

# **Sewage Spill Reduction Action Plan**

## **Summary Progress Report Fiscal Year 2016-2017**

### **Alto Sanitary District**

In Response to  
Docket No.: CWA-309(a)-08-030

**10/14/17**

Bill Hansell  
District Manager

**Certification**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that 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.



Date: 10/14/17

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Bill Hansell  
District Manager  
Alto Sanitary District

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Alto Sanitary District Capital Improvement Projects (CIP) 20 Year Plan  
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CIP Pipe Segment Table Pipe Material

**ATTACHMENT B**

Sanitary Sewer Map of Pipes Cleaned  
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Hot Spot Map  
Hot Spot Table

**ATTACHMENT C**

Sanitary Sewer System KEY Map  
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**ATTACHMENT D**

Alto Sanitary District Ordinance 2016-01  
Alto Sanitary District FY2016-17 Budget



**List of Abbreviations**

ADDWF	Average Daily Dry Weather Flow
ADDF	Also see ADDWF
ADWWF	Average Daily Wet Weather Flow
Alto	Alto Sanitary District
Almonte	Almonte Sanitary District
CCTV	Closed Circuit Television
District	Alto Sanitary District (also see Alto)
EPA	U.S. Environmental Protection Agency
GWDR	Statewide General Waste Discharge Requirements
HDPE	High Density Polyethylene
HVSD	Homestead Valley Sanitary District
I/I or I&I	Infiltration and Inflow
Mill Valley	City of Mill Valley
MH	Maintenance Hole or Man Hole
NASSCO	National Association of Sewer Service Companies
O&M	Operations and Maintenance
OERP	Overflow Emergency Response Plan
Order	EPA Order for Compliance
PS	Pump Station
RBSD	Richardson Bay Sanitary District
RH	Rod Hole
SASM	Sewerage Agency of Southern Marin
SSO	Sanitary Sewer Overflow
SSMP	Sewer System Management Plan
SSRAP	Sewage Spill Reduction Action Plan (Submitted October 15, 2008)
SSRAP – Volume II	Sewage Spill Reduction Action Plan – Volume II
SWRCB	State Water Resources Control Board
TCSD	Tamalpais Community Services District

## Section 1 Sewer System Cleaning and Root Control Program

### 1.1 Compliance Order Requirement

The Amended Order for Compliance (Docket No. CWA-309(a)-08-030) Paragraph III.A.3, Sewer System Cleaning and Root Control Program, states as follows:

*“Beginning 2009, by October 15 of each year, SASM and the member agencies each shall submit an annual report to EPA documenting activities conducted under that agency’s sewer cleaning and root control program during the previous annual cycle, including miles of pipe cleaned as part of the routine and hot spot cleaning programs and miles of pipe treated by each method used for controlling roots. SASM and the member agencies each shall include a description of the success of the sewer cleaning and root control program at preventing blockages and sewage overflows as well as any changes to be made to the program to further reduce spills”.*

### 1.2 Annual Report for Sewer System Cleaning and Root Control Program

#### 1.2.1 Activities Completed During Previous Annual Cycle

Fiscal year 2016-2017 was the Alto Sanitary District’s eighth year of an organized rotating cleaning program with a goal of cleaning a minimum of one third of the District’s ~16,500 feet of sewers each year. This cleaning program was instituted as a comprehensive cleaning program starting in Fiscal year 2009-2010, as budget allowed, and was revised in 2014 to improve system reliability and reduce SSOs.

Additionally, Hot Spot sewers, including several of the easement sewers known for repeated root intrusions, and some of the flat sewer lines with poor grade known for grit accumulation, were cleaned at a minimum of once each year. It was found that some of the most problematic pipes could not last one year, so the cleaning frequency on these pipes was increased to six- and, in some cases, four-month schedules. Root control is primarily performed using a combination of hydro flushing and rodding.

The Alto Sanitary District is divided into four cleaning criteria for cleaning purposes: A, B, C and D, with each letter assigned to a frequency. For example, pipes classified A are cleaned every three (3) years, while D is four (4) or six (6) months. This amounts to a three-year maximum cleaning cycle. Some sections of pipe, however, are cleaned on a two-year cycle while others, as stated above, are cleaned more frequently. The cleaning frequency for sections of pipe is revised after major CIP projects or spot repairs. Typically, the sections with the newer plastic pipes were set up to be cleaned on the three year flushing schedule, unless sag or a grease conditions occur in the pipe.

The budget improved in 2015 due to a Proposition 218 rate increase. CIP projects (outlined in Attachment A) have replaced some very problematic sewers pipes. Regular and Hot Spot cleaning continued on schedule cleaning a little over 4,500 feet of pipe, or 22% of the District. The cleaning report shows an average 3,500 feet cleaned in the year, plus about 1,000 feet in hotspots, which includes some pipes that were cleaned multiple times each year while newer pipes were cleaned at a frequency of once every three years. Cleaning tables for pipe segments are shown in Attachment B.

### 1.2.2 Description of Success of Sewer Cleaning and Root Control Program

Table 1-1 (below) shows the overall SSO statistics for Alto over the past nine fiscal years for data previously submitted.

**Table 3-1: SSO Statistics**

<b>Fiscal Year</b>	<b>No. of SSOs</b>	<b>Volume of SSOs (total gallons)</b>
2008-09	5	400
2009-10	6	170
2010-11	0	0
2011-12	1	200
2012-13	5	85
2013-14	2	10
2014-15	2	65
2015-16	2	60
2016-17	0	0

Table 1-2 (below) shows the SSO statistics for root-related SSOs for the past 9 years.

**Table 1-2:SSO Statistics for Root-Related SSOs**

<b>Fiscal Year</b>	<b>No. of SSOs from Roots</b>	<b>Volume of SSOs (total gallons)</b>
2008-09	5	400
2009-10	6	170
2010-11	0	0
2011-12	0	0
2012-13	5	85
2013-14	2	10
2014-15	2	65
2015-16	2	60
2016-17	0	0

The District has put procedures in place that ensure better consistency in documentation by the cleaning crews. Additionally, the paperwork is now submitted to the Engineer every month for review and entry into the GIS system. The Engineer also re-examines the SSO reports to confirm that they were reported correctly. This helps to ensure the reporting to the state is accurate. Table 1-3 (below) shows CCTV, cleaning, work order and SSO events and the paperwork submittals required.

Alto has converted the Implemented Structured Maintenance Management system to a GIS Database and Map System. The District has been tracking the results of sewer cleaning and has been able to use these results along with sewer inspections and smoke testing to clean, repair and maintain known problems and increase maintenance where on-going maintenance issues are identified. This effort is particularly important because there is not sufficient budget to repair every old sewer in the District at once.

**Table 1-3: Paperwork Requirements for Cleaning Records and Emergency Response**

<b>ALTO SANITARY DISTRICT</b> <b>CLEANING RECORD and SSO FORM REQUIREMENTS</b> <b>SERVICE CONTRACTOR SUBMITTAL TO DISTRICT</b>							
Cleaning Event	WORK REPORT (INVOICE)	CLEANING PROGRAM REPORT (TABLE)	STOPPAGE FORM	REPAIR REPORT	SSO REPORT-2 PAGES	DISTRICT ACTION REQUIRED	
Special Cleaning/ CCTV	✓	If Required				Review	Annual Summary
Cleaning Program (Seasonal)	✓	✓				Review	Annual Summary
Stoppage (Emergency)	✓	Check Hot List	✓	If Required	✓	Review	Annual Summary
Repair (Spot/ Emergency)	✓	Check Hot List		✓	If Required	Review	Annual Summary
SSO (Emergency)	✓	Check Hot List	✓	If Required	✓	Complete Report	Submit to State
Monthly Reports to District Engineer---->	✓	✓	✓	✓	✓	GIS MAP Data Entry Quarterly	Verify State Data Correct Bi-Monthly

Alto has seen improvements to the cleaning efficiency as a result of having more effective scheduling maps and information for the field crews as evidenced by a reduced number of SSO's in recent years.

Alto has made significant reductions to I&I as a result of spot repairs and CIP projects targeting the worst lines found though CCTV and Smoke Testing. Many of these areas had significant root intrusion. By repairing these areas the risk of SSOs and major inflows will be significantly reduced.

### 1.2.3 Program Changes

As discussed in Section 1.2.1, in an effort to reduce the spike in SSOs, the cleaning program was modified after the CIP replaced pipes so several pipes were removed from the hotspot. Other old pipes have increased cleaning and are moved to the Hot Spot list as required to ensure roots are removed to reduce SSOs. Also the CCTV of suspect pipes has been increased to monitor problem areas.

