evergreen Trees	New Deciduous Trees	Existing Trees
Credits for new and existing trees that meet interceptor tree minimum requirements	200 square feet	100 square feet	Square footage under the tree canopy for trees with an average DBH of 12 inches or more.
*DBH: Diameter at breast height (4.5 feet above grade) Source: BASMAA LID Feasibility Criteria Report, 2011 (based on the tree credit system in the State Construction General Permit standards for post-construction stormwater control)			

Load-bearing modular grid products, such as the Silva Cell, have also been developed to allow the planting of trees in uncompacted native soils, fill soils, or stormwater treatment soils, extending under sidewalks and other areas of pavement. With the Silva Cell product, for example, each cell is composed of a frame (or frames) and a deck (see Figure 2). The frames can be stacked one, two, or three units high before they are topped with a deck to create a maximum amount of soil volume for tree root growth and stormwater infiltration. Cells can be installed laterally as wide as necessary. Void space within the cells may accommodate the surrounding utilities.

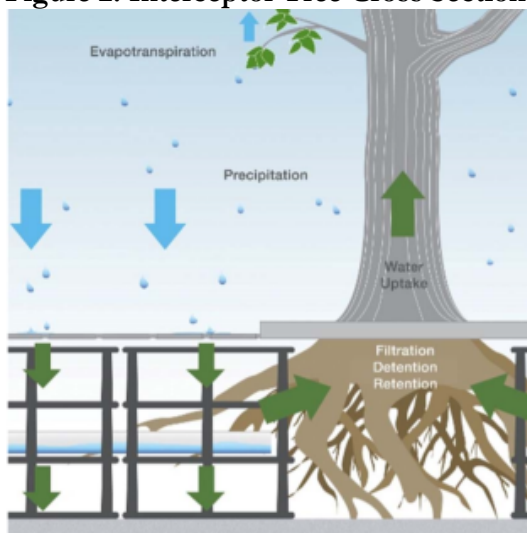
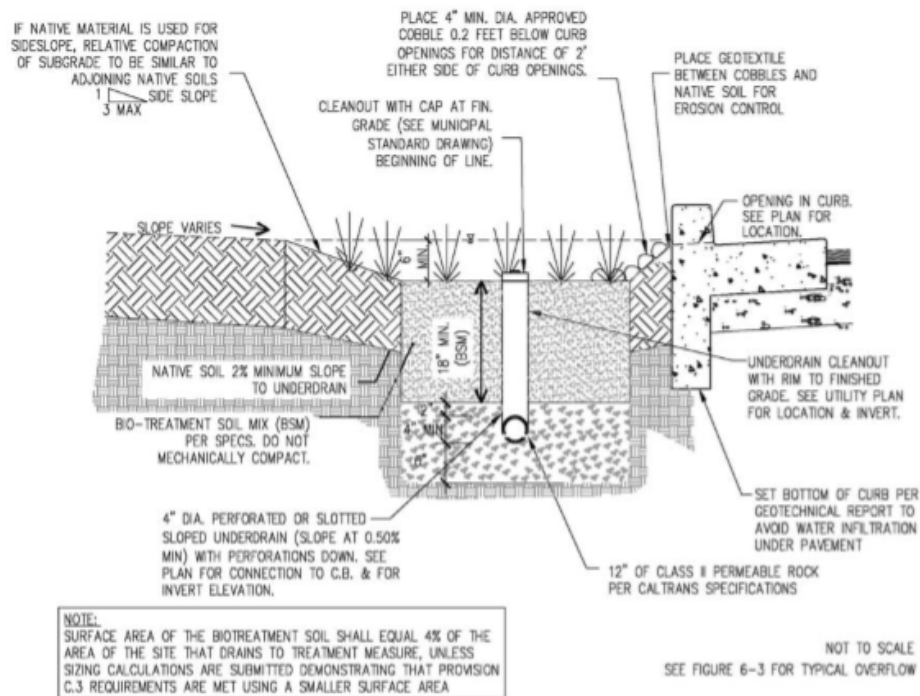
Figure 2: Interceptor Tree Cross Section

Figure 4-1: Silva Cells, stacked three units high. (Source: Deep Root Technologies, www.deeproot.com). The use of this photograph is for general information only, and is not an endorsement of this or any other proprietary product.

Bioretention Areas

Bioretention areas, or “rain gardens,” are concave landscaped areas that function as soil and plant-based filtration devices that remove pollutants through a variety of physical, biological, and chemical treatment processes. Bioretention areas can be any shape. Bioretention areas normally consist of the following layers, starting from the top: a surface ponding area, a layer of mulch, planting soil and plants, and an underlying rock layer with an underdrain that connects to the municipal storm drain system. The recommended sizing method for bioretention areas is the 4% method where the required surface area of the treatment method is 4 percent of the impervious area that drains to it. The installation of bioretention areas will require the demolition of curb, gutter and sidewalk in the vicinity of the planter.

Figure 3: Bioretention Area Cross Section

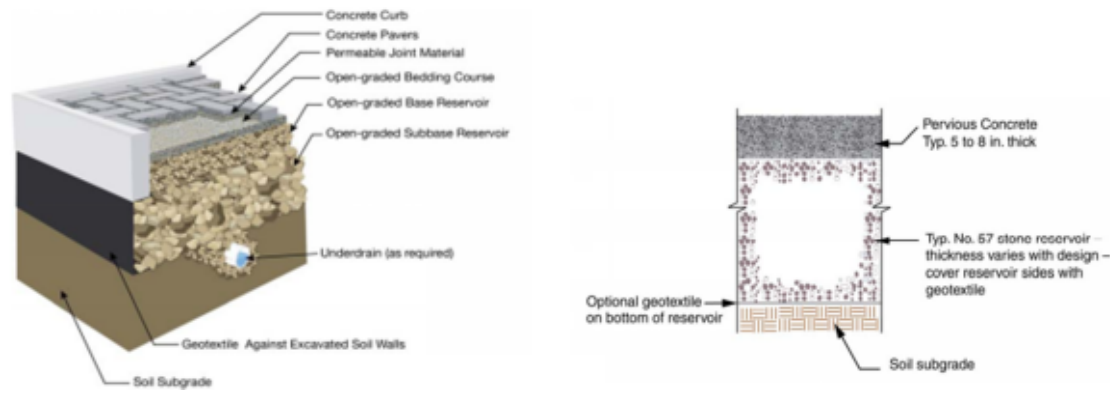


Pervious Pavement

Pervious pavement types include pervious concrete, porous asphalt, permeable concrete pavers and permeable interlocking concrete pavers (PICP). Permeable pavers allow infiltration across the entire surface of the paver while PICP utilize the joint space between the pavers for infiltration. Except for PICP, pervious pavement is generally used for areas with light vehicle loading and/or lightly trafficked areas, such as automobile parking areas. The term pervious pavement describes a system comprised of a load-bearing, durable surface constructed over a subbase/base structure typically consisting of compacted, open-graded aggregate. This layer or layers temporarily stores water prior to infiltration or drainage to a controlled outlet. The surface is porous such that water infiltrates across the entire surface of the material, or in the joints, at a high rate. If an area of pervious pavement is underlain with pervious soil or pervious storage material, such as a gravel layer sufficient to hold at least the Municipal Stormwater Regional Permit Provision C.3.d volume of rainfall runoff, it is not considered an impervious surface and can function as a self-treating or self-retaining area.

Pervious pavements are used as a self-retaining treatment method, the maximum acceptable ratio of pervious area to the receiving pervious area, pervious pavers, is two-to-one (2:1). The installation of pervious pavement will require asphalt removal and shallow excavation to create the reservoir.

Figure 4: Pervious Pavement Section



Analysis

Due to the limited available area within the San Mateo Avenue Corridor, for implementation of green infrastructure, it is not feasible to fully implement a single LID treatment measure to meet the SMCWPPP C.3 stormwater treatment requirements for the entire watershed. Implementation of a combination of interceptor trees, bioretention areas and pervious pavement can be integrated to achieve a maximum feasible percentage of the SMCWPPP C.3 stormwater treatment requirements.

Four (4) scenarios were analyzed to meet the SMCWPPP C.3 stormwater treatment requirements. Scenario 1 would meet the C.3 requirements and treat the sidewalk that is created and/or replaced. Scenarios 2 and 3, would exceed the minimum C.3 requirements by treating the sidewalk that is created and/or replaced as well as a portion of the greater watershed without any revisions to the existing curb line. Scenario 4 studies the possibility of treating the entire San Mateo Avenue Transit Corridor watershed. Each scenario will meet the minimum requirements of the SMCWPPP C.3 Guidance manual. Below is a description of LID treatment measure that would be implemented with each scenario.

LID Scenarios Analyzed:

- Scenario 1: Implements LID measures to manage runoff from the created and/or replaced sidewalk with the decorative pavement band in the sidewalk constructed of permeable pavement sized to act as self-retaining areas and utilizes interceptor trees.
- Scenario 2: Implements LID measures to manage runoff from the created and/or replaced sidewalk with the decorative pavement band in the sidewalk constructed of permeable pavement sized to act as self-retaining areas and portions of the existing watershed pavement with permeable pavement, within the 6-foot wide parking strip, sized to act as self-retaining areas and utilizes interceptor trees.
- Scenario 3: Implements LID measures to manage runoff from the created and/or replaced sidewalk with the decorative pavement band in the sidewalk constructed of permeable pavement sized to act as self-retaining areas and portions of the existing watershed pavement with permeable pavement, within the 6-foot wide parking strip, sized to act as self-retaining areas and utilizes interceptor trees. Note, the use of Silva Cells under the permeable pavement is included in this scenario.
- Scenario 4: Implements LID measures to manage the entire San Mateo Avenue corridor watershed with the combined LID measures of permeable pavement sized to act as self-retaining areas, utilizing Silva Cells, interceptor trees and bioretention areas.

Results

The Drainage Management Areas (DMA) tributary to the San Mateo Avenue Transit Corridor and potential sustainable green infrastructure are identified in Green Infrastructure Exhibits located in Appendix A. Table 2, below, identifies the DMA sub-watershed areas and created and/or replaced impervious surfaces within each sub-watershed.

Results of the analysis for Scenario 1 are identified below in Table 3. The use of the permeable pavement strip in the sidewalk and interceptor trees meets the SMCWPPP C.3 stormwater treatment requirements to manage runoff from the created and/or replaced impervious surface in the San Mateo Avenue Transit Corridor.

Scenario 2 results are depicted in Table 4, below. The use of the permeable pavement strip in the sidewalk and interceptor trees meets the SMCWPPP C.3 stormwater treatment requirements to manage runoff from the created and/or replaced impervious surface in the San Mateo Avenue Transit Corridor. However, there is insufficient permeable area to treat the entire impervious surface of the San Mateo Avenue watershed.

Results of the calculations for Scenario 3 are shown in Table 5. The use of the permeable pavement strip in the sidewalk and interceptor trees meets the SMCWPPP C.3 stormwater treatment requirements to manage runoff from the created and/or replaced impervious surface in the San Mateo Avenue Transit Corridor. However, there is insufficient permeable area to manage the treatment storm event for the entire impervious surface of the San Mateo Avenue watershed with permeable pavers and Silva Cells.

Scenario 4 results are depicted in Table 6, below. The use of the permeable pavement strip in the sidewalk and interceptor trees meets the SMCWPPP C.3 stormwater treatment requirements to manage runoff from the created and/or replaced impervious surface in the San Mateo Avenue Transit Corridor. However, there is insufficient bioretention area, permeable pavement area and Silva cells to manage the treatment storm event for the entire impervious surface of the San Mateo Avenue Transit Corridor watershed. Reducing parking to allow for larger bioretention areas, approximately 3,300 square feet of additional bioretention area, will allow for 100% management of the entire watershed.

Table 2: Summary of San Mateo Avenue Watershed Areas

Drainage Management Area (DMA) ID	Sub-Watershed Area (sf)	Created/Replaced Impervious Area w/o Treatment Measures (sf)
1	8999	2755
2	17582	3019
3	21294	3200
4	22966	2867
5	5016	671
6	24669	2970
7	7184	634
8	6125	1165
9	11750	1431
10	5274	441
11	6329	1023
12	4331	1005
13	10198	1262
14	7094	1191
15	8457	1097
16	16978	1726
17	9371	1376
18	16927	1831
19	17372	3242
20	6387	1012
21	7706	1346
22	4500	644
23	11173	1433
24	11524	1191
25	5058	1400
26	10204	1547
27	6297	2244
28	4187	427
29	6889	1051
30	4182	1531
31	13552	1704
32	1876	473
33	2946	560
34	1823	391

Table 3: Summary of Scenario 1 Results (Management of the created/replaced pavement only)

DMA ID	Created/Replaced Impervious Area w/o Permeable Pavement Area (sf)	Permeable Pavement Area (sf)	Interceptor Trees	Percent of Area Treated (%)
1	1763	992	6	100
2	1931	1088	5	100
3	2200	500	6	100
4	1587	1280	9	100
5	511	160	2	100
6	1938	1032	6	100
7	530	104	1	100
8	645	520	3	100
9	911	520	4	100
10	265	176	1	100
11	739	284	3	100
12	677	328	2	100
13	814	448	3	100
14	675	516	3	100
15	705	392	3	100
16	982	744	4	100
17	896	480	3	100
18	1271	560	4	100
19	2430	812	5	100
20	712	300	2	100
21	894	452	3	100
22	372	272	2	100
23	921	512	3	100
24	679	512	3	100
25	908	492	3	100
26	1067	480	4	100
27	1624	620	4	100
28	255	172	1	100
29	691	360	3	100
30	979	552	3	100
31	1068	636	3	100
32	273	200	2	100
33	320	240	2	100
34	239	152	1	100

Table 4: Summary of Scenario 2 Results (Management of portion of San Mateo Ave Corridor)

DMA ID	Sub-Watershed Area (sf)	Permeable Pavement Area (sf)	Interceptor Trees	Percent of Area Treated (%)
1	8999	1952	6	73.3
2	17582	2138	5	35.8
3	21294	1580	6	19.5
4	22966	2810	9	31.1
5	5016	460	2	24.1
6	24669	1722	6	24.5
7	7184	104	1	7.6
8	6125	1420	3	53.5
9	11750	1750	4	33.8
10	5274	326	1	16.2
11	6329	650	3	24.4
12	4331	628	2	33.0
13	10198	1018	3	23.1
14	7094	1194	3	40.4
15	8457	896	3	25.0
16	16978	1806	4	23.8
17	9371	480	3	12.9
18	16927	1508	4	20.1
19	17372	812	5	12.6
20	6387	738	2	28.5
21	7706	1148	3	35.2
22	4500	590	2	33.0
23	11173	1220	3	25.0
24	11524	1202	3	23.8
25	5058	1200	3	59.8
26	10204	1260	4	29.7
27	6297	1418	4	58.5
28	4187	400	1	24.3
29	6889	726	3	27.3
30	4182	1230	3	78.4
31	13552	1488	3	24.8
32	1876	500	2	77.9
33	2946	516	2	47.2
34	1823	302	1	48.0

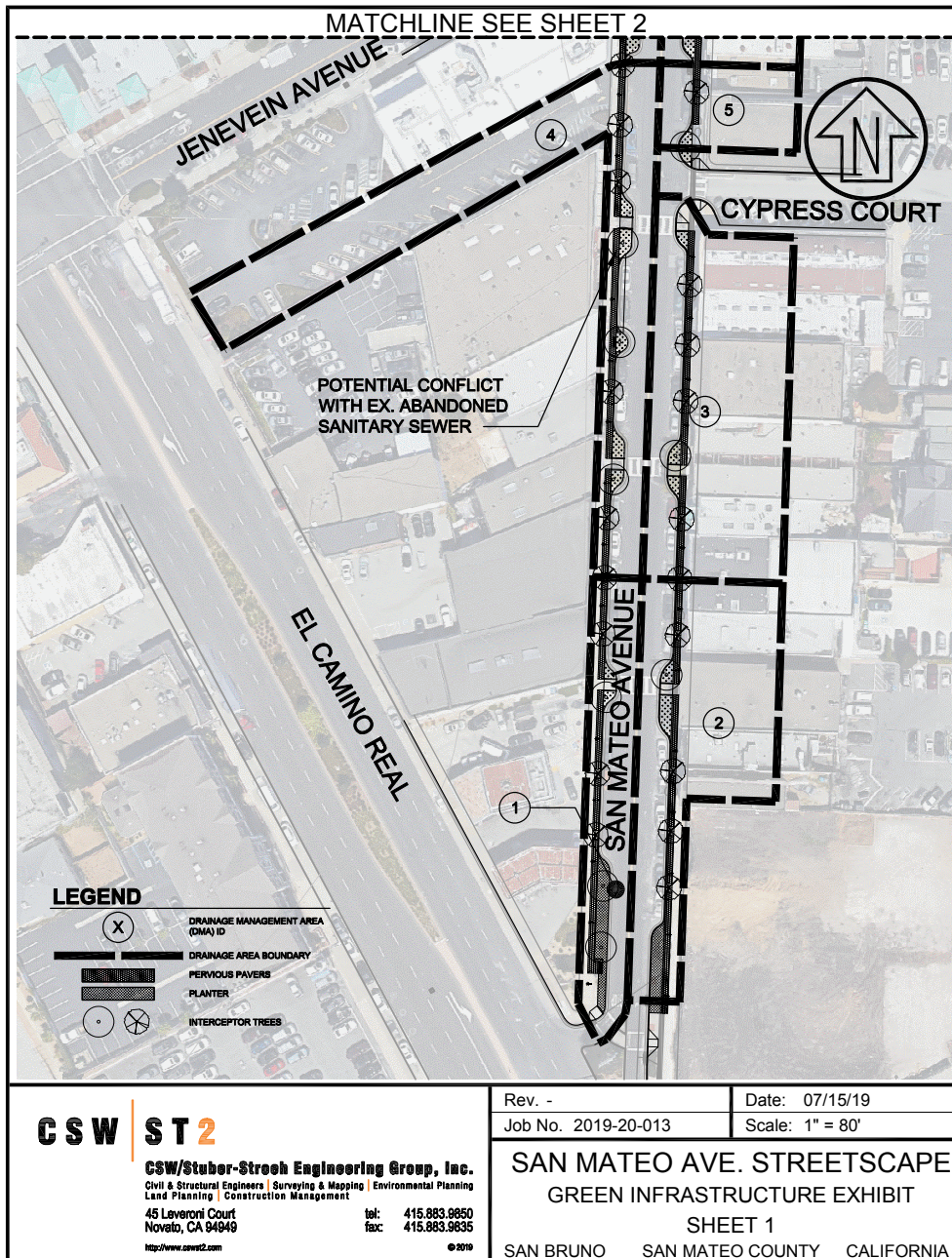
Table 5: Summary of Scenario 3 Results (Management of the San Mateo Ave Corridor)

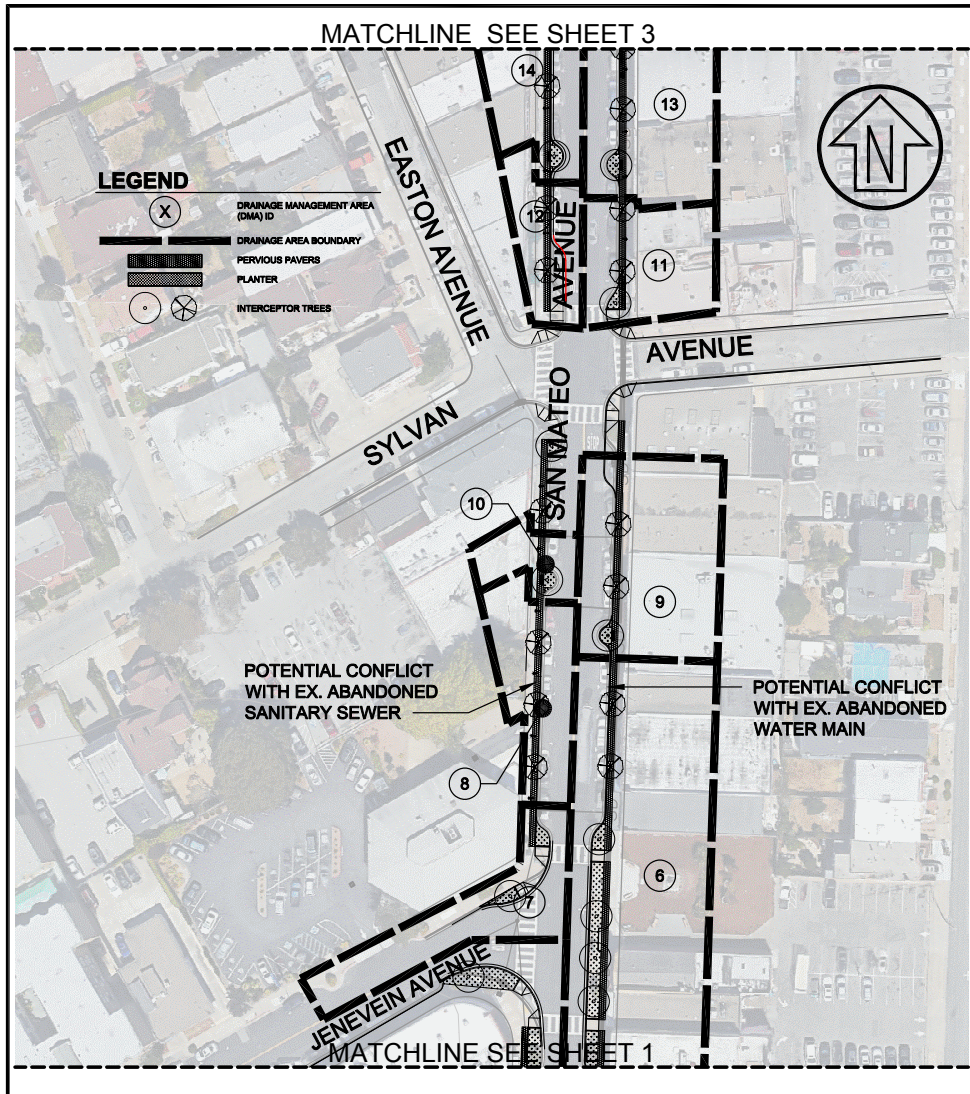
DMA ID	Sub-Watershed Area (sf)	Permeable Pavement Area (sf)	Silva Cell	Interceptor Trees	Percent of Area Treated (%)
1	8999	1952	42	6	100.6
2	17582	2138	88	5	62.2
3	21294	1580	65	6	35.0
4	22966	2810	118	9	58.4
5	5016	460	19	2	43.6
6	24669	1722	72	6	39.5
7	7184	104	5	1	11.0
8	6125	1420	52	3	100.6
9	11750	1750	73	4	66.1
10	5274	326	13	1	28.7
11	6329	650	27	3	46.9
12	4331	628	26	2	65.8
13	10198	1018	42	3	44.5
14	7094	1194	50	3	78.7
15	8457	896	37	3	47.9
16	16978	1806	75	4	46.5
17	9371	480	0	3	12.9
18	16927	1508	63	4	39.1
19	17372	812	0	5	12.6
20	6387	738	30	2	52.9
21	7706	1148	48	3	68.3
22	4500	590	25	2	62.8
23	11173	1220	50	3	48.2
24	11524	1202	50	3	46.2
25	5058	1200	36	3	100.3
26	10204	1260	52	4	56.5
27	6297	1418	46	4	100.3
28	4187	400	17	1	45.1
29	6889	726	30	3	50.4
30	4182	1230	15	3	100.0
31	13552	1488	60	3	47.6
32	1876	500	7	2	100.7
33	2946	516	21	2	87.4
34	1823	302	13	1	87.7

Table 6: Summary of Scenario 4 Results (Management of the San Mateo Ave Corridor)

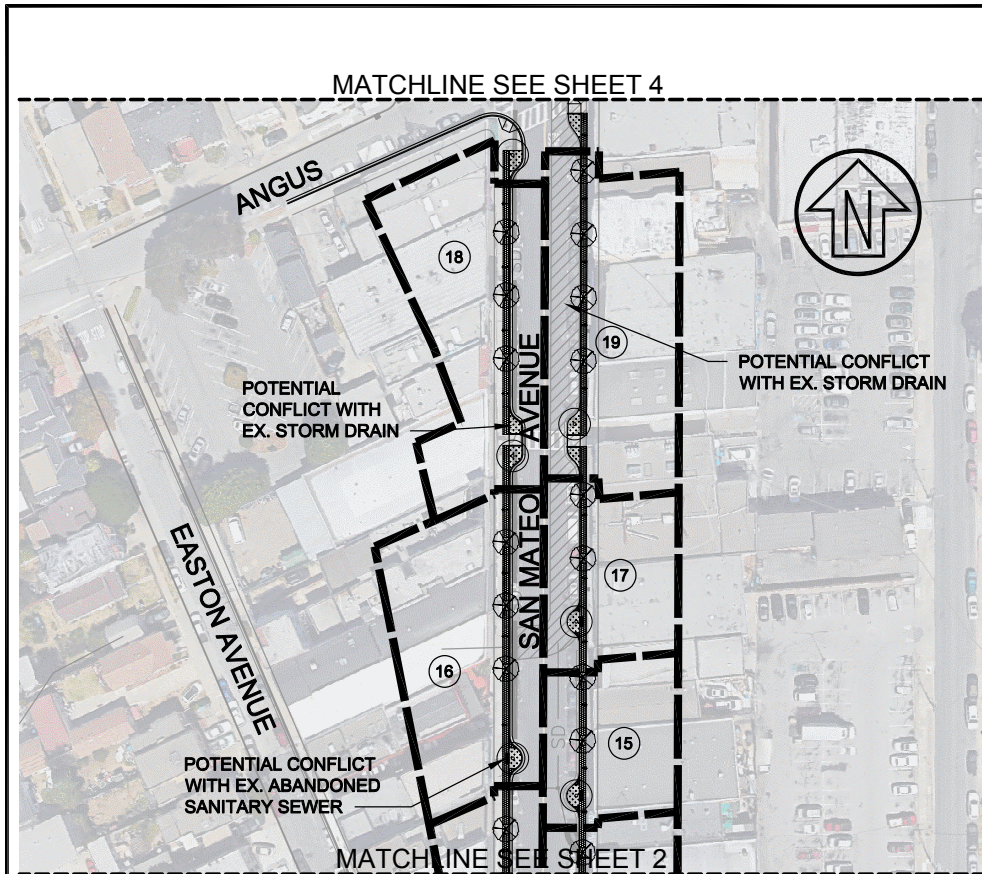
DMA ID	Sub-Watershed Area (sf)	Permeable Pavement Area (sf)	Silva Cell	Bioretention Area (sf)	Interceptor Trees	Percent of Area Treated (%)
1	8999	1952	0	764	6	100.0
2	17582	2138	0	721	5	100.0
3	21294	1580	65	391	6	63.2
4	22966	2810	81	427	9	100.0
5	5016	460	19	100	2	89.1
6	24669	1722	0	1095	6	100.0
7	7184	104	5	160	1	14.5
8	6125	1420	39	0	3	100.0
9	11750	1750	73	80	4	87.6
10	5274	326	13	80	1	43.3
11	6329	650	27	50	3	58.6
12	4331	628	26	0	2	67.6
13	10198	1018	42	75	3	55.5
14	7094	1194	35	75	3	100.0
15	8457	896	37	75	3	62.8
16	16978	1806	75	75	4	54.2
17	9371	480	0	75	3	13.7
18	16927	1508	63	100	4	46.8
19	17372	812	0	200	5	14.0
20	6387	738	30	100	2	92.6
21	7706	1148	48	75	3	98.2
22	4500	590	18	75	2	100.0
23	11173	1220	50	75	3	59.9
24	11524	1202	50	75	3	56.9
25	5058	1200	0	75	3	100.0
26	10204	1260	52	125	4	86.2
27	6297	1418	0	125	4	100.0
28	4187	400	17	75	1	84.5
29	6889	726	30	125	3	95.2
30	4182	1230	0	75	3	228.4
31	13552	1488	60	75	3	57.5
32	1876	500	0	75	2	100.0
33	2946	516	0	75	2	100.0
34	1823	302	0	75	1	100.0

APPENDIX A










<p>CSW ST2</p> <p>CSW/Stuber-Stroch Engineering Group, Inc. <small>Civil & Structural Engineers Surveying & Mapping Environmental Planning Land Planning Construction Management</small></p> <p>45 Leveroni Court Novato, CA 94949 http://www.cswst2.com</p> <p>tel: 415.883.9850 fax: 415.883.9835</p> <p>© 2019</p>	Rev. - Job No. 2019-20-013	Date: 07/15/19 Scale: 1" = 80'
	<p>SAN MATEO AVE. STREETScape GREEN INFRASTRUCTURE EXHIBIT</p> <p>SHEET 2</p> <p>SAN BRUNO SAN MATEO COUNTY CALIFORNIA</p>	



LEGEND

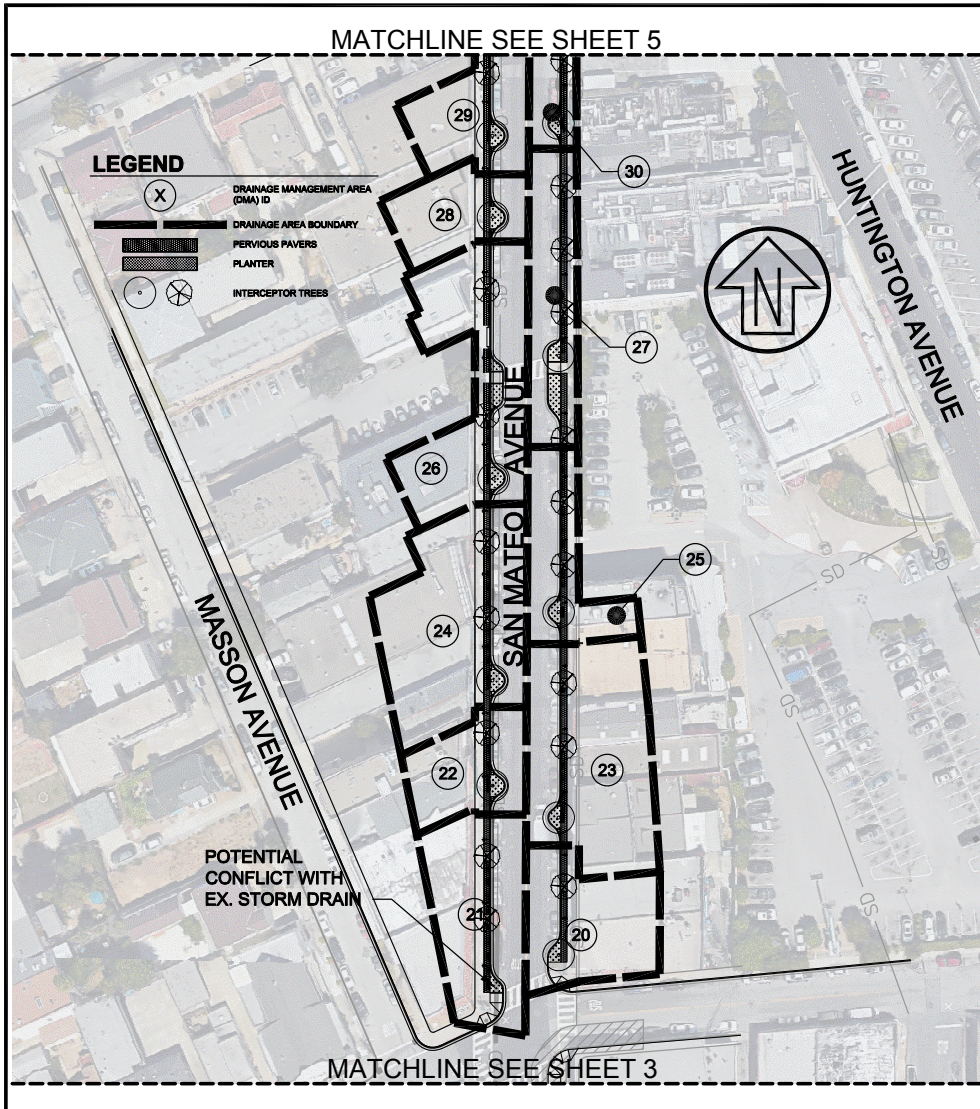
-  DRAINAGE MANAGEMENT AREA (DMA) ID
-  DRAINAGE AREA BOUNDARY
-  PERVIOUS PAVERS
-  PLANTER
-  INTERCEPTOR TREES

CSW | ST 2

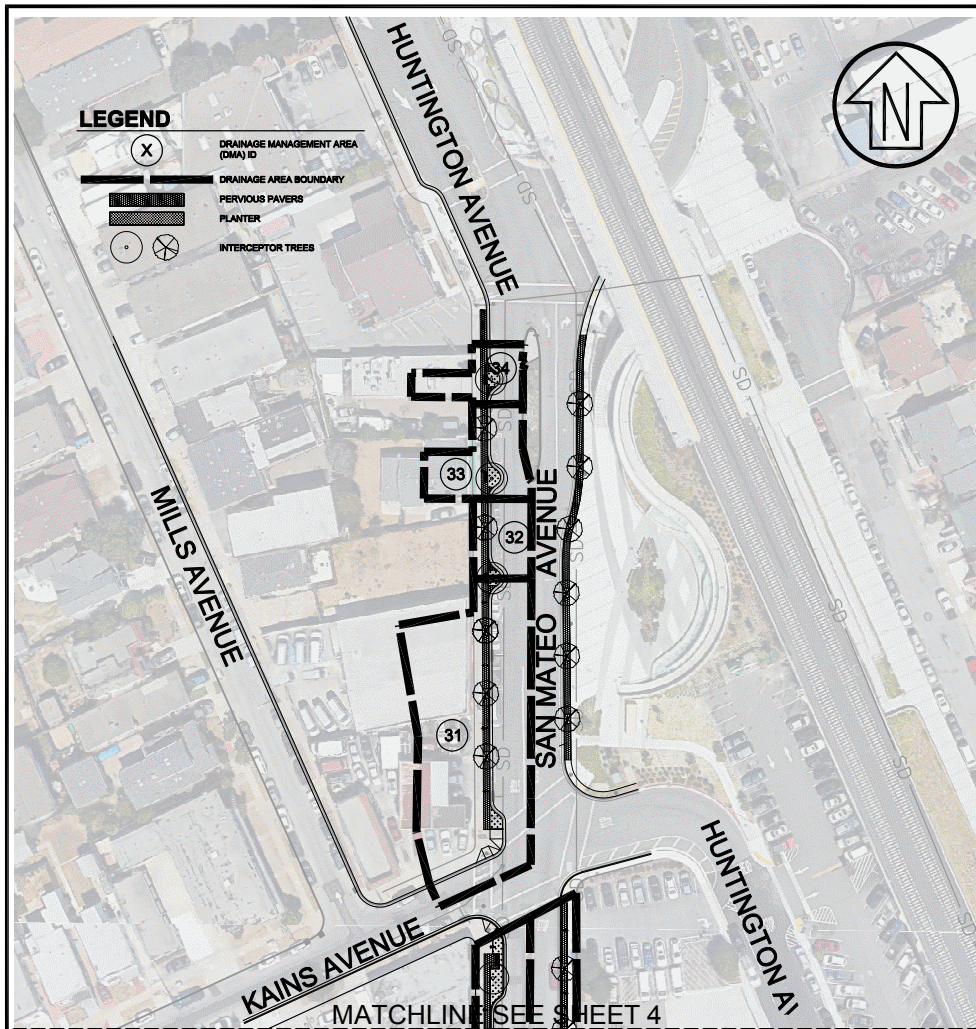
CSW/Stuber-Stroeh Engineering Group, Inc.
 Civil & Structural Engineers | Surveying & Mapping | Environmental Planning
 Land Planning | Construction Management
 45 Leveroni Court tel: 415.883.9850
 Novato, CA 94949 fax: 415.883.9835
<http://www.cswst2.com> © 2019

Rev. -	Date: 07/15/19
Job No. 2019-20-013	Scale: 1" = 80'

SAN MATEO AVE. STREETScape
 GREEN INFRASTRUCTURE EXHIBIT
 SHEET 3
 SAN BRUNO SAN MATEO COUNTY CALIFORNIA



<p>CSW ST2</p> <p>CSW/Stuber-Stroeh Engineering Group, Inc. Civil & Structural Engineers Surveying & Mapping Environmental Planning Land Planning Construction Management</p> <p>45 Leveroni Court tel: 415.883.9850 Novato, CA 94949 fax: 415.883.9835</p> <p>http://www.cswst2.com © 2019</p>	Rev. - Job No. 2019-20-013	Date: 07/15/19 Scale: 1" = 80'
	<p>SAN MATEO AVE. STREETSCAPE GREEN INFRASTRUCTURE EXHIBIT SHEET 4 SAN BRUNO SAN MATEO COUNTY CALIFORNIA</p>	



<p>CSW ST 2</p> <p>CSW/Stuber-Stroeh Engineering Group, Inc. Civil & Structural Engineers Surveying & Mapping Environmental Planning Land Planning Construction Management</p> <p>45 Leveroni Court tel: 415.883.9850 Novato, CA 94949 fax: 415.883.9835</p> <p>http://www.cswst2.com © 2019</p>	Rev. -	Date: 07/15/19
	Job No. 2019-20-013	Scale: 1" = 80'
<p>SAN MATEO AVE. STREETSCAPE</p> <p>GREEN INFRASTRUCTURE EXHIBIT</p> <p>SHEET 5</p> <p>SAN BRUNO SAN MATEO COUNTY CALIFORNIA</p>		

APPENDIX E: COST ESTIMATE

By: CSW/Stuber- Stroeh Engineering Group, Inc

E. COST ESTIMATE

CSW | ST 2

PRIORITY 1

ITEM	DESCRIPTION	QTY.	UNIT	UNIT COST	AMOUNT
100	GENERAL CONDITIONS				
101	Mobilization/ Demobilization	1	LS	\$ 338,000.00	\$338,000
102	Water Pollution Control	1	LS	\$ 16,000.00	\$16,000
103	Traffic Control	1	LS	\$ 40,000.00	\$40,000
				Task 100 Subtotal	\$394,000
200	DEMOLITION				
201	Remove Concrete	49,860	SF	\$ 6.00	\$300,000
202	Remove Trees	10	EA	\$ 1,500.00	\$150,000
203	Abandoned Utility Removal (Sewer & Water)	2,500	LF	\$ 40.00	\$100,000
				Task 200 Subtotal	\$450,000
300	EARTHWORK				
301	Cut and Export Soil	790	CY	\$ 100.00	\$79,000
				Task 300 Subtotal	\$79,000
400	STREETS AND SIDEWALKS				
401	Accessible Ramp	3,500	SF	\$ 40.00	\$140,000
402	4" PCC Sidewalk (incl. base rock)	38,400	SF	\$ 40.00	\$1,536,000
403	Bus Stop Improvements (Bus Shelters, Bulb-out Extension)	3	EA	\$ 25,500.00	\$76,500
				Task 400 Subtotal	\$1,676,000
500	UTILITIES				
501	Waterline Relocation: Remove Existing Water Line	660	LF	\$ 60.00	\$40,000
502	Waterline Relocation: 8" Water Line (incl. trenching & b	680	LF	\$ 250.00	\$170,000
503	Waterline Relocation: Asphalt Overlay (trench only)	74	TONS	\$ 195.00	\$15,000
504	Street Lights (assumes no upgrade to)	99	EA	\$ 4,000.00	\$396,000
				Task 500 Subtotal	\$621,000
600	IRRIGATION				
601	Irrigation	1,510	SF	\$ 10.00	\$15,000
				Task 600 Subtotal	\$15,000
700	PLANTING				
701	Trees	120	EA	\$ 2,000.00	\$240,000
702	Planting (incl. soil preparation)	1,510	SF	\$ 20.00	\$30,000
				Task 700 Subtotal	\$270,000
900	SITE FURNISHINGS				
901	Benches	28	EA	\$ 1,300.00	\$36,000
902	Bike Racks	62	EA	\$ 500.00	\$31,000
903	Trash and Recycle Receptical Replacement	76	EA	\$ 1,500.00	\$114,000
904	Wayfinding Signage & Business Directories (Allowanc	1	LS	\$ 90,000.00	\$90,000
905	Seatwalls	151	LF	\$ 500.00	\$76,000
				Task 800 Subtotal	\$347,000
				Construction Cost (2019 Dollars):	\$3,852,000
				Contingency (35%):	\$1,348,200
				Total Construction Cost (2019 Dollars):	\$5,200,200
				Design Cost (15% of Total Construction Cost)	\$780,030

Note: All Total Amounts have been rounded to the nearest \$1,000.

PRIORITY 2

ITEM	DESCRIPTION	QTY.	UNIT	UNIT COST	AMOUNT
1000	Priority 2 Improvements				
1001	Suspended Pavement at Tree Wells (Silva Cells)	120	EA	\$ 1,700.00	\$ 204,000.00
1002	Gateway Monuments	1	LS	\$ 750,000.00	\$ 750,000.00
1003	Paseo Gateway Monuments	10	EA	\$ 10,000.00	\$ 100,000.00
1004	Roadway Striping (Thermoplastic)	2,900	LF	\$ 5.00	\$ 15,000.00
1005	Planting (incl. soil prep) & Irrigation at Existing Bulbouts	3,700	SF	\$ 30.00	\$ 111,000.00
1006	Paseo Improvements/Art Installation (Allowance)	1	LS	\$ 400,000	\$ 400,000.00
1007	Alt. Stormwater Management#1 (see breakdown) ²	1	LS	\$338,000	\$ 338,000.00
				Task 1000 Subtotal	\$1,918,000
				Contingency (35%):	\$671,300
				Total Task 1000 Subtotal	\$2,589,300

Notes: 1. Alternative Stormwater Management #1 includes Permeable Pavement in the sidewalk, refer to Breakdown below and Hydrology Assesment Memorandum for further description.
 2. Alternative Stormwater Management #1 unit cost above represents the increase in cost above concrete sidewalk assumed in Priority 1, the breakdown below includes the total cost

PRIORITY 3

ITEM	DESCRIPTION	QTY.	UNIT	UNIT COST	AMOUNT
1100	Priority 3 Improvements				
1101	Centennial Park Improvements	7478	SF	\$ 70.00	\$524,000
1102	Artistic Expression: Accent Lighting (bench)	28	EA	\$ 400.00	\$11,000
1103	Artistic Expression: Accent Lighting (seatwall)	151	LF	\$ 200.00	\$30,000
1104	Alt. Stormwater Management#4 (see breakdown) ²	1	LS	\$1,382,580	\$1,383,000
				Task 1100 Subtotal	\$1,948,000
				Contingency (35%):	\$681,800
				Total Task 1100 Subtotal	\$2,629,800

Notes: 1. Alternative Stormwater Management #4 includes Silva Cells and Bioretention Areas, refer to Breakdown below and Hydrology Assesment Memorandum for further description.
 2. Alternative Stormwater Management #4 unit cost above represents the increase in cost above Alternative Stormwater Management #2, and removes the installation of vehicular

PRIORITY 4

ITEM	DESCRIPTION	QTY.	UNIT	UNIT COST	AMOUNT
1200	Priority 4 Improvements				
1201	Curb Realignment & Planting at Jenevien Ave.				
1201.1	Curb & Gutter/ Pavement Demolition	160	LF	\$ 15.00	\$3,000
1201.2	Curb & Gutter (incl. base rock)	180	LF	\$ 60.00	\$11,000
1201.3	4" PCC Sidewalk (incl. base rock)	1,100	SF	\$ 40.00	\$44,000
1201.4	Planting (incl. soil prep)	700	SF	\$ 20.00	\$14,000
1201.5	Irrigation	700	SF	\$ 10.00	\$7,000
1202	Posey Park Improvements	21272	SF	\$ 70.00	\$1,489,000
1203	Artistic Expression: Crosswalks	7412	SF	\$ 50.00	\$371,000
1204	Artistic Expression: Paving	19372	SF	\$ 50.00	\$969,000
1205	Artistic Expression: Seatwalls	151	LF	\$ 300.00	\$45,000
1206	Artistic Expression: Custom Benches	28	EA	\$ 1,500.00	\$42,000
1207	Alt. Stormwater Management#2 (see breakdown) ¹	1	LS	\$1,136,356	\$1,136,000
				Task 1200 Subtotal	\$4,131,000
				Contingency (35%):	\$1,445,850
				Total Task 1200 Subtotal	\$5,576,850

Notes: 1. Alternative Stormwater Management #2 includes Permeable Vehicular Pavement, refer to Breakdown below and Hydrology Assessment Memorandum for further description.