Starting in 2012, Alto Sanitary District implemented a Lateral Repair Permit which allows for more comprehensive tracking of pipe repairs and home remodels, and allows the District to work closely with the County of Marin Building Department to ensure quality pipe repairs are being performed.

In 2015, the Alto Sanitary District implemented a Lateral Ordinance that requires property owners to submit to the District a CCTV lateral inspection whenever homes are sold, remodels valued at \$50,000 or more over a three-year period are undertaken, when the District is repairing sewer mains, and when an overflow or malfunction of the sewer lateral occurs. In 2016, Lateral Permits were issued and one lower lateral was replaced during the FY2015-16 CIP.

During the FY2016-17 CIP, 29 lower laterals and 28 permits for upper laterals were completed. Nine (9) upper lateral permits are pending. While laterals are privately owned from the main to the building connection point, the District chose to repair all lower laterals as part of the CIP cost. This will likely reduce I & I into the collection system.

Previously, the District approved new Rate and Fee Structures to increase revenue to better fund the cleaning, CIP programs, and pending SASM treatment plant improvements. The Rates and Fee were approved by public hearing process, and Ordinances. Ordinance 2016-01 increasing Rates (also called Service Charge) was approved June 22, 2016. Attachment D includes the Ordinance and the FY2016-17 Budget.

## **Section 2 Pump Station Reliability Certification**

### **2.1 Compliance Order Requirement**

The Amended Order for Compliance (Docket No. CWA-309(a)-08-030) Paragraph III.C.4, Pump Station Reliability Certification, states as follows:

*“Beginning 2008, by October 15 of each year, SASM and the member agencies each shall submit an annual report to EPA documenting pump station and force main renovations, and upgrades during the previous year and describing projects to be completed in the coming annual cycle.”*

### **2.2 Annual Report for Pump Station Reliability Certification**

This annual report does not pertain to Alto Sanitary District since Alto does not own or operate any pump stations.

Alto Sanitary District is coordinating with SASM to work on a joint project that will improve the grade on the sewer pipe near the intersection of Shell Road and Lomita Drive. The District maintains the pipe on Shell Road and SASM maintains the Lomita Drive pipe. The pipe grade is very poor in this section, possibly worsening with settlement. If the grade cannot be repaired or the pipe cannot be re-directed to a different trunk sewer, a pump station would be required. So far the most economical solution is to work collaboratively with SASM to repair the existing shared pipes and improve the overall grade.

## **Section 3 Sewer Pipe and Maintenance Hole Inspection and Condition Assessment**

### **3.1 Compliance Order Requirement**

The Amended Order for Compliance (Docket No. CWA-309(a)-08-030) Paragraph IV.A.3, Sewer Pipe and Maintenance Hole Inspection and Condition Assessment, states as follows:

*“By October 15, 2009, SASM and the member agencies each shall submit an annual progress report to EPA summarizing the inspection methods and findings of the sewer pipe condition assessments conducted during the previous year and the estimated miles of sewer pipe and number of maintenance holes to be inspected during the current year.”*

### **3.2 Annual Report for Sewer Pipe and Maintenance Hole Inspection and Condition Assessment**

#### **3.2.1 Sewer Condition Assessment Findings of FY2016-17**

The FY 2016-17 cleaning and inspection crews worked on and submitted reports for approx. 16,000 lin. feet of pipe. This indicates ~96% of the District's facilities were cleaned in this time period.

By keeping a consistent maintenance schedule and a consistent program of annual inspection through CCTV and Smoke Testing, the District is confident that it will continue to be in compliance with the original EPA Order recommendations.

This information is used on an annual basis as part of the criteria for defining the Capital Improvement Projects for the District short term and long term programs and budgets. See Attachment A.

Annual Cleaning and CIP projects triggers regular re-evaluations and changes in the CIP. Urgent problems are dealt with under emergency action.

#### **3.2.2 Inspection Plan for Next Annual Cycle**

Alto has inspected most of the gravity sewer pipes at least twice now. CCTV work is ongoing as a critical tool for minimizing SSOs.

## Section 4 Flow Monitoring Results

### 4.1 Compliance Order Requirement

The Amended Order for Compliance (Docket No. CWA-309(a)-08-030) Paragraph IV.B.2, Capacity Assessment, states as follows:

*“By October 15, 2009 and each year thereafter, SASM and the member agencies each shall submit a report to EPA providing the results of collection system flow monitoring, including average dry weather flow and peak wet weather flow from each of the member agency collection systems.”*

### 4.2 Annual Report of Flow Monitoring Results

Flow monitoring was completed through a joint effort with SASM and documented in The 2014-2015 Sewer Flow Data RDII Evaluation by ADS Environmental Services. The report is available directly from SASM.

Preliminary results from the flow studies and modeling have been used to guide CIP projects, including pipe repairs and the SASM owned Sutton Manor pump station on Lomita Drive. The Sutton Manor pump station pumps all the sewage from Alto Sanitary District to the treatment plant.

SASM has rebuilt the pump station on Lomita Drive now and installed a new flow meter, so Alto flows can be reviewed continuously now and into the future.

**Table 4-1: Calculated and Tabulated Flow Statistics (Previously Reported)**

Assumed Condition	Gallons Flow Per EDU (Assumed - gal per day)	Method: EDUs Billed, Measured or Calculated	Volume of Flow (Total MGD)
Design Standard for New Pipes Average Usage	180	581 EDUs	0.1046
<b>Observed Average Usage*</b>	<b>153.5</b>	<b>581 EDUs</b>	<b>0.0892</b>
<b>Estimated ADDWF</b>	<b>121</b>	<b>581 EDUs</b>	<b>0.0705</b>
Observed Peak Flows**	132	Flow Meter	0.075
Calculated ADWWF- Storm Event**	464	Calculated	0.270

(\*) Flow measurements from Marin Municipal Water District SASM Bi-monthly report, converted from 13.25 CCF (hundred cubic feet) and estimated winter 10.0 CCF usage for Alto residents.

(\*\*) Data from the RDII report with 755 EDUs measured which includes approximately 187 Mill Valley EDUs resulted in the flow value of 0.10 measured and reported in the **2014-2015 Sewer Flow Data RDII Evaluation** is approximately 25% too high. ADWWF is a calculated value using the average Alto peaking factors of 3.5:1 as listed in the referenced flow evaluation.



## Section 5 Infrastructure Renewal Program

### 5.1 Compliance Order Requirement

The Amended Order for Compliance (Docket No. CWA-309(a)-08-030) Paragraph VI.B, Infrastructure Renewal, states as follows:

*Beginning 2008, by October 15 of each year, SASM and the member agencies each shall submit an annual report to EPA documenting sewer repair, rehabilitation or replacement activities completed in the previous year; describing projects to be completed in the coming annual cycle; and providing the current 10-year Capital Improvement Plan (CIP) and any updates to that CIP.*

### 5.2 Annual Report for Infrastructure Renewal Program

As repairs are made to the District's infrastructure, progress is documented. Planning for the Infrastructure Renewal Program is determined by the number of feet of pipe that have been rehabilitated or replaced and by the number of feet that will be rehabilitated or replaced, as well as by the number of maintenance holes repaired, rehabilitated, or replaced. Project progress and plans are documented by Fiscal Year.

#### 5.2.1 Sewer Repair, Rehabilitation and Replacement Activities Completed

Table 5-1 lists repairs and replacements completed in previous cycles totaling about 1,858 LF to date.

**Table 5-1: Pipe and Structure Repairs Performed in Prior Years**

<b>Fiscal Year</b>	<b>Structure ID</b>	<b>Location</b>	<b>Description</b>
CIP 2015-16	MH110.03-MH111.01	Easement	Islamic Center Main
CIP 2016-17	MH111.11-MH111.01	Easement	Shell-Lomita Easement
CIP 2016-17	MH111.05-MH111.01	Easement	Shell-Lomita Easement
CIP 2016-17	MH211.01-MH211.03	Easement	Shell-Lomita Easement
CIP 2016-17	RH211.33-MH211.03	Easement	Shell-Lomita Easement
CIP 2016-17	RH211.03-MH211.03	Easement	Shell-Lomita Easement

### **5.2.2 Projects Planned for Completion Next Annual Cycle**

During FY 2016-17, the CIP budget was expanded to approx. \$307,500. The projected CIP budget for each of the next five years will be \$300,000. This funding will go to sewer main replacements. Current fees will allow rehabilitation to be projected forward as a flat budget, with annual costs of construction increasing each year.