ALTERNATIVE STORMWATER MANAGEMENT BREAKDOWNS

1007	ALTERNATIVE STORMWATER MANAGEMENT #1				
1007.1	Permeable Pavement (Pedestrian, incl. base rock)	16,900	SF	\$ 60.00	\$1,014,000
				Task 1007 Subtotal	\$1,014,000

1207	ALTERNATIVE STORMWATER MANAGEMENT #2				
1207.1	Asphalt Removal/Demolition	20,400	SF	\$ 2.00	\$40,800
1207.2	Cut and Export Soil	756	CY	\$ 100.00	\$75,556
1207.3	Permeable Pavers (Vehicular, incl. base rock)	20,400	SF	\$ 50.00	\$1,020,000
				Task 1207 Subtotal	\$1,136,356

1104	ALTERNATIVE STORMWATER MANAGEMENT #3 (NOT USED)				
1104.1	Asphalt Removal/Demolition	20,400	SF	\$ 2.00	\$40,800
1104.2	Cut and Export Soil	756	CY	\$ 100.00	\$75,600
1104.3	Permeable Pavers (Vehicular, incl. base rock)	20,400	SF	\$ 75.00	\$1,530,000
1104.4	Silva Cells	1,370	EA	\$ 700.00	\$959,000
				Task 1104 Subtotal	\$2,605,400

1104	ALTERNATIVE STORMWATER MANAGEMENT #4				
1104.1	Asphalt Removal/Demolition	23,700	SF	\$ 2.00	\$47,400
1104.2	Cut and Export Soil	756	CY	\$ 100.00	\$75,600
1104.3	Permeable Pavers (Vehicular, incl. base rock)	20,400	SF	\$ 75.00	\$1,530,000
1104.4	Silva Cells	955	EA	\$ 700.00	\$668,500
1104.5	Demolition of Curb & Gutter	550	LF	\$ 15.00	\$8,250
1104.6	Curb & Gutter (incl. base rock)	550	LF	\$ 60.00	\$33,000
1104.7	Bioretention Soil	511	CY	\$ 90.00	\$46,000
1104.8	Class II Permeable	341	CY	\$ 250.00	\$85,185
1104.9	Storm Drainage (allowance)	1	EA	\$ 25,000.00	\$25,000
				Task 1104 Subtotal	\$2,518,935

APPENDIX F: TRANSPORTATION ASSESSMENT AND RECOMMENDATIONS

By: Parisi Transportation Consultants

F. TRANSPORTATION ASSESSMENT AND RECOMMENDATIONS



Memo

To: Jacob Tobias; WRT Design, Rivka Weinstock; WRT Design
 From: Patrick Golier, Jasmine Stitt, Josh Handel; Parisi Transportation Consulting
 Date: July 31, 2019
Subject: San Mateo Avenue Streetscape Plan: Transportation Memo

The purpose of this memorandum is to describe design recommendations for transportation on the San Mateo Avenue, located in San Bruno between the intersections of El Camino Real and Huntington Avenue. Specifically, this memorandum presents the recommendations and findings related to the following:

1. Bicycle Parking
2. Centerline Markings
3. Loading Zones
4. Bus Stop Recommendations
5. ADA Parking Recommendations
6. Bike Network Treatment
7. Pedestrian Treatments

BICYCLE PARKING

Summary:

- Provide a bicycle parking rack approximately every 100 feet along the corridor;
 - Each rack can accommodate two bicycles; one on either side of the rack
- Bicycle racks can be placed on the sidewalks and bulb outs

As part of the City of San Bruno's Walk 'n Bike Plan, a survey was conducted to identify the challenges and obstacles to biking in the City of San Bruno. Few or no bike-parking racks was identified as an obstacle by 72% of respondents¹. An open-ended question also asked what specific locations the public would like to see bike-parking racks and one of the most commonly cited locations was Downtown in General and San Mateo Avenue more specifically.

¹ City of San Bruno Walk 'n Bike Plan (2016) Retrieved from <https://www.sanbruno.ca.gov/civicax/filebank/blobload.aspx?blobid=27455>

Please use the following guidance in the siting of bike racks along the corridor:

General Recommendations

- A minimum of 57 bike racks should be sited along the corridor. This number represents an average of one rack roughly every 100 feet on each side of the street. The Federal Highway Administration, National Association of City Transportation Officials, and the Association of Pedestrian and Bicycle Professionals all recommend that bike parking be located no more than 50 feet from building entrances. By placing racks at least every 100 feet, the corridor will conform to this standard.²
- Single racks accommodating two bicycles (one on either side) dispersed throughout the corridor are preferable to fewer multiple bike rack sites because they allow a bicyclist to park closer to their destination, reducing the distance they need to walk to their destination. Widely distributed bike parking is also preferable for security, as it allows the rider to be closer to their bicycle.
- Bike racks should be placed in locations near the main entrances of businesses, in well-lit spaces in view of a window whenever possible.
- Rack placement should be prioritized in front of businesses that people are likely to bike to, such as convenience stores, coffee shops, restaurants, and gyms. These locations should have at least two racks (accommodating 4 bicycles) within 50 feet of the main entrances.
- Locations that customers are less likely to bike to on a regular basis (such as the gas station and the furniture store) do not need racks immediately in front of them.

Recommended Placement

- When the sidewalk is 10'-14' in width (the majority of the corridor), bike racks should be placed parallel to the street
- Bike racks placed parallel to the street should be sited at least 24" from the curb face, at least 36" from driveways, mailboxes, trash cans, or other street furniture, and at least 72" from fire hydrants.
- Where the sidewalk is at least 14' wide (such as at bulb-out locations), bike racks can be placed perpendicular to the street.

² <https://www.fhwa.dot.gov/publications/research/safety/pedbike/05o85/chaptr7.cfm>
<https://nacto.org/publication/transit-street-design-guide/station-stop-elements/stop-elements/bike-parking/>
https://cdn.ymaws.com/www.apbp.org/resource/resmgr/Bicycle_Parking/EssentialsofBikeParking_FINA.pdf

- A bicycle rack placed parallel to the curb must be placed at least 48" from an adjacent rack; 72" is recommended. A bicycle rack placed perpendicular the curb must be placed at least 36" from an adjacent rack – 48" is recommended.
- When sited adjacent to on-street parking spaces, racks should be placed roughly aligned with painted parking tees, if possible, so that parked bicycles do not interfere with the opening of car doors.

In addition to short term bicycle parking, long term parking near the Caltrain station is also recommended. The Caltrain Bike Parking Management Plan found that the utilization for electronic lockers is much higher than keyed lockers and recommends replacing keyed lockers with electronic lockers as funding is identified. Current bike parking at Posey Park has 12 keyed lockers; replacing these with electronic lockers can increase the number of cyclists that can access the Caltrain station.

CENTERLINE MARKINGS

Summary:

- Double yellow centerlines should only be used within 50 feet of each mid-block crosswalk and at 100 feet from the approaches to the intersection;
- Broken yellow centerlines should be used in the mid-block sections;
- The exception to this guidance is on the block of San Mateo Avenue between Sylvan Avenue and El Camino Real, where double yellow centerlines should be maintained given the multiple mid-block crossings and short block lengths along this section of the corridor.

San Mateo Avenue is currently striped with a double yellow centerline which indicates a no passing zone along the entire length of the street in the project area.

Per the California Manual on Uniform Traffic Control Devices (CA MUTCD 2014 Revision 4), centerline markings are required along San Mateo Avenue, consistent with the direction that these markings "shall be placed on all paved urban arterials and collectors that have a traveled way of 20 feet or more in width and an ADT of 6,000 vehicles per day or greater." There are two centerline pattern options presented by the CA MUTCD that are applicable to San Mateo Avenue, including the double yellow (CA MUTCD Figure 3A-101) and the broken yellow centerline (CA MUTCD Figure 3A-104). Caltrans' Standard Plans for centerline striping vary based on facility speed. The lowest speed centerline detail (Dashed Yellow) is Caltrans Detail 1 (no reflector) and Detail 2 (reflector).³

³ 2018 Caltrans Standard Plan 2018 A20A

Section 3B.02 of the CA MUTCD recommends striping a no-passing zone (i.e., double yellow striping) between 100 and 300 feet in length at the approach to an intersection placed in a pattern as shown in Figure 3A-109(CA). No-passing zones should also be established on two-way, two-lane roadways at vertical and horizontal curves and other locations where an engineering study indicates that passing must be prohibited because of inadequate sight distances or other special conditions (CA MUTCD 3B.02.03).

Based on the CA MUTCD it is recommended to restripe San Mateo Avenue as such:

- between Sylvan Avenue and Huntington Avenue,
 - restripe to a broken centerline (Caltrans Detail 1) along the corridor and
 - restripe to a double yellow centerline (Caltrans Detail 21) 50 feet from the approaches to crosswalks and 100 feet at the approach to intersection,
- between Sylvan Avenue and El Camino Real,
 - maintain the existing double yellow centerline.

Because San Mateo Avenue has a straight horizontal alignment and no vertical curves that adversely affect sight distance, provision of a broken yellow centerline within 50 feet of the mid-block crossings is recommended.

Figure 1 shows a summary of the proposed centerline markings.

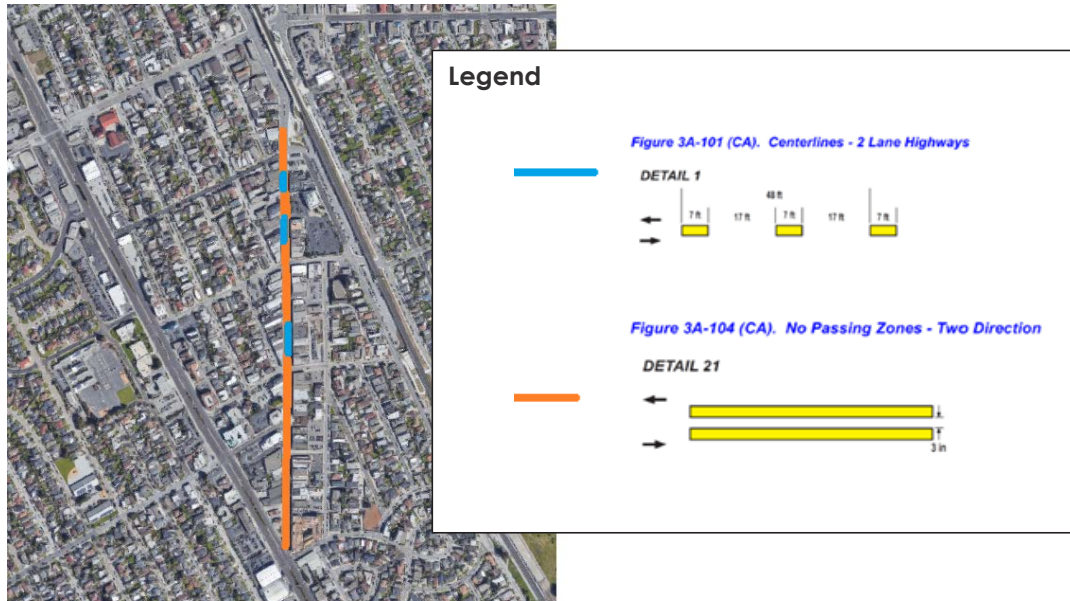


Figure 1: Centerline Marking Recommendations

LOADING ZONES

Summary:

- Install yellow loading zones approximately every 1,000 feet along the corridor to encourage commercial loading activities by delivery vehicles to take place along the curb rather than in the travel lane;
- Yellow zones should be placed at the beginnings of each block, ideally, to facilitate easier access for these larger vehicles to the curb;
- The exact locations of any new yellow zones should be planned in consultation with the local business community who can help to provide input on balancing the various user demands for the curbside;
- A passenger vehicle white zone should be installed in front of La Petite Baleen Swim School to facilitate safe passenger drop-off at the curb rather than in the travel lane

Yellow zones are designated areas where commercial and passenger loading activities only are permitted (San Bruno Municipal Code 7.16.020). These zones apply between 7am and 6pm on any day except Sunday. While there is no formal guidance to the location and number of loading zones along commercial corridors, it is generally common for commercial corridors to have yellow zones to formalize commercial activities. Designating a specified loading zone could decrease the amount of illegally double-parked delivery trucks. Trucks that are double-parked can restrict sightlines and cause unnecessary congestion.

It is for these reasons that yellow zones are recommended for San Mateo Avenue. One loading zone every 1,000 feet may be sufficient for the amount of deliveries on San Mateo Avenue, which would result in three loading zones along the project corridor. These loading zones should be 40 feet long (2 parking stalls) to ensure adequate space for larger delivery vehicles and to incentivize delivery trucks to pull over to the curb. Locating these zones on the east side of the street, in front of businesses where there are off street parking areas, may help to minimize the impact of parking loss for businesses that are close to other parking. Ideally, they should be located at the beginnings and ends of the blocks to make it easier for trucks to pull into the curb.

The exact locations of any new yellow zones should be determined with the local business community to determine the most effective locations along the street for yellow zones at the expense of general vehicle parking.

Per San Bruno Municipal Code yellow zones are time-restricted (i.e., 7am – 6pm Monday – Saturday), but the hours of the zone should also be considered under consultation with the business community who can help to provide input on balancing the various demands for curbside use along the corridor. Any deviation from Municipal Code would require City Council action.

In addition to yellow loading zones, passenger loading zones (i.e., white zones) are recommended in front of businesses with heavy drop-off activity, particularly after school activities for children. This recommendation is consistent with the Parking Management Recommendations as part of the San Bruno Parking Management Plan. Currently drivers often stop in the middle of the street to let children out directly in front of the business rather than taking the time to find parking further away. It is recommended to restripe two parking stalls as a time-restricted passenger loading zone in front of the La Petite Baleen Swim School during after-school hours. San Bruno Municipal Code sets the hours for white zones at 7am to 6pm Monday – Saturday, but this zone could be restricted for passenger loading between the hours of 1pm to 5pm Monday to Saturday, subject to City Council action, since this represents the times-of-day with the largest number of swim classes.



Figure 2: Time Restricted Passenger Loading Zone in front of La Petite Baleen Swim School

BUS STOP RECOMMENDATIONS

Summary:

- Bus stops should be designed so that passengers with limited mobility can embark and alight buses directly from the sidewalk;
- A 24' x 8' accessible boarding area is required to allow passengers to exit from the rear of a 40' bus;
- A level landing area of at least 5' x 8' should be provided so that a wheelchair lift can be deployed, if necessary. The sidewalks around the bus stops should be made clear of any obstacles (seafing, poles, planters, etc.) where a wheelchair lift would deploy;
- Curbs should be painted red at all bus stops

SamTrans line 141 provides transit service along San Mateo Avenue and uses 29', 35', and 40' buses. Forty-foot buses require a 20' out-taper when located in a parking bay, and 10' in-taper. When stopped, the bus should be located 10' from the crosswalk (at both near side and far side stops). A 24' x 8' accessible boarding area is required to allow passengers to exit from the rear door of a 40' bus.

- **Sylvan Avenue/San Mateo Avenue:** Both the northbound and southbound stops at this location are currently not ADA accessible. They lack a place for a bus to deploy a wheelchair ramp, and passengers exiting from the rear of the bus must exit into the parking lane.
 - At a minimum, the bus must have access to the curb to deploy a curb ramp and allow passengers to exit from the front door. This can be achieved by installing a curb extension in the first parking stall behind each of the bus stops to create a 24' x 8' boarding area. The existing potted plants at these locations may need to be relocated. This would allow passengers the ability to access the curb from both doors of the bus and eliminate the need for a bus to pull out of the traffic flow.
 - Alternatively, ADA-compliant bus stops can be facilitated if three street parking spaces are removed behind each of the bus stops and red zones installed in the parking bay to allow a 40' bus to access the curb. This would be the least expensive, short-term option, though less preferable from a parking supply and transit operations perspective.
 - In the longer term, the southbound bus stop could be a candidate location for a curb extension and placemaking elements. The southbound stop is located immediately in front of a Starbucks, and already has a small amount of outdoor seating. We recommend installing a combination bus stop – parklet here (Figure 3: Combination Bus Stop Parklet, Image from AC Transit Multimodal Corridor Design Guide)
- **Kains Avenue/San Mateo Avenue:** The north/eastbound stop is used to connect passengers to Caltrain and is located on the far-side of the intersection adjacent to Posy Park. The plaza is entirely concrete and provides no shade for users in the hot summer months or shelter in wet weather. The seating available in the plaza is far from the bus stop.

The south/westbound stop is located mid-block, with the flag in front of Ninja Sushi & Tofu (681 San Mateo Avenue).

- **North/Eastbound stop:** Recommended improvements include installation of red curb to better define the bus stop location, and a bus shelter with seating.

- **South/Westbound stop:** The existing south/westbound bus stop is located far from the intersection, in front of Ninja Sushi & Tofu at 681 San Mateo Avenue. The bus stop should be relocated to the existing bulb-out at the far side of the intersection so that bus passengers can board from the curb and a wheelchair ramp can be deployed.

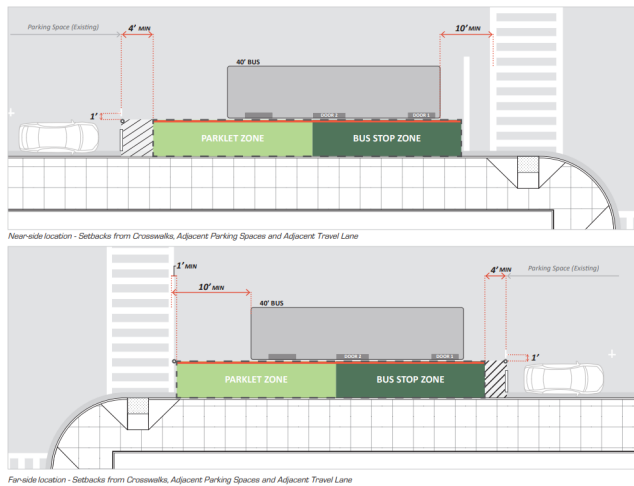


Figure 3: Combination Bus Stop Parklet, Image from AC Transit Multimodal Corridor Design Guide

ACCESSIBLE PARKING

Summary:

- A total of 6 accessible on-street parking stalls, including 1 van-accessible stall, must be provided throughout the project area;
- The exact locations of the accessible parking to be provided will be recommended as part of the City of San Bruno's draft *ADA Transition Plan*, currently under development;
- The implementation of accessible parking along the corridor may necessitate the construction of additional curb ramps that would provide wheelchair users the ability to access the sidewalk from their vehicles without encroaching in the vehicle travel lane

San Mateo Avenue has 162 on-street parking spaces and thus a minimum of 6 total accessible parking spaces must be provided along the corridor. Guidance for accessible parking within

public rights-of-way is generally defined in the "Proposed Guidelines for Pedestrian Facilities in the Public Right-of-Way" (PROWAG), prepared by the United States Access Board and dated July 26, 2011. These requirements are currently under development and have not been adopted by the Department of Justice. Once adopted they will become enforceable under Title II of the Americans with Disabilities Act.

However, in September 2014, the US Court of Appeals for the Ninth Circuit issued an opinion in *Fortyone v. City of Lomita*, which holds that local governments have an obligation under Title II of the Americans with Disabilities Act to provide accessible on-street parking spaces where on-street parking spaces are provided for the ambulatory public even though the Department of Justice has yet to adopt technical design standards for such parking. Given the limited guidance related to implementing accessible parking within the public right-of-way, the use of PROWAG guidance is recommended.