The District has identified and prioritized the sewer repair, rehabilitation, and replacement projects that are required to restore the collection system to a sound status over the next 20 to 25 years. Currently, Alto has plans for sewer repair/rehabilitation ranging annually from 500 feet to 1000 feet of pipe.

Alto has prepared a CIP map of rehabilitation needs with a plan projected for the next 20 to 25 years (see Attachment A.)

### **5.2.3 Current Rolling/Cyclical 20 Year CIP for Gravity Sewers**

The Alto CIP 20 year plan and CIP budget projected costs presented here are for Alto capital needs only and do not include any details of the costs of the SASM treatment plant improvements proposed. These estimated costs were incorporated into the 218 rate increase completed previously.

The nature of how the Capital Improvement Project pipes are laid out in the district may require spending to increase or decrease in alternating fiscal years between 500 ft and 1000 ft replacement cycles. At that rate, the District pipe CIP schedule will have all the pipes replaced on a 50 year life cycle.

Since the FY2016-17 CIP bid price was better than expected, the District maximized the scope of the project. Lateral Ordinance administration time and costs were larger than expected, though. Therefore, more funding was spent on the CIP than previously planned. Fortunately, fees for private lateral permits seem to be covering the District's administration expenses. Next year, savings for reserves and SASM increases may result in adjustments to the CIP funding.

Finally, the District has begun paying for an estimated \$27M SASM treatment plant upgrade. By EDU count, Alto is 3.57% of SASM which results in a District liability of \$600,000 to \$1,000,000 for the proposed treatment plant improvements. The actual costs and the terms for repayment will be realized as the project proceeds.

**Attachments for Alto Sanitary District  
FY2016-17 Sewage Spill Reduction Action Plan**

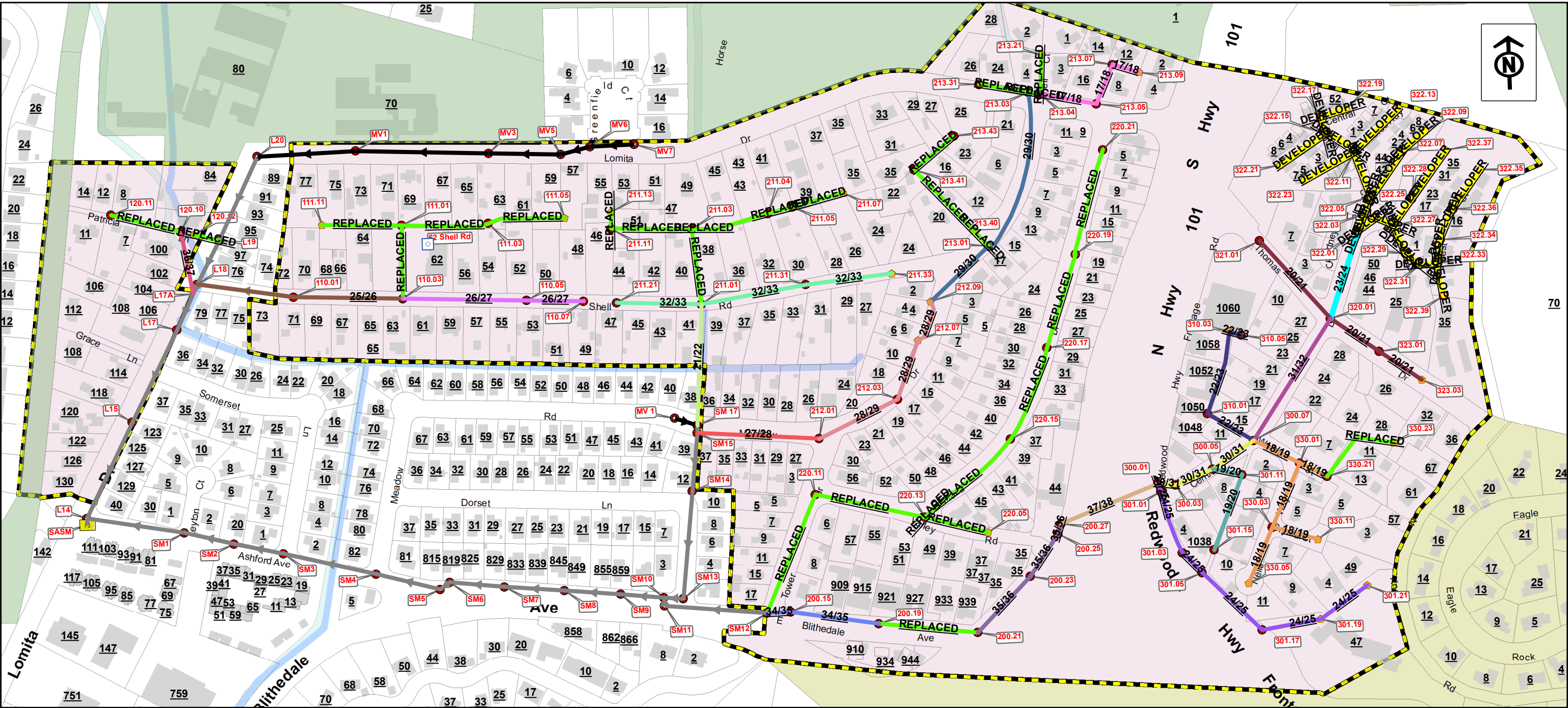
**ATTACHMENT A**

Alto Sanitary District Capital Improvement Projects (CIP) 20 Year Plan

CIP Pipe Segment Table Costs

CIP Pipe Segment Table Pipe Material

Attachment A : CIP MAP



907 Mission Avenue  
San Rafael, California  
TEL: 415-453-4480  
FAX: 415-453-0343

ALTO SANITARY DISTRICT

Drawn by: FGS

Checked by: DS

SCALE: 350 175 0 350 Feet

Date: 10/13/2017

LEGEND

- 17/18 20/21 23/24 26/27 29/30 32/33 36/37
- 18/19 21/22 24/25 27/28 30/31 34/35 37/38
- 19/20 22/23 25/26 28/29 31/32 35/36 32/21 32/22 32/23 32/24 32/25 32/26 32/27 32/28 32/29 32/30 32/31 32/32 32/33 32/34 32/35 32/36 32/37 32/38 32/39 32/40 32/41 32/42 32/43 32/44 32/45 32/46 32/47 32/48 32/49 32/50 32/51 32/52 32/53 32/54 32/55 32/56 32/57 32/58 32/59 32/60 32/61 32/62 32/63 32/64 32/65 32/66 32/67 32/68 32/69 32/70 32/71 32/72 32/73 32/74 32/75 32/76 32/77 32/78 32/79 32/80 32/81 32/82 32/83 32/84 32/85 32/86 32/87 32/88 32/89 32/90 32/91 32/92 32/93 32/94 32/95 32/96 32/97 32/98 32/99 32/100
- DEVELOPER
- REPLACED
- MILL VALLEY PIPES
- SASM PIPES

# ALTO SANITARY DISTRICT

## Capital Improvement Projects (CIP)

*Present Value Level Budgeting Projection*

20 Year Plan: 2017 - 2038

District Total Pipe Footage ~ 16,500 LF

HISTORY: District Previously replaced ~3,600 LF (~10 years or less new heavy guage plastic)

Developer installed Central Court 1986 ~29 years old ~2,150 LF (SDR 35 light guage plastic)

Remaining Pipe to replace: 10,750 LF (not counting Central Court)

GOALS: 80% replacement by 2038: yearly average 525 LF

Estimated Pipe Cost/Ft + 30% Contingencies      Easement      \$364

Street      \$455

Fiscal Year	Sewer Segments	Easement/Street	Footage	Cost (estimate/ft)	Budget (including 35% contingencies)	Running Total	Action/Notes (Planned, Completed, Hold)
2017/18	213.07-213.05	Easement	120	\$364	\$43,532		Planned
2017/18	213.09-213.07	Easement	78	\$364	\$28,299		Planned
2017/18	213.05-213.04	Easement	161	\$364	\$58,466		Planned
<b>FY 17/18 Total</b>			<b>358</b>		<b>\$130,297</b>	<b>\$130,297</b>	
2018/19	330.01-300.07	Street	145	\$455	\$65,975		Planned
2018/19	330.21-330.01	Street	86	\$455	\$39,149		Planned
2018/19	330.03-330.01	Street	196	\$455	\$89,234		Planned
2018/19	330.05-330.03	Street	173	\$455	\$78,544		Planned
2018/19	330.11-330.03	Street	132	\$455	\$59,851		Planned
<b>FY 18/19 Total</b>			<b>731</b>		<b>\$332,753</b>	<b>\$463,050</b>	
2019/20	301.11-300.05	Easement	84	\$364	\$30,487		Planned
2019/20	301.15-301.11	Easement	226	\$364	\$82,415		Planned
<b>FY 19/20 Total</b>			<b>310</b>		<b>\$112,902</b>	<b>\$575,952</b>	
2020/21	323.01-320.01	Street	166	\$455	\$75,530		Planned
2020/21	323.03-323.01	Street	143	\$455	\$65,065		Planned
2020/21	321.01-320.01	Street	296	\$455	\$134,817		Planned
<b>FY 20/21 Total</b>			<b>605</b>		<b>\$275,412</b>	<b>\$851,364</b>	
2021/22	211.01-SM17	Easement/SASM	341	\$364	\$124,124		Planned
<b>FY 21/22 Total</b>			<b>341</b>		<b>\$124,124</b>	<b>\$975,488</b>	
2022/23	310.01-300.07	Easement	150	\$364	\$54,600		Planned
2022/23	310.03-310.01	Easement	240	\$364	\$87,381		Planned
2022/23	310.05-310.03	Easement	35	\$364	\$12,629		Planned
<b>FY 22/23 Total</b>			<b>425</b>		<b>\$154,610</b>	<b>\$1,130,098</b>	
2023/24	322.01-320.01	Street	260	\$455	\$118,300		Planned
<b>FY 23/24 Total</b>			<b>260</b>		<b>\$118,300</b>	<b>\$1,248,398</b>	
2024/25	301.05-301.03	Easement	79	\$364	\$28,753		Planned
2024/25	301.03-301.01	Easement	183	\$364	\$66,697		Planned
2024/25	301.01-300.01	Easement	23	\$364	\$8,493		Planned
2024/25	301.17-301.05	Easement	234	\$364	\$85,199		Planned
2024/25	301.19-301.17	Easement	167	\$364	\$60,863		Planned
2024/25	301.21-301.19	Easement	162	\$364	\$59,073		Planned
<b>FY 24/25 Total</b>			<b>849</b>		<b>\$309,077</b>	<b>\$1,557,475</b>	
2025/26	110.03-110.01	Street	307	\$455	\$139,541		Planned
2025/26	110.01-L18	Street	274	\$455	\$124,749		Planned
<b>FY 25/26 Total</b>			<b>581</b>		<b>\$264,289</b>	<b>\$1,821,765</b>	
2026/27	110.05-110.03	Street	349	\$455	\$158,810		Planned
2026/27	110.07-110.05	Street	161	\$455	\$73,262		Planned
<b>FY 26/27 Total</b>			<b>510</b>		<b>\$232,072</b>	<b>\$2,053,836</b>	
2027/28	212.01-SM15	Street	344	\$455	\$156,668		Planned
<b>FY 27/28 Total</b>			<b>344</b>		<b>\$156,668</b>	<b>\$2,210,504</b>	
2028/29	212.03-212.01	Street	248	\$455	\$113,004		Planned
2028/29	212.09-212.07	Street	126	\$455	\$57,188		Planned
2028/29	212.07-212.03	Street	176	\$455	\$79,863		Planned

<b>FY 28/29 Total</b>			<b>550</b>		<b>\$250,056</b>	<b>\$2,460,559</b>	
2029/30	213.03-213.01	Street	467	\$455	\$212,365		Planned
2029/30	213.01-212.09	Street	226	\$455	\$103,025		Planned
<b>FY 29/30 Total</b>			<b>693</b>		<b>\$315,389</b>	<b>\$2,775,949</b>	
30/31	300.07-300.05	Street	139	\$455	\$63,401		Planned
30/31	300.05-300.03	Street	115	\$455	\$52,265		Planned
30/31	300.03-300.01	Street	49	\$455	\$22,287		Planned
<b>FY 30/31 Total</b>			<b>303</b>		<b>\$137,953</b>	<b>\$2,913,902</b>	
31/32	320.01-300.07	Street	406	\$455	\$184,851		Planned
<b>FY 31/32 Total</b>			<b>406</b>		<b>\$184,851</b>	<b>\$3,098,753</b>	
32/33	211.21-211.01	Street	239	\$455	\$108,738		Planned
32/33	211.31-211.01	Street	299	\$455	\$136,249		Planned
32/33	211.33-211.31	Street	244	\$455	\$110,850		Planned
<b>FY 32/33 Total</b>			<b>782</b>		<b>\$355,838</b>	<b>\$3,454,591</b>	
34/35	200.19-200.15	Street	250	\$455	\$113,775		Planned
34/35	200.15-SM12	Street	67	\$455	\$30,285		Planned
<b>FY 34/35 Total</b>			<b>317</b>		<b>\$144,061</b>	<b>\$3,598,651</b>	
35/36	200.25-200.23	Easement	142	\$364	\$51,846		Planned
35/36	200.27-200.25	Easement	30	\$364	\$10,881		Planned
35/36	200.23-200.21	Easement	216	\$364	\$78,788		Planned
<b>FY 35/36 Total</b>			<b>389</b>		<b>\$141,516</b>	<b>\$3,740,168</b>	
36/37	120.10-L17A	Street	179	\$455	\$81,394		Planned
<b>FY 36/37 Total</b>			<b>179</b>		<b>\$81,394</b>	<b>\$3,821,562</b>	
37/38	300.01-200.27	Crossing	295	\$1,500	\$443,198		Planned
<b>FY 37/38 Total</b>			<b>295</b>		<b>\$443,198</b>	<b>\$4,264,759</b>	
<b>Grand Total for 80% of Alto Sewers replacement by 2038 ( Present value)</b>						<b>\$4,264,759</b>	



CIP TABLE				
ID	CIP_FY	Diameter	Material	Length
213.07-213.05	17/18	6	VCP	120
213.09-213.07	17/18	6	VCP	78
213.05-213.04	17/18	6	VCP	161
330.01-300.07	18/19	6	VCP	145
330.21-330.01	18/19	6	VCP	86
330.03-330.01	18/19	6	VCP	196
330.05-330.03	18/19	6	VCP	173
330.11-330.03	18/19	6	VCP	132
301.11-300.05	19/20	6	VCP	84
301.15-301.11	19/20	6	VCP	226
323.01-320.01	20/21	6	VCP	166
323.03-323.01	20/21	6	VCP	143
321.01-320.01	20/21	6	VCP	296
211.01-SM17	21/22	6	VCP	341
310.01-300.07	22/23	6	VCP	150
310.03-310.01	22/23	6	VCP	240
310.05-310.03	22/23	6	VCP	35
322.01-320.01	23/24	6	VCP	260
301.05-301.03	24/25	6	VCP	79
301.03-301.01	24/25	6	VCP	183
301.01-300.01	24/25	6	VCP	23
301.17-301.05	24/25	6	VCP	234
301.19-301.17	24/25	6	VCP	167
301.21-301.19	24/25	6	VCP	162
110.03-110.01	25/26	6	VCP	307
110.05-110.03	26/27	6	VCP	349
110.07-110.05	26/27	6	VCP	161
212.01-SM15	27/28	6	VCP	344
212.03-212.01	28/29	6	VCP	248
212.09-212.07	28/29	6	VCP	126
212.07-212.03	28/29	6	VCP	176
213.03-213.01	29/30	6	VCP	467
213.01-212.09	29/30	6	VCP	226
300.07-300.05	30/31	6	VCP	139
300.05-300.03	30/31	6	VCP	115
300.03-300.01	30/31	6	VCP	49
320.01-300.07	31/32	6	VCP	406
211.21-211.01	32/33	6	VCP	239
211.31-211.01	32/33	6	VCP	299
211.33-211.31	32/33	6	VCP	244
200.19-200.15	34/35	8	VCP	250
200.15-SM12	34/35	8	VCP	67
200.25-200.23	35/36	8	VCP	142
200.27-200.25	35/36	8	PVC	30