According to Section R214 of PROWAG the number of accessible stalls a project should implement are as follows "Where on-street parking is provided on the block perimeter and the parking is marked or metered, accessible parking spaces complying with R309 shall be provided in accordance with Table R214." On-street accessible parking requirements from PROWAG's Table R214 are detailed in Table 1, below.

Total # of Marked Parking Spaces on the Block Perimeter	Minimum Required # of Accessible Parking Spaces
1 to 25	1
26 to 50	2
51 to 75	3
76 to 100	4
101 to 150	5
151 to 200	6
201 and over	4% of total

Table 1: On-Street Accessible Parking Requirements

PROWAG guidance on the design and locations of accessible parking stalls along San Mateo Avenue that is relevant to San Mateo Avenue is as follows:

- Accessible Spaces (x02.06.1.1). Where on-street public convenience parking is provided in commercial districts and at civic facilities, accessible on-street parking spaces shall be

included in the total provided in the project or project area in accordance with proposed ADAAG Section 208.2 and shall be dispersed within the project area.⁴

- Location – Exceptions (x02.06.1.2) Accessible on-street parking shall be permitted to be combined with off-street parking if equal or greater access is provided in terms of distance from an accessible entrance, user cost and convenience. Since off-street parking in the study area is located behind the storefronts, this threshold, while subjective, would not apply to all store-front entrances.
- General (R309.1). The technical requirements for accessible on-street parking spaces are contained in R309 and adapt the technical requirements for accessible parking spaces in the 2004 ADA and ABA Accessibility Guidelines to the public right-of-way.³
- Narrow Sidewalks (R309.2.1). Where the adjacent sidewalk or available right-of-way is less than or equal to 4.3 meters (14 feet) wide, an access aisle is not required, but accessible parallel parking spaces must be located at the end of the block face. This applies to the length of the San Mateo Avenue corridor.³
- Narrow Sidewalks (R309.2.2). Vehicle lifts or ramps can be deployed on a 2.4 meter (8 foot) sidewalk if there are no obstructions.³
- Curb Ramps and Blended Transitions (Advisory R309.4). Parking spaces at the end of block face can be served by curb ramps or blended transitions at the pedestrian street crossing.³
- Van Parking Spaces (502). For every six or fraction of six parking spaces required by Section 208.2, at least one shall be a van parking space.⁴

⁴ Proposed Right of Way Guidelines from the United States Access Board (PROWAG), x02.6 Vehicular Ways and Facilities

<https://www.access-board.gov/guidelines-and-standards/streets-sidewalks/public-rights-of-way/background/access-advisory-committee-final-report/x02-6-vehicular-ways-and-facilities>

³ Proposed Right of Way Guidelines from the United States Access Board (PROWAG), Chapter R3: Technical Requirements

<https://www.access-board.gov/guidelines-and-standards/streets-sidewalks/public-rights-of-way/proposed-rights-of-way-guidelines/chapter-r3-technical-requirements>

⁴ Proposed Right of Way Guidelines from the United States Access Board (PROWAG), Chapter 5: Parking Spaces

<https://www.access-board.gov/guidelines-and-standards/buildings-and-sites/about-the-ada-standards/guide-to-the-ada-standards/chapter-5-parking>

- The dimension requirements for accessible spaces required for conditions along San Mateo Avenue are found in the Proposed Right of Way Guidelines from the United States Access Board (PROWAG, Section 502)⁵:
 - Car parking spaces shall be 8' wide minimum.
 - All of the general (non-accessible) parking spaces along the corridor are recommended to be within the same range of dimensions as they are presently – 19 to 21' long (depending on space available) by 8' wide.
 - Van-accessible spaces are permitted (and recommended) to be the same dimensions as general parking spaces on the corridor. An access aisle is not required due to the sidewalk being less than 14 feet wide. Where possible, van-accessible spaces are recommended to be 21' long.
 - The area of the sidewalk immediately adjacent to the on-street accessible spaces holds the same requirements for clear space as an access aisle – the 8' of sidewalk area adjacent to the on-street accessible space must be free of any obstructions.

- Identification (502.6). Accessible spaces must be identified by signs with the International Symbol of Accessibility. Signs identifying van parking spaces shall contain the designation "van accessible." Signs shall be 60 inches minimum above the finish floor or ground surface measured to the bottom of the sign.⁵

Accessible Parking Locations

Based on the total on-street supply of 162 parking spaces, a total of 6 accessible on-street parking spaces should be made available, including 1 van accessible space. This increase in accessible parking stall supply is in addition to the 23 accessible parking stalls located in the adjacent off-street public parking lots.

The exact locations of the accessible parking stalls to be installed along San Mateo Avenue will be determined via the City of San Bruno's draft ADA Transition Plan, currently under development. However, the following criteria can help in the siting of the accessible parking:

- Seek to install approximately 3 spaces on each side of San Mateo Avenue given that the street's retail destinations are located on the east and west sides of the street

⁵ Proposed Right of Way Guidelines from the United States Access Board (PROWAG), Chapter 5: General Site and Building Elements

<https://www.access-board.gov/guidelines-and-standards/buildings-and-sites/about-the-ada-standards/ada-standards/chapter-5-general-site-and-building-elements>

⁵ Proposed Right of Way Guidelines from the United States Access Board (PROWAG), Chapter 5: Parking Spaces

<https://www.access-board.gov/guidelines-and-standards/buildings-and-sites/about-the-ada-standards/guide-to-the-ada-standards/chapter-5-parking>

- Provide geographical distribution of accessible parking stalls throughout the corridor
- Site the accessible spaces on the far side of the intersections
- Van parking – ensure that 8' of sidewalk area adjacent to the van-accessible parking spaces are free of obstructions for side loading.
- Endeavor to provide 8' of clear area behind the accessible parking spaces for rear loading.

One of the key challenges to siting accessible parking stalls along San Mateo Avenue is the presence of bulb outs along the corridor at each of the intersections and mid-block crossings. The bulb outs, which are built into San Mateo Avenue, prevent passengers in wheelchairs from accessing the sidewalk via a curb ramp without encroaching in the travel lane. Designing and constructing additional curb ramps onto the existing and planned bulb outs that would provide access to passengers in wheelchairs would be challenging given the presence of utility boxes, drainage inlets, fire hydrants and other utility obstructions that would be expensive to move. Additionally, the accessible spaces on San Mateo Avenue may preclude plantings, trees, bike racks and other amenities that are being considered for the sidewalks and bulb outs as part of the San Mateo Avenue Streetscape Plan. It is for these reasons that accessible parking on the side streets are advised, if potential locations can otherwise meet PROWAG guidance.

Examples of curb ramps that have been designed to provide wheelchair users with sidewalk access and that may be applicable to San Mateo Avenue are illustrated in Figures 4-5, below:

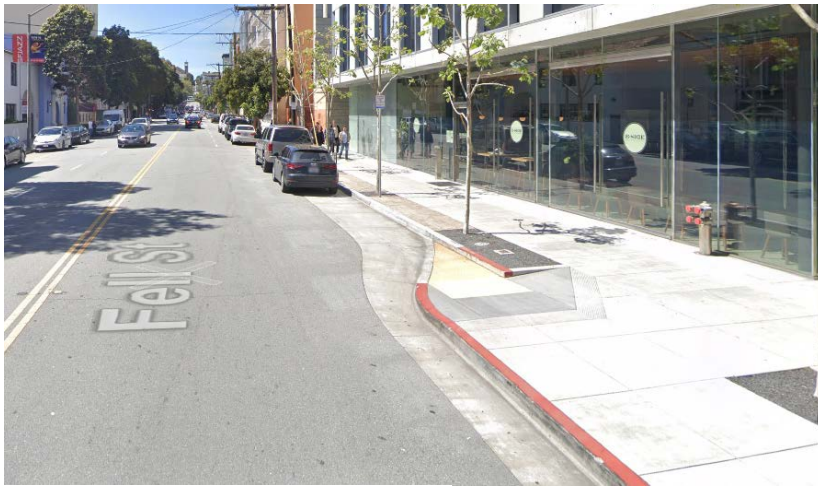


Figure 4: 201 Fell Street, San Francisco



Figure 5: 1498 Bridgeway, Sausalito

Further technical guidance on curb ramp design is provided in Section R304 of the United States Access Board guidance (<https://www.access-board.gov/guidelines-and-standards/streets-sidewalks/public-rights-of-way/proposed-rights-of-way-guidelines/chapter-r3-technical-requirements>).

BIKEWAY NETWORK TREATMENTS

Summary:

- Shared-lane markings (sharrows) should be placed approximately every 200' along the corridor in both directions of travel
- "Bicyclists May Use Full Lane" signs (R4-11) should be installed at each approach to the corridor

The City of San Bruno Walk 'n Bike Plan identifies San Mateo Avenue as a Class III Bike Route. Traffic speeds on the street are slow enough along the roadway so that, in the near-term, changes to this classification are not recommended, and no physical changes are required to improve bicycle safety. However, drivers should be aware that they share the roadway with people bicycling.

CAMUTCD provides the following guidance on the placement of shared-lane markings:

- If used, the Shared Lane Marking should be placed immediately after an intersection and spaced at intervals not greater than 250 feet thereafter (Section 9C.07 section 6)

The National Association of City Transportation Officials (NACTO) *Urban Bikeway Design Guide* provides the following additional guidance:

- Frequent, visible placement of markings is essential. The number of markings along a street should correspond to the difficulty bicyclists experience taking the proper travel path or position. SLMs used to bridge discontinuous bicycle facilities or along busier streets should be placed more frequently (50 to 100 feet) than along low traffic bicycle routes (up to 250 feet or more). SLMs used along low volume routes can be staggered by direction to provide markings closer together.

Given its proximity to both Caltrain and BART and the street's designation as San Bruno's Central Business District, San Mateo Avenue represents a key bicycle route in the city and a lower-stress cycling option to El Camino Real. The corridor contains daily vehicle volumes of approximately 11,000 and has high on-street parking turnover, contributing to potential conflicts between drivers and cyclists. Thus, more frequent placement of sharrows than is provided as part of MUTCD guidance is recommended.

- Shared-lane markings (sharrows) should be placed immediately after each intersection, immediately after the mid-block crosswalks and the bulb outs at the approaches to each intersection with an approximate spacing of 200 feet along the corridor in both the northbound and southbound directions. Shared lane markings assist with bicyclist lane position, reduce sidewalk bicycling, and reinforce the legitimacy of bicycle travel in the roadway. More specific to San Mateo Avenue, shared lane markings help to position cyclists in the travel lane rather than toward the bulb outs at the mid-block and intersection locations.
- At a minimum, two "Bicyclists May Use Full Lane" signs (R4-11) should be installed on the corridor. One should be visible to northbound traffic near the intersection of San Mateo Avenue and El Camino Real, and one should be visible to southbound traffic near the intersection of San Mateo Avenue and Kains Avenue. These locations represent the start of densely spaced retail activity.

PEDESTRIAN TREATMENTS

- Ensure that all crosswalks are striped with a high visibility 'Continental' crosswalk design
- Install in-road pedestrian yield signs at uncontrolled crossing locations that don't currently have them installed

- Install yield limit lines (shark teeth) at the approach to uncontrolled pedestrian crossings
- Install post-mounted diagonal arrow (W16-7P) plaque at the mid block crosswalk locations beneath existing pedestrian crossing (W11-2) warning signs
- Install stop bars at the approach to stop-controlled intersections

Traffic speeds and volumes on San Mateo Avenue are low enough, such that additional pedestrian countermeasure beyond existing and basic treatments aren't necessary. A few basic enhancements are recommended at existing crosswalks such as high-visibility markings, other striping enhancements and in-road pedestrian yield signs.

Much of the corridor already has high visibility crosswalk markings. All crosswalk locations along the corridor should be updated to California Standard Plans' "Continental" crosswalk design. The continental crosswalk markings per Caltrans standard plans (A24F) are not required but are recommended as they provide increased visibility of crossing pedestrians and have been shown to improve yielding behavior.

Artistic and creative crosswalks can be used in combination with the continental crosswalk design but must include the thick white bars to provide contrast with the surround black asphalt and pedestrians, particularly at night.

Much of the corridor already has in-road pedestrian yield signs at uncontrolled crossing locations, except for two locations: the mid-block crossing near Artichoke Joe's, and the north leg of Jenevein Avenue. Install in-street pedestrian crossing signs (R1-6) at the locations where they don't exist.

It is also recommended to install advanced yield lines at the uncontrolled crossings and advanced stop bars at the stop-controlled intersections and signalized intersections. Finally, post-mounted diagonal arrow (W116-7P) plaque at the mid-block crosswalk locations beneath existing pedestrian crossing (W11-2) warning signs should also be installed.

APPENDIX G: ANGLED PARKING EVALUATION

By: Parisi Transportation Consultants

G. ANGLED PARKING EVALUATION



Memo

To: Jacob Tobias; WRT Design, Rivka Weinstock; WRT Design
 From: Patrick Golier, Jasmine Stiff; Parisi Transportation Consulting
 Date: September 13, 2019
 Subject: **Angled Parking Analysis for San Mateo Avenue**

This memorandum describes the results of a technical study to consider the potential conversion of on-street parallel to angled parking along San Mateo Avenue, from El Camino Real to Huntington Avenue as part of the San Mateo Avenue Streetscape Plan.

SUMMARY

Parisi Transportation Consulting conducted an analysis regarding the feasibility of converting on-street parking along the corridor from parallel to a 60- and 45-degree configuration. The result of the analysis indicates that the conversion is not recommended due to the resulting narrow roadway width. More specifically, the implications of the reduced roadway width include an inability to:

- Meet San Mateo County Fire Code;
- Meet City of San Bruno Municipal Code Section 12.100.080 *Design Standards for Parking Facilities*;
- Maintain two travel lanes along the corridor; and
- Maintain on-street loading activity as a stopped vehicle or truck would block other vehicles

SIXTY-DEGREE PARKING

Parisi considered the installation of sixty-degree parking on one side of San Mateo Avenue from Kains Avenue to El Camino Real. The road width of San Mateo Avenue is 43-feet. The implications of this parking configuration are as follows:

- The width of the unobstructed roadway width would be 14-feet assuming an 8-foot-wide parallel parking configuration on the opposite side of the street, from approximately 27-feet under existing conditions, which would provide an insufficient drive aisle width to support parallel parking on the opposite side of the street. A 14-foot drive aisle width

does not provide an adequate amount of maneuvering room for vehicles to back out of an angled parking space and does not meet San Bruno's parking code requirements as depicted in Municipal Code Section 12.100.080.

- The San Mateo County Fire Code states that "fire apparatus access shall have an unobstructed road width of at least 20 feet and vertical clearance of 13 feet 6 inches...Fire apparatus shall not be obstructed in any manner including vehicle parking or vegetation intrusion." Under a 60-degree angled parking design, San Mateo Avenue would provide 14-foot unobstructed road width. In residential areas with low parking use this may be less of an issue for the Fire Department. However, since the parking on this street is well-used and the business uses include restaurants which could carry a higher risk of fire, parking conversion is unlikely to be approved by the San Bruno Fire Department;
- To meet fire clear-width requirements, parallel parking and bulb outs on the opposite side of the street from the angled parking would need to be removed. This would result in a total of 22-feet of roadway width. In addition, while this road width would allow for sufficient drive aisle width to facilitate angled parking on one side of the street, two-way traffic would be precluded for an insufficient drive aisle width for two-way circulation. A minimum of 24-feet of drive aisle width for two-way traffic is recommended to allow drivers backing out of angled parking spaces sufficient maneuvering room without conflicting with moving traffic in the opposite direction;
- Circulation on the street would be required to change from two-way to one-way given the narrow drive aisle width. This would also require the rerouting of the SamTrans 141 line and bicycle circulation in one direction. A circulation scheme through the neighborhood would need to be designed that provides intuitive vehicular and bicycle routing for traffic in the opposite direction of the one-way travel along San Mateo Avenue. This would also result in an increase in traffic volumes on adjacent residential streets;
- Removal of parking on the opposite side of the street would result in a total parking supply of 151 spaces. If the existing bulb outs from the side of the street with the angled parking were also removed in addition to the removal of the parallel parking, total on-street parking supply would be approximately 162.
- The City of San Bruno's Municipal Code Section 12.100.080 requires drive aisle widths for on-street angled parking to be 28 feet and stall depth to be 19.8 feet. The code, as currently written, would preclude the ability to fit 60-degree angle parking on San Mateo Avenue, even with the removal of on-street parking from the opposite side of the street, removal of all bulb outs, and the conversion of the roadway from two-way to one-way.

FORTY-FIVE DEGREE PARKING

Parisi also assessed the implications of a forty-five-degree parking scheme on San Mateo Avenue:

- The width of the remaining travel lanes would be 16-feet, from approximately 27-feet under existing conditions, assuming an 8-foot-wide parallel parking on the opposite side of the street;
- Circulation would be required to change from two-way to one-way;
- Parallel parking would need to be removed from one side of the street to accommodate the angled parking;
- The width of the one-way vehicle travel lane along the roadway would be 24-feet, which would not meet on-street requirements which require an aisle width between stall lines of 28 feet; and
- Total on-street parking supply after the removal of parallel parking from the opposite side of the street would decrease to approximately 115 along the corridor. If the existing bulb outs on the same side of the street as the angled parking were also removed in addition to the removal of the parallel parking, total on-street parking supply would decrease to 126.
- The City of San Bruno's parking codes for on-street parking require drive aisle widths to be 28 feet and stall depth to be 18.7 feet would preclude the ability to fit 45-degree angle parking on San Mateo Avenue.

DRIVE AISLE WIDTH

ON-STREET REQUIREMENTS

Drive aisles allow for vehicle circulation and provide sufficient area for motorists to back out of parking stalls. The City of San Bruno requires an additional 12-feet to the drive aisle width for 60-degree and an additional 16-feet for 45-degree parking from their off-street drive aisle regulations. The results of this drive aisle width requirements are detailed below in Figure 1 from the San Bruno Municipal Code Section 12.100.080 and Table 1, below. These drive aisle requirements would preclude the ability to fit any angled parking stalls on San Mateo Avenue, which has a curb to curb width of 43-feet.

Angled Parking Analysis for San Mateo Avenue

FIGURE 1
PARKING DIMENSION TABLE

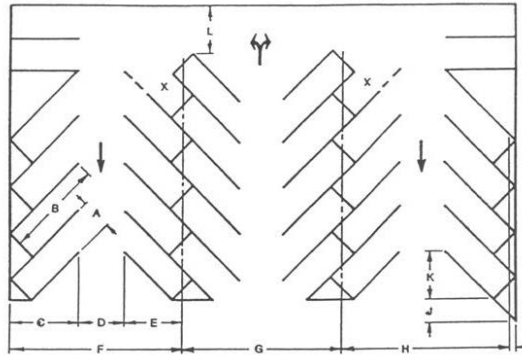


Table 1: San Mateo's Standards for Aisle Width for On-Street and Off-Street Parking Stalls

Dimension	Diagram	45 Degree		60 Degree	
		Off-Street	On-Street	Off-Street	On-Street
Stall Depth	C	18.70	18.70	19.80	19.80
Aisle Width Between Stall Lines	D	12.00	28.00	16.00	28.00
For on-street parking use the above dimensions, adding 16 feet to dimension "D" for 45-degree parking and 12 feet for 60-degree parking					

APPENDIX H: NOTES FROM COMMUNITY ENGAGEMENT AND STAKEHOLDER MEETINGS

By: WRT Design

H. NOTES FROM COMMUNITY ENGAGEMENT AND STAKEHOLDER MEETINGS

Public Engagement Summary

March 12, 2019 - 'Walk'shop – a walking tour, Community Workshop #1
 March 28, 2019 - Stakeholder Meeting #1
 March 30, 2019 - Drop-in Community Workshop #2
 March 11 - April 10, 2019 – Survey. We received 92 responses during this time.
 May 7, 2019 - Planning Commission Meeting #1
 May 8, 2019 - Stakeholder meeting #2
 May 15, 2019 - Parks and Recreation Meeting
 May 16, 2019- Arts Commission Meeting
 May 22, 2019 - Community Meeting #3
 July 16, 2019 - Planning Commission Meeting #2

Summary of Comments from All Community Engagement Meetings:

General Aesthetics:

- The spirit and texture of the design, including the transportation theme and the light, playful aesthetic, feels authentic and fitting for the site (Planning Commission #1).
- Agree with simplified design, with key unique features (Stakeholder #2).
- Ensure that the aesthetic intent is elegant and not 'fancy' or Victorian (Stakeholder #2).
- Put something on the avenue so that everybody likes to come! (CW #2: Bulb out board)
- Now desolate, dreary (CW #1)
- The charm is missing here - look at Broadway in Burlingame – should be a place to linger. (CW #1)
- Old san Bruno, cool, diverse, should encourage people to be here. (CW #1)
- Eclectic/Interesting/Artistic (CW #1)
- Family/community/diversity/yum/charm/potential/revitalized/we have roots/city with a heart. (CW #1)
- San Mateo Avenue is the heart of our community/Inclusive. (CW #1)
- "the heart of san Bruno is the people" (CW #2 Prioritization Exercise)
- Small town charm (CW #2 Character Concepts Board)
- Artistic/Unique, if done well (CW #2 Character Concepts Board)
- To red bench - artistic, but maybe uncomfortable (CW #2 Character Concepts Board)
- Keep it simple – not too cluttered! (CW #2 Character Concepts Board)
- Keep it approachable (CW #2 Character Concepts Board)
- Like modern, but buildings aren't modern – prefer simple (CW #2 Character Concepts Board)
- Airport elements, or general transportation (railroad history then airport etc) (SM #1)