200.23-200.21	35/36	8	VCP	216
120.10-L17A	36/37	6	VCP	179
300.01-200.27	37/38	8	PVC	295
322.39-322.33	DEVELOPER	6	PVC	93
322.28-322.27	DEVELOPER	6	PVC	91
322.03-322.01	DEVELOPER	6	VCP	49
322.35-322.36	DEVELOPER	6	PVC	135
322.05-322.03	DEVELOPER	6	PVC	54
322.07-322.05	DEVELOPER	6	PVC	152
322.11-322.05	DEVELOPER	6	PVC	131
322.13-322.11	DEVELOPER	6	PVC	177
322.23-322.11	DEVELOPER	6	PVC	162
322.15-322.11	DEVELOPER	6	PVC	98
322.17-322.15	DEVELOPER	6	PVC	49
322.34-322.33	DEVELOPER	6	PVC	67
322.19-322.17	DEVELOPER	6	VCP	74
322.21-322.15	DEVELOPER	6	PVC	154
322.09-322.07	DEVELOPER	6	PVC	90
322.25-322.01	DEVELOPER	6	PVC	62
322.27-322.25	DEVELOPER	6	PVC	53
322.37-322.28	DEVELOPER	6	PVC	167
322.29-322.27	DEVELOPER	6	PVC	87
322.31-322.29	DEVELOPER	6	PVC	52
322.33-322.31	DEVELOPER	6	PVC	51
322.36-322.34	DEVELOPER	6	PVC	95
330.23-330.21	REPLACED	6	PE	243
200.21-200.19	REPLACED	8	PE	281
211.03-211.01	REPLACED	6	VCP	213
211.11-211.03	REPLACED	6	VCP	228
211.13-211.11	REPLACED	6	VCP	46
211.07-211.05	REPLACED	6	VCP	149
213.41-213.40	REPLACED	6	PE	237
213.43-213.41	REPLACED	6	PE	147
213.31-213.03	REPLACED	8	PVC	139
213.21-213.04	REPLACED	8	PVC	112
111.05-111.03	REPLACED	6	VCP	218
111.11-111.01	REPLACED	6	VCP	225
111.01-110.03	REPLACED	6	P & PVC C-9	205
111.03-111.01	REPLACED	6	VCP	245
220.05-220.13	REPLACED	8	PVC	183
220.03-220.13	REPLACED	8	PVC	34
220.13-220.11	REPLACED	8	PVC	315
220.11-SM12	REPLACED	8	PVC	360
220.15-220.03	REPLACED	8	PVC	297
220.17-220.15	REPLACED	8	PVC	279
220.21-220.19	REPLACED	8	PVC	309
220.19-220.17	REPLACED	8	PVC	275



120.11-120.10	REPLACED	6	PE	201
211.05-211.04	REPLACED	6	VCP	70
211.04-211.03	REPLACED	6	VCP	221
120.12-L19	REPLACED	6	PE	73
213.04-213.03	REPLACED	8	PVC	34
213.40-213.01	REPLACED	6	PE	62

**Attachments for Alto Sanitary District  
FY2016-17 Sewage Spill Reduction Action Plan**

**ATTACHMENT B**

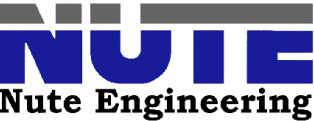
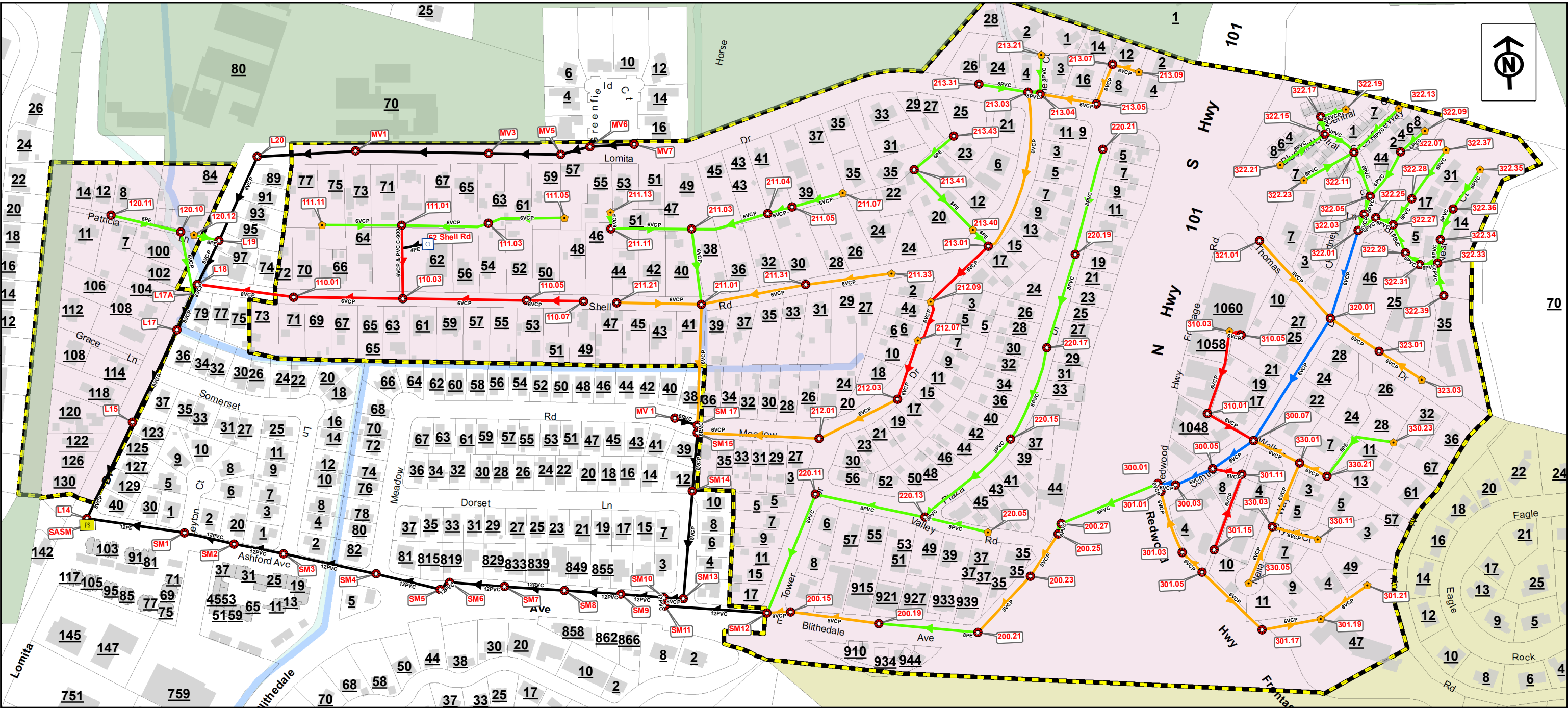
Sanitary Sewer Cleaning Map

Pipe Cleaning Schedule

Hot Spot Map

Hot Spot Table

CLEANING MAP



907 Mission Avenue  
San Rafael, California  
TEL: 415-453-4480  
FAX: 415-453-0343

ALTO SANITARY DISTRICT

Drawn by: FGS

Checked by: DS

SCALE: 350 175 0 350 Feet

Date: 10/12/2017

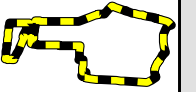
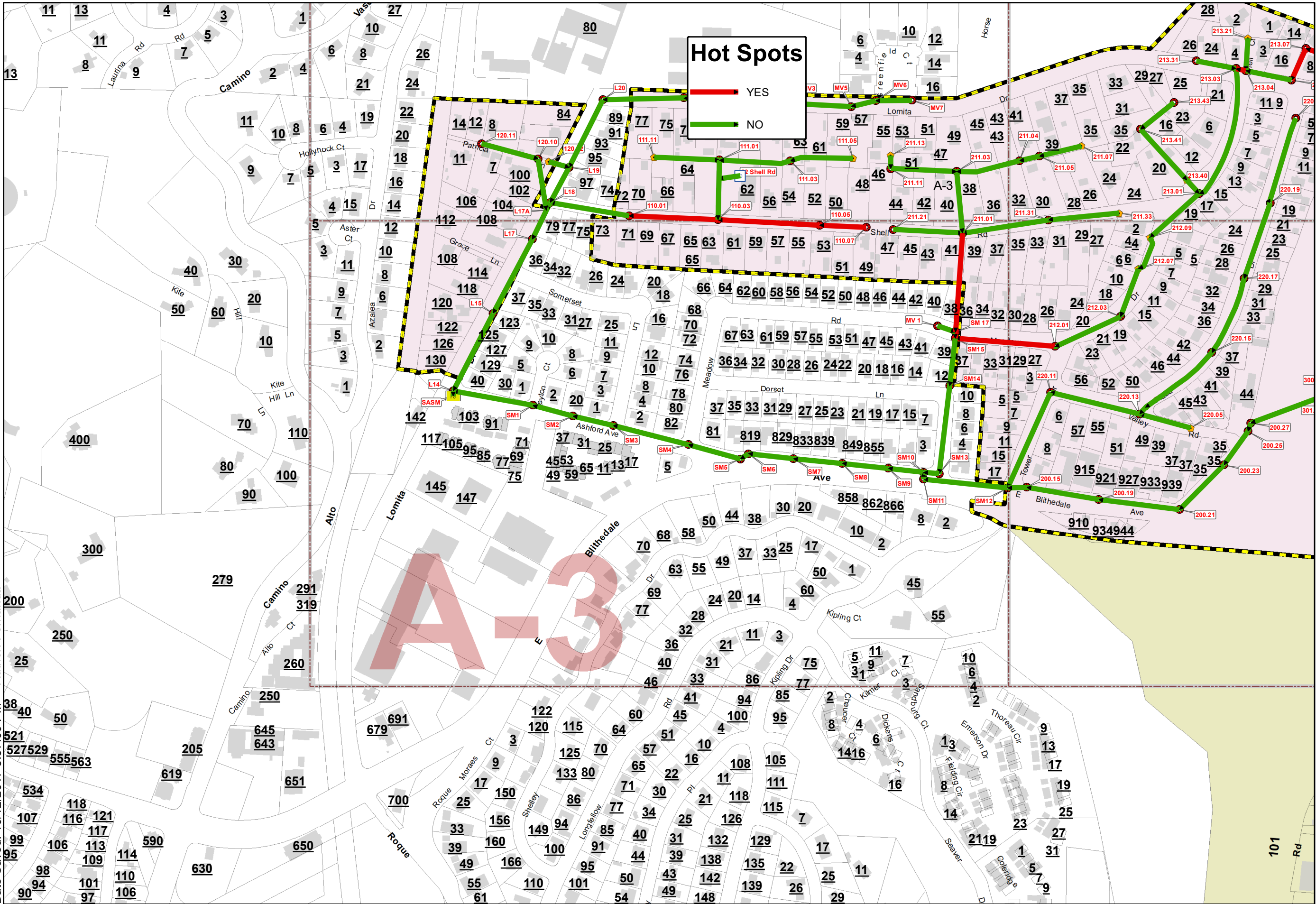
Legend

- A - Three-years
- B - Two-years
- C - One-year
- D- Six-months
- Other Districts

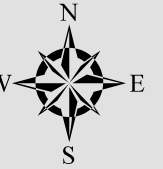
CLEANING TABLE						
ID *	Diameter	Material	Cleaning Code	Cleaning Freq	Easement	Length
322.21-322.15	6	PVC	A	Three-years	0	154
SM17-SM15	6	PVC	A	Three-years	0	21
213.04-213.03	8	PVC	A	Three-years	0	34
213.40-213.01	6	PE	A	Three-years	1	300
120.12-L19	6	PE	A	Three-years	0	73
120.10-L17A	6	VCP	A	Three-years	1	179
213.31-213.03	8	PVC	A	Three-years	0	139
213.21-213.04	8	PVC	A	Three-years	1	112
111.05-111.03	6	VCP	A	Three-years	1	218
111.11-111.01	6	VCP	A	Three-years	1	225
322.03-322.01	6	VCP	A	Three-years	0	49
200.27-200.25	8	PVC	A	Three-years	0	30
300.01-200.27	8	PVC	A	Three-years	0	295
322.35-322.36	6	PVC	A	Three-years	0	135
111.03-111.01	6	VCP	A	Three-years	1	245
322.05-322.03	6	PVC	A	Three-years	0	54
322.07-322.05	6	PVC	A	Three-years	0	152
322.11-322.05	6	PVC	A	Three-years	0	131
322.13-322.11	6	PVC	A	Three-years	0	177
322.23-322.11	6	PVC	A	Three-years	0	162
322.15-322.11	6	PVC	A	Three-years	0	98
322.17-322.15	6	PVC	A	Three-years	0	49
322.34-322.33	6	PVC	A	Three-years	0	67
322.19-322.17	6	VCP	A	Three-years	0	74
322.09-322.07	6	PVC	A	Three-years	0	90
220.05-220.13	8	PVC	A	Three-years	0	183
220.03-220.13	8	PVC	A	Three-years	0	34
220.13-220.11	8	PVC	A	Three-years	0	315
220.11-SM12	8	PVC	A	Three-years	0	360
220.15-220.03	8	PVC	A	Three-years	0	297
220.17-220.15	8	PVC	A	Three-years	0	279
220.21-220.19	8	PVC	A	Three-years	0	309
220.19-220.17	8	PVC	A	Three-years	0	275
322.25-322.01	6	PVC	A	Three-years	0	62
322.27-322.25	6	PVC	A	Three-years	0	53
322.37-322.28	6	PVC	A	Three-years	0	167
322.29-322.27	6	PVC	A	Three-years	0	87
322.31-322.29	6	PVC	A	Three-years	0	52
322.33-322.31	6	PVC	A	Three-years	0	51
322.36-322.34	6	PVC	A	Three-years	0	95
120.11-120.10	6	PE	A	Three-years	1	201
211.05-211.04	6	VCP	A	Three-years	1	63
211.04-211.03	6	VCP	A	Three-years	1	236
211.03-211.01	6	VCP	A	Three-years	1	217
211.11-211.03	6	VCP	A	Three-years	1	225
211.13-211.11	6	VCP	A	Three-years	1	39
211.07-211.05	6	VCP	A	Three-years	1	149
213.41-213.40	6	PE	A	Three-years	1	300
213.43-213.41	6	PE	A	Three-years	1	147
330.23-330.21	6	PE	A	Three-years	1	243
200.21-200.19	8	PE	A	Three-years	0	281



322.39-322.33	6	PVC	A	Three-years	0	93
322.28-322.27	6	PVC	A	Three-years	0	91
322.01-320.01	6	VCP	B	Two-years	0	260
300.03-300.01	6	VCP	B	Two-years	0	49
300.07-300.05	6	VCP	B	Two-years	0	139
300.05-300.03	6	VCP	B	Two-years	0	115
320.01-300.07	6	VCP	B	Two-years	0	406
330.03-330.01	6	VCP	C	One-year	0	196
330.05-330.03	6	VCP	C	One-year	0	173
330.11-330.03	6	VCP	C	One-year	0	132
321.01-320.01	6	VCP	C	One-year	0	296
330.01-300.07	6	VCP	C	One-year	0	145
330.21-330.01	6	VCP	C	One-year	0	86
212.01-SM15	6	VCP	C	One-year	0	344
213.07-213.05	6	VCP	C	One-year	1	120
213.09-213.07	6	VCP	C	One-year	1	78
211.01-SM17	6	VCP	C	One-year	1	343
323.01-320.01	6	VCP	C	One-year	0	166
323.03-323.01	6	VCP	C	One-year	0	143
213.05-213.04	6	VCP	C	One-year	0	161
301.17-301.05	6	VCP	C	One-year	0	234
301.19-301.17	6	VCP	C	One-year	1	167
301.21-301.19	6	VCP	C	One-year	1	162
301.05-301.03	6	VCP	C	One-year	0	79
301.03-301.01	6	VCP	C	One-year	0	183
200.23-200.21	8	VCP	C	One-year	0	216
200.19-200.15	8	VCP	C	One-year	0	250
211.33-211.31	6	VCP	C	One-year	0	231
301.01-300.01	6	VCP	C	One-year	0	23
212.03-212.01	6	VCP	C	One-year	0	248
200.15-SM12	8	VCP	C	One-year	0	67
211.21-211.01	6	VCP	C	One-year	0	230
211.31-211.01	6	VCP	C	One-year	0	308
213.03-213.01	6	VCP	C	One-year	0	467
200.25-200.23	8	VCP	C	One-year	0	142
301.11-300.05	6	VCP	D	Six-months	1	84
301.15-301.11	6	VCP	D	Six-months	1	226
310.01-300.07	6	VCP	D	Six-months	1	150
310.03-310.01	6	VCP	D	Six-months	1	236
310.05-310.03	6	VCP	D	Six-months	1	33
110.05-110.03	6	VCP	D	Six-months	0	349
110.07-110.05	6	VCP	D	Six-months	0	161
110.03-110.01	6	VCP	D	Six-months	0	307
110.01-L18	8	VCP	D	Six-months	0	274
111.01-110.03	6	VCP & PVC C-900	D	Six-months	1	205
213.01-212.09	6	VCP	D	Six-months	0	167
212.09-212.07	6	VCP	D	Six-months	0	114
212.07-212.03	6	VCP	D	Six-months	0	176