- Historic figures, murals of people who had a part in building San Bruno (SM #1)
- Artistic and unique (SM #1)
- Should feel more modern (SM #1)
- Classic Modern/Contemporary (SM #1)
- Charm, highlight multi-cultural (SM #1)
- Working Class (SM #1)

Furnishing and Paving:

- Choose a different trash can without the grass theme (Planning Commission #1 and Community Meeting #3).
- Ensure trash can has a cover plate (Stakeholder Meeting #2).
- Trash can looks small; ensure it works with the requirements of Recology (i.e. large enough, etc.) (Arts Commission).
- Look into solar compactor trash cans (Arts Commission).
- Custom curved benches aren't working as shown due to tripping hazard and lack of seating. They should be reconceptualized (Planning Commission #1).
- Paving design could include concrete with unit paver banding for the tree amenity strip (Stakeholder Meeting #2).
- In streetscape plan, could include both unit pavers and concrete, and indicate positives and negatives (Stakeholder Meeting #2).
- Suggestion that existing sidewalks and pavers could be painted to provide visual continuity at a lower cost than replacing all pavements (Community Meeting #3).
- Wheelchair ramps (CW #2: Table runner map)
- Raised crosswalks, especially mid-block (CW #2: Greening Opportunities board)
- Wheelchair access- no pedestal tables (CW #2: Activation Opportunities board)
- Need ADA access to businesses. (CW #1)
- Outdoor seating should generally be near the building not on the bulb out, though it may work in certain places. (CW #1)
- It's too cold to eat outdoors, too windy, maybe it would work in the building recesses. (CW #1)
- Outside seating is great, even if it's cold – can have heaters. (CW #1)
- People do sit and stop along the avenue where they can. (CW #1)
- The existing seating element/benches are ugly and not maintained well – the vegetation is overgrown, so it's hard to sit there. (CW #1)
- Provide benches for storefronts – provide seating. (CW #1)
- New lights, trash cans, bins – recycle-compost. (CW #1)
- Water bottle filler, water fountain, bike racks, fountains for dogs, signage, trash bags. (CW #1)
- Keep newspaper racks. (CW #1)
- More outside seating!! (CW #2: Activation Opportunities board)
- No wood, more concrete to avoid vandalism (CW #2: Activation Opportunities board)
- Ledge seating in the angular building setbacks (CW #2: Activation Opportunities board)

- Need more seating for elderly - to take breaks walking from one end to the other (CW #2 Prioritization Exercise)
- Welch family/Marshall family - benches named/paid for by families of former city leaders (CW #2 Prioritization Exercise)
- Need a better paving design than the current one, because now, if a spot on the distinctive strip breaks, they fix it with regular concrete and it looks ugly. (CW #1)
- Uneven, patchy sidewalk. Need a complete replacement. (CW #1)

Planting, Green Infrastructure and Drainage:

- Excited about the planted bulb outs and trees (Planning Commission #1).
- Place trees so that they don't interfere with opening car doors (Stakeholder Meeting #2).
- Look at drainage issues and bulb outs (Stakeholder Meeting #2).
- Don't propose flow-through planters because they collect trash (Stakeholder Meeting #2).
- Look at raised crosswalks and drainage (Stakeholder Meeting #2).
- Greening the bulb outs is a great idea (Arts Commission).
- Ensure that the right tree species is recommended to be successful on this corridor (Arts Commission).
- Concerned about utility conflict with trees (Community Meeting #3).
- Get rid of the pots – they're ugly! Also, drivers can't see people crossing the street behind the pots – bad for visibility. (CW #1)
- The street should be lined with trees! There used to be trees here but they weren't doing well, so they removed them. (CW #1)
- Make sure the tree species work well for visibility. (CW #1)
- More trees! (CW #1)
- Green infrastructure. yes! (CW #1)
- Trees. Yes! (CW #1)
- Ceremonty/target center – they did a nice job with the landscaping. (CW #1)
- Anywhere where there is too much street, we should reclaim. (CW #1)
- Need to plant the right species so that they don't pull out the sidewalk. (SM #1)
- More trees!! (CW #2: Table runner map)
- You could add some flowers, trees, etc. (CW #2: Table runner map)
- Plant trees that are native – the existing list is not native (CW #2: Table runner map)
- Like option #3 (removing bulb outs) (CW #2: Greening Opportunities board)
- Trees block our wheelchair van ramp – access needed - our ramp comes out on the right side of our van (CW #2: Greening Opportunities board)
- Big trees, wind tolerant – see San Carlos Ave in San Carlos (CW #2: Greening Opportunities board)
- Bring back the trees (CW #2: Greening Opportunities board)
- Need a wind break (CW #2 Prioritization Exercise)
- Please no bulb-outs between Kains ave and Caltrain station! – bicycle hazard. (CW #2: Greening Opportunities board)
- Could have parklet – an occupiable space instead of a planter (CW #1)

- Stormwater treatment will be important for future (CW #2: Bulb out board)
- Like green and bench, concerned about constraining sidewalk width (CW #2: Bulb out board)
- Like balance of planting and seating (CW #2: Bulb out board)

Lighting:

- Should have fluidity of lighting along the corridor: lighting should go along the street, or even over the street, if possible (Planning Commission #1).
- It's dark at night; need to do a photometric analysis. Attractive, nighttime lighting should be incorporated along corridor, paseos and side streets (Stakeholder Meeting #2 and Arts Commission).
- In-ground lighting will be difficult for maintenance (Stakeholder Meeting #2).
- Should have consistency in the light poles (Stakeholder Meeting #2).
- It's dark at night, need to lighten up the street, neon at night. (CW #1)
- Need lighting at night. (CW #1)
- Current street lights are ugly, historic looking, don't give a lot of light. (CW #1)
- Lights hanging from one pole to another (CW #2 Prioritization Exercise)

Bicycle infrastructure:

- Biking is important and in general plan; ensure bike infrastructure opportunities (Planning Commission #1).
- Sharrows would be good here (Stakeholder Meeting #2).

Centennial Plaza:

- Centennial Plaza is important to develop. (Planning Commission #1).
- It would be nice to include quiet, shaded seating opportunities (Planning Commission #1)
- Instead of a stage, have an open flex space with power access for different types of events (Stakeholder Meeting #2).
- Do not need to keep fountain (Stakeholder Meeting #2).
- Ideas for the plaza could include: children's play area, bocce ball, a pergola with vines, art sales, artistic play structure, a usable urban space, pop-up amenities (Arts Commission).
- Existing art is temporary; remove and save the art (Arts Commission).
- It's useless now because it's gated off. People do sit on those two benches though. Should open it up so that you can sit everywhere – (there is supposedly a contamination issue). (CW #1)
- Bioswale – could get funding for this, for beautification. (CW #1)
- Want to use this space, is a nice wind shelter. (CW #1)
- It's closed off because the center is just loose soil on old basement – not structurally sound. (CW #1)
- Pergola for shade (CW #2: Table runner map)
- Should be a community garden!! (CW #2: Table runner map)

- Improve the park – should be inviting, something for kids, it does get windy (CW #2: Table runner map)
- Simple stage for music opportunities (CW #2: Table runner map)
- ‘the non-park park’ (SM #1)
- Art there doesn’t fit with the character of the rest of the street. (SM #1)
- Could be an event space – look at Downtown Half Moon Bay (well lit, stage, benches, restaurants – hold concerts there) (SM #1)

Posy Park:

- A Posy Park redesign should ensure visibility and include trees (Planning Commission #1).
- Could have a farmer’s market here (Planning Commission #1).
- Ensure tensile structures can stand up to wind (Planning Commission #1).
- Ensure visibility and safety. Perhaps reorient the benches so that they are perpendicular to the street. Perhaps include a blue emergency beacon phone (Stakeholder Meeting #2).
- Can include café seating and a coffee cart (Stakeholder Meeting #2).
- Cigarette butts an issue here; install a cigarette receptacle (Arts Commission).
- Seating should not encourage homeless (Arts Commission).
- Install lighting at the mosaics (Stakeholder Meeting #2).
- Do not install lighting at the mosaics; they are fading (Arts Commission).
- Tent structures are good, as they do not take away from artwork, if they can be kept clean and will stand up to the wind (Art Commission).
- Like the idea of a shade shelter at Posy Park (Community Meeting #3).
- Would like to see signage or other means of identifying Posy Park – most people don’t know that name (Community Meeting #3).
- Will benches be utilized? Moveable tables and chairs could be an option (Parks and Recreation Commission).
- Make a place for trucks to park. Can do Off the Grid food trucks; useful for riders and the community (Parks and Recreation Commission).
- Add an area for skateboarding (Parks and Recreation Commission).
- Posy Park is underutilized; looks like a plaza (Parks and Recreation Commission).
- Park could have wind issues (Parks and Recreation Commission).
- Make it more friendly, add more grass. It is currently very cold (Parks and Recreation Commission).
- Dog park is not recommended (Parks Commission).
- In favor of landscape instead of the fountain. (CW #1)
- The white walls are boring. (CW #1)
- Too much concrete, ugly (SM #1)
- Redevelopment happening where Huntington meets San Bruno across from Posy Park (American Legion and Huntington Liquor Grocery) – going to be residential units with café and convenience store at ground floor. (SM #1)
- Too much concrete, more green in this park (CW #2: Table runner map)

Paseos:

- Paseos could be a place – murals, lighting, tables and chairs, chessboards, heaters, bocce ball, (plaza at Citibank also a good place for bocce ball). (CW #1)

- Is less windy here, so many better for seating? (CW #1)
- Stores usually have back entrances. (CW #1)
- Should be parking signage, make people aware, lighting, inviting, parking management. (CW #1)
- Could add plants, green walls, decorative light poles, planters, baskets, murals. (CW #1)

Wayfinding and Branding:

- The gateways need to stand up to the wind (Planning Commission #1).
- Could have signage that shows the medallions of all the organizations at Caltrain overpass (Stakeholder #2).
- Should have a marquee somewhere that shows events (the current one on El Camino Real is outdated, some thought it was charming, but the content is good) (Arts Commission).
- Concerned about 'The Avenue' branding. It speaks to the street, but not to the culture. Also concerned about redundancy of that name with Burlingame (Community Meeting #3, Arts Commission and Parks and Recreation Commission).
- A heart sculpture, creative gateway (not in a hokey way) (CW #1)
- Need a noted entrance on both ends; doesn't have to be an arch. Could use the walls (where the arches were supposed to be) for something. (CW #1)
- Maybe have store directories in the paseos. (CW #1)
- The current situation at El Camino real could be called 'the electric transformer gateway' because of all of the electric transformers – ugly, should remove. (CW #1)
- Need Wayfinding, not gateway (CW #2 Prioritization Exercise)
- Add one sign at Hazel Ave and Crystal Springs Ave, at City Park (CW #2 Wayfinding and Gateway Opportunities)
- Add one sign at Jenevein Ave and San Mateo Ave (CW #2 Wayfinding and Gateway Opportunities)

Art:

- Paseos are a great opportunity for art (Stakeholder Meeting #2 and Arts Commission)
- Could have an art competition: different artists can design different paseos. (Stakeholder Meeting #2).
- Art commission can help support this initiative (Stakeholder Meeting #2).
- Ensure murals are not 'bad art' (Palo Alto Murals are great) (Stakeholder Meeting #2).
- City should coordinate with property owners to see what can be done in Paseos (Stakeholder Meeting #2).
- Proposed artwork strategy is successful: having artwork in the paseos, posy and centennial park, and not along the street. (Arts Commission)
- Painted crosswalks are a good idea (Arts Commission).
- Don't like the aesthetics of the piano (Arts Commission).
- Could have murals on the storm drains, like City of Thornton (Arts Commission).

- Not enough art. (CW #1)
- The art that's out here is very old fashioned – the fountain and murals - it dates our downtown, but I know that some people do really like it. (CW #1)

Programming:

- Include street vendors, art shows, first Fridays, family friendly downtown, scavenger hunts (like San Jose downtown doors) (Planning Commission #1).
- Bring artwork along the street, children's competitions, farmer's markets (Stakeholder Meeting #2).
- closing off streets from vehicular traffic once a month.
- Encouraging activation by young people would be a good goal (Community Meeting #3).
- Should attract businesses and address these (Parks and Recreation Commission).
- Dog friendly downtown (CW #2: Activation Opportunities board)
- Dog friendly downtown! (CW #2: Activation Opportunities board)
- Dog potty stations w/ bags (CW #2: Activation Opportunities board)
- Could do 'Sunday Streets' where you close off the corridor for pedestrians only. (CW #1)
- Vibo Music (music store that also has performances) could have their performances outdoors. (CW #1)
- Could fundraise for the street by having sidewalk pavers of trees named for community members. (CW #1)
- There was a farmer's market here but it wasn't successful (wasn't run well), but people were excited about it. (CW #1)
- Farmer's Market (CW #2: Existing Corridor Character)
- Farmer's market: use parks and plaza spaces instead of closing the street (CW #2: Activation Opportunities board)
- Weekend events (CW #2: Activation Opportunities board)
- Music (CW #2 Prioritization Exercise)

Citibank Plaza:

- Citibank plaza is another open space opportunity (Planning Commission #1).

Parking and Loading:

- Should be sensitive to parking, and ensure that the design does not reduce parking (Stakeholder Meeting #2, Community Meeting #3). (WRT has responded that SamTrans bus accessibility requirements will remove 3 parking spots).
- City should coordinate with individual business owners to assess whether white and yellow striped zones are necessary and where (Stakeholder Meeting #2).
- Children from the swim school walk from the rear street – people park at Artichoke Joe's lot (Parks and Recreation Commission).
- There is no parking (Parks and Recreation Commission).
- More blue zones for handicapped (CW #2: Table runner map)

- Public parking space (CW #2: Table runner map)
- Add school-zone type signage near swim school (CW #2: Greening Opportunities board)
- Loading zone at swim school (CW #2: Greening Opportunities board)
- Everyone wants slower traffic, less cars. There's a lot of double parking, loading, creates traffic. (CW #1)
- The planters took parking away. (CW #1)
- Agree with diagonal parking, but don't want to lose sidewalk width – maybe look into making it a one way street? (CW #1)

Implementation and Maintenance:

- A piecemeal approach may work well, as opposed to trying to do all of the improvements in one go. Perhaps include a suggestion that landowners will have to pay into this, in addition to other sources. It will incentivize movement and responsibility from the landowners (Stakeholder #2).
- Need to consider maintenance costs and needs (Community Meeting #3).
- What is the status of the budget? (Community Meeting #3).
- Street improvements should be prioritized over Posy Park (Parks Commission).
- Who will maintain the landscape? (CW #2: Bulb out board)
- Who will maintain/take responsibility for the trees? (SM #1)
- Who will clean garbage? (CW #2: Bulb out board)
- Clean up the floors, trash cans, etc. (CW #2 Wayfinding and Gateway Opportunities)
- Maintenance is the most important element. (SM #1)
- Fewer, simpler elements that are well maintained is better than (SM #1)
- The city needs to maintain any planting that goes in. (The existing planters are being abused and not taken care of.) (SM #1)
- Maybe business owners should look into making a BID or Downtown Business association. (SM #1)
- Angus Avenue's sidewalk is still broken. (SM #1)
- The property owners here are required to fix the sidewalk. (SM #1)
- Once this streetscape is designed, the onus is on the city to really on the city to enforce it. (SM #1)
- If they're going to repave, think about maintenance – cost of repaving and how to make sure it looks nice when they have to repave for utility replacements etc. (SM #1)
- Need to wash the sidewalk. (CW #1)
- City should confirm what is most reasonable budget for building + maintenance (SM #1)
- The 'parking lieu fee' that comes from the 400 units on the corner of San Mateo Avenue and El Camino Real - where does that money go? Can it go into the street redesign? (SM #1)

Outside scope of this project:

- Absentee owners are a problem here. They are not maintaining them, and they are keeping storefronts vacant (Planning Commission #1).
- Ensure that something is in the building setbacks so that they are not used for encampment/trash (Stakeholder #2).
- Enforce trash clean up in front of stores, and/or provide trash enclosures (Stakeholder #2).
- Parking is still a major issue. If Caltrain builds a parking lot, it will relieve a lot of the parking issues (Stakeholder #2).
- Just by painting the buildings, could really help upgrade the downtown (like in Los Altos and Los Gatos, we can dictate the color of the buildings) (Stakeholder Meeting #2).
- Car Repair shop across from Posy Park is an eyesore (Community Meeting #3).
- Need to enforce ordinances to ensure that businesses keep up with maintenance (Community Meeting #3).
- Parking program for business owners (CW #2: Table runner map)
- Build a parking structure - then would support removing street parking for added green (CW #2: Greening Opportunities board)
- On Angus Avenue, Mason, and San Mateo, after 6 PM, cars are allowed to park on Mason (and Angus?), and it creates tons of traffic jams on corner of Angus and San Mateo. (CW #1)
- Caltrain parking costs money, but streets are free, so it backs up. (CW #1)
- Police Substation (CW #2: Table runner map)
- Police on bike 2x a day would make a big difference (CW #2: Table runner map)
- Less littering (CW #2: Table runner map)
- We could use a wider range from low cost to upscale restaurants (CW #1)
- Should be restaurants/entertainment here. Would be great to have more art/cultural uses/amenities, more social and community oriented places to gather, seems to be working well here. (CW #1)
- NW corner of Kains Ave + San Mateo should be a café, not an auto shop. (CW #1)
- Vacancies – one on nears Kains Ave, lease is too high. Maybe the city needs to do something with the vacant space while it's vacant? (CW #1)
- Is signage on buildings a part of this scope? In Bay Hill they have a standard and it looks good. Question about allowed building height on the street – 3-4 story buildings are allowed. (CW #1)
- The existing architecture is all cut up – it should feel continuous. (CW #1)
- Lack of transparency to the street – need a toolkit. Guide for businesses to have a good retail environment. (CW #1)
- There are a lot of businesses that remain closed/ closed blinds - is there zoning/code enforcement that can be done? (SM #1)
- More Colorful buildings – the buildings look dull (CW #2: Table runner map)
- Clean up store windows that are full of junk (CW #2: Table runner map)
- Paint buildings – pick out 3-4 tasteful colors (CW #2: Table runner map)
- Businesses should open their windows (CW #2: Existing Corridor Character)
- More poke stop! (CW #2: Existing Corridor Character)

Dots exercise from 3/30.19 Community Workshop**Existing Corridor Character**

Dot on rotary clock, newell's bar, starbucks sidewalk seating, and bunch of dots on 'more poke' and 'farmer's market' (both write ins)

Greening Opportunities

Most dots on the third tree placement option (remove bulb-outs), dots on the precedent image of the tree lines corridor

Bulb Out Opportunities

Most dots went to the bulb-out option that balances planting and seating/hardscape amenities

Option 3: (Combined planting + seating) – 13

Option 2: (Maximize hardscape) - 8

Option 1: (Maximize planting) - 7

Small mid-block bulb-out concept - 7

Activation Opportunities

Outdoor Café seating: People most liked the wood slat aesthetic (fig and sparrow), but were generally in favor of outdoor café seating

Paseo activation: People most liked the arbor/planting idea and the art/mural idea, but were generally in favor of activated paseos

Night Lighting: people seemed to like all of the ideas – but most dots went to the lighted spheres

Parklets: people most liked a parklet that incorporates planting

Character Concepts:

Most dots were in the "artistic, unique" category, but there was also an emphasis on simple and uncluttered design and people put dots on a bunch of the "simple, modern" images. In the "traditional" category: The image of Burlingame's paving got many dots as well.

Wayfinding and Gateway:

Gateway: Most dots were placed on pleasanthill's over the street gateway – one person noted that they liked the fact that it was over the street.

Wayfinding: Most dots on the Des Moines Iowa downtown wayfinding signage - people liked simple clear graphics, with some people liking the more craft/artistic like signage like Castro valley. One person wrote, that they need wayfinding, not a gateway

Should have gateway on Kains leading to downtown, (ppl would be coming from El Camino and Huntington) Kains is the main road from the library and city hall (Survey)

Prioritization exercise

31 trees and planting

27 pedestrian safety features

22 seating/outdoor dining

21 wayfinding and gateway markers

21 art

17 Special paving and custom elements

15 shade and comfort

7 stormwater management

5 bike parking

Survey: results as of 4/2/19 – 64 respondents

1. What brings you to San Mateo Avenue? (Please check all that apply)

Most respondents Live in the area, and eat and drink there. Second most do shopping/errands and drive on it to go elsewhere.

47 – **eat and drink**

40 - **live in the area**

26 – **shopping/errands**

25 – **drive on it to go elsewhere**

12 – strolling and exercise

10- take Caltrain

3 – other

3 – I own a business on san mateo ave

3- I work on san mateo ave

2. How often do you spend time on San Mateo Avenue?

Most respondents are there about once a week, second most are there once a month. Third, every day.

3. Which category below includes your age?

80 % of respondents are either 30-50 or 50-70.

4. What do you feel would be the most important to improve for the future of San Mateo Avenue? Please rank each of the following elements in the order of importance from 1 to 6. (1 is the most important and 6 is the least important):

Successful businesses ranked highest, then safety and beauty/character/identity.

4.81 – successful businesses

4.18 – beauty/character/identity

4.10- Safety

3.22- socially engaging and inclusive

2.44- comfort

2.43-Environmentally sustainable

5. What elements do you feel are most important to you?

Please rank each of the following elements in the order of importance from 1 to 9. (1 is the most important and 9 is the least important):

Car parking received the most importance, with trees and planting a close second.

Lighting, came in third, with seating/outdoor dining and pedestrian safety features very close after that.

6.62 Car Parking

6.26 Trees and planting**6.13 Lighting****5.68 seating/outdoor dining**

5.61 pedestrian safety features

4.71 Art

4.03 Special Paving

3.63 Wayfinding Signage

2.72 Bike Parking

6. What do you like most about San Mateo Avenue?

Diversity and quality of stores and restaurants: Locally owned business, good food, good selection, west coast café, culturally diverse, tandy leather, restaurants, variety, interesting, diversity, kid specialty shops, eclectic, affordable food,

Pedestrian amenities: wide sidewalks, stop signs at every block, close to public transport, walking distance from my home, close by, proximity, walkability, concentration of businesses, human-scale, contrasts well with El Camino real's speed and car centric character, generally safe,

Charm/ unique character: quaint, architecture/character of older buildings, history of area, small town feel, character, hidden gem, not overly crowded, small town feel

Free parking, free time limited parking

Potential: essentially a blank slate, potential destination for the city

7. What general attributes would you most like to change about San Mateo Avenue?**Any additional comments?**

Businesses that do not appeal to me/ need new and different businesses: strive for economic sustainability, need more than restaurants, need better businesses, some recognizable businesses, some big name businesses, look at Burlingame and Grand Ave – better businesses, businesses need to be updated, tanforan mall took away a lot of the business, now there are too many restaurants, need businesses that are not restaurants, city should work with new businesses to help them get started and give more support, city needs a new business program, need more successful businesses, too many empty businesses, often in disrepair, general facades/appearance need upgrade, and uniformity, update architecture, too many Chinese restaurants, need high caliber restaurants, do not require businesses to install expensive signage, require businesses to install nice signage, stores look cheap and junky, need better stores, need more mainstream businesses, more variety, more big name stores, like trader joes and jamba juice will help bring more people and help smaller businesses. More family friendly, better stores. A bookstore! No papered storefronts.

Run down: Dirty, embarrassing, Needs to be more attractive, bleak, look at Burlingame – needs to be more pleasing and inviting, look at Burlingame and Grand Ave - looks better., clean it up, it's an eyesore! Avenue is dirty, not aesthetically pleasing, look and feel needs to be updated, neglected, unpleasant, need to better hide garbage, grease clutter from businesses, get people to stop feeding birds behind Hon Lin, get rid of birds and bird

poop on sidewalks and parking lots, tear it all down and start over, add street lights or hanging baskets to encourage people to turn off el camino real, area looks depressed, more modern looking buildings, more conformity in look. Should be guidelines for storefront signage, paint color, need road repaving, looks old, outdated, dumpy, needs to look better, having streets cleaned, less vacancies, cleanliness, dilapidated businesses

Ped/bike safety: safer for moms with kids to walk, more ped friendly, bike lanes for Huntington and San Bruno Ave, more safety, keep bikes off sidewalks, not ped friendly (almost get hit by cars crossing the street), more walkable, crosswalk lights, bring public transport from hills

Parking is difficult: can't express this enough, need more parking, more parking is needed, need more free parking, need parking meters and a parking structure, code enforcement, not convenient to park, monthly parking structure or lot, find a way to make parking for 400 block easier, parking is a nightmare, parking can be challenging, parking parking, citizens have been asking about this for ages, charge for parking, Everyone knows more parking is needed. It's why so few people go downtown. Stop pretending it's not the main problem!! Better parking. Need to deal with double parking

Aesthetics/ Street furniture/outdoor activity: used to have produce outside across from starbucks but that went away, need more curb appeal, more outdoor dining, make it a street people would want to stroll on, more outdoor seating, add nice pavers, more art, plants, more places to sit, need fresh modern appearance, improved surfaces and textures, Finish centennial plaza, improve centennial plaza – could be a gem! More outdoor seating

Wayfinding/Signage: Should have gateway on Kains leading to downtown, (ppl would be coming from El Camino and Huntington), updated entry pt sign off camino real, signs directing cars to lots

Wider audience: would like to see downtown bring more visitors from all of the peninsula

Safety: people drive unsafely down the street, police station downtown, more lighting and safety, at night, seems unsafe and dark

Ecological/Planting- more trees, strive for ecological sustainability, need trees, planting, there's scarce greenery, taller more substantial trees, more/larger trees,

Activation/ Marketing: A Website page that describes the different restaurant's cuisines and perhaps weekly/monthly specials. It feels very unwelcoming to me as a new resident. 8. Create some events like Halloween trick or treating to bring families to the street. Or can you tie something to Celebrate Independence Day and have a street party? Or perhaps a "Back-to-School" shopping alternative to the mall. Perhaps you can create some special dining experiences for parents who visit some of the several businesses focused on children? OR maybe a special shopping event or experience for senior citizens. Most of them would likely remember life before Tanforan mall and might enjoy shopping along San Mateo Ave.



Draft San Mateo Avenue Conceptual Streetscape Plan

Summary of City Council Study Session Comments – September 24, 2019 Meeting

Summary:

On the September 24, 2019 regularly scheduled City Council meeting, the City Council reviewed the draft design, received public testimonies and provided comments to staff as they relate to the Draft San Mateo Avenue Conceptual Streetscape Plan at a Study Session. Overall the Council was in full support of the proposed project. Specifically, the Council favors the 'simple and elegant' design theme including the signage design, lighting design and the trash cans design. The Council also praised the addition of more trees, bike racks, improvements to the bus stops, the effort to maintain all existing parking and the phased implementation approach. The Council also envisioned the re-imagination of Posy Park to plant more trees and install additional benches closer to San Mateo Avenue.

The following includes comments and questions raised during the meeting and are categorized in the following sections:

- 1) Staff's recommended modifications;
- 2) Comments that do not need further action, and
- 3) Comments that are not included in the scope of the project.

1. Staff's Recommended Modifications

- **Loading Zone:** City Council expressed interest in incorporating a loading zone near the Posy Park to serve the San Bruno Caltrain Station. In response to the recommendation, the following note is added on page 52 and page 53 of the final Plan, respectively, "Potential drop-off zone (to be studied)" and "While a loading zone was not evaluated within the project scope, it may be considered in the future."
- **Hanging lights:** The Council recommended to review the hanging light design as they would not be suitable for the windy conditions of San Bruno. Staff has incorporated the following note on page 47 and page 50: "Note: all custom lighting elements should be designed and engineered to withstand wind loads. Further study would be required to determine the suitability of cable-suspended lighting fixtures, for example."

2. Comments that do not need further action

- **Landscaping:** The Council inquired if there were any examples of successful downtowns that had no trees. The Council also indicated their concerns regarding the high maintenance costs involved with mature trees and tree roots leaving the sidewalks uneven making them unsafe to walk on. Staff responded that healthy trees generally do not uproot the sidewalk pavements, if given enough underground space and are paired with an appropriate choice of tree species. Staff confirmed that the large tree pits and San Bruno native tree species are proposed in the Plan. Staff also clarified that the proposed trees species are deciduous in nature requiring less maintenance as compared to evergreen trees. Council did not have further questions or comments.
- **Sewer:** Council inquired if the existing sewer system would have any issues with the proposed trees in the sidewalks. Staff explained that the City had recently undertaken the sewer replacement project in the project area and the proposed project does not seem to have any adverse impacts on the existing sewer line and the proposed trees based on the utility assessment conducted by the engineering consultants. Staff also clarified that there might be one location - near the intersection of San Mateo Avenue and El Camino Real that could impact the installation of trees at that location. Council did not have further questions or comments.
- **Parking:** Council inquired, hypothetically, if there was no on street parking, could San Mateo Avenue be converted into something more stunning. Staff reiterated that the results from the community engagement process revealed that street parking is highly valuable to the San Bruno community. Furthermore, on-street parking helps support businesses downtown while acting as a safety buffer between the sidewalk and vehicle travel lane. Staff also responded if parking was eliminated, the street could have more planted/green areas, parklets and dedicated bike lanes. Staff reiterated that the project scope was to recommend streetscape improvements to the existing curb line on San Mateo Avenue and designing various scenarios was not in the scope of the project. Council did not have further questions or comments.
- **Loading:** Council recommended to explore locations on San Mateo Avenue for loading zones to facilitate businesses downtown. The Plan has evaluated providing loading zones through the *Transportation Memo* prepared by the transportation engineers and reviewed by San Bruno Public Works staff. The memo recommends providing yellow loading zones every 1000' on San Mateo Avenue. Staff is of the opinion that this comment was satisfactorily addressed through the *Transportation Memo*, as well as the recently adopted *Downtown Parking Management Plan* and therefore requires no further action. This is a City priority as a near term item to implement the *Downtown Parking Management Plan*.

- **Sidewalks and Curb Ramp:** Council recommended to address the non-compliant sidewalk slopes and curb ramps to be made code compliant. The Plan recommends to re-construct non-compliant curb ramps, as necessary, based on the technical assessment mentioned in the *Utility Assessment* Memo therefore requires no further action.

3. Comments not in the scope of the Plan

The comments under this section were not evaluated as they are not in the scope of the project. The solutions and answers to these comments may be part of a larger policy decision or other Code updates, based on detail analysis and CEQA analysis which was not in the scope of this Plan. As these items were not evaluated as part of this project, staff recommends no action for the following items:

- Better maintenance of existing and future street trees and shrubs.
- Feasibility eliminating the right turn only at the corner intersection of San Mateo Avenue and El Camino Real to help businesses in the 400 block on San Mateo Avenue.
- Requirement for installation of alcoves or screening to better screen garbage and recycling containers for the existing businesses.
- Explore the possibility of converting the Centennial Plaza into an entrance to a future City parking garage.
- Providing storefront awnings lights (Sign / Zoning Code requirement)



City Council Agenda Item Staff Report

CITY OF SAN BRUNO

DATE: October 22, 2019

TO: Honorable Mayor and Members of the City Council

FROM: Jovan D. Grogan, City Manager
Marc Zafferano, City Attorney

SUBJECT: Adopt Resolution Authorizing the Crestmoor Canyon Wildfire Mitigation Project in the Fiscal Year 2019-20 Capital Improvement Budget and Appropriating \$125,000 from the Emergency Disaster Reserve Fund to Initiate Project Planning and Environmental Clearance Processes

BACKGROUND:

Crestmoor Canyon is a large open space area totaling 76.6 acres owned by the City of San Bruno. The Canyon is wooded, containing some native species (Monterey pine, California live oak, etc.) but mostly non-native eucalyptus trees. The Canyon is located near the City's westerly border and is in close proximity to several regional and arterial roadways including Sneath Lane to the north, State Route 35 (Skyline Blvd.) to the west, San Bruno Avenue to the south and US 280 to the east. It is surrounded by the Crestmoor, and Rollingwood residential subdivisions, which contain approximately 321 homes; 137 homes, a school, and City facilities directly border the Canyon. Within a quarter mile to the west of the Canyon are 1,200 acres of open space (Sweeney Ridge), which is identified as a State Response Area with a high risk of fire.

During the 2010 PG&E gas pipeline explosion in the Crestmoor neighborhood, the fire spread into the Crestmoor Canyon. Fortunately, the devastation was mitigated by the quick thinking and heroic efforts of the first responders, who also requested that a CalFire aircraft spray fire retardant on the perimeter of the Canyon. This likely prevented the fire from spreading further into adjacent neighborhoods. Had a significant portion of the Canyon caught fire, large swaths of the City could have been destroyed, with many more people injured or killed. Fire danger in the Canyon remains a critical concern for residents of the affected Crestmoor neighborhood.

In 2015 the City proposed a "Crestmoor Canyon Fire Safety Improvements and Trails" project totaling \$1.9 million as part of the City's capital improvement program. However, the City was unable to initiate the project due to a lack of funds, and cost projections have not been updated since that time.

In January 2019, the City Council approved \$37,000 for a City-wide Wildfire Hazard and Risk Assessment. The Assessment seeks to identify the level of fire risk and potential fire

hazards throughout the City, and to develop an on-going mitigation work plan based on reviewing parcel density, road system complexity, distance to fire stations, and other environmental elements. A draft of the Assessment has already been completed and is currently under review by staff; a preliminary map is included as Attachment 2 for reference.

In June 2019, the City Council adopted its Fiscal Year (FY) 2019-20 budget, which includes \$75,000 for vegetation management and fire mitigation work in Crestmoor Canyon. These funds supplemented \$15,000 in grant funds from the California Fire Foundation that the City received and spent in the prior year (FY 2018-19) to clear brush and improve access to the Canyon's fire road.

As described in more detail below, the City may now have an opportunity to develop and fund a more extensive fire mitigation project in the Canyon. Staff is recommending that the City Council formally establish by resolution a Crestmoor Canyon Wildfire Mitigation Project in the FY 2019-20 Capital Improvement Program Budget and appropriate an additional \$125,000 from the Emergency Disaster Reserve Fund to initiate project planning and environmental clearance processes. This action would commit a total of \$200,000 in City funds (which includes the \$75,000 already budgeted) to the Project for FY 2019-20, authorize staff to develop a detailed scope of work and schedule, obtain needed regulatory approvals, and formally bid the Project as required by state law and the City's ordinances.

DISCUSSION:

In 2017, PG&E was sentenced to complete 10,000 hours of community service as a condition of their probation in the criminal prosecution arising from the 2010 gas pipeline explosion in San Bruno. At present, approximately three quarters of the court-mandated hours have been completed, some in San Bruno, but a significant portion within communities elsewhere in San Mateo County. Over the past several months, the City and PG&E have been discussing a proposal in which the United States District Court for the Northern District of California would consider that PG&E's remaining approximately 2,670 community service hours be satisfied upon implementation of a proposed community benefit project for wildfire mitigation in the Canyon.

On October 7, 2019, the City submitted a letter to District Judge William Alsup that requested the Court's approval of a negotiated agreement between the City and PG&E that includes a one-time \$3 million payment from PG&E to initiate the Crestmoor Canyon Wildfire Mitigation Project (Attachment 3). At a hearing held on October 8, 2019, Judge Alsup made the following comments:

- The City should develop a detailed schedule, scope of work, cost estimates, and budget;
- If approved, the \$3 million should be spent only on vegetation management and fire mitigation to directly benefit San Bruno residents, and not on consultants or any regulatory approvals needed for the project;
- The City should allocate its own resources for the Project, and would not seek any additional funding through the court for the Project;
- A hearing to follow up on these issues was scheduled for November 12, 2019.

Since the hearing, City staff have been working diligently to address the court's comments as follows:

- Developing a map reflecting 30' and 100' clearance parameters for creating defensible space (Attachment 4);
- Obtaining preliminary cost estimates from CalFire and contractors, which should be available in time for the November 12 hearing, and which will determine whether and how much additional funding above the \$3 million the City would need to allocate to the Project;
- Devising a schedule once the scope of work has been more clearly defined based on the cost estimates, and taking into consideration that if the court approves the Project, bankruptcy court approval would also be required;
- Developing an estimate for ongoing maintenance of the Canyon and creating budget strategies for annual funding.

The proposed Project will allow the City to combine current and future efforts to reduce wildfire fuel, improve access, and enhance defensible space along the entire upper edge of the Canyon at the Wildland-Residential Interface, using contractors and existing City personnel. This will be done by clearing underbrush and debris and by removing overhanging limbs and/or entire trees within the defensible space zone, including improving the fire access road and accessibility within the Canyon, and removing fallen and unhealthy trees that pose a risk of fire.

As an important and necessary first step before the November 12, 2019 hearing, staff is requesting that the City Council adopt the attached resolution to establish the Crestmoor Canyon Wildfire Mitigation Project, provide initial funding of an additional \$125,000 to support project planning and environmental clearance work, and include commitments that any contribution from PG&E to this community benefit project will only be spent on fire mitigation work in the canyon such as clearing vegetation, removal of dangerous or diseased trees, creating defensible space and improving emergency access to and within the Canyon, and that the City would not request any additional funds for the Project from the court proceeding.

FISCAL IMPACT:

Allocation of \$125,000 from the City's Emergency Disaster Reserve Fund to initiate project planning and environmental clearance processes for the Project. This Emergency Disaster Reserve Fund was established with an allocation of \$3 million in 2013 in accordance with City Council adoption of a reserve policy. The City policy requires a minimum balance of \$3 million. At present, interest earnings in the fund have increased the total available balance to \$3,182,000. Thus, the recommended allocation to the Crestmoor Canyon Wildfire Mitigation Project will leave sufficient funds to maintain the policy threshold.

Additional local funds may be needed to supplement the project's budget in order to attain the full 100 ft. clearance at the Wildland-Residential Interface. Further, the City will need to identify funding to support annual maintenance after the first-year vegetation clearance.

Staff will work to project and identify the required funding as part of the planning for the Project and during the upcoming FY 2020-21 budget development process.

Should the Court not approve funding from PG&E to support the Crestmoor Canyon Wildfire Mitigation Project, staff will work to program the available funds to enhance fire safety in and around the Canyon, while simultaneously working to identify additional resources to supplement the project.

ALTERNATIVES:

1. Do not approve the new Capital Improvement Project, Crestmoor Canyon Wildfire Mitigation Project for the Fiscal Year 2019-20 Capital Improvement Program (CIP)
2. Direct staff to seek other funding sources to initiate project planning and environmental clearance processes for the Crestmoor Canyon Wildfire Mitigation Project

RECOMMENDATION:

Adopt Resolution Authorizing the Crestmoor Canyon Wildfire Mitigation Project in the Fiscal Year 2019-20 Capital Improvement Budget and Appropriating \$125,000 from the Emergency Disaster Reserve Fund to Initiate Project Planning and Environmental Clearance Processes.

DISTRIBUTION:

None

ATTACHMENTS:

1. Resolution
2. Preliminary Draft of Crestmoor Canyon Risk Assessment Map
3. Letter to Federal Court Judge William Alsup dated October 7, 2019
4. Crestmoor Canyon Fire Mitigation Vegetation and Debris Clearance Map

DATE PREPARED:

October 11, 2019

RESOLUTION NO. 2019-____

RESOLUTION AUTHORIZING THE CRESTMOOR CANYON WILDFIRE MITIGATION PROJECT IN THE FISCAL YEAR 2019-20 CAPITAL IMPROVEMENT BUDGET AND APPROPRIATING \$125,000 FROM THE EMERGENCY DISASTER RESERVE FUND TO INITIATE PROJECT PLANNING AND ENVIRONMENTAL CLEARANCE PROCESSES

WHEREAS, Crestmoor Canyon is a large open space area totaling 76.6 acres owned by the City of San Bruno, and is located near the City's westerly border and is in close proximity to several regional and arterial roadways including Sneath Lane to the north, State Route 35 (Skyline Blvd.) to the west, San Bruno Avenue to the south and US 280 to the east. It is surrounded by the Crestmoor, Rollingwood and Glenview residential subdivisions, which contain approximately 321 homes; 137 homes, a school, and City facilities directly border the Canyon. Within a quarter mile to the west of the Canyon are 1,200 acres of open space (Sweeney Ridge), which is identified as a State Response Area with a high risk of fire.

WHEREAS, during the 2010 PG&E gas pipeline explosion in the Crestmoor neighborhood, the fire spread into the Crestmoor Canyon. Fortunately, the devastation was mitigated by the quick thinking and heroic efforts of the first responders, who also requested that a CalFire aircraft spray fire retardant on the perimeter of the Canyon. This likely prevented the fire from spreading further into adjacent neighborhoods. Had a significant portion of the Canyon caught fire, large swaths of the City could have been destroyed, with many more people injured or killed. Fire danger in the Canyon remains a critical concern for residents of the affected Crestmoor neighborhood.

WHEREAS, in 2015 the City proposed a "Crestmoor Canyon Fire Safety Improvements and Trails" project totaling \$1.9 million as part of the City's capital improvement program. However, the City was unable to initiate the project due to a lack of funds, and cost projections have not been updated since that time.

WHEREAS, in January 2019, the City Council approved \$37,000 for a City-wide Wildfire Hazard and Risk Assessment. The Assessment seeks to identify the level of fire risk and potential fire hazards throughout the City, and to develop an on-going mitigation work plan based on reviewing parcel density, road system complexity, distance to fire stations, and other environmental elements. A draft of the Assessment has already been completed and is currently under review by staff.

WHEREAS, in June 2019, the City Council adopted its Fiscal Year (FY) 2019-20 budget, which includes \$75,000 for vegetation management and fire mitigation work in Crestmoor Canyon. These funds supplemented \$15,000 in grant funds from the California Fire Foundation that the City received and spent in the prior year (FY 2018-19) to clear brush and improve access to the Canyon's fire road.

WHEREAS, the City may now have an opportunity to develop and fund a more extensive fire mitigation project in the Canyon in that in 2017, PG&E was sentenced to complete 10,000 hours of community service as a condition of their probation in the

criminal prosecution arising from the 2010 gas pipeline explosion in San Bruno. At present, approximately three quarters of the court-mandated hours have been completed, some in San Bruno, but a significant portion within communities elsewhere in San Mateo County. Over the past several months, the City and PG&E have been discussing a proposal in which the United States District Court for the Northern District of California would consider that PG&E's remaining approximately 2,670 community service hours be satisfied upon implementation of a proposed community benefit project for wildfire mitigation in the Canyon.