Hot Spots



1 INCH = 313 FEET

**SANITARY SEWER SYSTEM**  
ALTO SANITARY DISTRICT  
MARIN COUNTY, CALIFORNIA



Printed  
Date: 10/12/2017



HOT SPOTS TABLE				
ID *	Diameter	Material	HotSpot	Length
330.03-330.01	6	VCP	1	196
330.05-330.03	6	VCP	1	173
330.11-330.03	6	VCP	1	132
321.01-320.01	6	VCP	1	296
330.01-300.07	6	VCP	1	145
330.21-330.01	6	VCP	1	86
212.01-SM15	6	VCP	1	344
213.07-213.05	6	VCP	1	120
213.09-213.07	6	VCP	1	78
211.01-SM17	6	VCP	1	343
323.01-320.01	6	VCP	1	166
323.03-323.01	6	VCP	1	143
213.05-213.04	6	VCP	0	161
301.17-301.05	6	VCP	0	234
301.19-301.17	6	VCP	0	167
301.21-301.19	6	VCP	0	162
301.05-301.03	6	VCP	0	79
301.03-301.01	6	VCP	0	183
200.23-200.21	8	VCP	0	216
200.19-200.15	8	VCP	0	250
211.33-211.31	6	VCP	0	231
301.01-300.01	6	VCP	0	23
212.03-212.01	6	VCP	0	248
200.15-SM12	8	VCP	0	67
211.21-211.01	6	VCP	0	230
211.31-211.01	6	VCP	0	308
213.03-213.01	6	VCP	0	467
200.25-200.23	8	VCP	0	142
301.11-300.05	6	VCP	1	84
301.15-301.11	6	VCP	1	226
310.01-300.07	6	VCP	1	150
310.03-310.01	6	VCP	1	236
310.05-310.03	6	VCP	1	33
110.05-110.03	6	VCP	1	349
110.07-110.05	6	VCP	1	161
110.03-110.01	6	VCP	1	307
110.01-L18	8	VCP	0	274
111.01-110.03	6	P & PVC C-9	0	205
213.01-212.09	6	VCP	0	167
212.09-212.07	6	VCP	0	114
212.07-212.03	6	VCP	0	176
322.21-322.15	6	PVC	1	154
SM17-SM15	6	PVC	1	21

213.04-213.03	8	PVC	1	34
213.40-213.01	6	PE	0	300
120.12-L19	6	PE	0	73
120.10-L17A	6	VCP	0	179
213.31-213.03	8	PVC	0	139
213.21-213.04	8	PVC	0	112
111.05-111.03	6	VCP	0	218
111.11-111.01	6	VCP	0	225
322.03-322.01	6	VCP	0	49
200.27-200.25	8	PVC	0	30
300.01-200.27	8	PVC	0	295
322.35-322.36	6	PVC	0	135
111.03-111.01	6	VCP	0	245
322.05-322.03	6	PVC	0	54
322.07-322.05	6	PVC	0	152
322.11-322.05	6	PVC	0	131
322.13-322.11	6	PVC	0	177
322.23-322.11	6	PVC	0	162
322.15-322.11	6	PVC	0	98
322.17-322.15	6	PVC	0	49
322.34-322.33	6	PVC	0	67
322.19-322.17	6	VCP	0	74
322.09-322.07	6	PVC	0	90
220.05-220.13	8	PVC	0	183
220.03-220.13	8	PVC	0	34
220.13-220.11	8	PVC	0	315
220.11-SM12	8	PVC	0	360
220.15-220.03	8	PVC	0	297
220.17-220.15	8	PVC	0	279
220.21-220.19	8	PVC	0	309
220.19-220.17	8	PVC	0	275
322.25-322.01	6	PVC	0	62
322.27-322.25	6	PVC	0	53
322.37-322.28	6	PVC	0	167
322.29-322.27	6	PVC	0	87
322.31-322.29	6	PVC	0	52
322.33-322.31	6	PVC	0	51
322.36-322.34	6	PVC	0	95
120.11-120.10	6	PE	0	201
211.05-211.04	6	VCP	0	63
211.04-211.03	6	VCP	0	236
211.03-211.01	6	VCP	0	217
211.11-211.03	6	VCP	0	225
211.13-211.11	6	VCP	0	39
211.07-211.05	6	VCP	0	149
213.41-213.40	6	PE	0	300
213.43-213.41	6	PE	0	147



330.23-330.21	6	PE	0	243
200.21-200.19	8	PE	0	281
322.39-322.33	6	PVC	0	93
322.28-322.27	6	PVC	0	91
322.01-320.01	6	VCP	0	260
300.03-300.01	6	VCP	0	49
300.07-300.05	6	VCP	0	139
300.05-300.03	6	VCP	0	115
320.01-300.07	6	VCP	0	406

**Attachments for Alto Sanitary District  
FY2016-17 Sewage Spill Reduction Action Plan**

**ATTACHMENT C**

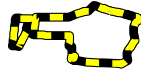
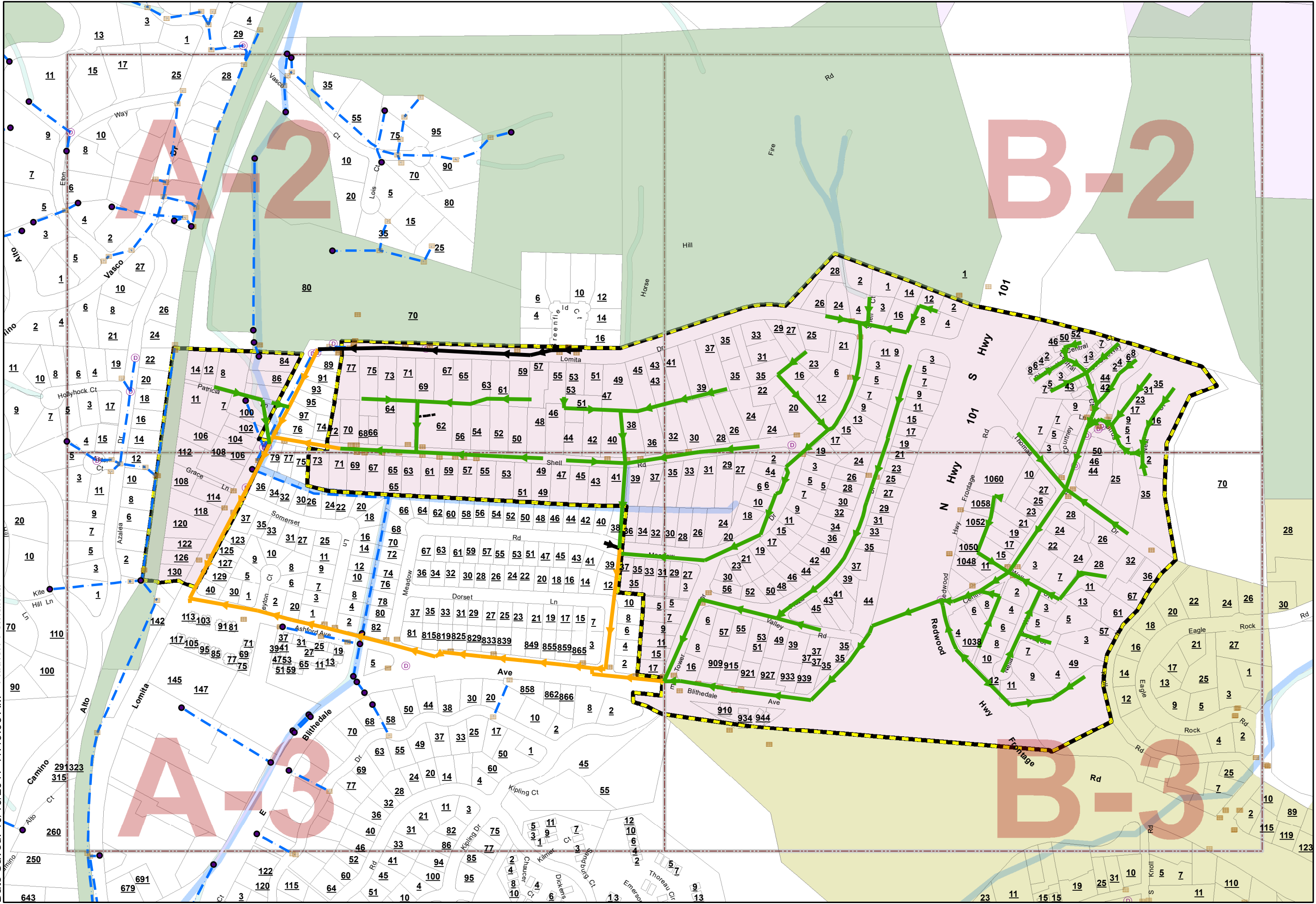
Sanitary Sewer System KEY Map