WHEREAS, on October 7, 2019, the City submitted a letter to District Judge William Alsup that requested the Court's approval of a negotiated agreement between the City and PG&E that includes a one-time \$3 million payment from PG&E to initiate the Crestmoor Canyon Wildfire Mitigation Project. At a hearing held on October 8, 2019, Judge Alsup made the following comments:

- The City should develop a detailed schedule, scope of work, cost estimates, and budget;
- If approved, the \$3 million should be spent only on vegetation management and fire mitigation to directly benefit San Bruno residents, and not on consultants or any regulatory approvals needed for the project;
- The City should allocate its own resources for the Project, and would not seek any additional funding through the court for the Project;
- A hearing to follow up on these issues was scheduled for November 12, 2019.

WHEREAS, since the hearing, City staff have been working diligently to address the court's comments as follows:

- Developing a map reflecting 30' and 100' clearance parameters for creating defensible space;
- Obtaining preliminary cost estimates from CalFire and contractors, which should be available in time for the November 12 hearing, and which will determine whether and how much additional funding above the \$3 million the City would need to allocate to the Project;
- Devising a schedule once the scope of work has been more clearly defined based on the cost estimates, and taking into consideration that if the court approves the Project, bankruptcy court approval would also be required;
- Developing an estimate for ongoing maintenance of the Canyon and creating budget strategies for annual funding.

WHEREAS, the proposed Project will allow the City to combine current and future efforts to reduce wildfire fuel, improve access, and enhance defensible space along the entire upper edge of the Canyon at the Wildland-Residential Interface, using contractors and existing City personnel. This will be done by clearing underbrush and debris and by removing overhanging limbs and/or entire trees within the defensible space zone, including improving the fire access road and accessibility within the Canyon, and removing fallen and unhealthy trees that pose a risk of fire.

WHEREAS, as an important and necessary first step before the November 12, 2019 hearing, staff is requesting that the City Council adopt the attached resolution to establish the Crestmoor Canyon Wildfire Mitigation Project, provide initial funding of an additional \$125,000 to support project planning and environmental clearance work, and include commitments that any contribution from PG&E to this community benefit project will only be spent on fire mitigation work in the canyon such as clearing vegetation, removal of dangerous or diseased trees, creating defensible space and improving emergency access to and within the Canyon, and that the City would not request any additional funds for the Project from the court proceeding.

NOW, THEREFORE, BE IT RESOLVED that the City Council hereby authorizes the Crestmoor Canyon Wildfire Mitigation Project in the fiscal year 2019-20 Capital Improvement Program Budget and appropriating \$125,000 from the Emergency Disaster Reserve Fund to initiate project planning and environmental clearance processes.

NOW, THEREFORE, BE IT FURTHER RESOLVED that staff is directed and authorized to: 1) enter into an agreement with PG&E, subject to court approval, to confirm the negotiated amount of \$3 million to be funded by PG&E for the Project; 2) develop a detailed scope, preliminary cost estimates, and a schedule for the Project; 3) process and obtain any required environmental and regulatory clearances and approvals; 4) present such information to the City Council with a recommendation regarding any additional City funding that may be required to complete the Project as designed; 5) initiate the formal bid process following City Council approval of the Project scope; and 6) determine the ongoing maintenance cost for the Project and present the City Council with budget strategies and alternatives to fund such costs.

NOW, THEREFORE, BE IT FURTHER RESOLVED THAT any contribution from PG&E to the Project will only be spent on direct fire mitigation work in the Canyon such as clearing vegetation, removal of dangerous or diseased trees, creating defensible space and improving emergency access to and within the Canyon.

NOW, THEREFORE BE IT FURTHER RESOLVED that the City will not request any additional funds for the Project from the court proceeding.

Dated: October 22, 2019

ATTEST:

Melissa Thurman, City Clerk

-o0o-

I, Melissa Thurman, City Clerk, do hereby certify that the foregoing Resolution was duly and regularly passed and adopted by the City Council of the City of San Bruno this 22nd day of October, 2019 by the following vote:

AYES: Councilmembers: _____

NOES: Councilmembers _____

ABSENT: Councilmembers: _____

City of San Bruno Crestmoor Canyon – Risk Assessment Map (DRAFT)





Marc L. Zafferano
City Attorney

October 7, 2019

Honorable District Judge William Alsup
United States District Court
Northern District of California
450 Golden Gate Avenue, Courtroom 12, 19th Floor
San Francisco, CA 94102

RE: PG&E Community Service Hours, Case No. 3:14-cr-00175

Dear Judge Alsup:

On behalf of the City of San Bruno, I am writing to request that the Court consider the Special Condition of Supervision #7 attached to the Probation Order regarding community service hours to be satisfied upon implementation of a proposed project agreed to between the Pacific Gas & Electric Company (PG&E) and the City of San Bruno (City).

In brief, PG&E would satisfy its approximately 2,670 remaining hours of community service by funding a community benefit project for wildfire mitigation in and around Crestmoor Canyon, which is directly adjacent to the Crestmoor neighborhood affected by the 2010 PG&E pipeline explosion. PG&E and the City would then ask the Court to consider PG&E's community service obligations to have been fully completed. The City will establish a capital project, titled the "Crestmoor Canyon Wildfire Mitigation Project" and undertake the work.

Special Condition of Supervision #7 states as follows:

PG&E shall perform 10,000 hours of community service. At least 2,000 hours shall be performed by high-level personnel, as defined in the commentary to § 8A1.2 of the Sentencing Guidelines. PG&E shall provide the prospective community service workers' names and titles to the probation officer to ensure compliance with this condition. The location and type of community service must be preapproved by the probation officer and to every extent possible be in the City of San Bruno. The intent of this condition is to require 10,000 hours of community service that PG&E would not otherwise have done, and the probation officer shall therefore consider as part of the approval process the extent to which the proposed projects can be tied to existing initiatives by PG&E. The community service shall be geared toward giving back to communities affected by PG&E's negligence, with special emphasis on the City of San Bruno, as directed by the probation officer.

On May 6, 2019, in a meeting with representatives of PG&E, the City learned for the first time that while PG&E had performed 5,225 hours of work towards the required 10,000 hours through April 2019, 60% of the hours had been performed outside of the City. And, virtually all 2,000 hours to be contributed by high-level personnel had been completed. Of the 2,057 hours that have been completed in the City, all but 27 hours were performed in service to the San Bruno Park School District. PG&E did not advise the City of its intention to perform these community service hours outside of the City beyond initial outreach during the early planning for the

service, seek the City's input regarding whether there were available community service opportunities in the City, or establish a protocol by which the City would be officially notified to collaborate on such opportunities prior to PG&E serving other communities.

While the projects completed by PG&E were reviewed and approved by the assigned Probation Officer and the City does not doubt that they represent PG&E's well-intended effort to comply with the community service requirement timely and with regional impact, the San Bruno community has not received significant community benefit from the community service program and does not believe that it adequately meets the intended spirit and purpose of the court's order. Projects that PG&E proposed and completed during the summer of 2019 began to be more focused on San Bruno and a dedicated email outreach to San Bruno non-profits and community organizations was sent in August 2019. From May through September 2019, PG&E has completed an additional 2,105 community service hours. This brings the total number of completed community service hours to 7,330 –leaving 2,670 hours remaining.

Following the May 6 meeting, at the City of San Bruno's request, the City and PG&E entered into discussions to identify projects that would represent tangible value to the City and its residents. The City suggested an immediate and critical opportunity to mitigate fire danger in the Crestmoor Canyon, which is immediately adjacent to the location of the pipeline rupture and the neighborhood affected by the explosion, and which was at substantial risk of conflagration as a result. (See Attachment 1.)

Crestmoor Canyon is a large open space area totaling 76.6 acres. The Canyon contains wooded areas with some native species (Monterey pine, California live oak, etc.) but mostly by non-native eucalyptus trees. There are several neighborhoods comprising of approximately 321 homes that would be directly impacted by a fire in this area. There are 137 homes, a school and city facilities that directly border the Canyon. Within a quarter mile to the west of the Canyon are 1,200 acres of open space (Sweeney Ridge), which is identified as a State Response Area with a high risk of fire.

During the 2010 PG&E pipeline explosion and fire in the City of San Bruno's Crestmoor neighborhood, the fire spread into the Canyon. Fortunately, the devastation was mitigated by the quick thinking and heroic efforts of the first responders, who also requested that a CalFire aircraft spray fire retardant on the perimeter of the Canyon. This likely prevented the fire from spreading further into adjacent neighborhoods. (See Attachment 2.) Had a significant portion of the Canyon caught fire, large swaths of the City could have been destroyed, with many more people injured or killed. Fire danger in the Canyon remains a critical concern for residents of the affected Crestmoor neighborhood.

In regard to a potential Crestmoor Canyon Wildfire Mitigation Project, the City initially thought that PG&E could perform the project with its own employees in direct satisfaction of its remaining community service hours, but then learned that PG&E regularly retains contractors to perform virtually all such work in their service territory throughout the state. In addition, because of concerns about future liability, there are significant legal obstacles to PG&E using their contractors to work on City property. As such, the City of San Bruno agreed to undertake the work through the use of contractors and City personnel, with a significant financial contribution supplied by PG&E – provided that the Court is in concurrence. After an investigation of the effort required, the City and PG&E agreed on the sum of **\$3 Million** from PG&E to the support the project.

This Crestmoor Canyon Wildfire Mitigation Project, as well as other similar fire mitigation projects, are currently unfunded in the City's budget. The proposed project would allow the City to hire contractors and utilize existing City personnel to establish a defensible space zone of up to 100 feet along the entire upper edge of the canyon at the Wildland-Residential Interface. This will be done by clearing underbrush and debris and by removing overhanging limbs and/or entire trees within the defensible space zone. The City recognizes that additional local funds may be needed to supplement the project's budget in order to attain the full 100 ft. clearance at the Wildland-Residential Interface, make improvements to the fire access road in the Canyon and, perhaps most important, fund annual maintenance after the first-year vegetation clearance. The City anticipates entering into a stipulated agreement with PG&E that outlines a one-time \$3M contribution to initiate the Crestmoor Canyon Wildfire Mitigation Project and restrict the use of the funds for fire hazard mitigation in Crestmoor Canyon and adjacent City open space areas.

A determination by this Court that PG&E's remaining community service hours would be satisfied by a \$3M contribution to the Crestmoor Canyon Wildfire Mitigation Project would serve the interests of justice and provide a significant mitigation from a wildfire – thereby reducing the potential loss of life and property in the event of a fire in or around the Canyon. A primary purpose of the community service hours was to demonstrate to the community that PG&E employees, including its executives, were visibly taking responsibility for their actions while providing a public benefit to the City. However, as noted above, virtually all of the required executive hours have already been completed, many of them outside of the City. Moreover, in connection with this Court's Probation Order, PG&E has been required to mitigate the risks associated with fires across the State, a task that requires the undivided attention of employees at every level of the company. Rather than diverting thousands of hours of staff resources away from this critical task to do additional volunteer work, PG&E would be better serving the State's residents by focusing its efforts on the many ongoing initiatives to ensure public safety.

This situation is different from one in which victims of crime might seek to enrich themselves by reducing or eliminating the broad public benefit resulting from a defendant's community service. In this case, the victim is a public entity and the San Bruno community –not a private individual or corporation. The City's residents were injured by PG&E's conduct, and those same residents would likewise benefit greatly from PG&E's initiative to enhance public safety by supporting the fire mitigation project described herein.

In closing, the City of San Bruno believes that the most compelling way to honor the remaining community service obligation to San Bruno would be to provide the City's residents with a tangible investment in their safety by supporting this important fire mitigation project.

Thank you for your consideration of this request.

Sincerely,



Marc Zafferano, *City Attorney*

Enclosures: (2)

CC: San Bruno City Council
Alex Vallejo, PG&E



City of San Bruno Crestmoor Neighborhood







**San Bruno Fire Mitigation
Vegetation and Debris Clearance
Crestmoor Canyon**

Distance from Buildings		
	30'	225285 Sq Ft 5.17 acres
	100'	590290 Sq Ft 13.55 acres





City Council Agenda Item Staff Report

CITY OF SAN BRUNO

DATE: October 22, 2019

TO: Honorable Mayor and Members of the City Council

FROM: Jovan D. Grogan, City Manager

PREPARED BY: Harry Burrowes, Project Manager – Crestmoor Reconstruction Project
Keith DeMartini, Finance Director

SUBJECT: Receive Presentation and Update on the Crestmoor (Glenview Fire) Neighborhood Reconstruction Project and Adopt Resolution:

- Authorizing Appropriation of \$100,000 from the Capital Improvement/One-Time Initiative Reserve Fund (Fund 004) to Cover the Costs Associated with Fire Station 52 Geotechnical Work; and,
- Authorizing \$490,000 of Staff Time on Reserve in the Emergency Disaster Recovery Fund (Fund 190) for the Remaining Expenditures in Order to Complete the Project.

BACKGROUND:

In the wake of the natural gas pipeline explosion and fire that occurred on September 9, 2010 in the Crestmoor neighborhood, the City of San Bruno and Pacific, Gas & Electric (PG&E) entered into a Trust Agreement. PG&E committed up to \$50,000,000 for the City to use for reimbursement of expenses incurred by the City related to the rebuild and recovery of the Crestmoor Neighborhood. Trust funds have been used to replace and reconstruct the underground utilities, street reconstruction, new streetlight system, new park replacement, and other infrastructure that supports the Crestmoor Neighborhood.

Reconstruction work within the neighborhood is essentially completed with only minor remedial construction items and final “punch-list” work left for the contractor to finish. The new Earl Glenview Park is a vital part of the Crestmoor neighborhood, and the surface infrastructure has been replaced with new facilities including sidewalks, paving and decorative intersections.

The purpose of this staff report is to update the City Council on the overall status and budget for the Crestmoor Neighborhood Reconstruction, the final reconstruction trust close-out, and to provide direction to staff in terms of any projected overall budget shortfall.

DISCUSSION:

As presented to the City Council last fall, the expenditures against the Crestmoor Fire PG&E Trust have been tracked in eight distinct categories since the trust's inception. These categories are as follows:

1. Regular and Contract Staff Time
2. Community Support & Outreach
3. Professional Services to Assist and Represent City's Interests
4. Neighborhood Reconstruction and Maintenance
5. Waived Fees
6. PG&E Trust Costs
7. San Bruno Community Foundation Establishment
8. Loss of Other Funding Due to Incident Response Focus

The Crestmoor Neighborhood Reconstruction Project has consisted of nine distinct projects:

- Crestmoor Canyon Retaining Wall & Slope Repairs – This work involved the reconstruction of the major retaining wall adjacent to the homes adjacent to the canyon as well as the reconstruction, stabilization, and erosion control measures to the canyon slopes in the immediate aftermath of the PG&E pipeline explosion and fire.
- Phase I Sewer Main – Replacement and upsizing of a small section of sewer line between Crestmoor Canyon and Claremont Drive performed before home reconstruction.
- Phase I Water System Improvements - The replacement and upsizing of water lines connecting the neighborhood the water main in Sneath Lane including the installation of two new water pressure regulating stations.
- Phase II Underground Utility Replacement – This project reconstructed the waterlines, sewer main, and storm drain lines (new and replacement) in the area in the near vicinity of the explosion and fire.
- Phase III Underground Utility Replacement – The Phase III project replaced and constructed new water, sewer, and storm drain facilities in the remainder of the entire Crestmoor neighborhood.
- Upper Sanitary Sewer Lateral Replacement Project (Phase V) – The replacement of over 330 upper (private) sanitary sewer laterals and associated surface restoration required for installation. Most of the laterals replaced were deteriorating "Orangeburg" pipe installed in the late 1950's/early 1960's.
- Earl Glenview Park – Replacement of the former "tot lot" destroyed in the pipeline explosion and fire. The new park complex consists of two elements located on Glenview Drive at the Earl Avenue and Claremont Drive intersections.
- Crestmoor Canyon Replanting Project – Originally envisioned as a "reforestation" project, due to the natural re-vegetation of the slopes by mostly native plant species, this project scope was lessened and included as a change to the Earl Glenview Park project. Work included new wood fencing, planting of Coast Live Oak trees, irrigation, and slope clean-up at the top of Crestmoor Canyon.
- Phase IV Street Improvements Project – The complete reconstruction of all surface infrastructure in the neighborhood. Work included completion of the storm drain

system (inlets/catch basins), roadway sub drain system, demolition and replacement of all concrete curb, gutter, and sidewalks, installation of all new electrical circuitry and new energy efficient and decorative LED streetlights, and the reconstruction and repaving off all streets including decorative stamped and colored asphalt intersections in the neighborhood.

A copy of the latest (June 1019) trust expenditure summary, including a more detailed description of each of these listed items, is attached to this staff report. The remaining expenditures fall into two of these categories – reconstruction and trust costs. The remaining reconstruction items are the final closeout of the Earl Glenview Park project and the final completion and closeout of the Phase IV Street Improvements Project.

The Earl Glenview Park was substantially completed in late 2018, however, several remaining remedial items remained to be completed as well as completion of the final cost negotiations of the last contract change order for extra work at the park(s) that the City directed the contractor to perform. This work has now been completed and accepted by the City with only the final change order still to be paid. This last change order increased the final Earl Glenview Park contract to an amount of \$26,090 above the total authorized construction budget of \$1,204,683. A separate City Council action is required to authorize an amendment to the construction contract and subsequently accept and close out the Earl Glenview Park project.

The City also contracted with the firm of MIG, Inc. to perform landscape design services and limited construction support for the Earl Glenview Park. As a result of the changes made during construction, MIG will incur additional expenses in the amount of \$6,400 above their existing contract. A separate City Council action will be required to authorize an amendment to the contract with MIG for this increased amount.

As described above, the Phase IV Street Improvements project included the replacement of all concrete curb, gutter, sidewalks, roadway reconstruction and new streetlight system. Remaining work to be completed as part of the Phase IV Street Improvements project includes:

- Final signing and striping revisions at the intersections to add highly reflective white bands at the crosswalks,
- Remedial pavement repairs in several locations where the sub-base materials beneath the new recycled paving have failed. This is a localized condition in several isolated areas. This work is an “extra” item to be performed via change order as the weak sub-base conditions were not anticipated nor observed during construction.,
- The replacement of concrete walkways adjacent to the new sidewalk in about a dozen locations throughout the neighborhood. Not all of the existing residential walkways matched the grade of the new sidewalk and reconstruction of small sections of the walks need to be performed to eliminate tripping hazards.
- The elimination of a mid-block portion of decorative paving that unfortunately acts as a crosswalk. The intent of this item was to act as a traffic calming measure, but it has created parking and potential access issues and eliminating it has been deemed to be the best solution.

- The removal of all construction materials and the clean-up of the laydown yard located on the Caltrans property adjacent to Glenview Drive south of Estates Drive.

All of these items of work are scheduled to be completed by mid to late November 2019. Subsequent to the completion of these final items of work, staff will bring an item to City Council for final project acceptance and closeout.

Project retention in the amount of \$510,353 has been withheld to date from Phase IV project contractor's (Graniterock Construction) payments in accordance with the contract documents and the Public Contract Code. Graniterock has requested a reduction in the retention amount by approximately 50% given the amount of work completed to date, the limited amount of contract and punch-list work remaining, and the desire to get some of their subcontractor's reimbursed. Staff concurs with this request and recommends a partial release of retention in the amount of \$250,000. A separate City Council action will be required to authorize the City Manager to release this partial retention.

Overall reconstruction closeout activities remaining include final documentation and archiving of project records, record (as-built) drawings, and the final record of survey for the street monument replacement in the neighborhood. Staff anticipates these final closeout activities to be completed on or before February 2020.

An updated listing of the total reconstruction effort costs, including the projected costs to complete is provided in the following chart:

OVERALL CRESTMOOR RECONSTRUCTION COST			
<u>Item</u>	<u>Expenditures to Date (thru June 2019)</u>	<u>Estimated Costs to Complete</u>	<u>Total Cost</u>
Regular and Contract Staff Time	\$ 7,720,551	\$ 0	\$ 7,720,551
Community Support & Outreach	\$ 216,835	\$ 0	\$ 216,835
Professional Services – Federal & State Proceedings	\$ 6,451,040	\$ 0	\$ 6,451,040
Reconstruction & Maintenance Costs	\$ 33,494,433	\$ 1,096,500	\$ 34,590,933
Waived Fees	\$ 816,231	\$ 0	\$ 816,231
PG&E Trust & Trustee Costs	\$ 379,178	\$ 60,000	\$ 439,178
San Bruno Community Foundation	\$ 55,253	\$ 0	\$ 55,253
Asset Transfer Loss	\$ 299,864	\$ 0	\$ 299,864
TOTALS	\$ 49,433,386	\$1,156,500	\$50,589,886

As shown above the total expected costs will exceed the PG&E Trust funding of \$50 million by approximately \$590,000. Included in these costs is a contingency amount of \$50,000 to cover any potential damages the City may be found liable for from existing or future claims from residents in the neighborhood.

The majority of this cost overrun can be attributed to the Phase IV Surface Improvements project and the Upper Sanitary Sewer Lateral Replacement Project. The bid price for the

Phase IV project was approximately \$1.3 Million above the engineer's estimate. Additionally, the surface restoration portion of the sewer lateral project is greater than originally projected.

Close-out of the \$50 Million Trust

The Trustee managing the Trust since inception, has requested that the City reserve \$60,000 from the available Trust balance for administrative costs required to terminate the Trust. The Trustee will coordinate all final tax reports, and legal actions to officially terminate the Trust. Any amount remaining in the close-out reserve will be returned for the purpose of the Trust, to cover expenses related to Crestmoor neighborhood reconstruction and recovery. The final close-out will be provided to both PG&E and the City of San Bruno, by the Trustee.

Strategy to Cover the Anticipated Budget Shortfall

On October 9, 2018, staff provided an update of the overall project as well as funding options for the City Council to consider and give direction to address the projected overall project budget shortfall. At that time, the project shortfall was projected to be approximately \$1.4 Million.

Considering the overall project shortfall is less than half of what was anticipated over a year ago, staff have developed the following strategy to solve for the anticipated budget shortfall:

1. Staff have identified approximately \$100,000 of staff and consultant costs associated with project management, geotechnical studies, feasibility analyses and investigations related to Fire Station 52 that be paid using the City's Capital Improvement/One-Time Initiative Reserve Fund (Fund 004).
2. Staff have identified approximately \$722,000 of full-time, salaried staff costs paid by the trust that can be recorded against the Emergency Disaster Recovery Fund (Fund 190). Fund 190 was used to track expenditures associated with the neighborhood rebuild project. This reserved amount is sufficient to cover the anticipated \$490,000 remaining budget shortfall.

FISCAL IMPACT:

The construction and recovery costs that are described above are covered through the City's Trust Agreement negotiated between the City of San Bruno and PG&E.

The City can transfer approximately \$100,000 of costs related to Fire Station 52 to the Capital Improvement/One-Time Initiative Reserve Fund and \$490,000 of a previous reimbursement for full-time equivalent (FTE) salaried staff costs that were set aside by the City Council to use as a reserve to the Emergency Disaster Fund.

ALTERNATIVES:

1. Direct staff to proceed with using identified strategies to pay remaining project costs.
2. Direct staff to consider alternative funding sources to pay remaining project costs.

RECOMMENDATION:

Receive Presentation and Update on the Crestmoor (Glenview Fire) Neighborhood Reconstruction Project and Adopt Resolution:

- Authorizing Appropriation of \$100,000 from the Capital Improvement/One-Time Initiative Reserve Fund (Fund 004) to Cover the Costs Associated with Fire Station 52 Geotechnical Work; and,
- Authorizing \$490,000 of Staff Time on Reserve in the Emergency Disaster Recovery Fund (Fund 190) for the Remaining Expenditures in Order to Complete the Project.

DISTRIBUTION:

None.

ATTACHMENTS:

1. Crestmoor Trust Fund Reimbursement Summary as of June, 2019
2. Resolutions

DATE PREPARED:

October 8, 2019

RESOLUTION NO. 2019-____

ADOPT RESOLUTION:

- **AUTHORIZING APPROPRIATION OF \$100,000 FROM THE CAPITAL IMPROVEMENT/ONE-TIME INITIATIVE RESERVE FUND (FUND 004) TO COVER THE COSTS ASSOCIATED WITH FIRE STATION NO. 52 GEOTECHNICAL WORK; AND**
- **AUTHORIZING \$490,000 OF STAFF TIME ON RESERVE IN TH EMERGENCY DISASTER RECOVERY FUND (FUND 190) FOR THE REMAINING EXPENDITURES TO COMPLETE THE CRESTMOOR RECONSTRUCTION PROJECT**

WHEREAS, the September 9, 2010 PG&E gas pipeline explosion and fire caused significant damage to the public infrastructure in the Crestmoor (Glenview) neighborhood; and

WHEREAS, a Trust Agreement was entered into between PG&E and the City that provided up to \$50 million to the City to cover the immediate and long term costs related to the explosion and fire including the repair, replacement, and reconstruction of infrastructure necessary to ensure the long term safety of the Crestmoor area; and

WHEREAS, the City has previously approved and authorized a list of numerous reconstruction projects that directly benefit the Crestmoor neighborhood and area by either enhancing public safety, improving the reliability of services, and providing further recovery for the residents; and

WHEREAS, funding for these reconstruction projects was made from the \$50 million Trust Agreement established between the City and PG&E, and

WHEREAS, the reconstruction of the neighborhood is nearing completion and the total expenditures are expected to exceed the funds provided in the Trust Agreement by \$590,000 to fully complete all of the outstanding projects; and

NOW, THEREFORE, BE IT RESOLVED that the City Council hereby authorizes:

- Appropriation of \$100,000 from the Capital Improvement/One-Time Initiative Reserve Fund (Fund 004) to Cover the Costs Associated with Fire Station 52 Geotechnical Work; and,
- \$490,000 of Staff Time on Reserve in the Emergency Disaster Recovery Fund (Fund 190) for the Remaining Expenditures in Order to Complete the Project.

Dated: October 22, 2019

ATTEST:

Melissa Thurman, City Clerk

I, Melissa Thurman, City Clerk, do hereby certify that the foregoing Resolution was duly and regularly passed and adopted by the City Council of the City of San Bruno this 22nd day of October 2019 by the following vote:

AYES: Councilmembers: _____

NOES: Councilmembers _____

ABSENT: Councilmembers: _____



City Council Agenda Item Staff Report

CITY OF SAN BRUNO

DATE: October 22, 2019

TO: Honorable Mayor and Members of the City Council

FROM: Jovan D. Grogan, City Manager

PREPARED BY: Harry Burrowes, Project Manager – Crestmoor Reconstruction Project

SUBJECT: Adopt Resolution:

- Authorizing the City Manager to Execute a Contract Amendment with Elite Landscape Construction, Inc in the Amount of \$26,090 for the Completion of Construction for the Earl Glenview Park; and
- Authorizing the City Manager to Execute a Contract Amendment with MIG, Inc. in the Amount of \$6,400 for Final Design Services for the Earl Glenview Park; and
- Accepting the Earl Glenview Park as Complete and Authorizing the Filing of Notice of Completion with the San Mateo County Recorder's Office.

BACKGROUND:

The Earl Glenview Park involved the new and replacement construction of a park complex on four former residential lots near the Earl Avenue, Glenview Drive, and Claremont Drive intersections within the Crestmoor neighborhood following the 2010 PG&E gas pipeline explosion. The new expanded park consists of a larger upper portion with active play areas for a variety of ages, a canyon overlook, and picnic area, and a lower portion that includes a sports court and flexible lawn area.

The park project was substantially completed in late 2018, and a ribbon cutting was held on October 27, 2018. Following the ribbon cutting, there were several remedial items of work as well as the final negotiations and costs related to contract changes remained. These items have now been completed and finalized. The re-opening of the park marked a milestone completion of construction within the neighborhood to many residents and neighbors.

In accordance with the City's established procedure, staff is requesting the City Council's acceptance of this project as complete. The final change order amount exceeds the previously authorized construction budget and staff is seeking City Council authorization to increase the budget to cover this shortfall. After the City Council accepts the project, a Notice of Completion (NOC) will be filed with the San Mateo County Recorder and the final project retention will be released.

DISCUSSION:

On August 22, 2017, the City Council adopted a resolution authorizing the City Manager to execute an agreement with Elite Landscape Construction, Inc. in the amount of \$1,047,550. City Council also authorized a construction contingency of \$157,133 for a total construction budget of \$1,204,683.

In addition to the base contract work, during the project numerous contract change orders were issued to the contractor for additional and/or changed work. These are listed here:

Change Order No.	Description of Work	Cost
1	Revisions to storm drain system including new area drains and piping.	\$ 23,985
2	Addition of electrical service connection for controllers, pad mounted meter, conduit and wiring.	\$ 13,317
3	Provide gopher cages for all 1 gal. 5 gal. and 15 gal plant materials (1,224 total plants), provide root barrier at all trees adjacent to walkways.	\$ 9,293
4	Removal of abandoned concrete footing and storm drain piping.	\$ 1,690
5	Addition of fencing and trees at Crestmoor Canyon including removal of existing chain link fencing, installation of new three-rail wood fence, twenty (20) new Coast Live Oak trees (24" box size), new irrigation line, root barrier, and slope hydroseeding.	\$ 74,955
6	New work at Concord Way "dead end" including removal and demolition of existing chain link fence on wall, repair and paint existing wall, install new posts and vinyl-clad chain link fencing, install new redwood retaining wall, and removal of dean and damaged vegetation.	\$ 27,109
7	Modifications at slide area including new concrete curbing and safety play surfacing, installation of wrought iron gates and fencing, addition of a 5 th bench including concrete pad, installation of a new section of wood fencing at Glenview Drive, and installation of elastomeric caulking at joints in sidewalk.	\$ 32,873
	TOTAL CHANGE ORDERS	\$ 183,222

All of the seven change orders were necessary for the successful completion and opening of the park as designed. It should be noted that the work involved in two of the change orders was not originally contemplated as part of the Earl Glenview Park project. The work at the Concord Way "dead end" (CCO No. 6) was separate and distinct from the park; however, staff deemed this work was vital to the overall reconstruction effort in the neighborhood and it was added to Elite's scope of work. The landscaping and fencing at the top of Crestmoor Canyon was always thought to be a separate future item of work – as part of what had previously been described as the "reforesting" of the canyon. In light of the natural revegetation by mostly native plant species in the canyon in the years since the explosion and fire, the need for a larger reforesting project was not necessary. For expediency, the work described above in CCO No. 5 was added

to this contract. Neither of these two items were anticipated at the outset of the Earl Glenview project.

The total construction cost (contract amount plus change orders) is \$1,230,772.35. This amount exceeds the previous authorized construction budget (\$1,204,683) by \$26,089.35. Staff is requesting an increase in the construction budget of this amount in order to submit the final progress payment to the contractor.

The contractor has completed all work under this contract, and staff is satisfied with its quality and the completion of the project. There are no unresolved stop notices or outstanding claims and the NOC is ready to be filed. Staff recommends that the City Council accept the Earl Glenview Park Project as complete and approve the release of the contract retention.

Staff is also requesting an increase in authorization of the total contract amount for the park design consultant, MIG, Inc. to cover additional costs related to construction support services and project closeout record drawing preparation.

On October 25, 2016, the City Council approved a contract with MIG, Inc., in the amount of \$227,750 for the design of both the Earl Glenview and Florida Avenue parks. The contract amount was split with total fee of \$118,250 assigned to the Earl Glenview Park. MIG has expended additional fees during the construction of the park for design revisions related to change orders, construction interface and reviews of contractor submittals. An increase in the total contract amount of \$6,400 is requested to cover the additional costs by MIG.

FISCAL IMPACT:

The Earl Glenview Park project was completed with a total contract cost that exceeded the authorized construction budget by \$26,090. The original base contract amount was \$1,047,550. Seven (7) change orders were issued to Elite Landscape in an amount totaling \$183,222. The total project construction cost was \$1,230,772.

The original design services contract with MIG, Inc. assigned a total fee amount of \$118,250 for the Earl Glenview Park. Additional costs incurred by MIG to complete the project including the change orders is \$6,400.

The appropriation required to enter into a contract amendment with Elite Landscape Construction, Inc and MIG, Inc requires a separate action of the City Council as described in the October 22, 2019 presentation and overall update provided by staff of the Crestmoor (Glenview Fire) Neighborhood Reconstruction Project.

ALTERNATIVES:

1. Do not accept the project as complete.
2. Do not authorize the City Manager to execute a contract amendment for Elite Landscape Construction, Inc and provide direction.
3. Do not authorize the City Manager to execute a contract amendment for MIG, Inc and provide direction to staff

RECOMMENDATION:

Adopt Resolutions:

- Authorizing the City Manager to Execute a Contract Amendment with Elite Landscape Construction, Inc in the Amount of \$26,090 for the Completion of Construction for the Earl Glenview Park; and
- Authorizing the City Manager to Execute a Contract Amendment with MIG, Inc. for in the Amount of \$6,400 for Final Design Services for the Earl Glenview Park; and
- Accepting the Earl Glenview Park as Complete and Authorizing the Filing of Notice of Completion with the San Mateo County Recorder's Office.

DISTRIBUTION:

None

ATTACHMENTS:

1. Resolution
2. Contract Acceptance and Release of Retention Information Form

DATE PREPARED:

October 15, 2019

RESOLUTION NO. 2019-____

ADOPT RESOLUTION:

- **AUTHORIZING THE CITY MANAGER TO EXECUTE A CONTRACT AMENDMENT WITH ELITE LANDSCAPE CONSTRUCTION, INC IN THE AMOUNT OF \$26,090 FOR THE COMPLETION OF CONSTRUCTION FOR THE EARL GLENVIEW PARK; AND**
- **AUTHORIZING THE CITY MANAGER TO EXECUTE A CONTRACT AMENDMENT WITH MIG, INC. FOR IN THE AMOUNT OF \$6,400 FOR FINAL DESIGN SERVICES FOR THE EARL GLENVIEW PARK; AND**
- **ACCEPTING THE EARL GLENVIEW PARK AS COMPLETE AND AUTHORIZING THE FILING OF NOTICE OF COMPLETION WITH THE SAN MATEO COUNTY RECORDER'S OFFICE.**

WHEREAS, the September 9, 2010 PG&E gas pipeline explosion and fire caused significant damage to the public infrastructure in the Crestmoor (Glenview) neighborhood; and

WHEREAS, the existing "tot lot" park located at the top of Crestmoor Canyon was destroyed in the fire; and

WHEREAS, The City Council authorized the construction of a new replacement park complete as part of the overall Crestmoor Neighborhood Reconstruction Project; and

WHEREAS, the park project was designed, advertised for bid, and a contract was awarded to Elite Landscape Construction Inc. in the amount of \$1,047,550 and a construction contingency of \$157,133 was also approved; and

WHEREAS, during the construction of the park several contract change orders were issued to Elite Landscape including the replanting and landscaping of the top of Crestmoor Canyon adjacent to Glenview Drive; and

WHEREAS, the total amount of change orders issued exceeded the combined contract amount and construction contingency by \$26,090; and

WHEREAS, all work, including the change orders, for the Earl Glenview Parks has been completed to the satisfaction of the City; and

WHEREAS, the City entered into a contract with MIG, Inc. to provides landscape design and limited construction support services during construction of the park; and

WHEREAS, extra costs were and will be incurred by MIG due to the changes during construction as well as the completion of record drawings for the project; and

WHEREAS, the costs of this extra work by MIG will exceed the previous authorized contract amount of \$118,250 allocated to this project by \$6,400.

NOW, THEREFORE, BE IT RESOLVED that the City Council hereby:

- Authorizes the City Manager to Execute a Contract Amendment with Elite Landscape Construction, Inc in the Amount of \$26,090 for the Completion of Construction for the Earl Glenview Park; and
- Authorizes the City Manager to Execute a Contract Amendment with MIG, Inc. for in the Amount of \$6,400 for Final Design Services for the Earl Glenview Park; and
- Accepts the Earl Glenview Park as Complete and Authorizes the Filing of Notice of Completion with the San Mateo County Recorder's Office.

Dated: October 22, 2019

ATTEST:

Melissa Thurman, City Clerk

-o0o-

I, Melissa Thurman, City Clerk, do hereby certify that the foregoing Resolution was duly and regularly passed and adopted by the City Council of the City of San Bruno this 22nd day of October, 2019 by the following vote:

AYES: Councilmembers: _____

NOES: Councilmembers _____

ABSENT: Councilmembers: _____



CRESTMoor NEIGHBORHOOD RECONSTRUCTION

Capital Improvement Program Project Acceptance Information Form

As of October 22, 2019:

Contract Name:	Earl Glenview Park
Project Manager:	Harry Burrowes, Project Manager – Crestmoor Reconstruction
Construction Contractor:	Elite Landscape Construction, Inc.

Project Information:

Project Description:	This project consisted of the construction of a new park complex on Glenview Drive at both the Earl Avenue and Claremont Drive intersections. The park complex was constructed to replace the former “tot lot” that was destroyed in the September 9, 2010 PG&E gas pipeline and explosion.
Construction Contract Award:	August 22, 2017
Start of Construction:	March 9, 2018
Contract Change Orders:	\$183,222
Substantial Completion:	December 18, 2018
Final Completion:	August 5, 2019
Notice of Completion:	Scheduled for filing on November 27, 2019

Project Costs:

	Budget	Actuals
TOTAL PROJECT	\$1,322,933	\$1,355,422
Construction Contract	\$1,047,550	\$1,047,550
Contingency	\$157,133	---
Change Orders	---	\$183,222
Design	118,250	\$124,650



City Council Agenda Item Staff Report

CITY OF SAN BRUNO

DATE: October 22, 2019

TO: Honorable Mayor and Members of the City Council

FROM: Jovan D. Grogan, City Manager

PREPARED BY: Harry Burrowes, Project Manager – Crestmoor Reconstruction

SUBJECT: Adopt Resolution Authorizing the City Manager to Release \$250,000 of Project Retention to Graniterock Construction for the Crestmoor Neighborhood Reconstruction – Phase IV Street Improvement Project.

BACKGROUND:

On July 26, 2016, the City Council authorized a construction contract for the Crestmoor Neighborhood Reconstruction - Phase IV Street Improvement Project in the amount of \$9,771,221 with Graniterock Construction. This phase of the Crestmoor Reconstruction Project included the replacement of all sidewalks, curb/gutter, roadway pavement, and streetlight system within the Crestmoor neighborhood. The scope of work is essentially complete with only a small amount of original contract work and some “punch list” items remaining. There still remains some additional change order work to be completed.

As of the date of this staff report, the modified contract amount with Graniterock, including change orders, totals \$10,218,756. The total amount of retention the City of San Bruno has withheld is \$510,353. Given the small amount of both contract work and punch list items remaining, Graniterock has requested that a portion of this retention be released. Staff concurs that a large portion of the retention is no longer required given the amount of completed work and is seeking authorization to release approximately one-half of the currently held retention to the contractor.

DISCUSSION:

The Phase IV Street Improvements Project includes the replacement of all sidewalks, curb/gutter, roadway pavement, and streetlight system within the Crestmoor neighborhood. This project has taken considerably longer than originally anticipated. In addition to significant weather delays, the coordination and construction logistics of replacing all surface infrastructure in a fully occupied neighborhood proved to be more time consuming than the contractor envisioned. The construction of these new improvements immediately adjacent to 374 existing homes, each with unique interface issues, resulted in numerous field modifications and changes that could not be anticipated during design. As such, a large amount of change orders have been issued. To date, the modified contract amount, including these change orders, totals \$10,430,851. The accompanying retention (5%) held

by the City totals \$510,353. Graniterock has requested that all or a portion of the retention be released.

There are currently no mechanics liens that have been filed, nor anticipated on this project. Staff estimates that the remaining contract work and punch list items total less than \$50,000. Additionally, all completed work is subject to a one-year warranty per contract.

Given the limited remaining risk to the City, the relatively large amount of current project retention, and the amount of time the retention has been held, staff recommends that \$250,000 of the retention be released at this time to help lessen the financial burden to Graniterock and their sub-contractors.

FISCAL IMPACT:

The current retention (\$510,353) is being held by the City as part of previous authorized payments to Graniterock Construction. As such, a partial release of retention in the amount of \$250,000 has no fiscal impact as it has already been accounted for in the overall cost of the Phase IV Street Improvement project.

ALTERNATIVES:

1. Do not authorize a partial release of retention to Graniterock.

RECOMMENDATION:

Adopt Resolution Authorizing the City Manager to Release \$250,000 of Project Retention to Graniterock Construction for the Crestmoor Neighborhood Reconstruction – Phase IV Street Improvement Project.

DISTRIBUTION:

None

ATTACHMENTS:

1. Resolution

DATE PREPARED:

October 15, 2019

RESOLUTION NO. 2019-____

ADOPT RESOLUTION AUTHORIZING THE CITY MANAGER TO RELEASE \$250,000 OF PROJECT RETENTION TO GRANITEROCK CONSTRUCTION FOR THE CRESTMOOR NEIGHBORHOOD RECONSTRUCTION – PHASE IV STREET IMPROVEMENT PROJECT.

WHEREAS, the September 9, 2010 PG&E gas pipeline explosion and fire caused significant damage to the public infrastructure in the Crestmoor (Glenview) neighborhood; and

WHEREAS, one of the last remaining projects as part of the overall Crestmoor Neighborhood Reconstruction Project is the Phase IV Street Improvement Project; and

WHEREAS, on July 26, 2019, the City Council authorized a construction contract with Graniterock Construction Co. in the amount of \$9,771,221; and

WHEREAS, to date, construction contract change orders in the amount of \$447,535 have been issued to Graniterock increasing the current contract amount to \$10, 218,756; and

WHEREAS, the Phase IV project is nearing completion with only a small amount of contract and remedial punch-list work left to finish in addition to several additional change orders; and

WHEREAS, the City has retained \$510,353 in retention from payments to Graniterock in accordance with the contract documents and the California Public Contract Code; and

WHEREAS, Graniterock has requested a release of all or a portion of the withheld retention; and

WHEREAS, staff has determined that the risk to the City in releasing a portion of the retention is small given the limited amount of work remaining and the fact that there are no outstanding mechanic's liens or other claims; and

NOW, THEREFORE, BE IT RESOLVED that the City Council hereby authorizes the City Manager to Release \$250,000 of Project Retention to Graniterock Construction for the Crestmoor Neighborhood Reconstruction – Phase IV Street Improvement Project.

Dated: October 22, 2019

ATTEST:

Melissa Thurman, City Clerk

-o0o-

I, Melissa Thurman, City Clerk, do hereby certify that the foregoing Resolution was duly and regularly passed and adopted by the City Council of the City of San Bruno this 22nd day of October, 2019 by the following vote:

AYES: Councilmembers: _____

NOES: Councilmembers _____

ABSENT: Councilmembers: _____