Sanitary Sewer System page A-2

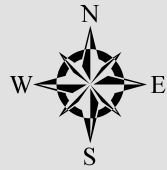
Sanitary Sewer System page A-3

Sanitary Sewer System page B-2

Sanitary Sewer System page B-3



KeyMap



1 INCH = 365 FEET

# SANITARY SEWER SYSTEM

## ALTO SANITARY DISTRICT

MARIN COUNTY, CALIFORNIA



Printed  
Date: 10/13/2017













**Attachments for Alto Sanitary District  
FY2016-17 Sewage Spill Reduction Action Plan**

**ATTACHMENT D**

Alto Sanitary District Ordinance 2016-01

Alto Sanitary District FY2016-17 Budget



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**ORDINANCE NO. 2016-01**

**ORDINANCE OF THE ALTO SANITARY DISTRICT BOARD OF  
DIRECTORS ESTABLISHING THE RATE OF THE ANNUAL  
SEWER SERVICE CHARGE LEVIED ON IMPROVED  
PROPERTIES IN THE DISTRICT**

**SECTION I. FINDINGS:**

**WHEREAS**, the Alto Sanitary District, operating as a public agency, provides services required to fulfill its mandate to operate and maintain an adequate wastewater collection system, to prevent sewer overflows and to pay for treatment and disposal of the wastes generated by that system;

**WHEREAS**, the District must pay for the administration, operation and maintenance of the District's wastewater collection system;

**WHEREAS**, the cost of wastewater treatment and disposal by the Sewerage Agency of Southern Marin (SASM) has dramatically increased and SASM has also added \$30 million dollars of planned capital improvements, which have resulted in increased costs to Alto;

**WHEREAS**, the District must fund the planned repair and replacement of the District's collection system;

*and*

**WHEREAS**, the District has a responsibility to provide sufficient reserves to fund unforeseen emergencies;

**THEREFORE BE IT ORDAINED** that the Board of Directors of the Alto Sanitary District ordain as follows:

**SECTION II. Ordinance:**

Based on the financial needs of the Sanitary District, the annual Sewer Service Charge levied per Equivalent Dwelling Unit (EDU) on improved properties in the District is hereby established to be;

\$1,100 for the fiscal year beginning July 1, 2016;  
\$1,250 for the fiscal year beginning July 1, 2017;  
\$1,500 for the fiscal year beginning July 1, 2018;

And will remain at \$1,500 until such time that the Board of Directors ordains otherwise.

1                   **SECTION III. Compliance with Proposition 218**

2                   The Board of Directors hereby determine that the charge set forth above is  
3 reasonable and reflects the cost of providing services based on the following findings:  
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- 5                   1. Revenues derived from the increase shall not exceed the funds required to  
6 provide the property related service;  
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8                   2. Revenues derived from the increase shall not be used for any purpose other than  
9 for which the increase is imposed;  
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11                  3. The amount of the increase imposed upon any parcel or person as an incident of  
12 property ownership shall not exceed the proportional cost of the service  
13 attributable to the parcel;  
14  
15                  4. No charge shall be imposed for a service unless the service is actually used by, or  
16 available to the owner of the property in question; and  
17  
18                  5. No charge may be imposed for general governmental services including but not  
19 limited to police, fire, ambulance or library services where the service is  
20 available to the public at large in substantially the same manner as it is to the  
21 property owners.

22                   **SECTION IV. Effective Date**

23                   This ordinance shall be and is hereby declared to be in full force and effect as of  
24 thirty (30) days from and after the date of its passage and shall be published once before  
25 the expiration of fifteen (15) days after its passage, with the names of the supervisors  
26 voting for and against the same in the MARIN INDEPENDENT JOURNAL, a  
27 newspaper of general circulation published in the County of Marin.

28                   **PASSED AND ADOPTED** at a regular meeting of the Board of Directors of the Alto  
29 Sanitary District held on this **22nd** day of **June, 2016**, by the following vote:  
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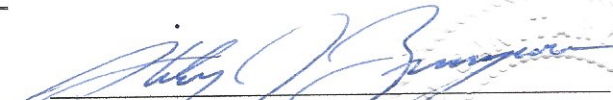
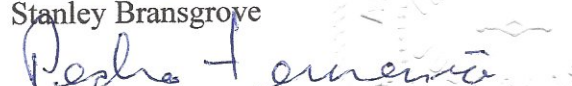
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32                   AYES: 5

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34                   NOES: 0

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36                   ABSENT: 0

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39                   ATTEST:

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42                   ATTEST:

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44                   President, of the Board  
45                   Stanley Bransgrove  
46                     
                    Secretary/Treasurer

**Alto Sanitary District**  
Budget for Fiscal Year 2016-17

<b>Revenue</b>		
<i>Item</i>	<i>FY15-16 Actual</i>	<i>FY16-17 Budget</i>
<b>Operating Revenue</b>		
Program Revenues (Sewer Service Charges)	283,586	612,562
Franchise Fees (MVRS)	13,623	13,500
Permits & Fees	1,828	12,000
Operating Revenue:	<b>299,037</b>	<b>638,062</b>
<b>Non-Operating Revenue</b>		
Property Taxes	45,423	46,000
Excess ERAF	16,448	16,500
Aid from Govt Agencies (HOPTR)	245	250
Interest	809	1,000
Non-Operating Revenue:	<b>62,925</b>	<b>63,750</b>
<b>Total Revenue:</b>	<b>361,962</b>	<b>701,812</b>

<b>Expenses</b>		
<b>Sewage Treatment</b>		
Sewage Treatment SASM	164,621	202,160
Sewage Treatment:	<b>164,621</b>	<b>202,160</b>
<b>Sewer System Maintenance</b>		
Cleaning	18,527	25,000
Televising Program	824	1,600
Repairs	3,708	9,500
Lateral Rehab Prog (Inspections)	933	1,000
Underground Service Alert	7,885	7,500
Unscheduled Services	0	0
Sewer System Maintenance:	<b>31,877</b>	<b>44,600</b>
<b>Professional Services</b>		
Marin County Admin Fees	1,197	1,200
LAFCO Dues	187	221
Marin County Encroachment Fee	490	490
PO Box Fee	102	106
SWRCB	2,088	2,100
Underground Service Alerts Fees	263	263
Audit	6,000	6,000
Bookkeeping	1,119	1,000
Legal	2,409	2,450
Engineering (GIS,EPA,SSMP)	9,151	9,000
Engineering (Lateral Oversight)	10,267	10,000
Engineering (Other)	12,374	11,000
Professional Services:	<b>45,647</b>	<b>43,830</b>

**Alto Sanitary District**  
Budget for Fiscal Year 2016-17

**Administration Costs**

Insurance: CSRMA	621	886
Election Notices and Fees	1,330	39
Office Expenses (Postage, Printing, Supplies)	564	1,363
Utilities (Cell Phone, Office Phone, Website)	1,044	1,211
Miscellaneous (Parking, Mileage)	49	0

Administration Costs:	<b>3,608</b>	<b>3,499</b>
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**Payroll Expenses**

Payroll for Manager (New Manager @\$36K/yr began 9/15/16)	28,600	34,500
Stipends for Board (includes YTD Special Mtgs)	7,600	9,000
Employer Taxes	3,186	4,252
Payroll Service	1,078	1,100
Payroll Bank Account Fees	144	144

Payroll Expenses:	<b>40,608</b>	<b>48,996</b>
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<b>Total Operating Expenses:</b>	<b>286,361</b>	<b>343,085</b>
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<b>Net Operations (Revenue - Expenses):</b>	<b>75,602</b>	<b>358,727</b>
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<b>CIP Program/Rehabilitation</b>
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Line 111.01-110.03 (Islamic Cntr Parking Lot)	0	51,215
Capital Improvement Projects (Easements Main Replacement)	0	307,512

CIP Expense:	<b>0</b>	<b>358,727</b>
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<b>Net Operations - CIP Expense:</b>	<b>75,602</b>	<b>0</b>
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<b>Net Change to Fund Balances</b>
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<b>75,602</b>	<b>0</b>
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<b>Contribution to Reserve Fund:</b>	16,000	0
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<b>Reserve Fund Balance: \$500K-\$800K Target (Year End Amount)</b>
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<b>216,059</b>	<b>216,059</b>
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